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Special Libraries, January 1977

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special libraries

January 1977, vol. 68, no. 1

- Microfilm Cameras
- National Periodicals System
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SPLBA 68 (1) 1-56 (1977)
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Letters	6A	
Microfilm Cameras A Survey of Features and Functions	1	William Saffady
Toward a National Periodicals System	7	Alphonse F. Trezza
On-Line Services and Operational Costs	13	Mary L. Calkins
Subject Classifying Botanical Art	18	Mary Anne Snavelly Craft
Selecting a Computer Terminal for the Library	24	Edward John Kazlauskas
Special Libraries in the Philippines	28	Julie Bichteler

SLA News

1977 Candidates for SLA Office	35	
Actions of the Board of Directors, Oct 14-16, 1976	41	
		Chapters & Divisions 43

Vistas

Washington Letter	45	Reviews	53
Staff Development	46	Pubs	56
IFLA	48		
Unesco Program for Libraries	51		
Placement	15A	Index to Advertisers	16A

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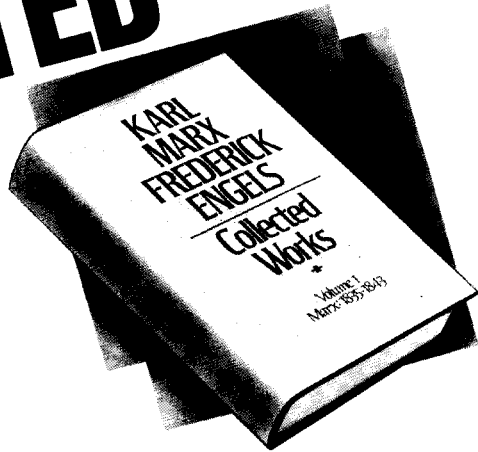
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LETTERS

To Whom It May Concern

Is Ron Copen sure that it is the librarians who are to blame [see *Do Librarians Read? Special Libraries* 67 (no. 2): p. 7A (Feb 1976)] and not the organizations for which they work?

Institutional policy requires that this library forward to a central purchasing department all requests for material and for payment of fees, memberships, etc. Request for material on a pre-payment basis must go to an additional department en route to the post office, that is, the accounting department. When an essentially single person operation becomes a multidepartmental operation the inevitable happens: Orders, special instructions, and so forth, are lost, ignored, or confused. I have often paid dues and/or requested special materials only to find out—usually months later—that checks were mailed without specifying a membership name to be credited, or that payment was issued to a person rather than an individual institution. The possibilities and opportunities for confusion are endless.

It does happen. And more than often, it is no fault of ours.

**Nancy Mary Panella
St. Luke's Hospital Center
New York, New York 10025**

New Rules with "Teeth"

Federal Trade Commission rules effective Feb. 2, 1976, regarding mail order apply to book publishers, reprint publishers, and others.

Under the new regulations companies that are selling goods by mail must:

1. Notify the customer within thirty days after receipt of a prepaid order if the merchandise will not be shipped immediately.
2. Provide the customer with a postage-paid method of cancelling the order.
3. Refund prepayment within seven days of receipt of the notice of cancellations.

Published reports on the new FTC regulations say that magazines, COD orders, and "merchandise" like photofinishing are exempt from the regulations.

It seems that these regulations will apply to prepaid book orders. I think that the library buyers would be helped a lot by this, especially

since after one query or so, they could just send in a request for refund, with a copy of the FTC rules and possible penalties. After a little bit of this, the publishers would be a bit less eager to solicit money to finance publication at some later date.

**Ernest Perez
Houston Chronicle
Houston, Texas 77002**

Do You Have Any?

As announced in the *New York Times* of Mar 19, 1976, The New York Public Library, with the generous assistance of the Pope Foundation, plans to microfilm the New York City newspaper *Il Progresso Italo-Americano* from 1881 to date. *Il Progresso* is the longest continuously published Italian-American newspaper published in the United States. NYPL's effort to preserve it on microfilm represents what may well be the last opportunity to assure the availability of this unique historical and social resource to future generations.

The publisher of *Il Progresso* has generously donated the entire hard copy backfile in his possession. This will be filmed and integrated with another portion of the newspaper which was filmed by NYPL in 1960 under its preservation program.

With the aim of assembling as complete a file as possible, the New York Public Library is urgently seeking to locate backfiles to fill the following gaps before it completes the filming of this newspaper.

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1897–April to June
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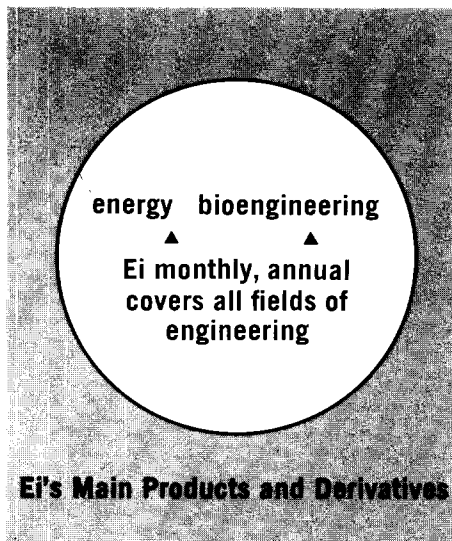
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**Paul J. Fasana
Preparation Services
New York Public Library**

More Info

The article, "Guide to the Indexing of U.S. Government Periodicals," which appeared in the February 1976 issue of *Special Libraries* [67 (no. 2): 76-83] was incomplete in its coverage of periodical indexing. Congressional Information Services, Inc., publishes two highly pertinent indexing and abstracting services, neither of which was mentioned.

The *American Statistics Index*, published since 1973, with retrospective coverage dating back a decade or more, is a master guide to the statistical publications issued by the entire U.S. Government: the Executive agencies, Congress, and other Federal statistics-producing programs. Currently, *ASI* provides continuously updated coverage of nearly 800 different periodicals which contain statistics on an extremely wide range of subjects. These periodicals represent the output of more than 140 different Federal sources. We project there will be more than 7,300 individual issuances of these periodicals in 1976.

ASI reports new periodicals as they are issued, as well as changes in existing ones. Each is fully indexed, and its contents described in detail, including bibliographic data for retrieval purposes.

The *CIS/Index*, published since 1970, fully covers all of the working papers of Congress, including its periodicals, along with all hearings, prints, documents, reports, and special publications. *CIS* editor and publisher James B. Adler received SLA's Professional Award in 1972 for an "outstanding contribution to librarianship and information science."

Both the *CIS/Index* and *ASI* data bases are searchable on-line through the facilities of System Development Corporation. Both index services are issued monthly, with annual cumulations, and also have available full-text microfiche copies of the source documents themselves, which can be acquired in either inclusive, automatically updated files or individually, as needed.

**Howard Goldstein
Congressional Information Service, Inc.
Washington, D.C. 20014**

Update

Ms. Derrick, in her interesting "Thoughts on the British Library" (*Special Libraries*, September 1976), states (p. 440) that serials in the British Library Lending Division "are arranged in a classification system comparable to LC." Serials are arranged in simple alphabetical order, to allow retrieval without having first to search catalogues. They are given a code number which helps to keep them in alphabetical order and which can be used to retrieve items which are not found on a first search and have to be checked with the library's records. The only parts of the library that are classified (by UDC) are the public Reading Room and the Staff Library.

Perhaps I could bring some of the other facts and figures she quotes up to date. The Lending Division now subscribes to 47,500 current serials. Translations can now be arranged from any language. Overseas requests now account for 15% of the total.

The statement that "there is no service charge in the UK" may be misunderstood. British libraries do indeed pay for each item received, but the charge does not recover all the marginal costs, whereas the overseas charge does.

**M. B. Line
British Library Lending Division
Boston Spa, England**

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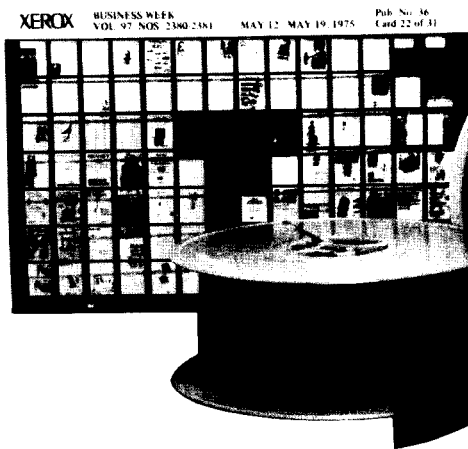
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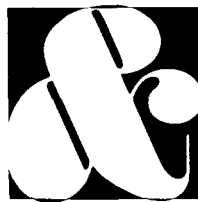


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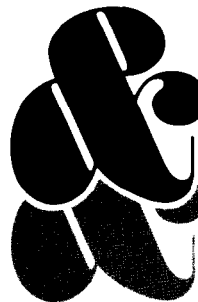
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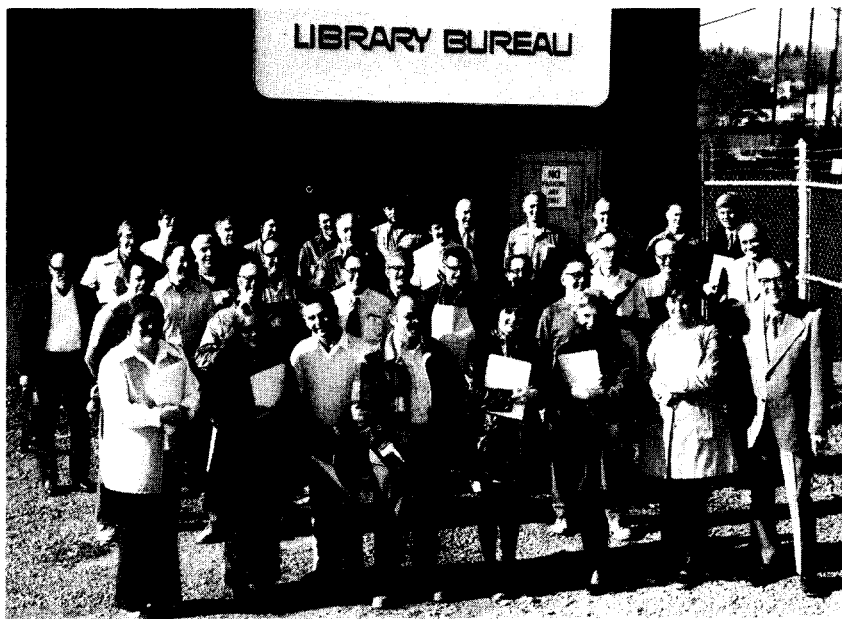
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State University of New York at Albany, School of Library and Information Science,
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■ A survey of features and functions of currently available rotary, planetary, and step-and-repeat microfilm cameras. Features that simplify camera operation and enhance versatility are described.

THIS article surveys features and functions of new, and selected older, cameras.

Microfilm cameras are usually divided into three groups: rotary microfilmers, planetary cameras, and step-and-repeat cameras. Special purpose planetary cameras designed to expose 35mm microfilm chips premounted in aperture cards are sometimes considered a fourth group. A 16 mm rotary camera is used to microfilm checks, tab cards and office records transported at high speed past a narrow slit aperture. Automatic feeding mechanisms, capable of rated speeds in excess of 600 check-sized documents per minute, maximize productivity. The obvious throughput advantage of rapid document transport is, however, offset by an inevitable loss of resolution resulting from photographing a moving target. Resolution in the range 80 to 100 lines/mm is inadequate for many research materials. Where resolution requirements are critical, 16mm and 35mm planetary cameras microfilm stationary documents positioned face-up on a flat copyboard or face-down on a glass platen. Even the least expensive models, like the 3M Data

Recording Cameras or the Bell and Howell Filemaster, claim resolution capabilities in excess of 120 lines/mm. Step-and-repeat cameras are designed to create microfiche by exposing successive images in a pre-determined format of rows and columns on 105mm roll or sheet film. As with planetary cameras, documents to be microfilmed are positioned on a flat surface. The resulting resolution is acceptable for research materials. The Dietzgen 4330 Step-and-Repeat Camera, for example, will resolve at least 140 lines per millimeter at 24× reduction and 160 lines per millimeter at 42× reduction.

For many micrographics vendors and users, enthusiasm for COM has diverted interest from source document microphotography. Of the five micrographics industry leaders (Kodak, 3M, Bell and Howell, Datagraphix, and Xerox), the last two do not include microfilm cameras in their product lines. Unlike copiers, where the state-of-the-art is dynamic and new equipment is introduced regularly, most currently available microfilm cameras were on the market five years ago in substantially their present form. Kodak, for example, introduced the Recordak MRD-2, the most popular 35mm planetary camera for library applications, in 1961. Bell and Howell still markets its Micro-Twin Recorder/Reader, first introduced in 1959 (1).

Instead of introducing radically new equipment, vendors have increasingly modified existing product lines to meet the

needs and budgets of the broadest spectrum of users. Heavy-duty rotary microfilers, like the Recordak Reliant 700 and the Bell and Howell SRM Microimager System, emphasize modularity. The customer buys the basic unit and only those accessories required for existing applications. Additional capabilities can be acquired as needs change and funds permit. Depending on accessories selected, prices range from \$5,000 to \$10,000. Smaller libraries are increasingly well-served by a group of Small-Office-Microfilm (SOM) products designed specifically for the straightforward requirements and budgetary constraints of low-volume users (2). SOM rotary cameras, like the 3M 4000, the Recordak RP-1, and the Agfa Copex D2000, cost around \$2,000, while prices for low-volume 16mm planetary cameras begin at around \$1,000.

New Technology

The silver halide process remains the dominant microphotographic technology, despite advantages that have led to its virtual abandonment in full-sized document reproduction applications and in the production of micro-duplicates (3,4). Vesicular microphotography has aroused considerable interest, but vesicular step-and-repeat cameras have failed to develop beyond prototype (5). The one currently available non-silver microrecording device is, however, of the greatest potential significance. The System 200 Record Processor, developed by Scott Graphics and marketed by A. B. Dick/Scott is a step-and-repeat camera that employs a variant of the electrostatic process called "transparent electrophotography" or TEP (6). Previous electrostatic microrecording devices have employed low reductions, on the order of 3x, in affixing images to opaque supports (7,8). System 200 records document images on film at 25x reduction. TEP film has the ability to retain sensitivity despite repeated exposure. System 200 is unique in permitting additions to previously exposed fiche, thereby removing the most significant deterrent to the microreproduction of ac-

tive, continually expanding collections of documents. While it is still too soon to estimate the impact of such a powerful records management tool, initial user reactions have been enthusiastic despite high cost (9).

Simplified Operation

Rather than experimenting with innovative technology, most microfilm camera vendors have emphasized design improvements that facilitate operation by non-technical personnel, with a minimum of training, in the office environment. Simplified control panels and push-button, or foot-pedal, operation are now the rule. Many smaller cameras—the Recordak RV-2 16mm planetary, for example—have only an on/off switch and an exposure trip button. Warning lights and audible alarms signal the end of the film, improper loading, burned-out lamps, and other sources of potential operator error. Some cameras, like the Sperry-Remington S-77 rotary, will not operate until the malfunction is corrected.

Simplified controls are essential in step-and-repeat cameras where images are recorded on film in a pre-determined format and the operator must be constantly aware of the row and column under exposure. To enable the operator to manipulate film position, the Bruning Model 750 Microfiche Camera provides push-button controls that skip an image, advance a row, or return to the starting position. A lighted grid on the Dietzgen 4330 indicates the frame position being exposed. A single button facilitates rapid advance to the last frame, a useful feature in exposing partial fiche.

Exposure Control

All microfilm cameras offer some sort of exposure control to enable the operator to compensate for variations in the color and texture of source documents. In manual systems, appropriate exposure settings for different types of documents are determined by performing a camera step-test. During filming, the operator must make necessary exposure adjustments on a case-to-case basis, using a

rheostat. A number of microfilm cameras feature automatic exposure control systems as either a standard feature or an optional accessory. A photocell is used to determine the reflectance value of each document and make corresponding adjustments in either lamp intensity or shutter speed. Exposure errors resulting from operator misjudgment are thereby minimized. With high-speed rotary cameras, automatic exposure control is essential to maximum productivity and uniform image quality.

Loading, Unloading, and Processing

Several microfilm cameras offer special features designed to simplify the potentially wasteful and time-consuming tasks of film loading and unloading. The Recordak Reliant 700 and Reliant 450 will accept thin 2.5-mil estar base microfilm in 215 foot lengths, thereby reducing the amount of required loading by 50% over conventional 100 foot lengths. To prevent fogging during loading and unloading, the Bell and Howell SRM, the Bell and Howell Inter/COM, and the Canon 300 automatically cycle the proper amount of leader and trailer film onto the camera take-up spool. The 3M 4000 rotary camera uses dyeback-type film that can be loaded in daylight. At least three microfilm cameras feature some types of cartridge or cassette loading system that eliminates operator film handling. When equipped with the appropriate film unit, the Recordak Reliant 700 will accept Recordak type 3453 film in Instamatic cartridges. The 3M Data Recording Cameras accept cassettes containing microfilm in 100 and 215 foot lengths. The 3M 3400 rotary camera accepts raw film stock loaded in a proprietary cartridge. After processing, the film is returned to the cartridge for use on 3M reader/printers.

Both the Recordak Reliant 700 and the 3M 3400 cartridges interface directly with a microfilm processor, thereby eliminating the need to unwind film onto a reel prior to processing. The Recordak Instamatic Processor is a self-contained unit that automatically threads and develops exposed

film from an Instamatic cartridge. The unit is designed to operate alongside the Reliant 700 camera without external venting or plumbing. The 3M Portable Microfilm Processor, a desk-top unit, can be equipped with an adapter for direct insertion of 3M 3400 cartridge film. Several conventional spool-loading cameras also provide a processor interface. The Itek 3536 35mm planetary camera, for example, utilizes a take-up magazine that interfaces directly with the Itek 335 Transflo Processor.

Camera/processors, which expose and develop microfilm images as one continuous operation, represent the ultimate in convenience. The Bruning Model 750 Microfiche Camera/Processor, for example, produces dry, developed microfiche from special pre-cut film stock containing both the silver emulsion and a developing agent. The film supplied in proprietary individual packages called "fiche-paks" is first exposed, then automatically transported through a four-step development process, and delivered ready for viewing. The processing cycle takes about ninety seconds, during which time another fiche can be exposed. All major system components are modular and interconnecting. As a self-contained camera/processor, the Bruning 750 will not remove sufficient residual thiosulfate to satisfy requirements for archival quality processing. An external processing unit is available, however. The 3M 2000 Series camera/processors expose and develop 35mm microfilm chips pre-mounted in aperture cards. Processing cycle time is less than 60 seconds. The 3M 2000 N/P gives the operator a choice of either conventional or reversal processing, a useful feature in applications involving radiographs and other originals of negative polarity.

Depending on special features, camera/processors can cost as much as \$15,000. For the small special library, the Canon 161G is a significant exception. Priced around \$3,000, it exposes and develops 16mm microfilm as a single step. Processor throughput is 7 in./min. A special film buffer compensates for differences between processor and camera

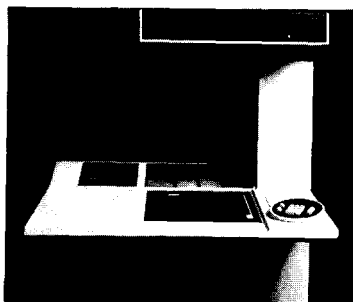
film transport speeds. No external plumbing or ventilation is required but, as with all camera/processors, proprietary film must be used. Canon claims archival quality processing when used according to directions.

Interrupting Filming

The ability to interrupt filming prior to exposure of an entire roll is crucial to optimum utilization of equipment in applications where different groups of documents must be filmed daily or where several departments must share the same camera. The Bell and Howell Inter/COM rotary camera has separate film supply and take-up compartments to facilitate the removal of exposed film without exposures of the remaining supply. Within the Dietzgen 4330 Step-and-Repeat Camera, exposed film is taken up and contained in a light-tight cassette for daylight removal. A single fiche can thus be exposed, removed, and processed immediately. The Itek 3536, GAF Microbox MBS-O, and Keuffel and Esser Micromaster 35mm planetary cameras feature built-in severing devices to facilitate the removal of short film strips. Most rotary and planetary cameras utilize interchangeable film units that allow both supply and take-up spools to be removed from the camera. The 3M 3400 rotary camera, with its unique cartridge loading system, allows exposed film to be rewound into the cartridge and removed from the camera. An odometer is used to identify the point where filming was interrupted. At a later time, the cartridge can be reloaded, the film advanced slightly beyond the point of interruption, and work continued.

Interchangeable Reductions

Versatility has long been a great strength of microfilm cameras. Despite complaints that the ability to film documents of different sizes at varying reductions and in different formats has complicated the development of both standards and inexpensive readers (10), interchangeable reduction ratios remain a major selling point for currently available equipment. With rotary cameras, reduction changes are accomplished by inter-



Credit line: Photo courtesy of Kodak

Figure 1. One of the Three Kinds of Microfilm Cameras. This is a Planetary Model.

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changing film units. The Recordak Reliant 700, for example, offers film units at 24 \times , 32 \times , 40 \times , and 50 \times reductions. The Bell and Howell SRM features film units at 24 \times , 34 \times , 44 \times , and 51 \times . Rotary camera reductions above 30 \times are usually done in the duplex (front and back) or duo (8mm principle) mode. The Recordak Rotoline, a continuous forms microfilmer, offers 24 \times and 32 \times reductions in the simplex mode.

Most planetary cameras change reductions by moving the camera unit closer to or away from the copyboard. The Bell and Howell Filemaster 16mm planetary features pre-selected reductions of 21 \times , 25 \times , 27 \times , and 29 \times . The Recordak MRD-2 permits infinitely variable reductions within the range 5 \times to 27 \times . The Recordak MRG-1, the Itek 3536, the GAF Microbox MBS-O, and other 35mm planetary cameras designed for engineering drawings typically offer five or six pre-selected reductions with infinite variability in between. The 3M Data Recording Camera, being an inverted planetary microfilmer, uses interchangeable lenses to alter reductions. The Recordak RV-2 16mm planetary requires a change of film units at either 22 \times or 27 \times . Double-exposure controls on planetary cameras like the Itek 1400 permit duplex mode microfilming by holding an area of a given frame open for a second exposure. To prevent operator error, a light indicates whether the first exposure has been made.

Most step-and-repeat cameras are engineered at the factory to produce fiche in NMA, COSATI, COM or other for-

mats. The Dietzgen 4330, for example, allows users a choice of four formats and three reductions: 20×, 24×, 42×. The Bruning 750 offers eleven standard formats in six reductions. Special formats can be tailored to user requirements. The Bell and Howell Diplomat Microfiche Camera permits variable reductions between 10× and 26×. Interchangeable grids and apertures permit format changes.

Film Indexing

The ability to encode, or otherwise index, images during microfilming is essential to later retrieval from 16mm rolls, cartridges, and cassettes. Rotary cameras have traditionally offered the widest range of encoding options. The Recordak Reliant 700, for example, has accessories for blip encoding, kodaline indexing, and the imprinting of a sequential number on each document. The Recordak Reliant, the 3M 3400, and the 3M 4000 cameras have an odometer for indexing by the film-footage method. The 3M 3400BE, the Bell and Howell SRM, and the Canon 300B will all produce blip-encoded 16mm microfilm.

Most 16mm planetary camera copyboards can be easily modified for blip encoding. The Bell and Howell Filemaster, for example, is available with a black copyboard designed specifically for such applications. The camera interfaces with an automatic jacket inserter. The Recordak RV-2 16mm planetary camera can be equipped with a special aperture plate for blip encoding. The Canon 161G and the 3M Data Recording Cameras feature an accessory that sequentially numbers each microfilm frame.

Other Features

A few other points of versatility are worth noting. To save film in applications involving smaller documents, the Itek 1400 allows a choice of six aperture sizes and seven film advances. Aperture size on the Recordak RV-2 can be pre-set for either small (4.5 × 12 in.) or large (9.25 × 12 in.) documents. The Alan Gordon

35mm planetary camera features a half-frame advance. For creating microfilm jackets that meet NMA microfiche specifications, the Bell and Howell Filemaster 16mm planetary can be equipped with an optional camera that produces a fixed frame size of 10mm at 24×.

The Recordak Reliant 700, Reliant 450, RP-1, and RV-2 will expose two rolls of film simultaneously for applications requiring both a working and a security copy of microfilmed documents. The Sperry-Remington S-77 will simultaneously expose two rolls of 16mm film at two different reductions, creating, for example, a working copy at 22× simplex mode and a security roll at 40× duo mode. In large applications, the resulting film savings can be significant. The Itek 1401 has the unique ability to simultaneously expose a roll of 16mm and a roll of 35mm microfilm at identical or different reductions.

For applications involving bound volumes, built-in spring-loaded book holders on the Itek 1400 planetary camera and the Dietzgen 4300 Step-and-Repeat camera keep books flat and correctly positioned during filming.

The 3M 4000 portable rotary camera can be equipped with an optional computer stationary console for microfilming continuous forms. The Recordak Rotoline and Bell and Howell Inter/COM, two continuous forms microfilmmers, will both accept cut sheet documents.

Summary

Currently available microfilm cameras emphasize simplified operation and ease of use, especially in such potentially time-consuming tasks as exposure control, film loading, and the interruption of filming. Interchangeable reductions, a wide range of indexing options, and other features enhance the versatility and utility of microfilm cameras for the widest possible range of applications.

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Toward a National Periodicals System

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■ Progress is reported on the activities of the Task Force on a National Periodicals System, National Commission on Libraries and Information Science. Established to prepare a specific plan for a national periodicals system, the Task Force commenced their investigation in January

1976 with plans for completion in December 1976. Activities during the first six months have included the specification of goals and objectives for a national periodicals system, services and products, criteria for choosing the best approach, and alternative structures of the system.

EFFECTIVE and timely accessibility not only for scholars, specialists, and students but for any library or information user is the goal of a national periodicals system. Can service be provided from a single national center similar to the British Library Lending Division? Should a national system be based on existing collections with hierarchical access? Should there be one or more dedicated collections? Should they be centers of first or last resort? Will the coverage be general or subject oriented? What level of successful "fills" is reasonable? What mix of Federal, state and local funds should be used to support a national periodicals center?

These are some of the questions currently being addressed by the NCLIS Task Force on a National Periodicals System. The task force is by no means the first group to consider these questions on the best approach to increasing accessibility to the periodical literature in the United States. The consideration of whether the U.S. should have a comprehensive periodical center patterned after the well-known Boston Spa operation in Great Britain has intrigued

American librarians for the last ten to fifteen years. The Boston Spa operation is the British Library Lending Division (BLLD), formerly the National Lending Library for Science and Technology. The BLLD is a modern mechanized warehouse facility located in a rural area of north-central England and this year will supply about 2 million loans and photocopies of articles from serials to requesting libraries. Some argue that due to the geographic size of the U.S., such a single center would not be adequate for this country.

The purpose of this paper is to briefly summarize some of the previous thinking on this subject, as well as the current considerations of the task force.

Background

The first major attempt to investigate the academic interlibrary loan activities on a national level across all subject areas was undertaken by the Association of Research Libraries (ARL) in 1970. Through a contract with Westat, Inc., the study provided basic data on the magnitude,

characteristics, and costs of academic interlibrary loans (1). It was estimated that in the year 1969-1970 academic libraries received about 2.1 million loan requests, of which 48% were for periodicals. Based upon this first study, ARL felt that, perhaps, the best solution to reducing the interlibrary loan burden on their members was through improvement of the handling of loans for periodicals. A second ARL study, again conducted by Westat, investigated several alternatives for improving accessibility to periodical resources (2). Three basic structures were developed and evaluated for a national periodicals system: 1) a single new facility with a comprehensive collection, patterned after the British model; 2) a new multi-location national system based on a number of satellite resource centers with dedicated collections of the most heavily used titles, and a single new national center serving as the major resource in the system; and 3) a regional resource network based on designated existing library collections.

Based on the analysis of cost and other factors, Westat recommended a single national center, i.e., the first alternative. This study was finished in late 1973; a recent article by Vernon E. Palmour in the *IEEE Transactions on Professional Communication* summarizes the results (3).

During the ARL study on periodicals, Westat was awarded a contract with the NCLIS to look at the role of resource and bibliographic centers in a national network for all materials. A hierarchical network was recommended with state, zonal, and regional resources at the multistate level, and national components. A single periodicals center was recommended as a part of the national level.

As part of the review process by NCLIS on this study, a two-day conference was held in April 1975 in Washington, D.C. Representatives from the library community were invited to participate in helping the NCLIS decide on next steps to take in light of the study recommendations. There was group consensus on the need for a national periodicals system, and that the NCLIS should take action to bring about such a system. The NCLIS appointed a task

force to prepare a specific plan for the establishment of a national periodicals system.

The task force started its work in January 1976 with plans for completion in December 1976. Initial activities have included the specification of goals and objectives for a national periodicals system, services and products, criteria for choosing the best approach, and alternative structures of the system.

Goals of a National Periodicals System

The overall goal of a national periodicals system must be in line with the ideal adopted by the Commission in its National Program Document:

To eventually provide every individual in the United States with equal opportunity of access to that part of the total information resource which will satisfy the individual's educational, working, cultural and leisure-time needs and interests regardless of the individual's location, social or physical condition or level of intellectual achievement (4).

With this broad goal in mind, the following more specific goals are being considered for shaping a national plan for improved access to periodical resources:

- Improved bibliographic and physical access to periodical materials for all users.
- Improved delivery of periodical materials.
- Reduced burden on large net lenders of periodical materials.
- More effective use of individual library funds in the provision of periodical materials.
- Effective awareness and promotion to insure wide knowledge of the availability of the system and its services.
- Improved access to the contents of periodicals, which implies seeking means for improving each step in the preparation, publishing, abstracting and indexing, bibliographic identification and control, and distribution of the materials, with recognition of the various components in the private and public sectors.

The accomplishment of these goals will require a flexible system capable of adjust-

ing its scope, configuration, and operating methodology as indicated by experience, future demand, and available technology.

Services and Products

What services and products are required of a national periodicals system to meet the goals? The primary immediate need is improved document delivery. Even at the stage we are in today, our bibliographic tools are more advanced than the means of delivery. The development of indexing and abstracting services and the more recent on-line data bases have greatly enhanced the user's ability to identify needed publications; comparable advances have not been made in the delivery of documents.

The main service of the national periodicals system would be dependable delivery of loans or photocopies of journal articles. This service would be based on the following design features:

- The collections of the system should be comprehensive in subject coverage.
- All worthwhile journals should be collected and made available.
- Heavily used, moderately used, and little used materials should be available.
- Value of content rather than language should be the criterion for selection of a title.
- Materials acquired for dedicated collections should build forward from a specified start date.
- Initially, most requests for materials would arrive via mail and teletype; photocopies and loans would be dispatched by mail. In the near future some requests would be sent via a computer-based communications system. Telefacsimile costs should also become more favorable in the future.
- Other special services and products would be considered for future options.

A comment on copyright is necessary at this point. Clearly, any national periodicals system will have to operate under the copyright law. An organized system, with

specified lending centers, would make the problem of accounting, for copyright purposes, much more manageable.

Criteria for Evaluating Alternative Structures

In order to compare and evaluate alternative structures for a national periodicals system, we need a set of criteria. If each of several alternative structures satisfies the goals and objectives, then the "best" alternative should be chosen on the basis of its "score" in meeting the criteria. This approach is conceptionally sound, but difficult practically because of the inability to objectively assign a score (rating) to each criterion for the alternatives.

Acceptability to Community. The acceptance by all types of libraries of the proposed structure for a national periodicals system is most important for its success. "Community" should include librarians, users, publishers, and other information components in the public and private sectors.

Legal Basis. The legal structure of the system must be capable of serving all types of library organizations. Possible limitations on payment of funds, contracting, and other legal arrangements must be assessed for each proposed alternative structure.

Governance. What kind of organization will a national periodicals system require? Different alternatives will call for different organizational approaches. The greater the decentralization of the system, the more coordination between the components that will be required. At the top, an advisory committee might be appointed by the NCLIS to set general policy. Such a committee might operate as a Board of Directors.

Performance. Performance has several dimensions, but speed of delivery and fill rate are two of the more important. Speed of delivery might well be listed as a criterion. It encompasses location of facilities, and internal operational capabilities. Fill rate should be a function of the collection coverage and whether titles are dedicated for the national system.

Startup Potential. Can a reliable and fast service be demonstrated quickly? The right kind of action is needed soon. If a structure cannot make an impact on the problems for several years, it may well be overtaken by events and fail.

Funding Potential. The adopted structure should possess attributes that assist in financing the system. Incentives should encourage funding at several levels, e.g., Federal funds might require matching state or regional funds. Federal funding should provide the incentive for local development. Another aspect to consider is the overall level of funds required, as well as the size of investment and operating funds during the first several years.

Costs. Some of the comments under funding potential apply here also. Cost must be viewed in relation to performance. It is common in cost-effectiveness comparisons to fix either cost or performance for all alternatives and choose the alternative that is best on the other factors—highest performance at a fixed cost level, or minimum cost at a fixed level of performance.

Overall Impact. Improved allocation of resources by local libraries is important.

Growth Flexibility. The ability of the system to absorb growth will be critical to its future success.

Planning Factors

Before addressing alternative structures of a national periodicals system, a few planning factors should be mentioned. The task force has assumed a time schedule which would establish a system organization by 1977 and would start service by 1978. It is well-known that the bulk of interlibrary loan requests are concentrated on relatively few titles. The British Library Lending Division receives about 45,000 current periodical titles and demand for current titles constitutes about 75% of total annual demand (5). Based on the BLLD experience and similar U.S. studies, the task force has made the following assumptions for planning purposes: 2,000 titles will satisfy approximately 50% of the expected total annual demand for current titles. A total of

10,000 titles will satisfy approximately 90% of the expected total annual demand for current titles. Finally, it was decided that 45,000 titles will satisfy most demands for current titles. This distribution assumes all back files of the titles.

Furthermore, the following definitions have been adopted. The term *heavily used titles* refers to the 2,000 most frequently used titles required to meet about 50% of annual demand for current titles. *Moderately used titles* indicates the next 8,000 titles required to meet the next 40% of demand. The term *little used titles* has been adopted for the 35,000 remaining titles required to meet the last 10% of demand for current titles.

At this point in the planning, 1,000,000 loan requests were assumed as the potential demand on a national system during the first full year of operation. This estimated figure represents loan requests that must go out of the existing state and regional systems to be filled and is an update of an estimate derived in the earlier ARL study on periodicals (2). Predicting demand is, perhaps, the most difficult aspect of our planning. Many believe that if this country had an effective periodicals system, the demand would be very high, particularly from the industrial special libraries.

Alternative Structures

A number of alternative structures of a national periodicals system have been conceptualized and reviewed by the task force. Alternative structures considered have run the gamut from a comprehensive union catalog that would identify libraries which agree to loan specific titles to hierarchical systems containing several new national centers with dedicated comprehensive collections. The development and use of a union catalog with only the existing collections was not considered responsive to the need for fast reliable service.

Various kinds of structure have been investigated. Three examples are given. The first alternative is a three-level system. In the first level a number of small dedicated collections of the 2,000 most

heavily used titles would be established and would be the responsibility of states. Ten to twenty centers might evolve. Realizing that every individual state would not have need of such a center, a number of centers could serve clusters of states.

In the second level, four dedicated national centers to handle demand for the moderately used 8,000 titles would be set up. For example, these centers might be developed from existing collections such as the Center for Research Libraries, the U.S. Book Exchange, the ACM Periodical Data Bank, and designated research collections.

The third level would comprise the remaining 35,000 current titles and dead titles used less frequently. For this, existing designated collections would be used in conjunction with a bibliographic data base which has holdings attached (CONSER with holdings).

A second alternative is a two-level system in which a number of small dedicated collections of the 2,000 most heavily used titles would be established. In addition, a centralized national lending library developed from the Center for Research Libraries would be organized for the remaining titles.

A third alternative would be to employ ten or so regional resource centers responsible for the 10,000 heavily and moderately used titles. These centers would be based on existing strong collections. A single central facility would be used for the remaining 35,000 little used current titles.

The previous examples do not by any means completely specify workable alternatives, but they provide some indication of the attempt to pull together existing resources to form an organized national periodicals system. It is recognized that whatever form the National System takes, it must not detract from the local resource sharing within existing systems. The purpose of the National System is not to replace this local exchange of materials; in fact, it must encourage local development. While it does not seem necessary to make such a statement, it is not the intention of the National System

to centrally locate a single copy of each title and provide copies to all the libraries in the country.

In light of the evaluation criteria, the task force has concluded that a three-level system is best suited to meet the anticipated future needs for periodical materials. The task force will now consider ways to improve local, state, and regional capacities to meet a substantial portion of the routine needs for periodical literature (i.e., the first level). It will establish the best course of action to create, initially, a major comprehensive periodical collection with the sole purpose of meeting the full range of national needs (second level). In addition, it will describe appropriate ways to assure a continuing capacity to tap unique resources of national and other major research libraries (third level).

The bulk of loan requests unfilled by the first level would be met by a single comprehensive center with a collection dedicated to interlibrary loan. An unresolved question is whether future demand and delivery of services can be met adequately from a single center. Experience may show that several such centers are required in the future. Changes in technology and publishing may also suggest a more decentralized approach to this second level in the system.

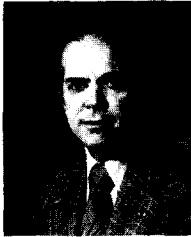
The specifications for the system, as outlined previously, will include a number of required operating and performance characteristics. An example is the flexibility required to adjust the scope, configuration, and access mechanisms in each of the three levels as indicated by experience and future demand. Other necessities are an operating methodology that will permit effective use of existing and anticipated future computer, communications, photographic technology, and the ability to monitor performance of the system as a whole, as well as the individual components.

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On-Line Services and Operational Costs

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■ Many on-line bibliographic data bases are being used at the U.S. Environmental Protection Agency library at the Research Center in Cincinnati. A cost study of searches performed in four of the most widely used systems, Lockheed, SDC, MEDLINE, and TOXLINE, reveals the

cost-effectiveness of on-line literature searching as compared with manual and batch searching. New features which have improved search effectiveness are outlined, as well as suggestions for future improvements.

THE U.S. Environmental Protection Agency's library located at the Environmental Research Center in Cincinnati is EPA's central scientific and technical library. As such it serves approximately 600 scientific staff members in Cincinnati. It also provides a number of services to the staff and clientele of 28 additional EPA libraries located in research centers, laboratories, and regional offices throughout the country.

The decision to initiate on-line literature searching was based on a need to improve the quality, speed, and scope of library reference services, within a framework of improving operational costs.

EPA scientists are concerned with a myriad of environmental problems, such as water pollution, air pollution, toxicology, new energy sources, solid waste disposal, sewage treatment, and land use

planning. Environmental scientists must cross disciplinary lines and use material from the fields of chemistry, biology, medicine, and engineering, as well as economics and law.

Thus, from the outset, plans were made to obtain access to a broad range of bibliographic data bases.

It was necessary to consider systems' response time, in addition to scope and quality of the material indexed. EPA personnel often face crisis situations involving court actions, hearings, or specific health hazard situations when material is required immediately. As Rosenberg states (1), on-line systems offer "the opportunity of getting information for a crisis at a given point when it is needed."

In addition, scientists need exhaustive searches before initiating research projects to determine how much work has been done in specific areas. Having access to multiple on-line systems seemed to fit these requirements.

New library services had to be provided within a framework of strict personnel

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ceilings, which allowed no increase in library staff. Budgetary limitations were also a factor. The library needed to maximize the effectiveness of every dollar spent for reference services.

Bibliographic on-line searching services for EPA were introduced in mid-1972. Since the library in Cincinnati is the agency's largest scientific and technical library, it was designated as the central point for computerized searching.

At the outset the library had access to only one system, MEDLINE, and 20 searches were performed the first month. Since that time many systems have been tested and used. The library now has access to more than 30 data bases totalling more than 12 million citations. During 1975 the number of on-line searches performed each month averaged 225.

Evaluations

In order to determine search effectiveness, users are asked to complete evaluation forms. Based on these evaluations and discussion with users, most scientists and researchers are pleased with the results of on-line searching. They stress the time saved and the quick response to requests. Most users also feel that on-line search results are as good as or better than manual or batch mode retrieval.

Most on-line systems only include information published in the past few years. Some users feel this is a disadvantage, but not a major drawback, contrary to the opinion expressed by Rawls (2). Users are guided to older literature by the references cited in recent literature found through on-line searching.

Users especially appreciate the ability to change the search strategy as the search progresses. In addition, the outstanding capability of combining concepts, in ways that would be almost impossible in manual searching, exists.

Another measure of effectiveness and acceptance is in the large number of users who come back for on-line searching when they need information.

The library is seeking better ways to measure effectiveness of on-line searching. As Doudnikoff (3) notes: "The most

important single element of an information system is the user. The value of the system does not lie in the hardware, nor in the information contained in the system (unless the information is used), nor in the potentially rapid access, but in the use made of the system. User acceptance is difficult to measure scientifically, but it is nevertheless real."

On-line searching has helped to make the library a more effective part of the total organization. Many people who had not used the library previously are now regular patrons. This is shown by significant increases in book and journal circulation as well as interlibrary loan requests.

The impact of on-line searching has been felt throughout the agency, as shown by the continually increasing demand for searches. By mid-1974 it became impossible for the Cincinnati library to process all the requests. Now a number of EPA libraries and offices are doing their own on-line searching.

Cost Comparisons

With the establishment of on-line searching as a new library service, operational costs need to be examined in terms of cost effectiveness. Costs of on-line searching may be compared with costs of manual literature searching and with costs of computer batch searching.

Costs of manual searches at the Cincinnati library are roughly estimated at \$150.00 each. This figure is based on a rate of \$6.00 per hour for 20 hours of a literature searcher's time, plus \$30.00 for overhead costs. These include the clerical tasks of locating and copying citations, reproduction, etc. This cost seems to be a representative figure, compared with recent statistics reported by Elman (4), Bivans (5), and Maier (6).

Due to the time involved and the limited size of the library staff, it is impossible to offer more than extremely limited manual searching service. In fact this service is so expensive and time consuming that the Cincinnati library, like many other special libraries, has been forced to seek less expensive alternatives.

Costs of computer batch searching offer another measure of comparison. The Cincinnati library uses GIDC (University of Georgia Information Dissemination Center) and BIOSIS (Biological Abstracts) for batch searches. These average \$350.00 for each data base searched for a 3 to 5 year period, which approximates the years available with most on-line systems. Batch searches involve only a minimal amount of library staff time, since the profiles are prepared by the searching facility. However, the major disadvantages are the relatively high cost and a 2 to 4 week delay in receiving information.

Consequently, in retrospective searching the EPA library uses batch systems only for data bases and years not available on-line. The batch systems are particularly useful for current awareness or SDI searching. Profile updates average \$8.00 for each issue searched.

On-Line Cost Study

A cost study of on-line retrospective searches at the Cincinnati library is in progress. SDI/current awareness searches are excluded, since they are repeated on new file updates and do not involve prior preparation once the search strategy is established.

Systems included in the study are Lockheed's DIALOG (Lockheed Information Systems), SDC's ORBIT (System Development Corporation), MEDLINE and TOXLINE (both National Library of Medicine.) Data bases used most heavily in the Lockheed and SDC Systems are CAC (Chemical Abstracts Condensates), NTIS (National Technical Information Service), COMPENDEX (Engineering Index), CAIN (National Agricultural Library), POLLUTION (Pollution Abstracts); SCI-SEARCH (Science Citation Index), and SSIE (Smithsonian Citation Information Exchange).

Log sheets are used for each system to record data for each search. Costs of time on-line and off-line print charges are recorded, as well as date, user's name, title of search and actual time used on-

line. The log is then reconciled with the vendors' monthly bills so that all figures used in the study are based on actual costs.

In determining total actual costs additional items are included: 1) the search analyst's time, both on-line and in search preparation and follow-up; 2) the cost of 2 Datapoint CRT terminals with attached printers; and 3) a Band 2 WATS telephone line. Cost of the scientist/user's time is not included. The information user works with the librarian/search analyst in preparing the search strategy and is always urged to be present while the search is in progress. This team approach has proved to be effective in many libraries, as stated by March and Scheffler (7) and Rawls (2), among others.

The formula used for determining the average cost per search is:

$$\frac{\text{Total Costs}}{\text{Number of Searches}} = \text{Average Cost per search}$$

Preliminary results for the first 6 months of 1975 are based on a total of 886 retrospective searches. The average cost per search for this period is \$25.31, across all data bases used in the 4 systems noted earlier. Sixty percent of this figure, \$15.68, represents costs of time on-line and off-line print charges. The remaining 40%, \$10.63, consists of the overhead costs. The average time spent on each search is 20 minutes on-line, plus 40 minutes in preparation and follow-up. Thus for each minute spent on-line 2 minutes are spent in related work.

Since data base connect time charges vary widely, i.e., from \$8.00 per hour to \$120.00 per hour, average costs for each system reflect the differences (Table 1). Most data base prices rose during this time period, so succeeding months will show the upward trend.

In considering how on-line searching has affected the efficiency and effectiveness of the library staff the cost figures are particularly illuminating. On-line searching costs for the 6 months studied are less than 20% of the costs of manual searching

Table 1. Costs to Search Different Systems

	Average Time Cost Per Search	Average Time + Print Cost per Search	Average Cost Per Connect Hr.
MEDLINE	\$ 1.88	\$ 2.88	\$ 7.65
TOXLINE	5.44	7.33	15.00
Lockheed	17.48	19.96	43.09
SDC	22.23	25.72	90.00

and less than 10% of the costs of batch searching.

In terms of both time and library costs, it would be impossible for the EPA library staff to accomplish the same number of searches through either manual or batch operations. Staff time used for on-line searching has been used far more productively than is possible with other types of literature searching.

It is felt that funds spent for on-line services are proving their cost-effectiveness to a great degree. On-line service appears to be here to stay in this agency. It has become an accepted and expected part of library reference service.

All libraries and information centers are caught in the economic crunch of inflation, and all services must be evaluated in terms effectiveness versus operational costs. The on-line cost picture could change considerably within the next few years if data base prices continue to rise, so systems' effectiveness is particularly important.

Both vendors and producers of the four systems included in the Cincinnati cost study, Lockheed, SDC, MEDLINE, and TOXLINE, should be commended for their responsiveness to users' needs.

Improvements

Price increases during the past two years have been partially offset by system improvements, such as faster response time, fewer computer disconnects or crashes and less frequent periods of computer inoperation or down time.

In addition, search capabilities have been enhanced. These new features are

available on some, but not all, of the data bases in the four systems:

1. More single word terms are searchable, for example, from titles, multiple word index phrases and corporate sources.

2. Search strategies may be stored on-line and altered when necessary. Stored searches are notably effective for SDI/current awareness service by allowing new data base updates to be searched without keying in terms. Ideally designated profiles will be executed automatically. This feature is also valuable for storing frequently used concepts or groups of terms. Lockheed is the first vendor to offer this service to all customers, and other systems promise to follow suit in the near future.

3. Users' manuals and searching aids are being revised, improved and updated. Frequency lists of searchable terms are available from SDC in microfiche. Lockheed has produced four term-frequency indexes in which terms from several data bases are merged. These DIALIST index collections are offered in four broad subject areas and are valuable tools for selection of search terms.

4. More training sessions are being conducted by personnel from data base producers. MEDLINE and TOXLINE are exceptions. These systems are produced and made available through the National Library of Medicine and provide user education as well. Until recently most user education has been provided by data base vendors or processors who are specialists in the use of the systems rather than subject content. Users need both types of training, so the combined producer/vendor approach is an encouraging development. Experienced searchers know that the key to effective searching is knowledge of the subject content of each data base, as well as indexing practices and retrieval techniques which are peculiar to each base.

Looking to the future from a cost-conscious user's standpoint, some additional improvements can be suggested.

Copyright or other restrictions which apply to off-line prints need to be stated

clearly and concisely by each data base producer. Most users understand that off-line prints may not be copied for sale or for profit. But what restrictions or charges are involved in the use and distribution of off-line prints among government agencies or among offices within an organization?

Suppliers should adopt more standardized formats, which would aid both data base processors and users. Whenever possible, abstracts, authors' addresses, and index terms should be included in data bases—as well as author, title, and source. Chemical Abstracts Registry numbers and Wiswesser line notations should be searchable.

A thesaurus of index terms should be available for each data base. To be most useful they should include annotations, scope notes and cross references to synonyms, inverted terms and multiple word terms.

More years should be searchable on-line. The most recent five years should be available at all times, with a limited access (of one or two days a week) to an additional five years. The older files should have the same search capabilities as the recent file.

In conclusion, EPA's Cincinnati library/information center has found on-line systems to be useful and cost effective aids in answering the information needs of environmental scientists, researchers, and managers. Even though some problems exist, many have been solved or greatly diminished. Improvements are continually being made in computer systems, searching capabilities and aids, and in user education. As the use of on-line systems becomes increasingly widespread, these

trends point toward greater on-line searching effectiveness. This in turn will provide significant improvements in operational costs.

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Subject Classifying Botanical Art

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■ The design of a subject classification scheme for botanical art in the media of fine prints, watercolors and drawings is described. The scheme is designed specifically for the botanical art collection at the Hunt Institute for Botanical Docu-

mentation, Carnegie-Mellon University, Pittsburgh, Pa. It takes into account the composition of the collection and the needs of its users and staff. The scheme with its alphabetical index is illustrated in the appendix.

CLASSIFYING a collection of original botanical art poses many of the same problems as classifying other collections of specialized library materials. Specifically, since there is no accepted general scheme available as a guide, one must develop an original scheme taking into account the degree of subject analysis required by users as well as the demands of staff time and available funding. In addition, if the fragility and value of the materials involved is a consideration, then certain restrictions must be placed on browsing and extended handling. This, in turn, has implications for the degree of cataloging control.

Frequently, before the formal approach to cataloging described above is considered, an informal classification is already in effect. This is often the result of a spontaneous effort to meet the basic reference needs of staff and users. Such informal classifications are generally considered temporary—although they may persist quite satisfactorily for many years. However, with certain positive changes in those circumstances which dictate the extent of cataloging or classifi-

cation, such as use of the collection, or availability of funds, the groundwork is laid for transition to a more permanent cataloging system.

The Hunt Institute's botanical art collection, which consists of original prints, watercolors and drawings, has a cataloging system officially referred to as the "temporary catalog." The system has generally been sufficient for the art collection in its fifteen years of existence as part of the Hunt Institute for Botanical Documentation at Carnegie-Mellon University. (The Hunt Institute was formerly known as the Hunt Botanical Library. The name was changed in 1971).

As a result of continued growth of the collection, its active exhibition program and its association with Carnegie-Mellon University, however, the collection has begun to outgrow the confines of its "temporary" system.

Now under consideration is a transition to a permanent and more effective system of descriptive and subject cataloging which can be used to meet the growing needs of the collection over long-term use. It is the purpose of this paper to present a

suitable subject classification scheme giving the background of its development and to illustrate the scheme with its alphabetical index.

Current Subject Control

The Hunt Institute's botanical art collection is made up predominately of what are designated "plant portraits." These are single plants, details or sections of plants which are scientifically accurate representations of identifiable species. They are the most actively collected group of plant subjects, and are usually selected on the basis of their aesthetic appeal as well as their scientific accuracy.

In addition to the plant portraits, there are representations of plants whose botanical identification is not known, plants represented in environments such as parks and gardens, and various plant subjects of pictorial, literary, or horticultural significance.

Subject cataloging for the collection is currently limited to the genus or species identity of the plant portraits. An earlier attempt at subject cataloging was made in 1961 when a detailed scheme was devised. Emphasizing the decorative treatment of plant subjects, the scheme distinguished between urns and baskets as containers for plant subjects, garlands and wreath borders, and animal life and landscape backgrounds. Not only was the kind and extent of detail not appropriate to the majority of the collection or its projected growth but such detail was never requested. This is most likely one of the reasons, along with financial ones, that the scheme was never implemented. It has, however, provided important reference material for formulation of the new scheme.

The New Scheme

In the process of devising the new classification scheme other botanical graphic art collections were consulted with regard to their methods of subject organization and use.* It was found that in cases where botanical art collections were of any appreciable size, subject control

was similar to that of the Hunt collection. That is, provision was generally made for access by family, genus, or species.

The existence of any subject analysis other than that of botanical classification, or the plan for such in the future, was not apparent. That this is the case is not surprising since few botanical graphic art collections approach the size of the Hunt collection's 16,000 items. Those few European botanical art collections which do rival the Hunt Institute's in size (the Royal Botanic Gardens, Kew, England; the British Museum of Natural History, London; and the Museum National d'Historie Naturelle, Paris) do not currently acquire art at the sizable rate that the Hunt Institute does, specifically, about 100 items a year. Furthermore, there is no indication that the collections consulted have the amount of use which the Hunt collection has. Use of these collections seems for the most part limited to in-house exhibitions and occasional scholars.

The Hunt collection, on the other hand, is used by botanical students and scholars, students of art history and design, artists and illustrators, authors and publishers, the staff of the Hunt Institute in planning exhibitions, the staff of other institutions, garden clubs, donors, and potential donors. The subject needs of the users vary from simple identification of plants or groups of plants for illustration purposes to the need for scientifically accurate representations of plant details, and plants as objects of decoration and design.

In devising the new scheme the subject needs of the various users were taken into

*Those collections consulted were: Cooper-Hewitt Museum of Design, New York; Fairchild Tropical Gardens, Miami, Florida; Missouri Botanical Garden, St. Louis; National Museum of Natural History, Washington, D.C.; New York Botanical Garden Library, Bronx, New York; Botanischer Garten und Botanisches Museum, Berlin, Germany; British Museum (Natural History), London; Fitzwilliam Museum, Cambridge, England; Museum National d'Historie Naturelle, Paris; Royal Botanic Garden, Edinburgh, Scotland; Royal Botanic Gardens, Kew, England.

account as were the preferences of those staff members most involved with the collection, namely the Curator of the Art Collection and the Director of the Institute.

The scheme is divided into three sections based on the needs of the majority of users as observed by the author and the institute staff. The first section, I, provides for plants identified and unidentified. The second section, II, deals with the growing of plants, or horticulture, and the third section, III, provides for various plant themes. The scheme with its alphabetical index is illustrated in the appendix.

Portion of Plant Represented

Section I.A. gives subject access by scientific name for family, genus or species of the plant portraits. Thus it answers to those requests for identification of specific and scientifically accurate plant representations as well as simple plant identification.

The author originally considered making a distinction between those art works which are botanically recognizable, i.e., the plant portraits in Section I.A., and those in which aesthetic considerations take priority over scientific ones. The institute staff rejected the differentiation, however, on the basis that it was not a useful distinction. Thus, if a reader requests art whose subject matter is roses (*Rosa*), for example, he will receive all the representations of roses in the collection whether botanically accurate or not and it is up to him to sort those he wants.

As far as the purely decorative representations of plants which bear little or no resemblance to actual species, these number very few in the Hunt's collection and are not actively acquired. Provision is made for them in the scheme under Section I.C., "Decorative representations."

Special Categories of Plants

This section (I.B.) seemed to be the only feasible solution for accommodating questions in particularly broad categories, such as "mosses," "palms," "grasses," etc. The categories were suggested by the



staff as those most frequently requested by users. Such users include students of design at Carnegie-Mellon University who use the botanical art collection for supplying illustrations for design projects, and institutions preparing exhibitions.

The author considered making a distinction between herbs, shrubs, and trees. The staff rejected this on the basis that it was too difficult a distinction to make, especially between shrubs and trees. Since the category "trees" was frequently requested it was added to Section B, and because of the numerous entries under this category, provision was made for subdivision by continent.

Another change was made in the category "state flowers" which was originally included in Section B. The staff decided they preferred simply a list of state flowers with their botanical names to which the reader could refer. The reader could then retrieve those he wished by botanical name. Although a slightly longer process of retrieval, it is a satisfactory one assuming there is little call for the information.

Decorative Representations

The third section, I.C., "Decorative representations and applications of plant forms" includes decorative renditions of plants, as mentioned in discussion of Section I.A. It also treats the application of

graphic plant forms (i.e., in the media of fine prints, watercolors, and drawings) to decorative and utilitarian objects. For example, a watercolor of an iris which is intended for reproduction on a greeting card would be assigned the classification C.2.a. for objects of two dimensional interest. A drawing of an art nouveau room with tulip shaped furnishings would be classified under C.2.b. for three dimensional objects.

Section II

This section deals with the growing of plants; Section II.1. with representations of plant environments such as gardens, landscapes and parks; and Section II.2. with horticultural subjects, such as persons engaged in the growing or selling of plants, caricatures of garden activities, and garden structures and tools. The small number of these plant subjects which are currently represented in the collection does not justify further subdivision. However, if necessary in the future, subdivisions can be added.

Section III

The last section, "Plant themes," includes the literary and symbolical aspects of plants, and includes such illustrations as ladies with flower faces, and the Tree of Life. Again, subdivisions could be added in the future, if necessary.

In devising the new scheme a conscious effort was made to overcome the short-

comings of the 1961 scheme insofar as that scheme reflected user's needs and subject content of the collection it was designed to serve. However, the actual success of the new scheme cannot be determined until it is implemented. The Hunt Institute hopes to obtain the necessary funds for implementation of the scheme along with extensive descriptive cataloging according to the standards of the American Association of Museums and the Anglo-American Library Association.* A computer-based catalog for the collection is projected for the future.

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*The following manuals are used as guides: Dorothy H. Dudley and Irma Bezold Wilkinson, *Museum Registration Methods*, Washington, D.C., The American Association of Museums and the Smithsonian Institution, 1958, 1968; and the *Anglo-American Cataloging Rules*, prepared by the American Library Association, the Library of Congress, the Library Association, and the Canadian Library Association, Chicago, 1967, chapter 15: "Pictures, Designs, and other Two Dimensional Representations."

Appendix

Subject Classification Scheme for Original Works of Botanical Art in the Graphic Media

- | | |
|--|-----------------------------------|
| I. Plants identified or unidentified | represented, indicate as follows: |
| A. Portion of plant represented | Quercus alba—root section) |
| 1. Entire plant; specify family, genus or species (e.g., Fagaceae Quercus alba) | 3. Stem |
| 2. Root (for items 2 through 10 subdivide species, or genus if species is unknown, by portion of plant represented, e.g., Quercus alba—root; if section is | 4. Branch |
| | 5. Leaf |
| | 6. Flower |
| | 7. Fruit |
| | 8. Nut |
| | 9. Seed |
| | 10. Other |

- B. Special categories of plants likely to be requested which may or may not coincide with botanical classification
 - 1. Algae
 - 2. Bamboo
 - 3. Cacti
 - 4. Ferns
 - 5. Fungi
 - 6. Grasses
 - 7. Mosses
 - 8. Palms
 - 9. Trees (subdivide by continent, e.g., Trees—Europe)
 - 10. ad.inf. (i.e., additional categories may be added)
- C. Decorative representations and applications of plant forms
 - 1. Decorative representations
 - a. single plant forms
 - b. bouquets and arrangements
 - c. other
 - 2. Applications of graphic plant designs to decorative and utilitarian objects
 - a. objects of two dimensional interest (e.g., carpets, fabrics, printed materials)
 - b. objects of three dimensional interest (e.g., ceramics, coins, jewelry)
- II. Horticulture
 - A. Plant environments including gardens, landscapes, parks, greenhouses, etc. (by name and place, if known, e.g., Royal Botanic Gardens, Kew, England)
 - 1. Plans
 - 2. Views
 - 3. Other
 - B. Horticultural subjects such as garden activities, garden humor, garden structures, (i.e., tool sheds, pavilions, bridges, etc.) garden tools
- III. Plant themes
 - A. Literature, mythology, legends and folklore
 - B. Allegories (e.g., the Four Seasons, Tree of Life, etc.)
 - C. Personifications (e.g., ladies with flower faces)
 - D. Emblems and heraldry, etc.
 - E. Other

Alphabetical Index to Subject Classification Scheme
(Examples Used are Those Illustrated in the Scheme)

Algae	I.B.1.	Fabrics	I.C.2.a.
Allegories	III.B.	Fagaceae Quercus alba	I.A.1.
Applications of graphic plant designs	I.C.2.	Ferns	I.B.4.
Arrangements <i>see</i> Bouquets and arrangements		Flower <i>see</i> species name subdivided by "flower," e.g., Quercus alba—flower	
Bamboo	I.B.2.	Folklore	III.A.
Bouquets and arrangements	I.C.1.b.	Four Seasons	III.B.
Branch, <i>see</i> species name subdivided by "branch," e.g., Quercus alba—branch		Fruit <i>see</i> species name subdivided by "fruit," e.g., Quercus alba—fruit	
Bridges	II.B.	Fungi	I.B.5.
Carpets	I.C.2.a.	Garden activities	II.B.
Ceramics	I.C.2.b.	Garden humor	II.B.
Coins	I.C.2.b.	Garden structures	II.B.
Decorative representations	I.C.1.	Garden tools	II.B.
Details of plants <i>see</i> genus or species name subdivided by plant details (e.g., Quercus alba—root)		Gardens	II.A.
Emblems and heraldry	III.D.	Grasses	I.B.6.
Entire plants <i>see</i> family, genus or species names		Heraldry <i>see</i> Emblems and heraldry	
		Horticulture	II.
		Humor (garden) <i>see</i> Garden humor	
		Jewelry	I.C.2.b.
		Landscapes	II.A.
		Leaf <i>see</i> species name subdivided by "leaf," e.g., Quercus alba—leaf	
		Legends	III.A.
		Literature	III.A.
		Mosses	I.B.7.
		Mythology	III.A.

Nut *see* species name subdivided by
 "nut," e.g., *Quercus alba*—nut
 Pavilions
 Palms
 Parks
 Personifications
 Plans
 Plant details *see* genus or species
 name subdivided by plant detail
 (e.g., *Quercus alba*—root)
 Plant environments
 Plant names *see* family, genus or
 species name
 Plant sections *see* genus or species
 name subdivided by plant section
 (e.g., *Quercus alba*—root section)
 Printed materials
Quercus alba
Quercus alba—branch
Quercus alba—flower
Quercus alba—fruit
Quercus alba—leaf
Quercus alba—nut
Quercus alba—root
Quercus alba—seed
Quercus alba—stem

II.B.
 I.B.8.
 II.A.
 III.C.
 II.A.1.

 II.A.

 I.C.2.a.
 A.1.
 I.A.4.
 I.A.6.
 I.A.7.
 I.A.5.
 I.A.8.
 I.A.2.
 I.A.9.
 I.A.3.

Root *see* species name subdivided by
 "root," e.g., *Quercus alba*—root
 Royal Botanic Gardens, Kew,
 England II.A.
 Sections of plants *see* Plant sections
 Seed *see* species name subdivided by
 "seed," e.g., *Quercus alba*—seed
 Stem *see* species name subdivided by
 "stem," e.g., *Quercus alba*—stem
 Tool sheds II.B.
 Tree of Life III.B.
 Trees *see* subdivision by continent,
 e.g., Trees—Europe
 Trees—Europe I.B.9.

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Selecting a Computer Terminal for the Library

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■ With the increased use of on-line systems in libraries, the problem arises as to which computer terminal to select. Such topics as hardcopy versus CRT terminal, type of character font and format,

size of screen display, system compatibility, storage and editing capability, and cost are presented as points to be considered in any terminal selection process.

COMPUTER terminals are utilized in many types of organizations, such as the insurance industry where they are used to assist in inputting raw data to the computer; and in education where they are used to assist in the instructional process, specifically through computer-assisted instruction (CAI) and computer-managed-instruction (CMI) programs. Terminals have become more common in libraries where they are used in on-line library processing systems, such as cataloging and circulation, and in accessing computer networks in order to perform on-line bibliographic search and retrieval from such data bases as ERIC and NASA.

Today not only must the librarian or information specialist be familiar with procedures and methods for automating library processing functions and with a bibliography and access information to available data bases, but also with the selection criteria for an important hardware item, the computer terminal.

Types of Terminals

A visit to a computer equipment conference or a glance through a popular computer periodical, such as *Datamation*,

indicates that many types and models of terminals exist. These computer terminals can be categorized in various ways. In simplest terms, terminals can be categorized as being a typewriter or hardcopy terminal or a visual display or CRT (cathod-ray-tube) terminal. Frequently, terminals are categorized as teletype, IBM 2741, or IBM 3270 compatible. Teletype compatible terminals use ASCII code and operate at 10 to 30 cps, 2741 compatible terminals use EBCDIC code and operate at 15 cps, and 3270 terminals use EBCDIC code and operate at 120 cps. ASCII (USA Standard Code for Information Interchange) and EBCDIC (Extended Binary Coded Decimal Interchange Code) refer to the standard code structures which are used to represent characters, and the 10, 15, 30, or 120 cps refer to the number of characters transmitted per second.

Selection Criteria

Terminal selection should be accomplished using the systems approach. An individual or library must determine its own needs and requirements and then perform the necessary trade-off study to ascertain

which terminal is best suited for the unique situation. But there are a number of questions which should be asked in any terminal selection process and which can be used to form the basis for establishing a list of terminal needs and requirements.

Type of copy. Possibly the first question to ask is whether printout or visual display is desired. In many situations it is essential to provide the patron or client with a hardcopy of the search "hits." If hardcopy is needed, there are additional selection issues. Impact terminals, such as the IBM 2741 and the Anderson Jacobson 841 can use any paper for output; in fact, even the reverse side of old printouts can be used. On the other hand, those terminals which use a thermal print process, such as the Texas Instruments Terminal, require special heat sensitive paper—and this can be an expensive supply item. But obviously, one must balance this additional supply cost with the fact that most thermal printer terminals, as well as electrostatic and ink-jet terminals, operate at 30 cps versus the slower rate of 15 cps for impact printer terminals. However, improved impact terminals, such as the IBM 3767 Communications Terminal, exist and these offer increased speed and a variety of special features, such as much quieter operation and bidirectional printing.

If hardcopy is not essential, a CRT terminal should be selected. If occasional hardcopy is required from a CRT display, either an impact or thermal printer attachment can be added to the terminal system. But, naturally, adding a printer increases the cost of a terminal system. In regard to the hardcopy or visual display terminal, it appears (from the author's own observations) that CRT terminals without printer attachments are popular for on-line library processing functions, and thermal hardcopy typewriter terminals are popular for those applications which require searching bibliographic data bases.

In selecting a terminal, one should consider the character font and format. For example, are upper and lower case characters needed? Or would upper case suffice? What is the keyboard format? In other words, is a regular alpha-numeric

keyboard sufficient, or is an additional numeric character set needed? An additional numeric set of keys may be important if there is a large amount of numeric input. But this is probably not the case in most library applications.

If a CRT device is desired, certain points should be considered. The display should have adequate contrast; the display itself should be crisp and stable; and the display size should be suitable for the amount of data. There are numerous screen display sizes, such as 16 lines by 64 characters per line and 24 lines by 80 characters per line. A small display size could mean that a complete bibliographic citation may not be visible on the screen, that is, if it exceeds the maximum number of lines of screen display. Of course, a scrolling feature may be added to the terminal. As new information appears at the bottom of the screen, information at the top is eliminated from the screen display. Scrolling allows information "scrolled" off the top to be redisplayed on the screen. This scrolling feature requires an internal buffer or memory area on the terminal device.

An additional question to ask regarding a CRT terminal is what kind of cursor control is available? The cursor, which acts as a tab on the visual screen display, should be movable to any position on the screen to allow for maximum formatting flexibility. Are protected fields required? The operator can input data using a preformatted display which is user programmable. The preformatted fixed fields of data are protected from being erased or written over by the operator. Some CRT terminals can transmit only the inputted variable data, while other terminals have the option of sending the entire contents of the screen display to the CPU. Various display terminals, such as the Beehive Super Bee and the Delta Data 4000, incorporate these transmit data and screen and field protect features, as well as other special edit and function capabilities, such as tab and insert/delete characters.

Compatibility. Is the terminal under consideration compatible with the computer, the network, and data base? For

example, certain data bases, such as LEXIS, require special key functions on the terminal. Probably the best approach in regard to these types of questions is to attempt to use the terminal with the system or data base. Naturally, data base vendors or others involved in marketing on-line systems will provide information as to which terminals are appropriate and popular with their systems. For example, SDC and Lockheed indicate that the popular terminals with their systems include: Anderson-Jacobson; Computer Devices; Datapoint; Execuport; Hazeltine; IBM 2741; NCR; Novar; Teletype; Terminet; and Texas Instruments.

What method will be used as a communications interface? Although terminals can be wired directly to the computer, the most common access to the computer is through a device which allows the terminal and computer to transmit data across communications lines. One such communications interface device is the acoustic coupler, a device which translates terminal signals into analog signals for transmission over telephone lines and also translates analog signals transmitted over telephone lines back into terminal signals. This acoustic coupler is physically connected to the terminal via an easily attached cable. After dialing the computer, the telephone receiver is placed in the coupler and the terminal is connected via the telephone to the computer. Another communication interface device which is more expensive yet more reliable in its ability to filter out line noise is the dataset, a self-contained telephone and coupler unit which is directly connected to communications lines. These communications interface units are additional cost items which must be considered in any terminal system. It should be noted that there are terminals available, particularly portable type terminals, which have a coupler already built into the terminal unit. This combined terminal-coupler approach may have distinct advantages to certain users.

Terminals can have built-in storage and editing capabilities. These features increase the cost of the terminal but achieve certain benefits. For example,

storing complicated searches on a cassette for later playback eliminates the need to rekey the entire search. Large amounts of data can be input using the terminal in an off-line mode. The data are input and edited, and stored on a cassette for later transmission to the computer. This approach provides the flexibility of an "intelligent" terminal system, yet reduces computer connect time charges since the terminal is connected to the computer only at the time of transmission. Also, in those cases when the computer system goes down, the input data can be recouped if they have been recorded on a cassette.

Cost. Cost is obviously an important consideration in any selection process. Firstly, one needs to determine whether to lease or purchase a terminal. The outright purchase of a terminal may achieve some cost savings when compared to the costs associated with an extended lease arrangement. Lease to purchase costs for terminals tend to equal each other in from 24 to 30 months. In some cases, the purchase of less expensive terminals recover the lease cost in from 12 to 16 months. More sophisticated terminals may be wisest to lease since the user who chooses such a terminal probably stands a higher chance of requiring additional capabilities, such as cassette or printer attachment. It must be noted that with an outright purchase of a terminal, one must assume a maintenance contract. Also, with the purchase of a terminal there is always the problem that a newer, more sophisticated, and less costly terminal may appear on the market. Lastly, two important points to remember in regard to terminal costs are that 1) special features increase costs, and 2) lower terminal speed, such as 10 cps on a teletype terminal as compared to 30 cps on a CRT terminal, increase cost for computer connect time and staff time.

Other considerations. Other computer terminal selection points to consider are: What type of error detection features are available on the terminal? What is the servicing, maintenance, and reputation of the vendor? For your organization is security or portability of the terminal more important? If a terminal is to be located in an

unsecured public area, it may be advantageous to have a large, bulky, non-moveable terminal. On the other hand, portability and compactness have definite advantages—the librarian or information specialist can take the terminal to a remote location, such as individual user's office, to perform a bibliographic search.

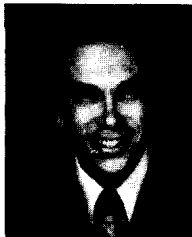
Conclusion

Obviously, there are many questions to ask in regard to selecting a computer terminal for a library. Hopefully, the questions raised in this article will help the individual library formulate its own terminal needs and requirements. It probably could be stated that most libraries are just beginning to use on-line systems and services. Hence, consider the future in any terminal selection process. Consider selecting a terminal device not just for the present application, but also for any future expansion of the library's on-line capabilities.

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Special Libraries in the Philippines

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■ Statistics from 229 special libraries indicate that a large majority are government supported, with 70% having collections of fewer than 5,000 titles. Sixty percent fall roughly in the subject areas of business-finance, medicine-public health, science-technology, and social sciences. Outstanding features and activities of selected libraries illustrate the current scene in this rapidly developing country. Problems frequently result from restric-

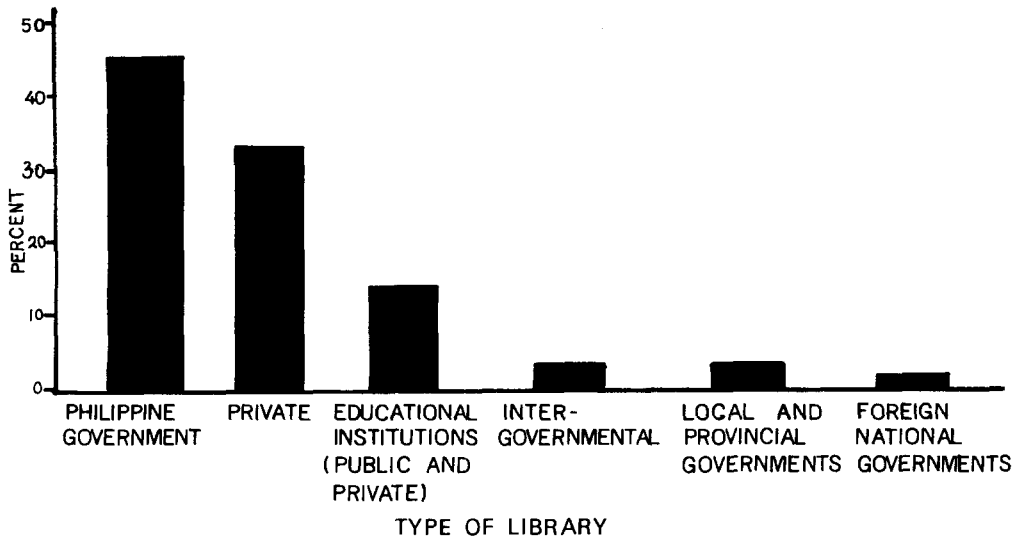
tive government regulations, lack of adequate financial support, and difficulties with mail and other communication services. The Association of Special Libraries of the Philippines is working actively to encourage the establishment and development of special libraries and to improve the status of librarians by, for example, adopting standards and increasing opportunities for continuing education.

THE REPUBLIC of the Philippines is an archipelago of more than 7,100 islands, lying about 500 miles off the southeast coast of Asia. Under Spanish and American control for many years, the Philippines has been influenced by Western Culture more than other Asian nations. It is the only Roman Catholic country in Southeast Asia, and English is one of the official languages. With more than forty universities and hundreds of private colleges, the Philippines is among the most educationally advanced in Asia. A by-product of this proliferation of institutions has been the establishment of a large number of academic libraries, which, along with special libraries, are the most well-developed in the country (1). Public library development has been slow and fraught with difficulties (2).

Special libraries in the Philippines, as elsewhere, are influenced by general eco-

nomic growth and development and by national priorities. The country's economy, based on agriculture, fishing, and forestry, is fairly healthy at present; however, the government of President Ferdinand Marcos faces numerous problems. Unemployment and underemployment together stand at 25%. Moslem unrest in the South continues, despite efforts to come to terms with this minority group. Poverty is widespread, and the disparity between rich and poor is increasing. In response, the government has made one of its top priorities a massive land redistribution program, which has made substantial progress in recent years (3). With other, more pressing considerations, the government has placed little importance on library development and information services. The most outstanding special libraries are those which have additional outside support from foundations or

Figure 1. Types of Philippine Special Libraries Characterized by Their Source of Support



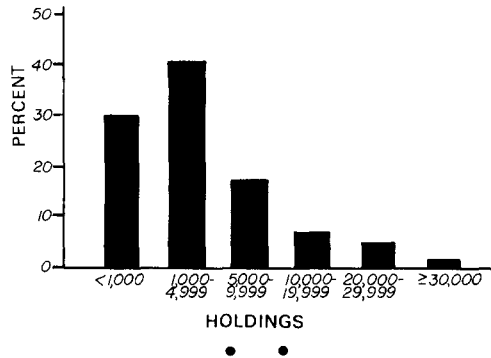
international agencies, such as the U.N., or are connected with a project or institution supported by several countries.

Overview

The Association of Special Libraries of the Philippines (ASLP), founded in 1954, is an active and enthusiastic group of special librarians who have done a great deal to improve library service in the country. One of their recent publications is the *Directory of Special Library Resources and Research Facilities in the Philippines* (4). The statistics which follow are based on this *Directory*.

If one excludes *Directory* entries referring to general collections of universities and colleges, a total of 229 special libraries (including university branches) remains. Figure 1 shows types of these libraries as classified by their source of support; Figure 2 illustrates size in terms of holdings. Information for the *Directory* was obtained from questionnaires sent to all known special libraries in the country; the low number of local and provincial government libraries suggests that data are probably incomplete for institutions outside the Metro Manila area. Note that the single largest category is that of li-

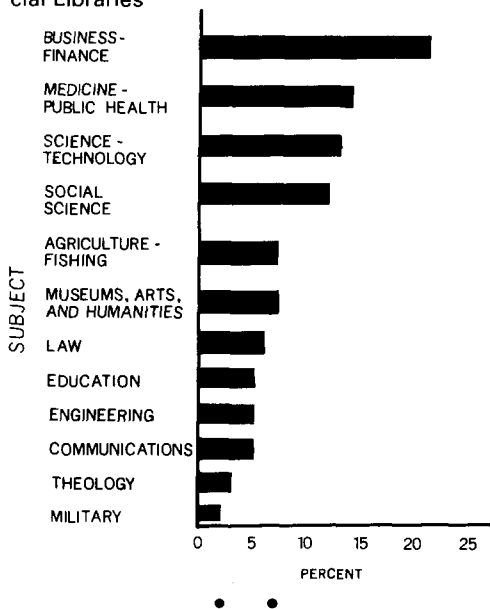
Figure 2. Number of Titles Held by Philippine Special Libraries



braries within national government agencies and that 70% of Philippine special libraries have fewer than 5,000 titles.

Figure 3 roughly illustrates the major subject areas of Philippine special libraries. In a few cases, the distinctions are somewhat arbitrary, as a given library appears in only one category, regardless of what may be a rather broad collection. The four categories of business-finance, medicine-public health, science-technology, and social science account for 60% of the total. Note that the number of libraries relating to agriculture and the fishing industry is relatively high, reflecting

Figure 3. Subject Profile of Philippine Special Libraries



the importance of these activities to the country's economy.

Many business and financial agencies having libraries are concerned with Philippine development and investments, an area of considerable interest to the government and one that is significant to the country's improving economy. These include, for example, the National Investment and Development Corporation and the government's National Economic and Development Authority (NEDA). The NEDA Library is supported by the Philippine government, the U.N. Development Programme, the Ford Foundation, and the Asia Foundation. The main library in Manila serves as a centralized technical processing facility for the twelve regional NEDA libraries scattered about the country. This kind of cooperative effort, particularly needed in developing countries, is rare in the Philippines.

The outstanding library in the country in the area of science and technology is that of the National Science Development Board (NSDB). As the primary scientific body of the government, the NSDB is responsible for formulating policy and establishing priorities in science and technology; developing programs for manpower training and utilization; awarding

grants, scholarships, and prizes; and coordinating and promoting cooperation in science and technology between the government and private enterprise (5). Located in fine, new quarters in a suburb of Manila, the NSDB Library contains the newer, more heavily used materials in science and technology in contrast to the National Institute of Science and Technology in central Manila, where older material is located. The institute is one of several NSDB agencies; others are concerned with volcanology, textile research, pollution control, forestry, food and nutrition, and inventions. In addition, the NSDB has several "attached" agencies and twelve regional field offices.

The main NSDB Library has had a significant influence on bibliographic control in the Philippines, developing, for example, a union list of serials for their libraries which they would like to expand to include the entire country. NSDB goals of avoiding duplication of foreign journals and increasing access through interlibrary loan, familiar to U.S. librarians, are more difficult to achieve in the Philippines than in the U.S., due to various governmental regulations discussed later. The NSDB Library is actively investigating possibilities for microwave communication in a bibliographic network, perhaps linked to the Southeast Asia Regional Center for Research and Graduate Studies in Agriculture, the Association for Scientific Cooperation in Asia, or the Australian Council for Scientific and Industrial Research Organizations. Eventually, the NSDB Library system in science and technology should serve as a model for other sectors, such as the social sciences.

Other Government Libraries

The employees of most government agencies have some kind of library service available to them. Many of these libraries are small and highly specialized; in general, their access to holdings of other libraries is limited, in contrast to special libraries in the U.S.

The new library of the National Computer Center (NCC) serves the Center and the National Computer Institute, the

research and education arm of the center. The center is the central agency for governmental data processing activities and acts in an advisory, educational, and research capacity in such areas as systems analysis, management information systems and EDP for other government agencies. Partially supported by the U.N. with a recent grant from the Asia Foundation, the NCC Library has the best computer science and data processing collection in the country. Since the NCC Library has access to computation facilities, it is one of the few Philippine libraries considering the installation of automated procedures in technical services and information retrieval.

An example of the country's smallest and most highly specialized government libraries is that of the Davao Research Center of the Philippine Coconut Authority. Located far south, a few miles from Davao, Mindanao, in the world's largest coconut experimental and research facility, the library supports a fascinating program which ranges from cross-breeding experimentation to the development of improved drying techniques for copra. (Although there may be disadvantages in being isolated in the midst of acres and acres of coconut trees, a definite fringe benefit for the center's librarian is access to large quantities of buko, the tender young coconut meat which is one of the nation's most delightful delicacies!)

Two other excellent government libraries which are particularly impressive are those of the Central Bank and the Population Center Foundation, both in Metro Manila. The latter represents the Philippines in the Association of Population Libraries and Information Centers. The libraries of both NSDB and the Population Center Foundation offer their users a manual SDI service, unusual in the Philippines.

Libraries in the Private Sector

Special libraries of privately owned organizations vary widely in size and support. They may be connected with Philippine business and industry such as the

library of the Philippine Air Lines and the several libraries supported by the large, diversified San Miguel Corporation. They may be associated with law firms or with foreign or multinational corporations. They may be those of museum and archival collections such as the Ayala libraries or the Conrado Benitez Memorial Library, located in the beautiful old Benitez family home. Wherever they are found, their support and development, as in the U.S., depend on the importance which the parent organization places on information services.

Intergovernmental Libraries

Although few in number, special libraries of organizations supported by several countries are some of the most outstanding and influential in the Philippines. The Asian Development Bank (ADB) Library, for example, is a model of excellence in both service to users and physical facilities. The ADB is supported by its forty member countries, of which twenty-six are in the Asian region (6). The library actively participates in projects of the Society for International Development, supplying reference service and materials in their worldwide network, and is particularly noted for an excellent collection of government publications and more than 80,000 pamphlets, thoroughly indexed and organized.

The International Rice Research Institute (IRRI) at Los Baños is supported by the governments of Australia, Japan, and the Philippines and by the Ford and Rockefeller foundations. The IRRI was established as an experimental agency engaging in a variety of research projects and in training of agricultural experts from many parts of the world in rice cultivation and research methods. Its excellent, highly user-oriented library, praised by Kaser (7) as one of the most outstanding in the country, serves rice researchers all over the world with loan and photocopy service, reference, and with the invaluable *International Bibliography of Rice Research*, based on library holdings. The IRRI office in Tokyo translates and transliterates bibliographic information

(more than 45% of the material in the *Bibliography* is Japanese) and will arrange for translation of articles when necessary. The IRRI Library is the AGLINET (Agricultural Libraries Network) reference center for Southeast Asia and the worldwide center for rice information.

Problems

Philippine librarians are, of course, plagued by many of the same problems faced by their colleagues in the U.S., such as escalating serial prices or the need to convince management of the value of information services. But they also have some rather unique problems unheard of in this country. For example, the principle of *accountability*, common in many Asian countries, applies to the libraries of all government or public agencies. This means that the individual librarian is held personally responsible for the loss or damage of library material! Books are classified as "equipment" in government property inventories, and, although a low annual percentage of loss is usually allowed, the librarian must pay for anything over this percentage. Weeding of collections must be approved by the auditor, and even donations and gifts are subject to accountability. Nor can obligations be avoided by retirement or death—retirement checks are withheld until restitution is made, or payment may be deducted from one's estate. How anxious would American librarians be to form resource sharing arrangements if we were made to pay personally for any lost or damaged material?

During a recent ASLP Board meeting, the question of accountability arose once again, and members discussed some possible approaches which might be tried. Bureaucratic red tape is always difficult to cut, and many ASLP members feel that the situation is almost hopeless. On one point all can agree—library cooperation and resource sharing will never be a reality in the Philippines until something is done about this archaic rule which treats professional librarians as potential petty thieves.

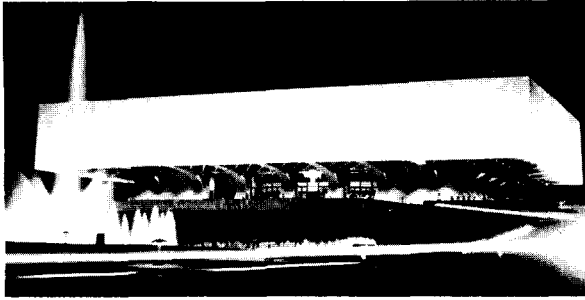
Unreliable mail service creates additional problems for special librarians—too

often, incoming packages get lost or delayed or are tampered with by postal employees. Air mail from abroad is quite expensive, and surface mail slows materials acquisition by approximately two months. Clearance through customs may be difficult for other than standard, printed material. Microfiche shipments, for example, may be held up for purposes of national security. (The story of the ERIC delivery which was refused by a customs agent and returned to the U.S. is actually true! After its third trip across the Pacific, it was accepted, arriving in the library some eight months late.) And another library's shipment of photographic chemicals was ruined when, contrary to written instructions with the shipment, a customs agent opened various containers and exposed the contents to light.

Expenditures involving foreign currency require written approval of the Central Bank, which, although a rather simple procedure, tends to delay material from abroad even more. Many librarians dread this bit of red tape and appreciate the services of jobbers like the Dyvers Publications Corporation, which allow payment in pesos for material from abroad. Although dollars are in short supply, funds for materials and services payable in local currency are more readily available. Low costs of labor intensive activities, such as that of binderies, would seem a bargain to U.S. librarians.

The Philippines, as other developing countries, does not yet have a high degree of bibliographic control. The library of the University of the Philippines has been a leader in this area, publishing, for example, bibliographies of Filipiniana and indexes to Philippine periodical literature, based on materials owned by the library. The University also sponsored the first union list of serials in the country (8), and, more than ten years ago, the library began the excellent *Philippine Bibliography* (9). In the bibliographic control of government documents, less has been accomplished. The Philippines has no publication which is equivalent to the *Monthly Catalog* and no usable document classification system. Existing bibliographies of documents are

Figure 4. Cultural Center, Manila



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quite incomplete. Acquisition is direct from the issuing agency, since a central office, such as that of the U.S. Superintendent of Documents, has not been established.

Communication facilities which U.S. librarians take for granted are lacking in the Philippines. The telephone system is inadequate, and, at times, it is easier to use messengers. TYMSHARE or its equivalent is not available, so on-line data base searching using U.S. installations would be prohibitively expensive.

Finally, problems may be caused by adverse weather conditions. The earthquake and typhoons of 1976 are extreme examples. However, on a daily basis, librarians must deal with heat and high humidity, frequently unaccompanied by sufficient air conditioning. Coupled with the lack, often, of funds for microfilming material such as newspapers, preservation of collections is difficult indeed.

Standards

An area of current concern to ASLP members is that of standards for special libraries. A draft of tentative standards (10) has been prepared by members of an ASLP committee, who first surveyed special librarians in the country to attempt to profile types of libraries and librarians. These standards include the general objectives of special libraries, the place of the library in the organization which it serves, collection development, staff and continuing education, the budget, services offered by the library, and physical quarters and equipment. This excellent,

well-organized statement will be of particular benefit in a country where many practitioners are relatively isolated and where considerable education of management and various government authorities is clearly needed.

Conclusion

Special libraries in the Philippines may well be on the verge of a period of expansion and long-deserved recognition. The government will inevitably realize that the New Society's many social, economic, scientific, and cultural programs must be supported by adequate information resources to be successful. Not only is a greater financial commitment on the part of the government necessary, but also the kind of national planning recommended by Kaser (7) remains the single most critical requirement for development of libraries of all types:

It is urgent that national surveys, comprehensive planning, and a new legislative approach to library development take place in order to assure the eventual creation of a strong national library program throughout the country.

Certainly, appropriate library legislation would include the elimination of the overwhelming obstacle of accountability, which so restricts library cooperation and resource sharing. This false economy costs the country much more than a few lost books. A cooperative, national network of all types of libraries, perhaps beginning with the many libraries in the Metro Manila area, would be invaluable to all concerned.

Some encouraging trends appear. Special librarians demonstrate an intense desire for continuing education, and opportunities for this kind of professional activity are increasing. The 1976 ASLP Workshop on Indexing and Abstracting, for example, was highly successful, with attendance much greater than anticipated. Librarians are quite concerned about improving services to users and would like to take advantage of new technologies. The quality of library education continues to improve, as does the status of professional librarians.

Overall, Philippine special librarians have made impressive gains, working under handicaps which would have frustrated and discouraged a less resourceful group. And somehow they have managed to keep a sense of humor and perspective which many in the U.S., accustomed to an easier climate of cooperation and support, would have lost long ago. This visitor has the greatest admiration for her colleagues in the Philippines.

In 1976, stimulated by such factors as the discovery of oil in Palawan, tremendous gains in tourism, flourishing construction and services sectors, and continually increasing foreign investments, the Philippine economy is recovering from the recent worldwide recession, and the outlook is brighter than it has been for several years. Hopefully, the future of special libraries is equally bright.

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1977 Candidate for SLA Office

For President-Elect



FIELD



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SLA Division Activities. She was local representative for the Business and Finance Division for the Detroit 1970 Conference; coordinated videotape projects for the Division (1970 and 1972); served as Chairman-elect and bulletin editor (1971/72) and as Chairman for two terms (1972/74).

Association-Level Activities. She was a member of the Education Committee (1974/75); a member of the Awards Commit-

tee (1976/77); Conference Advisory Committee (1975/77); Special Committee on Discontinuance of Host Chapters (1976/77); Division Cabinet Chairman-Elect (1975/76) and Chairman (1976/77); Special Committee on Division Finances (1976/77). A member of SLA since 1962.

She is a co-author of *Bibliography of International Finance* (1971). She has lectured on new businesses and international business services. This includes SLA's Continuing Education Seminar in Toronto in 1974; the Illinois Chapter Seminar, "Services for the Seventies: A Reference Update" (1973); and Chicago (1975). She has also lectured on government documents and special librarianship. In 1974 she was the John Cotton Dana Lecturer at the University of Iowa.

She is a member of the American Library Association and the American Association of Information Scientists.

Vivian D. Hewitt is librarian, James Thomson Shotwell Library, Carnegie Endowment for International Peace, New York. She received the AB with honors in French and Psychology from Geneva College (1943), the BS in LS from Carnegie Institute of Technology Library School (1944), and has taken graduate courses in community organization at the University of Pittsburgh (1947/48) and various continuing education seminars in New York and Washington, D.C.

In 1945 she became junior assistant and special worker with young adults, Carnegie Library of Pittsburgh, Wylie Avenue Branch. In 1947 she was appointed senior assistant at the Wylie and Homewood Branches. In 1949 she accepted the position of instructor-librarian, School of Library Service, Atlanta University, Atlanta, Ga. She was researcher and assistant to the director, Readers' Reference Service, Crowell-Collier Publishing Co., New York (1953/55). In 1955 she became librarian, Rockefeller Foundation, New York, and held this post until 1963.

SLA Chapter Activities. She was secretary-treasurer, Biological Sciences/Hospital

Group, New York Chapter (1961/63); member of the SLA Fiftieth Anniversary Committee (1964/65); chairman, Hospitality Committee (1964/65); Program chairman (1964-65 and 1967/69); deputy conference chairman (1967); president-elect (1969/70); president (1970/71); and coordinated a Chapter seminar on planning and equipping the special library (1970).

SLA Division Activities. She is a member of the International Affairs Section of the Social Sciences Division and the Museums, Arts & Humanities Division.

Association-Level Activities. She was the Non-Governmental Organizations Observer to the United Nations (1964/70); SLA representative to Pacem In Terris Convocation (1965) and to the White House Conference on International Cooperation Year (1965); a member of the International Relations Committee (1964/65, 1970/73), and chairman (1965/69). She has been the SLA Representative to IFLA since 1970. A member of SLA since 1952.

She is a member of the American Library Association, on the Board of Directors of METRO (New York Metropolitan Reference and Research Agency) and of Windham Child

Care. She was the U.S. Representative to the International Federation of Documentation Developing Countries Committee.

In 1958 she served as librarian/consultant, Mexican Agricultural Program of the Rockefeller Foundation, Mexico City. She was a member of the selection panel to choose a librarian for the Nigerian Institute of International Relations (1966).

She has contributed chapters to the following books: *The Black Librarian in America; What Black Librarians Are Saying; New Dimensions for Academic Library Services*, and *A Century of Library Service*. She was the John Cotton Dana lecturer at Texas Women's University in 1968. That year she also gave a continuing education seminar at the SLA Montreal Conference. She has lectured on special librarianship at Atlanta University, North Carolina Central University, St. John's University, and the University of North Carolina.

She won a creative writing award from Geneva College and was awarded the Community Service Merit Award of the United Fund of Greater New York, 1965/75.

For Chairman-Elect of the Chapter Cabinet



GASAWAY



PRIVAT

Laura N. Gasaway is director, Law Library, and Associate Professor of Law, University of Oklahoma, Norman. She received a BA (1967) and MLS (1968) from Texas Women's University, and a JD from the University of Houston (1973).

She was assistant catalog librarian, University of Houston (1968/69), and catalog/circulation librarian (1969/72). From 1972 to 1973 she was acting law librarian, then

law librarian and assistant professor of law at the University of Houston (1973/75).

SLA Chapter Activities. She was Public Relations Committee chairman for the Texas Chapter (1970/72), bulletin editor (1971/72), first vice-president/program chairman (1972/73), Texas Chapter president (1973/74).

SLA Division Activities. A member of the Social Sciences and Publishing Divisions, she served as a panel member at the 1976 Conference Publishing Division Program on Book Selection.

Association-Level Activities. She was the chairman of the Special Committee on the Pilot Education Project. She joined SLA in 1967.

She is a member of the American Association of Law Libraries, the American Bar Association, the Oklahoma Libraries Association, and the State Bar of Texas. She edited the brochure "Equal Pay for Equal Work; Women in Special Libraries," and the AALL "Recruitment Checklist, 1974." She is the author of "New Community Districts: A Proposal to Aid

New Town Developers," *Houston Law Review* (1972). She wrote the chapter on "Shepards Citations" in the *Fundamentals of Legal Research*, Assignment Book (1973) and "Non Book Materials: A Panel," which appeared in *Law Library Journal* (1972).

She is a member of Beta Phi Mu.

Jeannette M. Privat is assistant vice-president and librarian, Seattle First National Bank. She received the BA in Business Administration (1960) and the MLS (1969) from the University of Washington.

She was assistant librarian, United Control Corporation, Seattle (1960/64) and librarian (1964/68).

SLA Chapter Activities. She was secretary-

treasurer of the Pacific Northwest Chapter (1966/67), Membership Committee chairman (1967/68), Publicity Committee chairman (1969/70), president-elect (1970/71) president (1971/72), and Consultation Committee chairman (1973/75).

SLA Division Activities. In the Business and Finance Division, she was secretary (1970/72).

Association-Level Activities. She is a member of the Education Committee (1974/77) and is presently chairman (1976/77). She has been a member of SLA since 1965.

She is a member of the National Micrographics Association and the National Association of Bank Women. She wrote the text for the brochure "There's a Special Library in Your Stars."

For Chairman-Elect of the Division Cabinet



SCHECHTMAN



YAGELLO

Joan Schechtman is manager, Library and Technical Information Service, Union Carbide Corporation, Tarrytown, N.Y. She received the BA cum laude in chemistry from Hunter College (1954) and the MSLS with honors from Columbia University (1964).

She was a chemist for Boyce Thompson Institute, Yonkers, N.Y. (1954/58). From 1958/61 she was assistant supervisor, Manufacturing Departments Technical Information Service, Shell Oil Company, New York; research librarian, Merck, Sharp & Dohme Research Laboratories, Rahway, N.J. (1961/63); head librarian, Union Carbide Research Institute, Tarrytown (1963/68).

SLA Chapter Activities. She was president of the Hudson Valley Chapter (1973/74); member of the Program Committee (1974/75); and member of the Budget Committee (1976/77).

SLA Division Activities. She is a member of

the Chemistry Division and served on the Tellers Committee (1966); chairman-elect and program chairman (1974/75), and chairman (1975/76).

Association-Level Activities. She was a member of the New York 1966 Conference Registration Committee; a member of the Joint Cabinet Special Committee on Local Subject-Oriented Groups (1975), and a member of the SLA Advisory Committee for the National Center for Education Statistics/SLA Contract, "Special Libraries in Commerce and Industry" (1976/77). She has been a member of SLA since 1958.

She is a member of the American Society for Information Science, American Chemical Society and the American Association for the Advancement of Science. She was the co-author of several technical papers during her career as a chemist.

She is a member of Phi Beta Kappa and Beta Phi Mu.

Virginia E. Yagello is head, Chemistry and Physics Libraries, and associate professor of library administration, Ohio State University Libraries, Columbus. She received the BA from Western Reserve University (1944) and the MLS from Carnegie Tech Library School (1950).

She served as young adult librarian, Enoch Pratt Free Library, Baltimore, Md. She was a USAREUR Special Services librarian in France, Germany, and Italy (1954/59);

Southern European Task Force, Command librarian (1959/61). At Ohio State she began as assistant to the supervisor of Department Libraries (1961/63); then head, Chemistry Library; assistant professor of library administration (1967/72).

SLA Chapter Activities. She was president-elect of the Dayton Chapter (1970/71) and president (1971/72); member of the Public Relations Committee. (1968/70); member, Recruitment Committee (1973/74); member, Nominating Committee (1973/74); member, *Chemical Abstracts* Workshop Committee (1976); and a member of the Annual Workshop Committee (1975/76).

SLA Division Activities. She is a member of the Chemistry and Physics-Astronomy-Mathematics Divisions. She served as chairman-elect (1973/74) and chairman (1974/75) of the Chemistry Division.

She is a member of the Academic Library Association of Ohio; the American Chemical Society, Chemical Information Division; American Society of Information Scientists; The Franklin County Library Association. She

was a member of the State of Ohio Library Standards and Planning Workshop Committee (1972); the State of Ohio Interlibrary cooperation Planning Institute (1975); the Planning Committee of Midwest Academic Librarians Conference (1974/75).

She has reviewed books for *Library Journal*, *Reference Services Index* and *Serials Reviews*. Among her articles are the following: "The Effect of Reduced Loan Periods on High Use Items," with Gerry Guthrie, *College and Research Libraries*; "The Model Library Program of Project Intrex," *American Journal of Pharmaceutical Education*; "Increasing User Participation in Chemical Titles Search Program," in *Quantitative Methods in Librarianship; Guide to Literature of Chemical Engineering*, ASEE, ESLD (1970); *The Charles Henry Shaw Memorial Collection on the History of Science: A Centennial Booklist*, (1970); *Monographs Written by the Chemistry Faculty: 1870-1970, a Centennial Booklist* (1970); "Early History of the Chemical Periodical," *Journal of Chemical Education* (1968).

For Directors (1977/80)



DODD



HENDERSON



KING



SCHILD

James B. Dodd is associate professor and coordinator of Service to Business and Industry, Georgia Institute of Technology Library. He received the BS (1948) and MS (1950) in education from Southern Illinois University; the MSLS from the University of Illinois (1952).

He was initially a secondary school teacher and head, Language Arts Department, Olney, Ill. (1948/51). He was assistant librarian (1952/53) and librarian (1953/55), National Testing Station Library, U.S.A.E.C., Idaho Falls, Idaho; head, Information Services Section, Babcock & Wilcox Company, Atomic Energy Division, Lynchburg, Va. (1955/62). He was assistant professor and science librarian, Northern Illinois University, De Kalb, Ill. (1962/67). He held the position of graduate librarian, Georgia Institute of Technology from 1967 to 1968, at which time he assumed his present position. He has held several other professional positions. Among them are instructor, library science, University of Virginia, Division of Extension and General

Studies (1961/62) and visiting lecturer in librarianship, Emory University (1972).

SLA Chapter Activities. He is a member of the South Atlantic Chapter and served as vice-president (1969/70) and president (1970/71). He held the post of Public Relations chairman (1968/69; 1975/76); member, Education Committee (1971/73); Recruitment and Membership chairman (1972/73; 1974/75); Program chairman (1973/74); and member, Directory Committee (1975/76).

SLA Division Activities. He is a member of the Business and Finance, Nuclear Science and Science-Technology Divisions. As a member of the Metals/Materials Division, he was bulletin editor (1958/61); chairman-elect (1961/62); chairman (1962/63); and duplicate exchange chairman (1965/67).

Association-Level Activities. He was a member, Nominating Committee (1974/75). He has been a member of SLA since 1955.

He is a member of the American Library Association, Southeastern Library Association, and the Georgia Library Association. At various times in the past he held active positions in the Virginia and Illinois Library Associations.

He was editor of the *Directory of Libraries and Library Personnel in and around Lynchburg, Virginia* (1960). From 1966 to 1967 he was associate editor of *Illinois Libraries*. He was editor of the Northern Illinois University Branch of the *A.A.U.P. Newsletter* in 1966. His articles have appeared in *Special Libraries and Virginia Librarian*.

Floyd L. Henderson is librarian, U.S. Department of Agriculture Forest Service, North Central Forest Experiment Station, St. Paul, Minn. He has a BA in Business Administration from Valparaiso University (1957) and the MLS from the University of Minnesota (1963).

He was librarian, University of Minnesota Library (1962/66); assistant research and legal librarian, Cargill, Inc., Minneapolis (1966/69); and manager, Corporate Libraries, Control Data Corporation; Minneapolis (1969/75). He has also been a guest lecturer at the Library School, University of Minnesota.

SLA Chapter Activities. He is a member of the Minnesota Chapter. He has served in several capacities: treasurer (1966/67); president-elect (1967/68); president (1969/70); director (1974/75); and member, Nominating Committee (1976/77).

SLA Division Activities. He is a member of the Natural Resources Division and served on the Nominating Committee (1976/77). He presented a paper at the Business and Finance Division Circles (1974).

Association-Level Activities. He was a member of the Non-Serials Publications Committee and chairman (1968/69); chairman of the Nominating Committee (1975/76). He has been a member of SLA since 1965.

He has published book reviews in *Special Libraries*. He is the author of "The Use of Coordinate Indexing in Agriculture," which appeared in the *Journal of Feed Microscopist*.

He was the John Cotton Dana lecturer at the University of Rhode Island and Queens College (1973).

David E. King is editorial librarian, Standard Educational Corporation, Chicago, Ill. He has a BS in English with a library science minor from Ball State University (1958); the MALS from Rosary College (1971); and did graduate work at Hofstra University (1959/60).

He was librarian, Sachem Central Schools, Lake Ronkonkoma, N.Y. (1958/60); U.S. Army Dependent Schools, Germany (1960/61); volunteer, U.S. Peace Corps, Philippines (1961/63); college traveller, American Book Company (1963/64); librarian, R. R. Donnelley & Sons Company, Chicago (1965/69). He was a visiting lecturer, Graduate School of Library Science, University of Illinois, Urbana, during the summer of 1976.

SLA Chapter Activities. As a member of the Illinois Chapter, he was a member of the Hospitality Committee (1970/72); chairman, Nominating Committee (1970/71); Education Committee chairman (1971/73); chairman of the Illinois Chapter's seminar, "Sources for the Seventies: A Reference Up-Date" (1973); By-laws Committee chairman (1976/77). He is the editor of the Illinois Chapter *Membership Directory*, 1968/69.

SLA Division Activities. He is a member of the Publishing Division. He has served as program chairman for the Division (1970/71); editor of its bulletin (1971/73); chairman-elect (1973/74); chairman (1974/75); projects coordinator (1975/76); chairman, By-Laws Committee (1976/77).

Association-Level Activities. He was chairman, Publisher Relations Committee (1969/71); member, Recruitment Committee (1972/73); deputy conference chairman for Chicago 1975 Conference (1974); conference chairman, Chicago (1975); chairman, Conference Advisory Committee (1975/76). He has been a member of SLA since 1966.

He is a member of American Library Association; Chicago Library Club; National Library Association; Illinois Regional Library Council, Continuing Library Education Network & Exchange; member, LSCA Title III Subcommittee of the Illinois State Library Ad-

visory Committee; member, Advisory Council of Librarians to the Graduate School of Library Science, University of Illinois; member, Continuing Education for Librarianship Committee of the Illinois Library Association.

Doris Lee Schild is librarian, IBM Systems Research Institute, New York. She received the BA from Rice University and the MLS from the School of Library Service, Columbia University.

She worked for Time, Inc., for the Marshall Plan in Paris, and for McCann-Erickson, Inc., before attending library school. Her first job after that was as researcher-librarian, *The Gallatin Annual*, published by American Heritage. In 1964 she joined the Components Division of IBM at East Fishkill and transferred to the Systems Research Institute in 1965.

SLA Chapter Activities. In the New York Chapter, she has served as Program Chairman (1969/70); first vice-president (1971/72); president (1972/73). Museums, Arts and Humanities Group Hospitality Committee (1970/71); chairman, Nominating Committee (1974/75).

SLA Division Activities. Museums, Arts and Humanities Division Nominating Committee (1971/72). Business & Finance Division, Nominating Committee chairman (1973/74).

Association-Level Activities. She served on the Oral History Committee (1971/72). She is presently deputy chairman of the New York 1977 Conference Committee. A member of SLA since 1963.

She is a member of American Society for Information Science.

She is a member of Phi Beta Kappa.

Ballots and voting instructions will be mailed from the Association's New York Offices in late March or early April.

Officers and Directors who will continue to serve on SLA's Board of Directors in 1977/78 are:

Shirley Echelman who automatically succeeds to the office of President. Mark H. Baer who will serve as Past President. Robert G. Krupp and H. Robert Malinowsky will serve the third term of their three-year terms (1975/78) as Directors. Aphrodite Mamoulides and Mary Lee Tsuffis the second year of their three-year terms (1976/79) as Directors.

Actions of the Board of Directors October 14-16, 1976

Copyright—The SLA Board of Directors recorded its opposition to the extension of copyright, for any period of time, to federal government publications, on the grounds that copyright is a private privilege and materials produced with public money by the federal government should be in the public domain. (This action relates to the 5-year copyright for NTIS documents that had been inserted in §105 of the Copyright Law Revision Bill, but which was removed by the House Senate Conference Committee. See letter to Rep. Rodino in Dec. 1976 issue, p. 591.)

Minimum Salary—As a result of the data collected in the SLA 1976 Salary Survey, the Board increased the minimum salary acceptable for "Positions Open" advertisements in *Special Libraries* and *Employment Opportunities*. The minimum level has been raised to \$10,000 for positions in both the U.S. and Canada, effective Jan. 1, 1977.

Technical Book Review Index and Scientific Meetings—Permissions to assume publication of *Technical Book Review Index* and *Scientific Meetings* effective with the January 1977 issues were granted to each of their former editors. Albert Kamper will publish *Technical Book Review Index* from 427 Wimer Drive, Pittsburgh, Pa. 15237. Marian Holleman will publish *Scientific Meetings* from Scientific Meetings Publications, 2069 Sea View Avenue, Del Mar, Calif. 92014. Subscription orders and other inquiries should now be addressed to the new publishers.

Conferences—The Board considered a summary of the conflicts in Atlanta which had recently arisen in relation to the 1978 Conference. The Atlanta Convention & Visitors Bureau and one hotel made commitments to another association without advising SLA. As a result SLA members would have had an unsatisfactory dispersal of meeting rooms, sleeping rooms, and exhibit space. Therefore, the Board authorized a transfer of the 1978 Conference to Kansas City, Mo. The dates for the Conference in Kansas City are Jun 11-15, 1978.

SLA has again scheduled its Conference in Atlanta, Jun 14-18, 1981. The Association has not previously held a Conference in a southeastern city and considers the city of At-

lanta an attractive site for an SLA Conference. The need to move the 1978 Conference site in no way reflects adversely on either the City of Atlanta or on the SLA's South Atlantic Chapter.

Fall Board Meetings—Some dates for future Fall Board Meetings were adjusted so that the Board would have available the financial report of the third quarter of the current year when the budget for the next fiscal year was being considered. The dates are Oct 27-29, 1977; Oct 26-28, 1978; Oct 25-27, 1979. All Fall Board Meetings are scheduled for New York City.

Continuing Education—A motion was approved that SLA revert to its former terminology of "Continuing Education Seminars" instead of "Continuing Education Update Sessions (CEUS)." The change in terminology is to avoid confusion with the widely used abbreviation "CEUS" for "Continuing Education Units" in many professional fields.

Honoraria—The Board approved payment of honoraria not to exceed \$300 per seminar to be distributed to all instructors involved in a Continuing Education Seminar.

Education Seminars in Chapters—The Education Committee presented a proposal for a test program of education seminars in four Chapters to be scheduled before June 1977 (Heart of America, Pacific Northwest, South Atlantic, Toronto). During this test period 30% of the net income will be assigned to the sponsoring Chapter and 70% of the net income will be assigned to the Association to partially finance the employment of an SLA Education Coordinator.

Education Coordinator—A 3-member Special Committee of the Board was asked to find the additional money needed to employ a part-time Education Coordinator. The Special Committee was asked to report in January 1977 (Miriam Tees, chairman; Judy Field; and Ellis Mount).

Positive Action Program for Minority Groups—To attempt to identify minority group members of SLA for purposes of making

Association appointments, the Manager, Membership Department, in consultation with the Positive Action Committee for Minority Groups was asked to prepare a short questionnaire to be inserted with the 1977 Dues Renewal Notices. It was requested that minority group members, who wish to do so, complete and return the questionnaire to the Association Office.

Royalties—A change in royalty rates to be paid to authors or sponsors of SLA Non-Serial Publications has been approved by the Board as recommended by the Finance Committee. The new royalty rates will be 15% of net for each NSP for Publishing Agreements signed after Oct 31, 1976.

New Position at Association Office—The Board approved the establishment of a new position title of Assistant Executive Director on the Association staff. This does *not* represent the

addition of a new staff member. The Manager, Membership Department, will also be the Assistant Executive Director.

Nominating Committee—The Board voted to elect the Nominating Committee for Spring 1978 Elections as submitted by the two senior Directors. The Committee members are Gilles Frappier (chairman), Roger Martin, Lou Par- ris, Ruth S. Smith, Anne Roess.

Chapter and Division Allotments—The allotments of \$3.75 and \$2.50 per member to the Chapters and Divisions, respectively, will remain the same in 1977, as recommended by the Chapter Cabinet Chairman-Elect and the Division Cabinet Chairman-Elect.

Division Activities—The Board voted to approve the request of the Petroleum Division to change its name to Petroleum & Energy Resources Division.

General Fund Budget (Summary) Jan 1–Dec 31, 1977

Dues & Fees		\$398,700
Less Chapter Allotments	\$(40,000)	
Division Allotments	(36,000)	
Student Group Allotments	(900)	
Allocation to <i>Special Libraries</i> *	(60,300)	
		<u>(137,200)</u>
Dues & Fees (Net, after allotments & allocations)		\$261,500

INCOME, GENERAL OPERATIONS

Dues & Fees (Net)	\$261,500
Contributions (Patrons & Sponsors)	2,000
<i>Special Libraries</i> Program Budget (Net)	(17,500)
Conference Program Budget (Net)	63,400
Education Program Budget (Net)	5,900
Promotion Program Budget (Net)	(18,800)
Non-Serial Publications Fund (Transfer)	0
Equipment Reverse Fund (Transfer)	0
Interest Income	9,000
Mailing List Service	6,000
Miscellaneous	1,000
Income for General Operations	\$312,500

EXPENSES, GENERAL OPERATIONS

Salaries (Net)	\$165,700
Employee Benefits (Net)	45,100
Office Services	77,200
Occupancy Costs	46,700
Professional Fees & Services	20,500
Travel (Net)	18,800
Member Services	18,800
Bank Charges	300
Depreciation on Furniture	900
Miscellaneous	100
Overhead Transfers from Program Budgets	\$394,100
Overhead Transfers from Other Funds	(20,300)
NSP Postage & Handling Fees—Transfer	(3,500)
Expenses of General Operations	\$(267,400)
Income for General Operations	\$312,500
Expenses of General Operations	(267,400)
Anticipated Excess Income over Expenses	45,100
Transfer to Reserve Fund	\$(5,000)
Net Earnings	\$40,100
Restricted Net Earnings†	(36,400)
Net Earnings after Restriction	\$3,700

* Required by Internal Revenue Service.

† To offset the excess expenses over income in FY74 & FY75 before the dues increase became effective.

CHAPTERS & DIVISIONS

Baltimore—On Thursday, Nov. 18, the Chapter met for a business discussion and a tour of Westinghouse Information facilities.

The Chapter is endeavoring to involve area students in SLA activities. One proposal suggested individual librarians sponsor a student internship, perhaps for library school credit.

Cincinnati—The November meeting was held jointly with ASIS. The group visited the new Environmental Protection Administration Library/Computer Center at the University of Cincinnati campus.

Colorado—The Chapter visited St. Anthony Hospital for a business meeting in September. They observed the "flight for life" program facilities and saw the library.

In October they met at the Denver Medical Society Library. Florence Wilson, cataloger, Denver Public Library, presented a program on the development of the International Standard Bibliographic Description for Monographic Publications as applied to descriptive cataloging in the United States.

A dinner and business meeting on Nov 30 was addressed by Dr. G. Dale Meyer. The program dealt with "Contingency Views of Management."

Connecticut Valley—The November meeting was held at Wesleyan University. Robert Neiman presented a workshop on management strategy for the special librarian.

Heart of America—The Chapter visited the William Jewell College Library on Oct 23. Dinner followed.

A seminar on special librarianship was given to library science students from three area schools in November. The speakers included president-elect Shirley Echelman, a newspaper librarian, a law librarian, a medical librarian, and a museum archivist.

Illinois—The October Chapter meeting was held at the EBSCO Headquarters.

On Nov 12 a luncheon meeting was held.

Kentucky—On Oct 29 the Chapter met to hear Martin May, Manager of Training and Development, University of Kentucky Personnel Department. The topic of his presentation was "Employee Development."

The November meeting was held with the Kentucky Academy of Sciences. A panel of five discussed. "The Library—Your Best Research Ally."

Mid-Missouri—Early in October the Chapter met in the State Capitol to hear Nancy Edelman speak about the "Benton Murals in the Missouri State Capitol."

Mid-South—The fall meeting was held Sep 18 at the University of Tennessee Faculty Club. Dr. Frank McKenna addressed the group on the new copyright legislation then pending.

Minnesota—The Chapter meeting was held with the ASIS Chapter at the Hill Monastic Microfilm Collection, St. John's University. Dr. Julian Plante escorted the assembly through the facilities and spoke of some of his "adventures" in finding the manuscripts.

The meeting on Nov 11 was a "Student Rap Session" at the University of Minnesota.

Montreal—An all-day workshop was held at the Graduate School of Library Science, McGill University. The subject of the workshop as PRECIS (PREserved Context Indexing System). Derek Austin, British Library, and Jutta Sørensen, Danish National Bibliography, were the speakers. The session was jointly sponsored by the Canadian Association for Information Science—Montreal Chapter, the Quebec Library Association; the Association of McGill University Librarians, and Montreal Chapter Special Libraries Association.

New Jersey—A joint meeting was held with the ASIS Chapter on Sep 28. The use of OCLC in special libraries and the possibility of an alternate source of technical processing was discussed.

In Oct the Chapter met with the Princeton-Trenton Chapter, SLA. The topic of the session was the relevance of library research to special libraries.

In December a visit was arranged to the AT&T facility, Basking Ridge.

New York—Shirley Echelman was the speaker at the first meeting of the "'77 Conference Season," on Sep 30.

New York, Advertising/Marketing and Business/Finance Groups—A joint meeting was held at the CUNY Graduate Center on Sep 22. Edward Spar, *Sales Marketing and Management Magazine*, spoke about demographics.

New York, Social Science Group—The topic of the meeting on Oct 14 was the South Bronx Project. The presentation was given by Lillian Lopez and Daniel Chavez.

North Carolina—A dinner meeting Oct 14 centered on North Carolina State Government Publications. Daniel Boykin of the N.C. State University Library was the speaker.

Pacific Northwest—“Scientific Communication And Technology Transfer” was discussed in a session with Martin Robbins, SCATT advisory group chairman at the University of Denver.

Pittsburgh—The September meeting began with business as the Chapter approved its new by-laws. Following the business meeting, Dr. Talbert T. Fowler talked about the Law Library and its facilities.

In October a workshop on using the Federal Register was planned. Insurance for libraries was the topic for the November meeting.

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Travel Stipend Award

Sci-Tech Division is again sponsoring a contest for two \$350.00 awards toward the expenses of attending the SLA Conference in New York, Jun 5-9, 1977. One stipend will be awarded to a student member of SLA who need not be a member of Sci-Tech and the other may be either to a student or to a Division member.

To qualify, the applicants must:

- 1) Be SLA members at the time of application;
- 2) Be attending their first SLA Conference;
- 3) Write 300 words or less describing the advantages of being able to attend the conference;

- 4) If not student members, be members of Sci-Tech Division;
- 5) Submit entries no later than Mar 1, 1977, to

Ralph E. Swinburne, Jr.
Technical Library Rm. 5E-233
Bell Telephone Laboratories
Whippany Road
Whippany, New Jersey 07981

Special instructions: Put name, address, and statements of qualification for award on first page. Put item 3 on separate sheet for blind judging. Winners will receive checks by May 1, 1977.

Washington Letter

Radio and TV Archive

The persevering librarian who reaches the penultimate page of the new copyright slip law (PL 94-553) will find a reward: the American Television and Radio Archives Act (2 USC 170).

The archives act is one of the so-called "transitional and supplementary provisions" of PL 94-553. Its purpose is to establish within the Library of Congress a permanent record of the television and radio programs which are of present or potential public or cultural interest, historical significance, or otherwise worthy of preservation.

Furthermore, the Librarian of Congress is directed to maintain and publish catalogs and indexes of the collections of the archives, and to make the collections available for study and research. The librarian is authorized to establish standards and conditions for the use of archive materials.

The new archives act authorizes the librarian to reproduce regularly scheduled newscasts or on-the-spot coverage of news events, to compile them by subject matter without abridgment or any other editing, and to reproduce these compilations for distribution by loan to persons engaged in research and for deposit in certain libraries or archives.

Lifelong Learning

Improved coordination of federal support for lifelong learning programs and establishment of a clearinghouse for information on lifelong learning opportunities are goals of the 1976 Education Amendments (PL 94-482). Among other things, the Department of Health, Education, and Welfare is to review the lifelong learning opportunities "provided through employers, unions, the media, libraries and museums, secondary schools and postsecondary educational institutions, and other public and private organizations" to determine how they can be made more effective and better coordinated.

The Assistant Secretary of Education is given authority to implement the lifelong learn-

ing review and may enter into contracts with or make grants to appropriate state agencies, institutions of higher education, and public and private nonprofit organizations, in order to complete the job. A report on the status of lifelong learning is due by Jan 1, 1978, accompanied by legislative recommendations as appropriate.

Implementation of new programs such as this one is not likely to proceed until the new Carter Administration takes over on Jan 20, 1977.

Public Documents Commission

The National Study Commission on Records and Documents of Federal Officials (sometimes referred to as the Public Documents Commission) is holding public hearings in various regions of the country during the final months of 1976. The last scheduled public hearing will be in January 1977 in Washington, D.C.

Created by PL 93-526 during the Nixon papers crisis, the Commission is studying problems and questions about the control, disposition and preservation of records and documents produced by or on behalf of federal officials. They are to develop recommendations for appropriate legislation, rules and procedures for such control, disposition and preservation.

A 92-page *Public Hearings and Background Memorandum* is available from the Commission at no charge while the supply lasts (1000 Connecticut Ave., N.W., Washington, D.C. 20036). Included among questions to be studied by the Commission is how the Commission's findings relate to the depository library program of the Government Printing Office.

Persons or organizations wishing to make their views known may submit written statements to the Commission, or testify at one of the public hearings. Contact the Commission for more information.

NSF Guide to Programs

The 61-page FY 1977 *Guide to Programs* of the National Science Foundation is available from GPO (price \$1.35, stock number 038-000-002-94-5) or free by request to NSF, Washington, D.C. 20550.

The guide provides summary information about NSF programs and is intended as a source of general guidance for institutions and individuals interested in participating in these programs. Grant application deadlines vary from program to program.

The guide's section on "Science Information Activities" refers readers to NSF brochures, as follows: "Guidelines for Preparation of Unsolicited Proposals for the Economics of Information Program," "Guidelines for Preparation of Unsolicited Proposals for the User Support Program," "Guidelines for the Preparation of Unsolicited Proposals for the Access Improvement Program," and "Grants for Scientific Research," all available from NSF's Division of Science Information.

Institutions eligible to submit proposals are professional scientific and technical societies, universities and colleges, and profit and

nonprofit organizations. Persons who plan to submit proposals are encouraged to discuss their ideas informally with appropriate staff members before preparing formal proposals.

NCLIS Vacancies

In the rush to adjourn before the election, Congress took no action on President Ford's September 27 nominations to fill two vacancies on the National Commission on Libraries and Information Science (NCLIS). The nominations will have to be resubmitted after the new Congress convenes in January, which will give Jimmy Carter his first crack at recommending NCLIS members.

The two nominees of President Ford were Robert W. Burns, Jr., of Ft. Collins, Colorado (assistant director of libraries for research services at Colorado State University) and Gloria Sepulveda-Vazquez of Lansing, Michigan (reference and reader services librarian, Lansing Community College). The two NCLIS members whose terms have expired are Andrew Aines and Catherine Scott.

Sara Case

STAFF DEVELOPMENT

Alpander, Guvenc G. / Developing Team Effectiveness by Eliminating Superior Subordinate Gap in Role Perception. *Human Resource Management* 14 (no. 4): 29-32 (Winter 1975).

There can be a wide gap between the supervisor's and the subordinate's perceptions of the latter's specific responsibilities. The author describes the development of procedures to measure the perceptual gap. An abstract of the article appears in *Personnel Management Abstracts* 22 (no. 1): 33 (Spring 1976).

Bowman, James S. / The Behavioral Sciences: Fact and Fantasy in Organizations. *Personnel Journal* 55 (no. 8): 395-397 (Aug 1976).

While the behavioral sciences may have an impact on the personal attitudes of managers, organizations are still being managed according to the more traditional concepts, i.e., "functional specialization, formal hierarchy and fixed procedures." The author presents the conflicts caused by this situation and the dilemma in which both managers and employees find themselves.

Cherry, George W. / The Serendipity of the Fully Functioning Manager. *Sloan Management Review* 17 (no. 3): 69-82 (Spring 1976).

Quantitative analysis is used "to support the proposition that self-actualization will increase the productivity, creativity, job satisfaction and personal growth of the employee." Also discussed is the "concept of the humanistic management approach that will also increase productivity."

Holley, William H., Hubert S. Field, and Nona J. Barnett / Analyzing Performance Appraisal Systems: An Empirical Study. *Personnel Journal* 55 (no. 9): 457-459, 463 (Sep 1976).

Pointing out the need for "performance accountability" while also meeting EEOC and demands of the court for nondiscriminatory systems, the authors present a sample study of an internal analysis of an appraisal system. Many factors are discussed with the last two sections—"Legal Considerations" and "Design of the New Performance Appraisal System"—being especially helpful.

Hollman, Robert W. / Let's Not Forget About New Employee Orientation. *Personnel Journal* 55 (no. 5): 244-250 (May 1976).

A re-examination of the fundamental concept that employee orientation programs are the shared responsibility of the Personnel Department and the line supervisor. The author clearly explains the respective contents, methods, and time frames of general and departmental orientation programs.

Hughes, Charles L. and Vincent S. Flowers / Strategies For Effective Training. *Personnel and Guidance Journal* 53 (no. 4): 50-57 (Jul/Aug 1976).

Trainers and staff development officers discouraged by negative or conflicting feedback will find this behavioral approach to small-group training both thought-provoking and useful. The authors, who admonish trainers to "deal with trainees as they are, not as you would like them to be," boldly categorize and describe seven archetypal employee attitudes toward work, salary, advancement, and communication: reactive, tribalistic, egocentric, conformist, manipulative, sociocentric, and existential. A complementary chart of "Do's and Don't's For Successful Programs" suggests customized small-group training sessions which match up instructional techniques, style, materials, and facilities with each of six of the employee value systems identified.

Jones, William S. / The Manager's Role in Developmental Planning. *Training and Development Journal* 30 (no. 7): 3-9 (Jul 1976)

The author presents a humanistic view of staff/employee development. Three key steps are involved: recognizing realistic career goals; developing a plan based on the strengths of an employee; and "removing organizational roadblocks." This article should be of interest to all supervisors, personnel directors, and library directors.

Mack, Harold / Some Lessons in Motivation. *Supervisory Management* 21 (no. 8): 2-7 (Aug 1976).

The author discusses the practical "hows and whys" of motivation within the context of three phenomena: "crisis motivation," "entrepreneurship and motivation," and "the psychological contract." The first two phenomena have built-in motivational factors. The third is based on a healthy relationship between manager and subordinate.

Morrisey, George L. / MBO Questions and Answers. *Public Personnel Management* 5 (no. 2): 96-102 (Mar-Apr 1976).

The author responds to concerns which seem to indicate that MBO cannot be effectively utilized in the public sector. Some of these concerns include changing leadership, pressures of legislative bodies, jurisdictional problems, the communication breaks within the hierarchy, budget reductions, and civil service safeguards. Because of its flexibility, MBO can overcome some of the frustrations felt by the public sector manager.

Muller, David G. / A Model for Human Resources Development. *Personnel Journal* 55 (no. 5): 238-243 (May 1976).

For the individual or organization in the early stages of staff development planning, this article—designed to define and outline the general objectives of human resources development—should provide a broad frame of reference. The model covers methods of training needs assessment, categories of developmental opportunities, and various in- and out-of-house training programs for the maximum utilization of staff capabilities. A generous number of organizational charts supplement the text, graphically illustrating the overall organizational implications of human resources development.

Wadsworth, M.D. / How to Evaluate the Job Satisfaction of Critical Employees. *Personnel Journal* 55 (no. 9): 464-466 (Sep 1976).

Although the evaluation process described seems rather complicated, the idea of seriously evaluating whether the employee is satisfied with his job and whether the job is best for the employee is an important concept. The author describes the steps for such a procedure.

Warrick, D. D. / Applying OD to the Public Sector. *Public Personnel Management* 5 (no. 3): 186-190 (May-Jun 1976).

There has been a rapid growth in the public sector of the use of organizational development (OD). There are special concerns as to its applicability in all its phases from needs assessment through program follow-up. With unionization in public agencies, increased concern over the efficiency and effectiveness of government programs, and the knowledge that has been gained about the depersonalizing effects of bureaucracy, OD is likely to have a long and productive life in the public sector.

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IFLA

International Federation of Library Associations and Institutions

Vivian D. Hewitt

Limited to 500 registrants, participants from 42 countries met in picture-post-card pretty Lausanne, Switzerland, on the shore of Lake Geneva (Lac Lemman) August 23–28, 1976, for the 42nd General Council Meeting of the International Federation of Library Associations (IFLA). With the adoptions of its new statutes, the name has been changed to International Federation of Library Associations and Institutions, but the acronym "IFLA" will be retained.

The United States, West Germany and Great Britain had the largest delegations. France, Canada, Belgium and the USSR were well represented. Among the other countries taking part in the meetings were: Australia, Bulgaria, Congo Brazzaville, Finland, Ghana, Iran, Jamaica, Malaysia, Senegal, Tunisia and Turkey.

The meetings were held at the Swiss Institute of Technology in its "Aula," a building which bears a striking resemblance to the TWA terminal at the John F. Kennedy Airport in New York. From the hotels the Institute could be reached by the cog Metro, bus, taxi, or shank's mare. Depending on the location of one's hotel, all forms of transportation seemed to involve walking *up* hill or *down* hill on Lausanne's San Francisco-like hills. Thoughtfully, the city provides meeting participants with tickets for unlimited travel by public transportation to get around Lausanne for the duration of the many conferences that are scheduled in Lausanne.

There was a 3-day exhibition providing information from international sources including publishers, library equipment producers, and suppliers of audiovisual materials.

The conference was officially opened on Monday, August 23rd, with greetings from Georges-Andre Chevallaz, federal councillor and chief of the Federal Department of Finances and Customs; and Anton Gattlen, president of the Swiss Library Association, brought greetings to the delegates. Representatives of UNESCO, FID and the ICA also spoke. IFLA President Preben Kirkegaard, Director of the

Library School (Copenhagen) stated in his official address that the main purpose of this General Council was the adoption of the new statutes and related regulations.

The proposals which were to be voted on had been approved by the Executive Board at its earlier meetings; and drafts had been distributed earlier in the year to be studied, considered, and commented on prior to the Lausanne meeting. Before leaving New York, the SLA Voting Delegate, Vivian D. Hewitt, and the SLA Alternate Voting Delegate, Dr. Frank McKenna had spent an afternoon at the SLA Office in a minute review of the proposals. In effect, each voting delegate was an "instructed" voter. Recognized by a special badge, voting delegates were separated from all others and seated in alternate rows in order to help the tellers collect ballots. Each voting delegate had received three thick packets of colored slips for the balloting: pink, yes; blue, no; and abstain, white. As it turned out, these slips were not used because as each item was voted, it could be accomplished by a show of hands. The difficulties encountered at the 1975 meeting in Oslo did not occur in 1976. The IFLA Secretary-General (Margreet Wijnstroom) and the IFLA Board had made revisions to avoid the problems of Oslo.

To avoid any linguistic misunderstanding, the IFLA First Vice-President, Harry C. Campbell of Toronto presided over this most important meeting. It was conducted in English with simultaneous translation into French, German, and Russian. When it was all over, after two and a half hours of intensesness, there seemed to be a general feeling of relief and a sense of some accomplishment on the part of the delegates. Indeed, the confusion of the year before in Oslo and the discussions there, to quote President Kirkegaard, "were an essential phase in our preparations for IFLA's future." Anyone who has ever suffered through the pain and pangs of the reorganization, retrenchment, and redirection of any organization, must agree that IFLA, large, complex, multinational and multilingual, has now

been given, through the adoption of these Statutes, the go-ahead signal for the beginning of a new era of international librarianship.

There are now 140 member associations and 504 member institutions (libraries and library schools). The new Statutes now allow member institutions to vote in the General Council.

The final Plenary Session on Saturday, August 28th, consisted of reports and formalities in closing. The Treasurer reported that "IFLA's financial situation currently gives no cause for concern. However, we must not lose sight of the fact that general inflation in the last few years has resulted in a marked decrease in the amount of money available to support professional activities. The termination of the Council on Library Resources grant to the UBC office (London) threatens to reduce these activities even further. The new Statutes put considerable emphasis on professional work. It will therefore be necessary to seek out new sources of funding in the very near future. After former associate members are given expanded rights as institutional members under the terms of the new Statutes, it is to be hoped that a larger number of libraries will choose to join IFLA and thereby enhance the Federation's financial position." The annual report of the Secretary-General had been made available earlier in printed booklet form.

Summaries of resolutions and statements submitted by the various divisions, sections and committees of IFLA were given. The executive director of the American Library Association, Robert Wedgeworth, gave a more than half hour speech, an "ALA Centennial Statement," concluding it by presenting a slide show prepared especially for ALA's 100th anniversary.

Between the Plenary Sessions, there were scheduled dozens of meetings of the Standard Advisory Committees where IFLA's "Medium Term Programme," in which its goals for the period 1975-80 were elaborated, was discussed in terms of its meaning for the various committees—Administrative Libraries, Astronomical & Observation Libraries, Library Schools, National and University Libraries, Public Libraries, Special Libraries, Children's Libraries, Libraries in Hospitals, Library Buildings, Developing Countries, and so forth.

Some of the papers presented were "University Libraries in Developing Countries: A Proposal for the Medium-Term Program of the University Libraries Sub-section by Andrew J. Eaton, (Director of Libraries, Washington University, St. Louis, Mo.); "The Library Situation in Africa Today: Problems and Difficulties" by A.G.T. Ofori (Director of Library Services, Ghana); "Bibliotherapy with Disabled Children of All Age-Groups, in

Particular Speech-handicapped Children" by G. Freytag (Federal Republic of Germany); and an interesting presentation by G. K. Thompson of the International Labour Organization (Geneva). "The Library of the ILO in Geneva takes its temperature, gazes into its crystal ball and concludes that cooperative networking is its only hope for survival."

In the Special Libraries meeting, Dr. Frank McKenna discussed "The Future of the Section of Special Libraries." Mrs. Elena Savova, Director of the Central Library at the Bulgarian Academy of Sciences, Sofia, Bulgaria, and Chairman of the Special Libraries Section read a paper entitled, "Contemporary Organizational Structure and Management of Special Libraries," while Dr. Frieda Otto, Federal Republic of Germany and the Secretary of the Section chose as her topic, "Special Libraries and Library Planning."

These, of course, are only a sampling of the scores of other papers presented before other IFLA groups. In addition, other international groups sometimes meet in conjunction with IFLA. The International Association of Law Libraries (IALL) had a Round Table on "Law Libraries and Legal Documentation in Developing Countries." INTAMEL (International Association of Metropolitan City Libraries) also met during the week.

A pre-IFLA meeting of the SLA European Chapter had been scheduled for the afternoon of Saturday, August 21. This was an effort by the Association to determine the status and viability of the Chapter. Miriam H. Tees (Canada), Past President of SLA, Vivian Hewitt and Frank McKenna spoke respectively on the following topics: "Special Libraries Across Borders"; "The Media as Means of Communications Across Borders" and "Recent Interests and Activities of SLA; and The Special Libraries Sections of IFLA."

As a result of the new IFLA Statutes, the former Special Libraries *Sections* has become the Special Libraries *Division*. Its former Sub-sections are now Sections. The timetable for the new IFLA voting procedures are such that permanent officers of the new Special Libraries Division cannot be elected before the IFLA meeting in 1977. Frank McKenna has been named as the provisional chairman of the SLD, and in this role he is also a member of the IFLA Professional Board.

An important action of IFLA's General Council was the adoption of a resolution addressed to Unesco to urge the formation of a single strong information program in Unesco which is to include UNISIST and NATIS rather than to create a further fracturing of the international library and information interests

of Unesco. (See p. 51 for the resolutions adopted by the SLA Board of Directors at its October 1976 meeting. Copies of the SLA resolution were sent to all the members of the U.S. and Canadian delegations to the Unesco General Conference held in Nairobi).

The IFLA conference also included visits to a variety of libraries, tours in and around the city as well as a reception at the Musée des Arts Décoratifs, a boat cruise on Lake Geneva to the Château de Chillon and a reception at the Palais de Rumine with W. I. Johnson Company (New Jersey) and Verlag Dokumentation (Munich) as co-hosts. Friday was given over to tours of international libraries in Geneva, and museums, landmarks, and other historic sites in areas surrounding Lausanne: Oron-Gruyeres; Avenches-Grandson; La Sarraz-Romainmotier and Anzeidaz.

* * *

Under the gracious patronage of His Majesty the King of Belgium, IFLA will celebrate its 50th Anniversary in 1977 in Brussels from September 1-10. There will be a pre-session seminar—The Strategy of Library Planning—for librarians from developing countries in Antwerp from August 31 to September 3. The overall theme is "Libraries for All: One World of Information, Culture and Learning."

At the official opening of the Congress on Monday, September 5, distinguished persons from the various regions of the world will bring greetings to IFLA. Mrs. V. Teresjkova (the female cosmonaut from the USSR) and Chief Adebo (Nigeria) will be among them. The theme meetings will all feature a key speaker and a panel discussion. Among the keynote speakers are: C. P. Snow (The Book World), Angus Wilson (Reading for Pleasure), A. M'Bow (Education and Learning) and Roger Caillois (The Challenge of the Future). A theme session on "Libraries in Commerce and Business" is being planned by SLA's Miriam Tees.

Belgian hospitality is proverbial; and a lavish social program has been planned: a Brueghelian night at one of the oldest squares of Brussels, a ballet performance by Maurice Bejart's Ballet du XXme siecle; vernissages; an "open poetry" evening where artists will perform and discuss with participants at different places in town and so on.

IFLA hopes to attract 3,000 people to this gala anniversary meeting, particularly young librarians and those who have not yet attended any of its meetings.

A new board will be elected and elections within other units will complete the reorganization of IFLA when it meets in Brussels.

Several years ago an attempt was made to move responsibility for special libraries in science and technology out of the Unesco Department of Libraries, Documentation and Archives into UNISIST. At that time SLA wrote to the U.S. and Canadian Permanent Representatives to Unesco to protest such an action. The issue was not resolved by Unesco at its 18th biennial session. Since then NATIS (National Information Systems Program) has been organized within Unesco; and UNISIST attempted to enlarge its own involvements.

The Director-General of Unesco had prepared a resolution for presentation to the 19th Session of the Unesco General Board at its Oct-Nov 1976 meeting. The text of this document recommended the establishment of a unified information program

within Unesco rather than a splitting of responsibilities for special libraries in science and technology away from all other Unesco library activities. This resolution would enhance the operation and effectiveness of the total Unesco information program.

To voice the concerns of SLA in this situation, the Board of Directors of SLA adopted a resolution in Oct 1976 which was communicated to the Minister Councillor and Permanent Delegate of the United States of America to Unesco, the Ambassador and Permanent Delegate of Canada to Unesco, and all members of the U.S.A. and Canadian National Commissions for Unesco. The SLA resolution follows.

Resolution Concerning the Unesco Programme for Information, Documentation, Libraries and Archives

The Board of Directors of Special Libraries Association notes with extreme interest that the Director-General of Unesco has indicated his intention to present a Resolution (Section 4.16.I of Document 19C/5, the text of which is to be submitted in Document 19 C/42) to the Nineteenth Session of the Unesco General Conference in October-November 1976.

The Board of Directors of Special Libraries Association, representing the third largest library- and information-related association in the world, considers it a necessary, useful and valuable purpose that a *single unified* information program be created for assistance in the development of information, documentation, libraries and archives services; and that such a program have a *single* international consultative and steering mechanism within Unesco.

In this and related matters, the SLA Board of Directors expresses its concern that an existing conflict within Unesco itself seems to continue because of an unfortunate rivalry between certain sectors within Unesco. It is our particular concern that the UNISIST Steering Committee has expressly stated:

"The statutes of the UNISIST Steering Committee should be modified in order to make this committee responsible for guiding and supervising the planning implementation of a *general* [emphasis added] Unesco program on information known as UNISIST."

Special Libraries Association has previously stated its position that information in the natural sciences is an obvious necessity for the successful operations of UNISIST. We apply the same measure of necessity for the operations of NATIS. But we continue to adhere to our previously stated position of pragmatic opposition to any and all fissions or fractures of a global view of the total spectrum of library- and information-related services that is sheltered and fostered by Unesco.

A Unesco body to coordinate library, archives, information and documentation activities must adequately represent all the broad bases and all the balanced membership representations of the member nations; but such a body must also include proper representations and fundamental interests of the totality of all areas of man's knowledge. Such a Unesco body must clearly provide for subject expertise by its staff and for administrative expertise sympathetic to the needs in the social sciences, humanities and arts. Any effort to enlarge the scope of scientific and technical operations under the guise that such an enlarged scope truly represents areas outside of the natural sciences wastes both human and financial resources.

Further, we express our serious concerns that the Unesco program and budget for 1977/78 do not appear to include any proposals for new and innovative programs to reflect the

constantly changing and growing needs of the world's peoples who must be served by the libraries, archives and documentation services throughout the world.

Finally, Special Libraries Association wishes to note that this association is in complete agreement and accord with the Resolution

unanimously adopted by the General Council of the International Federation of Library Associations at its meeting in Lausanne, Switzerland on August 28, 1976.

The Board of Directors of Special Libraries Association respectfully asks the Director-General of Unesco to consider these matters.

* * *

The Unesco General Conference at its 19th Session in Nairobi adopted a resolution in line with the recommendations in the resolution adopted by SLA Board of Directors and forwarded to Unesco.

The Unesco resolution recommends that separate funding be given to its general information program. The Director-General is to take measures to ensure that Unesco's information program, through the development of projects already begun under UNISIST, will provide a framework for "Unesco's information activities as a whole." This important action will prevent the separation of special libraries in science from all other library activities in Unesco.

The resolution promotes cooperation among member states and the overall planning of national information systems in order to participate in a unified international program which would avoid duplication of efforts and to ensure "complementability." Special attention is to be paid to "(i) increasing the essential contribution of libraries to the development of education, science and culture; (ii) promoting the development of archives services, particularly as a tool for administrative efficiency and as a factor in the preservation and presentation of the cultural heritage and of national identity."

REVIEWS

Classification and Indexing in Science, by Brian C. Vickery. 3d ed. London, Butterworths, 1975. 228 p. £5.50.

In this third edition of *Classification and Indexing in Science*, Vickery has continued his interest in the development of classification schemes, exemplifying the British and European interest. I am coming to the conclusion that the Europeans understand the need for a common language to use for subject analysis which, to Vickery, will probably be derived from a classification scheme of some sort. We Americans have difficulty in becoming involved with classification schemes or even metalanguage thesauri. I think Americans, who are so isolated from other languages, feel that subject headings by themselves are adequate for subject description. If we had to deal with people speaking three or four different languages asking us reference questions, we might want to try to develop an international language or one that did not depend on knowing just one language. Vickery tries to present what he considers to be an important part of librarianship.

The book is a good attempt at identifying the theoretical aspects of classification schemes. It may be odd that Americans have led in this field. Dewey, Cutter, and Bliss are outstanding names in this field, yet all the current work done in classification studies is now being conducted elsewhere.

The British have tried to develop faceted classification schemes based on the Ranganathan Colon work. These, at present, cover only specific disciplines and not total knowledge. Vickery has included substantial portions of two faceted classification schemes in his Appendixes, one on social science and the other on container manufacture.

There is no question in my mind that Vickery and others who support the use of classification schemes are aware of the shortcomings of the existing schemes. There are several methods given in this book to try to lessen these.

I have said in the past that I find the use of classification schemes either in a catalog or a printed index difficult to use. I have not changed my opinion. However, in the development of an international language or metalanguage which can be used to provide everyone with subject description of books and journal articles, Americans have languished behind the Europeans. In this book, Vickery is trying to

tell us that there is a great deal of value in the development of classification schemes. Although, he does not quite press for the development of general schemes like Dewey's, he does support the need and is pressing for their improvement.

If you happen to be a classification admirer, then this is a book you should read. But for those of us who are not too involved with classification, then this book can be looked on as a reference book.

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Staff Management in University and College Libraries, by Peter Durey. Oxford, Pergamon, 1976. xii, 170 p. \$8.50 (International series in library and information science, 16)

This is a strange little volume; perhaps "quaint" is a more appropriate adjective. The title promises good things; the volume delivers little more than a mild, and sometimes cutely humorous, dose of home-grown wisdom on a highly complex subject.

The author does not give any indication of his intent in writing the book. The table of contents does not help either. The volume is divided in two parts. Part I, "The Organisational Framework," has chapters on administrative structure, style of management, planning and budgeting, communication, and unionization. Part II, "The Human Aspects," has chapters on recruitment, conditions of service, training, promotion and performance appraisal, and the problem staff member. Thus it is not possible to assess whether the author achieved what he set out to do, no matter how modestly.

Durey is the librarian of the University of Auckland, N.Z. From that vantage point he comments on management techniques in England (where he held various posts), Canada, Australia, and the United States. The result is confusion and obfuscation, with needless worrying on the author's part about such matters as what titles librarians have in various parts of the world, or whether the employment contract spells out specific conditions of retirement, over which most university librarians have no control anyway.

The chapter on communication is only ten pages long. The subheadings are personal

contact, conduct of staff meetings, written instructions, newsletters, the grapevine, and a conclusion. The following are quotes from this chapter:

"Personalities play an important part in the success or otherwise of face-to-face communication. . ." (p. 55)

"The chairing of meetings is an art which not everyone possesses." (p. 58)

"An informal method of communication which exists in every library is, of course, the grapevine." (p. 62)

This reviewer is compelled to dismiss this slender volume as unnecessary. The author says in the preface (p. xi), "It is almost an act of faith to write on the topic of staff management at this particular time in library history." Durey is to be commended for his faith, but one could hope that his wisdom would have prevailed and that the publisher would have been charitable enough to reject the manuscript.

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Studies in Library Management, v. 3, edited by Gileon Holroyd. London, Clive Bingley; Hamden, Conn., Linnet Books, 1976. 192p. \$10.

This is the sort of book which requires the reviewer to use most of his space describing it, rather than evaluating it. It is the third volume in a series devoted to library management; this and the preceding volume have been edited by Gileon Holroyd, Senior Lecturer, School of Librarianship, The Polytechnic of North London. A number of the contributors to this volume as well as to the earlier ones are associated with the same school.

"The purpose of this open-ended series is to acquaint librarians and library students with the latest developments and trends in management theory and practice, and to offer specialist contributors the opportunity to write in depth on aspects of management in relation to library science." The series reflects trends "as represented in national debates on policy, in research projects, and above all in those local or individual experiments which put ideas to the test under the noses of library clients."

The seven essays in the volume divide into four scholarly contributions from the United Kingdom, two from the U.S., and one from

Australia. The subject matter is extremely diverse and, in some cases, only casually related to the field of management. But because of the diversity, and because of the opportunity provided the contributors to write in depth and at length, many readers are likely to find some interesting, even stimulating, ideas as they browse and pick and choose among the following:

- A paper by Ralph Blasingame and Mary Jo Lynch (Rutgers University) which takes a fresh look at public library standards, origins, characteristics, goals and objectives.

- One by James A. Hennessy (Polytechnic of North London) which discusses information in the context of urban politics, and ends with some explicit guides for action.

- Another by Elizabeth Orma (Engineering Industry Training Board) on the information needs of industrial training boards, an interesting ten-year-old British phenomenon, which might be the article of greatest interest to special librarians.

- A study of the changing career patterns of qualified librarians in the UK, 1935-1990, by Patricia Layzell Ward (Polytechnic of North London), which has some interesting things to say about our future.

- A handy summary and review, by the editor, of the Maryland Manpower Studies, the large program of research into the utilization of manpower in the library and information profession, undertaken at the School of Library and Information Services of the University of Maryland during the period 1967-70.

- A consideration of some of the broader aspects of the management of finance in public and university libraries by James A. Hennessy, Terence J. Beck and Angela Dixon (Polytechnic of North London).

- A concluding paper by Colin F. Cayless (Western Australian Institute of Technology) which discusses the evaluation of administrative effectiveness in libraries in the light of the current recession in librarianship.

Edward G. Strable
J. Walter Thompson Company
Chicago, Ill.

Impact of On-Line Retrieval Services; A Survey of Users, 1974-1975, by Judith Wanger, Carlos A. Cuadra and Mary Fishburn. Santa Monica, Calif., System Development Corp., 1976. 237 p.

This is an 8½ in. by 11 in. paperback report which gives the results of a survey undertaken

by SDC, partially supported by government contract, to determine the response to on-line searching systems. Since SDC is one of the major suppliers of on-line searching systems, they have a vested interest in the outcome of the survey. Even if this survey was not supported by government funding, SDC probably would want to know how well their products were being accepted.

Every organization which is supplying on-line data bases to decentralized locations, will want a copy of this report. Those users who were surveyed have other on-line services besides those provided for by SDC. The sample surveyed consisted of two categories: searchers and managers of on-line using organizations. There is no reason why the results of this survey should not be accepted as reported.

Among the major findings contained in this survey is that most searchers enjoy on-line searching (74%). In addition, they think that on-line systems are extremely valuable (63%). Most managers (75%) think that on-line systems increase the productivity of their staff. Many searchers (68%) believe that an on-line search equals the quality of a manual search. About three-quarters of both managers and

searchers believe that on-line searching is more cost-effective than manual searching.

Some of the other areas surveyed were: introducing on-line services; the selection and training of the staff to perform on-line searching; the usage, selection and access of on-line systems; and the problems associated with on-line systems. The entire gamut of on-line retrieval systems activity was covered in this survey. It is the reviewer's opinion that not only has the number of users increased but the number of data-bases available on-line has also increased. On-line searching and on-line data bases are here to stay and will become more economical and easier to use.

This is a report of a survey with all the dull statistics included. However, if you are at all interested in how other people feel about on-line systems, this is a good book to have. It does not discuss any of the problems of developing an on-line system locally, but it does provide information about the systems available for purchase and lease.

**Masse Bloomfield
Hughes Aircraft Company
Culver City, Calif.**

PUBS

(77-001) **National Referral Services for Industry; Worldwide Directory.** 4th ed. FID/II Study Committee "Information for Industry." The Hague, International Federation for Documentation, 1974. 87p.

International directory of organizations which are able to direct clients to sources of technical and economic information. Available from: International Federation for Documentation, 7 Hofweg, The Hague, Netherlands.

(77-002) **North American Film and Video Directory; A guide to Media Collections and Services.** Weber, Olga S., comp. New York, Bowker, 1976. 284p. LC 76-26748 ISBN 0-8352-0883-4 ISSN 0362-7802

Revision and extension of the **Directory of Film Libraries in North America**, published by the Film Library Information Council in 1971. Includes services offered by 1,273 libraries and media centers.

(77-003) **University Libraries in Britain; A New Look.** Bryan, Harrison. Hamden, Conn., Linnet Books, c1976. 192p. \$8.50. LC 76-15273 ISBN 0-208-01532-9

Based upon a survey conducted in 1975. Part 1 discusses university librarianship, and part 2 discusses the different libraries visited.

(77-004) **Directory of Special Libraries, Japan.** Tokyo, Special Libraries Assn. Japan, 1976. 563p. In Japanese. Includes 2,006 institutions.

(77-005) **Directory of European Associations, Part 1: National Industrial, Trade & Professional Associations.** Anderson, I. G., ed. 2d ed. Detroit, Mich., Gale Research Co., 1976. 557 p. \$65.00 LC 76-11697 ISBN 0-900246-19-7

Covers more than 9,000 organizations. Organizations in Great Britain and Ireland are not included.

(77-006) **The Language of the Foreign Book Trade; Abbreviations, Terms, Phrases.** 3d ed. Orne, Jerrold. Chicago, American Library Assn., 1976. 333p. \$15.00. LC 76-11748 ISBN 0-8389-0219-7

Words in 15 languages and their English equivalents.

(77-007) **Guide to Reference Books.** 9th ed. Sheehy, Eugene P., comp. Chicago, American Library Assn., 1976. 1015p; \$30.00 LC 76-11751 ISBN 0-8389-0205-7

Includes about 10,000 entries. LC classification numbers have been added to each entry.

(77-008) **Archive-Library Relations.** Clark, Robert L., ed. New York, Bowker, 1976. 218p. \$15.95. LC 76-18806 ISBN 0-8352-0770-6

Exploration of the relationship between the two professions.

(77-009) **Final Report on Planning for the Continuing Library Education Network and Exchange (CLENE), June 15, 1975-June 30, 1976.** Washington, D.C. CLENE, 1976. 39 p.+

Includes an evaluation and review of the program, as well as conclusions and recommendations for the future. Appendixes include such items as the CLENE by-laws, bibliography, and list of publications.

(77-010) **Selected Readings on Information for Industry.** FID/II Study Committee "Information for Industry." Copenhagen, International Federation for Documentation, 1974. 60p.

Includes 68 references to articles, papers, proceedings, books, reports and handbooks. Available from: International Federation for Documentation, 7 Hofweg, The Hague, Netherlands.

(77-011) **Proceedings of the Information Broker/Free-Lance Librarian—New Careers—New Library Services Workshop.** Minor, Barbara B., ed., Syracuse, N.Y., Syracuse Univ., School of Information Studies, 1976. 53p.+ (Miscellaneous Studies #3). \$5.00.

Available from: Publications Office, School of Information Studies, Syracuse University, 113 Euclid Ave., Syracuse, N.Y. 13210.

(77-012) **Media Equipment; A Guide and Dictionary.** Rosenberg, Kenyon C. and John S. Doskey Littleton, Colo., Libraries Unlimited, 1976. 190p. \$11.50. LC 76-25554 ISBN 0-87287-155-X

Includes sections on general and specific criteria for selection, as well as the dictionary. Items covered include motion picture, slide, filmstrip, overhead and opaque projectors, phonographs and tape recorders.

(77-013) **Biomedical, Scientific & Technical Book Reviewing.** Chen, Ching-chih. Metuchen, N.J., Scarecrow, 1976. 186p. \$8.00 LC 76-20480 ISBN 0-8108-0939-7

Study of approximately 500 reviewing journals in the above fields.

(77-014) **Regional Interlibrary Loan in New York State: A Comparative Study.** Carr, Harry, Vicki MacDonald and Eugene Vorhies. Washington, D.C., Checchi and Co., 1976. 288p.

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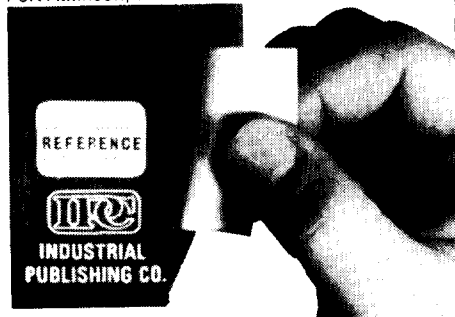
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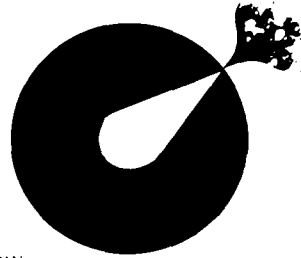
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