Special Libraries, July 1983

Special Libraries Association

Follow this and additional works at: https://scholarworks.sjsu.edu/sla_sl_1983

Part of the Cataloging and Metadata Commons, Collection Development and Management Commons, Information Literacy Commons, and the Scholarly Communication Commons

Recommended Citation

This Magazine is brought to you for free and open access by the Special Libraries, 1980s at SJSU ScholarWorks. It has been accepted for inclusion in Special Libraries, 1983 by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.
New Publications from SLA

SPECIAL LIBRARIES
AND
INFORMATION CENTERS
An Introductory Text
Ellis Mount

PICTURE SOURCES
4
Ernest H. Robl, ed.

MANAGING
THE
ELECTRONIC LIBRARY
Library Management v. 3
Michael E. D. Koenig, ed.

ISSUES
AND
INVOLVEMENT
Alberta L. Brown Lectures in Special Librarianship 1978-80
Pamela Jobin & Marcy Murphy, comps.

Now, at last, a single modern text on the management of special libraries. Thoroughly explores the role of managers, planning, budgeting and marketing. Suitable for students of library science and those in related fields.

Two hundred new sources have been added to the nearly 1,000 listings in this completely revised and updated classic. An invaluable sourcebook for librarians, archivists, curators, editors, and all those who work with images.

A collection of essays to help information professionals find practical ways to tailor the new technologies to the services they provide.

A collection of papers by a distinguished group of authors, including David R. Bender, Joseph M. Dagnese, Beth A. Hamilton, Vivian D. Hewitt, and Emily R. Mobley.

Order from the Order Dept.
Special Libraries Association
235 Park Avenue South
New York, NY 10003

Prices subject to change without notice.
Free publications catalog available on request.
An On-Line System especially for you

Your library can now enjoy the multi-fold benefits of our newly-enhanced DataLib software. DataLib is an integrated, comprehensive, flexible package which allows you to easily handle:

- Acquisitions
- Cataloging
- On-Line Retrieval
- and more

DataLib's easy-to-use, sophisticated database management technology provides the tools for you to:

- Define the record formats necessary to fit your specific needs.
- Define the data elements you want to search using Boolean logic.
- Quickly access the system functions using either novice or experienced user interfaces.
- Easily transfer information to your system from other services such as OCLC, BRS, and ERIC.
- Define access controls to meet your data security needs.

DataLib is as easy to learn and use as it is powerful. What's more, you can install DataLib on your own in-house computer, purchase it along with computer hardware from us, or easily access it on a timesharing basis.

Join many of the major federal agencies and Fortune 500 companies whose Information Centers require sophisticated control and individualized flexibility.

Just complete the coupon or call us to see how DataLib can help you meet your information management objectives.

Sigma Data, Inc.
5515 Security Lane, Rockville, Maryland 20852
301/984-3636

Yes! I am interested in learning more about DataLib

☐ Please send me more information on how DataLib can help me manage my information center.

☐ Please have an Information Specialist call me to discuss how DataLib can help me manage my information center.

Name
Title
Organization
Address
City State Zip
( ) Telephone
Number of Volumes

July 1983
Over 10 years in preparation · 10,000 entries · 4 million words · more than 1,000 illustrations · 1,300 contributors · 9 volumes, including comprehensive one-volume index.

KODANSHA ENCYCLOPEDIA OF JAPAN

To create this epoch-making work, more than 650 eminent Japanese scholars and 650 non-Japanese authorities from over 15 nations—each deeply involved in Japanese life, thought and history—have contributed articles on all subjects relating to Japan. Here is, in depth, information on history, philosophy, literature, fine arts and culture . . . business, economics, politics, international affairs and law . . . sociology, anthropology, psychology, science and technology—ranging from broad essays on key topics to shorter articles on lesser items.

Published by Kodansha, one of Japan's largest and most respected publishing houses, with an outstanding editorial advisory committee chaired by Edwin O. Reischauer in the United States and Sigeto Tsuru in Japan, the Kodansha Encyclopedia of Japan provides the most comprehensive, detailed picture ever published in English of a nation whose global importance has been prodigious.

Students and teachers, businessmen and diplomats, researchers and journalists—virtually all readers interested in Japan's impact on today's world—can now find, at a central source, anything they wish to know about Japan.

SPECIAL PREPUBLICATION SAVING OF $50.00

The Kodansha Encyclopedia of Japan will be available later this year at $600.00. If you order now, however, the price of the nine-volume set will be only $550.00—a saving of $50.00. This offer expires December 31, 1983; shipping and handling are additional.

FOR FURTHER INFORMATION call (212) 593-7050 or write Dept. 7G for a detailed prospectus describing this invaluable reference, truly one of the most important publishing events of our time.
Letters 265
Talkback Telephone Network
Ruth W. Wender

211
Microcomputer Programming
in the Information Center
Howard Fosdick
271
Church and Synagogue Library Association
Claudia Hannaford

222
Audiovisual Material and
Copyright in Special Libraries
Laura N. Gasaway
278
Nigerian Institute of International Affairs Library
John U. Obasi

240
Cataloging Software
Mercedes Dumlao and
Sherry Cook
289
Name Authority Control in a Communications System
Cathy Ann Elias and C. James Fair

246
Status of Audiovisual Material in Networking
Patricia Ann Coty

254
Crisis and Growth:
SLA 1918-1919
Robert V. Williams and Martha Jane Zachert
297
SLA's 75th Anniversary
Robert G. Krupp
298
75 Years of Service:
Reconsider, Redefine, Reconfirm
Pat Molholt

Publisher: DAVID R. BENDER
Director, Information Services:
NANCY M. VIGGIANO
Editor: DORIS YOUDELMAN
Circulation: FRED BAUM
© Copyright 1983 by Special Libraries Association. Material protected by this copyright may be photocopied for the non-commercial purpose of scholarship or research.
Subscription Rates: Nonmembers, USA $36.00 per calendar year includes the quarterly journal, Special Libraries, and the monthly newsletter, the SpecialList; add $5.00 postage for other countries including Canada. Special Libraries is $12.00 to members, the SpecialList is $3.00 to members, included in member dues. Single copies of Special Libraries (1981- ) $9.00; single copies of SpecialList $1.00. Membership Directory (not a part of a subscription) is $25.00.

Back Issues & Hard Cover Reprints (1910-1965): Inquire Kraus Reprint Corp., 16 East 46th St., New York, N.Y. Microfilm & Microfiche Editions (1910 to date): Inquire University Microfilms, Ann Arbor, Michigan. Microforms of the current year are available only to current subscribers to the original.

Changes of Address: Allow six weeks for all changes to become effective. All communications should include both old and new addresses (with ZIP Codes) and should be accompanied by a mailing label from a recent issue.

Members should send their communications to the SLA Membership Department, 235 Park Avenue South, New York, N.Y. 10003.

Nonmember Subscribers should send their communications to the SLA Circulation Department, 235 Park Avenue South, New York, N.Y. 10003.

Claims for missing issues will not be allowed if received more than 90 days from date of mailing plus the time normally required for postal delivery of the issue and the claim. No claims are allowed because of failure to notify the Membership Department or the Circulation Department (see above) of a change of address, or because copy is “missing from files.”


Indexed in: Book Review Index, Business Periodicals Index, Computer Contents, Cumulative Index to Nursing and Allied Health Literature, Historical Abstracts, Hospital Literature Index, International Bibliography of Book Reviews, International Bibliography of Periodical Literature, Library Literature, Management Index, and Science Citation Index.


Membership

DUES. Member or Associate Member $55; Student Member $12.00; Retired Member $10; Sustaining Member $250; Sponsor $500; Patron $1,000.
Get in-depth economic and social reports on Latin America, the Caribbean, South Asia, the Middle East and Africa. Now you have online access to Inter Press Service, Depthnews Asia, The Middle East Reporter, Earthscan, The Center for Science and Environment in New Delhi, and more . . . by subscribing to Interlink.

Choose from two services:

**INTERLINK NEWSLINE**
- over 1000 full-text articles on line
- database updated daily
- key-word indexing for easy search and retrieval
- accessible by any office/personal computer with telephone modem

**INTERLINK WEEKLY REPORTS**
- a selection of 8 to 12 key articles from the Interlink Newsline
- weekly delivery by mail

**INTERLINK—A DIRECT LINE TO THE UNDER-REPORTED NATIONS OF THE WORLD**

For more information and our surprisingly low rates, contact:
**INTERLINK PRESS SERVICE** 777 United Nations Plaza New York, N.Y. 10017 (212) 599-0867
KEEP CURRENT
Only With PRE-PSYC

It used to take months, even as long as a year, for the latest psychological literature to be cited in online databases. It still does in every other database except BRS/PRE-PSYC.

Utilizing the same format and indexing system as BRS/PRE-MED, the most up-to-date online database in the medical field, PRE-PSYC gives you immediate access to citations from 98 key psychology publications months before you'll find them online anywhere else. It's the most current service available, and another BRS first.

Eliminate the time lag in getting the information you need. Call or write for details on PRE-PSYC today.
Letters

Mixed Reactions

I don’t usually write letters to the editor of Special Libraries, because you do such a good job there’s little to say. However, I feel compelled to comment on the October 1982 issue, particularly the article by Mark Baer. “Achieving Failure in the Company Environment” was one of the best, funniest, and altogether most enjoyable articles I’ve read in a long time. It is refreshing to find an article which pokes fun at the profession while making some very valid points regarding how not to run a library. And the accompanying drawings were equally funny.

I know it isn’t easy to find authors who can write well and be humorous at the same time. If you find any others, I do hope you will publish them. The day we as professional librarians become so taken with our own image as solid, serious professionals that we can’t find time to laugh at our own foibles is a sad day indeed. Thank you for selecting the article for publication in Special Libraries.

Marydee Ojala
Libraries Manager
Bank of America
San Francisco, CA 94137

Further, in the majority of pictures, your female artist has done little service to her female associates; in only one drawing is it implied that the “librarian” might be a male.

Unexpected humor in a professional journal can be a relief, but in this form it needed more than the usual grain of salt—perhaps a kilo or two.

Kathleen M. Nichol
Vancouver, BC

Superseded Standards

As a publisher of some of the standards referred to by Beth Hamilton in her article, “Managing a Standards Collection in an Engineering Consulting Firm,” [SL 74 (no. 1):28-33 (Jan 1983)], I would like to compliment her on an excellent job. She has detailed the importance of standards and how they can help to make the products we use safer, less expensive, and easier to repair.

I have but one minor complaint to voice about the article, and that deals with the availability of superseded standards and rationale statements. We at SAE are proud of our ability to ship copies of standards, both old and new, along with rationale information if requested with as little as a few hours turnaround. Billing for this special service is at our normal document or photocopy fees, and the customer can charge a credit card or request an after-the-fact invoice. Notorized copies can even be provided for courtroom use in this manner with a small service charge.

Additionally, our staff is happy to help locate referenced documents or suggest additional material of interest. We recognize that, in addition to the responsibility we have in developing standards, we have, perhaps, a greater responsibility in assisting users of our standards, many of whom are special librarians.

Dave Mitchell
Manager, Product Development and Marketing
Publications Group, SAE
Warrendale, PA 15096

According to Special Libraries’ “Information for Contributors,” this professional journal “publishes material on new and developing areas of librarianship and information technology. Informative papers on the administration, organization and operation of special libraries and information centers and reports of research in librarianship, documentation, education, and information science and technology are appropriate contributions.”

I wonder, where in this definition you would put Mark Baer’s article entitled, “Achieving Failure in the Company Environment”? Perhaps I was in the wrong frame of mind when I read it but, generally speaking, I do not fit into Mr. Baer’s set of professionals who take themselves too seriously, and I fail to see why an article such as his would be published in Special Libraries. In what way does it advance the profession?
Congratulations

Please accept my warmest congratulations on a fine job of editing the Business and Finance Division-sponsored April issue of Special Libraries. There is a good balance of articles reflecting varying facets of the main theme. And I can’t think of a more fitting way to commemorate the Division’s 25th anniversary.

Valerie Noble
Chairman, SLA Division Cabinet

The Library Management issue of SL was everything I hoped for and more. Miriam Drake did an outstanding job as editor and author. Her article was very comprehensive and certainly set the tone for the entire issue. It’s the kind of writing that all of us would like to claim as our own.

I enjoyed all of the articles, including Mark Baer’s. I really got a chuckle out of that. It’s a shame that so many librarians seem to lack a sense of humor—it’s such a vital necessity for survival.

Joe Ann Clifton
Chairman, Library Management Division

Congratulations on the October 1982 issue of SL. I found it very pertinent to the problems of special libraries and librarians. I have few books in my library. Therefore, the quote from NTIA, “Information management not only deals with the needs of individuals and organizations to convert data into information but it also deals with the problems of getting the right information to the right people at the right time and in the right form,” has long been a motto and goal to be constantly pursued.

Betty Jacobson
Foundation of the Wall & Ceiling Industry
Washington, DC 20002

The October issue is one of the finest collective issues that I have ever read. Miriam Drake, her colleagues in the Library Management Division, and the contributing authors are to be commended for their efforts.

Allen Ekkebus
Central Research Library
Oak Ridge National Laboratory, TN

Elsevier Science Publishing Company announces a major price reduction on all titles published by Applied Science Publishers in Barking, UK that are distributed by Elsevier in the US and Canada. The strength of the US dollar against the English pound has enabled us to make these across-the-board price reductions and to pass on savings which could total hundreds of dollars for our North American customers.

A complete listing of our price reductions is available on request. Following is just a short listing of ASP titles and the savings that we are passing on to you.

<table>
<thead>
<tr>
<th>Title</th>
<th>Old Price</th>
<th>New Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackley, Synthetic Rubbers</td>
<td>$74.00</td>
<td>$66.75</td>
</tr>
<tr>
<td>Hepburn, Polyurethane Elastomers</td>
<td>$82.00</td>
<td>$74.00</td>
</tr>
<tr>
<td>Mascia, Thermoplastics</td>
<td>$78.00</td>
<td>$70.50</td>
</tr>
<tr>
<td>Sheldon, Composite Polymeric Materials</td>
<td>$39.00</td>
<td>$35.25</td>
</tr>
<tr>
<td>Brown, Meat Microbiology</td>
<td>$94.50</td>
<td>$85.00</td>
</tr>
</tbody>
</table>

Due to the uncertain nature of the international monetary market it is never possible to predict the long range performance of the US dollar. We urge you to act now to take full advantage of these lower prices.

For further information about additional discounts contact:

Geoff Boytos,
ELSEVIER SCIENCE PUBLISHING CO.
52 Vanderbilt Ave.,
NY, NY 10017

special libraries
EBSCONET, a dynamic online system designed to meet the changing needs of librarians all over the world. We listen to suggestions, and requests. And then act on them. EBSCONET is tailored to provide you with the best of technology in a manner you can understand and use.

Because EBSCO recognizes the different expectations of online systems, EBSCONET gives you a choice.

**ONLINE SUBSCRIPTION SERVICE**

For as little as $250. Claim, order and access title and price information. Receive Summary of Publications Ordered information. You can even locate missing issues—online. Within 24 hours you can be online to EBSCO's extensive database.

**SERIALS CONTROL SYSTEM**

For complete automation, including check-in, claiming, reference, binding, and union list reports. Sophisticated and versatile. Coming soon are accounting and routing.

**EBSCO SUBSCRIPTION SERVICES**

P.O. Box 1943 Birmingham, AL 35201 (205) 991-6600
It's Time To Try A New ROUTE.

Introducing ROUTE, The Newest Module In Faxon's LINX System.

Now there's a computerized system for creating, updating and printing journal routing slips. The ROUTE system.

With ROUTE, all the time-consuming details of managing routing lists are handled for you. ROUTE keeps track of who gets what publications; it lists readers by name, location, address and other identifiers you specify; it can prioritize routing order by title or other parameters; and it produces all your routing slips for you.

ROUTE also gives you valuable management and statistical reports; a simplified procedure for changing reader records, and much more.

For the full story on easy-to-use, easy-to-learn ROUTE, part of Faxon's LINX serials management system, just return the coupon or call 617-329-3350; outside of Boston, call 800-225-6055.

--Show Me The ROUTE.

I'm looking for a way to manage periodical distribution more efficiently! Send me all the facts on your ROUTE system right away.

NAME: ____________________________

ADDRESS: ____________________________

CITY: ____________________________

STATE: __________ ZIP: __________

Faxon

15 Southeast Park, Westwood, MA 02090

The Art & Science of Serials Management.
What if there were no Standard & Poor's Corporation?

There was no Standard & Poor's Corporation 120 years ago. Instead, there was an informational void.

The stock market frequently depended on rumor instead of fact. Bonds were sold without ratings, rhyme or reason. Stocks were often watered.

And, then, suddenly, Standard & Poor's harnessed the young, explosive energy of capitalism... and became a guiding force and an integral part of the capital formation system.

With careful, thorough, objective analysis and factual reporting,

So traders were finally able to learn who and what backed a new issue. Investors were able to obtain carefully-researched analytical and statistical information to help them make investment decisions.

From that day to today, Standard & Poor's has dealt objectively with facts. Facts and expert consideration of the implications are our stock-in-trade... for stock brokers, bankers, institutional and individual investors, investment bankers, pension fund managers and financial and planning officers.

Consider just three of the more than 50 services Standard & Poor's makes available to the financial community—

Stock Reports. Continually updated detailed performance reports on every company listed on the NYSE, ASE and on those most actively traded over-the-counter and on regional exchanges. Over 4,500 companies are reported on in a manner uniquely our own.

Corporation Records. A prime source for in-depth, timely information on American corporations—facts on over 10,000 leading companies prepared by a staff of 65 professionals. Used by corporations themselves, their competitors, brokers, bankers, investment managers, insurance companies.

And introducing S&P MarketScope™. Our new dynamically updated system delivers vital advisory and statistical information over quote terminals directly to the user's desk. It provides on-demand analysis of stocks and industry developments, penetrating comments on current market activity, and recommendations that meet specific investment criteria. Over 4,500 companies are covered.

Today (and tomorrow) the financial community can depend on Standard & Poor's. Our commitment to deliver reliable information clearly and quickly is stronger than ever. In just about whatever medium or mode—from hard-bound library reference works to dynamically updated real-time systems—Standard & Poor's will continue to provide unique services to the marketplace.

Standard & Poor's Corporation
25 Broadway, New York, NY 10004

For more information: S&P print services and publications, contact Robert Gorton, (212) 248-7225
S&P MarketScope™, contact Caren Brustein, (212) 248-3638, Blue List Bond Ticker, contact Marjorie Raimpino, (212) 248-3377
“Look, Sci-Mate even searches MEDLINE!”
At last!
One language to search
DIALOG, BRS, SDC, ISI and MEDLINE!

With the Sci-Mate Universal Online Searcher and a microcomputer, you can use one
language to search the systems you use most. There's no training needed: you'll learn as
you use Sci-Mate because its menu-driven commands are in plain English. And this menu-
driven system offers the search capabilities of the host system (for example, EXPAND,
SEARCH, and current awareness functions).

If you prefer, you can search in the original language of the host system. Either way—
menu-driven or host system—Sci-Mate saves you time by automatically dialing up and
logging on for you.

You and your staff can search more quickly and easily with the Sci-Mate Universal Online
Searcher. And it costs just $440.

There's also additional software that lets you incorporate the items you retrieve online into
your own Sci-Mate data management system. Place your hits in your own "work file" to
edit, sort, or flag them for ordering . . . create your own data base that's free-text
searchable. Sci-Mate's Personal Data Manager costs $540.

Purchase both at one time and pay
$880—a $100 savings.

Find out how Sci-Mate can speed and simplify your online searching—call
800-523-4092, or mail the coupon
provided here.

Sci-Mate is currently available for IBM
PC, Vector 3 and 4, Apple II, TRS-80
Model II microcomputers, and all other
CP/M-80 systems with standard 8" drives. Sci-Mate software for IBM,
Vector, and Apple micros is available
on 5 1/4" disks.
ARE WORLDWIDE PATENTS ELUDING YOU?

We've got them covered.

At last, the most comprehensive, up-to-date source of patents—both U.S. and worldwide—is available online, exclusively with Pergamon InfoLine®.

Now you can subject search the entire file of INPADOC—the world's largest patent database with records of over 10 million patents, as far back as 1968, from 51 national and regional Patent Offices.

All titles are fully searchable, including English language titles for Japanese and Soviet patents. And our patent family command lets you find all foreign equivalents in seconds.

For more in-depth searching, our PATSEARCH® database has abstracts of all U.S. patents since 1971 and all PCT published applications in one single file that makes your searching faster, easier, and less expensive. New patents are added every week within a week or two of publication. And the PATLAW database complements the patent files with reports of all decisions from U.S. courts on patents, trademarks, copyright and unfair competition.

InfoLine brings you more than just patent databases.

Exclusive databases on rubber and plastics, paper and packaging, chemical directories, and other major scientific and technical sources of information make Pergamon InfoLine a service you can't do without.

Call us today for a database catalog and service order form. We'll give you a free Brief Guide to InfoLine and a half-hour of practice time when you sign up. Or if you prefer, our Patent Search Center can do the searching for you.

Pergamon International Information Corporation
1340 Old Chain Bridge Road, McLean, VA 22101
Toll-free: 800-336-7575  in Virginia: 703-442-0900
Announcing Circa™ Automated Circulation Systems — Featured in a New Highsmith Catalog!

Menu-driven, Display-oriented Software • Barcode Entry with Light Pens • Plus the 45-day Highsmith Guarantee!

Reliable circulation software with hard-disk mass memory storage. Circa I™ for Apple IIE™, Circa II™ for Apple III™ and for the new IBM/PC-XT™. Visit the Highsmith booth at ALA to see the new Circa systems and our many microcomputer products for school, public and special libraries.

If you haven't received your Microcomputer and Library Automation catalog, write or call:
The Highsmith Company, Inc.
P.O. Box 800SL
Fort Atkinson, WI 53538
Toll-Free Ordering: 1-800-558-2110.
(In WI, AK and HI, 1-414-563-9571.)
We’re Minding Your Business.

Business Periodicals Index

...the first choice for a business index.
REFERENCE SERVICES REVIEW

Keeping up with today’s expanding world of business means coming to grips with thousands of important articles in hundreds of business magazines...every month! This is what Business Periodicals Index can do for you.

- Complete indexing of every article in 305 business magazines, the most complete business index available in any format
- Coverage of more than 30 business fields
- Articles indexed under specific business subject headings in one alphabet by professional librarians
- Complete bibliographic information to locate an article
- Extensive cross-referencing
- Citations to current business book reviews
- Complete publication data about each of the magazines indexed

Business Periodicals Index has recently undergone an in-depth study of its contents and editorial policy conducted by the Committee on Wilson Indexes, a standing committee of the American Library Association's Reference and Adult Services Division. The study was conducted with the help of consultants with expertise in specialized business fields and subscribers who commented about the index and suggested periodicals to be indexed. The study resulted in the addition of 80 new periodicals.

Business Periodicals Index is published monthly except in August, with quarterly cumulations and permanent hardbound annual cumulations. It is sold on the service basis. For a free brochure that lists all of the magazines indexed and instructions for ordering, please write to:

The H.W. Wilson Company
950 University Avenue
Bronx, New York 10452
WOULDN'T IT BE EASIER TO USE JUST ONE DOCUMENT SUPPLIER?
Simplify your work—no matter what subject, what language, or what type of document, IOD is the one place to go for all your document delivery needs.

FAST TURN AROUND TIME
IOD is recognized as the world's leading commercial document delivery service. With over 11 year's experience, IOD has the systems, the staff and the know-how to give you the fastest possible delivery of all the materials you need.

ORDER BY ANY METHOD
We speed your request electronically to our network of information professionals in over 20 major research centers. You can send us orders by any online retrieval service, by phone, facsimile, or photocopy. Nothing could be faster or easier.

NO COPYRIGHT RISK
And with IOD your company runs no risk of copyright violation. IOD pays all copyright royalties either through the Copyright Clearance Center or through license agreements with the publishers.

SIMPLE, AFFORDABLE PRICING
IOD saves you time and money—document delivery from as little as $10.50.

This simple, single price includes:
- Photocopying up to 20 pages
- Copyright royalties up to $4
- Electronic ordering and routing
- Free status reports
- Itemized invoices
- First Class mail or UPS

To order today, type: ORDER INFO on DialOrder or call toll free: 800-227-0750 (415-644-4500 in California).
Our friendly professional staff is waiting to assist you.

LEXIQUE GÉNÉRAL Anglais-Français
Contains a comprehensive nomenclature covering the organs, basic legislation and administrative and budgetary procedures of the UN family. It is a vade-mecum for the people whose profession requires understanding and using the multifarious vocabulary of international affairs.
ST/DCS/1/Rev.2
$60.00

THESAURUS OF INTERNATIONAL TRADE TERMS
International Trade Centre UNCTAD/GATT Geneva
Includes terms relating to reference materials, functional subjects connected with trade, countries and geographical entities and a broad range of products of export and import interest to developing countries. Lists terms alphabetically and in numerical order.
$30.00

The only company that can fulfill all your document delivery needs
THERE'S A LOT MORE TO BUSINESS INFORMATION THAN STOCK QUOTES AND CURRENT EVENTS. THAT'S WHY DIALOG OFFERS SEARCHERS MORE BUSINESS DATABASES THAN ANYONE ELSE. WITH DIALOG, YOU ARE ABLE TO SEARCH MORE THAN 50 DIFFERENT DATABASES COVERING BUSINESS INFORMATION FROM MARKET RESEARCH TO MANAGEMENT TECHNIQUES, ECONOMIC TRENDS TO COMPANY SPECIFICS—A UNIQUE COMBINATION OF BIBLIOGRAPHIC, DIRECTORY, AND STATISTICAL FILES ONLY DIALOG CAN PROVIDE. 


FOR A BROCHURE ON DIALOG'S BUSINESS DATABASES, CONTACT DIALOG INFORMATION SERVICES, DEPT. 88, 3460 HILLVIEW AVE., PALO ALTO, CA 94304. CALL TOLL-FREE (800) 227-1927. IN CALIFORNIA CALL (800) 982-5838.
Now available! CA abstracts will be available for display when you retrieve substance information through CAS ONLINE. Whether you search by structure, by name or by CAS Registry Number, you can also receive the bibliographic reference and CA abstract text for the 10 most recent documents mentioning the substance.

Abstracts—to tell you the new, chemical information disclosed in each document.
Abstracts—to help you decide whether or not the original document is likely to be of interest.
Abstracts—available through CAS ONLINE.

CAS ONLINE™
The Chemical Substance Search and Display System From Chemical Abstracts Service
Chemical Abstracts Service, Marketing Dept. 30683, P. O. Box 3012, Columbus, Ohio 43210 U.S.A., Telephone 614/421-3600

CAS is a division of the American Chemical Society
© 1983 by ACS
ERDE International is the only specialized publication in the world that concentrates on the technology of the natural ingredients (botanical and animal) used in the cosmetic, perfumery, and flavor industries. Articles on the chemistry, extraction, formulation, preparation and technology of natural derivatives are presented. Published material is researched, developed and edited by qualified chemists, micro-biologists, dermatologists, biologists and pharmacologists from different parts of the world.

The journal aims to provide an up to date presentation of pure and applied information to the wide fields in the health and beauty industry.

Erde is currently published in English. Publication dates of the French, German and Spanish edition are available on request.

Subscription Rates
U.S.A., Canada and all Latin American countries: U.S. $165 for one year and $300 for two years including air freight to Canada and Latin America (Third class mail within the United States). All other countries: U.S. $210 for one year and $385 for two years including air freight. Remittance for subscriptions should be sent to Erde International (USA), P.O. Box 25007, Phoenix, Az 85002, U.S.A.

Advertisements
Inquiries and bookings should be sent to:
Advertisement Manager,
Erde International P.O. Box 25007, Phoenix, Az. 85002, U.S.A.
Telephone (602) 241-4848, Telex (165-083)
If it's about behavior, you'll find it in PsycINFO

LAWYERS will find information about child advocacy, jury selection, or evidence validity; ADVERTISERS about consumer behavior or brand loyalty; PHYSICIANS about drug interactions, behavioral aspects of disease, or the addictive personality; MANAGERS about employee motivation or personnel selection.

Behavior is a part of everyone's business.

SOCIAL SCIENTISTS, EDUCATORS, and PSYCHOLOGISTS have long relied on PsycINFO for behavioral information.

Free: Guide to PsycINFO
Learn more about the PsycINFO services, and how to decide which ones will serve your needs best. Call or write for your free Guide to PsycINFO today.

Psychological Abstracts Information Services 1200 Seventeenth Street, N.W. Washington, D.C. 20036 800-358-6880—Toll free (In Virginia, Call 804-633-5988)

american psychological association
When you manage a library these days, you’re well aware that space is precious. And additional shelves for backfile volumes are expensive.

Well, the American Chemical Society knows your concerns. That’s why all the Society’s 20 primary publications in the field of chemistry are available in microfilm editions — including complete volumes back to 1879.

Start Saving Space In Your Chemical Reference Files Now!

If you are setting up a microfilm system, expanding or changing one, or just want to discuss the possibilities—an ACS Sales Representative is ready to work with you. Just fill in the coupon below, or better yet, call us:

American Chemical Society
Our 15th Year in Micropublishing

ACS Microfilm Editions—Information Coupon

Yes, please send me more information on American Chemical Society publications as indicated below:

☐ ACS Microforms Catalog
☐ ACS Books & Journals Catalog (includes microforms information)

Name ____________________________
Organization ______________________
Address __________________________
City, State, Zip ______________________
Country __________________________
Telephone (__________)____________

Return this coupon to: American Chemical Society, Sales Office, 1155 16th Street, N.W., Washington, D.C. 20036
The most highly acclaimed science reference ever published has been completely updated and greatly expanded to reflect the most recent developments, discoveries, and advances in each of 75 disciplines ranging from Acoustics to Vertebrate Zoology. Included are breakthroughs in genetic engineering, video disk recording, metallic glasses, immunoassay, industrial robots, solar energy, artificial intelligence, and hundreds more.

The Fifth Edition features:
- 7,700 articles — more than 2,100 extensively revised or completely new
- 12,400 pages — 1,500 more than the Fourth Edition
- More than 7.3 million words
- 15,250 illustrations (most in two colors) — 2,150 more than the previous edition
- 3,000 international contributors
- Two giant indexes: Analytical — with 150,000 entries; Topical — with lists of all article titles by discipline
- Revised bibliographies and 50,000 cross-references

HIGH RECOMMENDATIONS

"Top quality . . . Written for the student and nonspecialist but definitely "of" and not just "about" science."
— Science Books & Films

"The essential cornerstone around which public, academic, special, and high school libraries should build their science reference collections."
— Wilson Library Bulletin

"Any library that has a serious intention of catering for scientists, technologists and engineers needs a copy of this edition . . . ."
— Nature

Regular list price $935. Institutional price $840.
For a free 16-page, full-color Prospectus describing this Fifth Edition in detail — or to order direct — please contact:
Elyse Nevid • 212-997-3551 • Professional & General Books Group • 35th Floor • McGraw-Hill Book Co. • 1221 Avenue of the Americas • New York, NY 10020
Charles Cutter's Concern Then.
Gaylord's Solution Today...

During his time, Charles Ammi Cutter dreamed of a new type of library; one which would "lend everything to anybody in any desired quantity for any length of time." In order to do so, existing facilities and services had to be improved and the increasing volume of materials had to be organized more efficiently. Voila, the Cutter System!

Today, Gaylord enhances Cutter's legacy with superior library shelving designed to aid in the organization, storage or display of books and other materials. When resources are at a premium, Gaylord offers shelving in a variety of product styles to help you easily solve all of your library's important storage problems. And, because we stock an extensive inventory, most Gaylord products are shipped within four to six weeks, so you don't have to wait months for delivery.

For one piece of furniture or an entire library, come to Gaylord: the single source for all your storage and display needs. You can be confident when it's Gaylord. We wrote the book on library furniture.

Cutter photo used by permission of the American Library Association.
Microcomputer Programming in the Information Center

Howard Fosdick

Villa Park, IL 60181

Historically, PL/I has been the general-purpose programming language of choice in libraries and information centers. However, available evidence suggests that librarians are programming their microcomputers in BASIC and Pascal. Several issues pertaining to the choice of programming languages for library microcomputing are discussed. Microcomputer BASIC, Pascal, and PL/I are characterized and contrasted in terms of their suitability for library and textual processing needs.

The increasing use of microcomputers in libraries and information centers has raised important questions concerning the programming of these machines. Choosing an appropriate programming language(s) affects the development, maintainability, and portability of library microcomputer software. Several programming languages will be analyzed in terms of criteria significant to library microcomputing. Commercial software packages which do not imply original library programming (1) have been excluded from consideration. “Nontraditional” programming languages, such as nonprocedural and database languages, are also excluded from the scope of this paper.

Previous Studies

To date, no formal papers have been published on the specific applicability of programming languages to library microcomputers. Although some literature exists on the general topic of programming languages appropriate to library use, this literature largely predates widespread use of microcomputers in libraries.

For example, Davis (2) has characterized the major (mainframe) programming languages and analyzed their suitability for library programming in the context of his teaching computer programming to library science students over a five-year period. His description of FORTRAN, ALGOL, COBOL, APL,
BASIC, and PL/I, concludes that PL/I is the most generally suitable language for library use, primarily because it combines text processing features with strengths in data processing and library operations research.

Saffady (3) similarly reviews the capabilities of various programming languages for library and information science. He contrasts COMIT, SNOBOL, PL/I, APL, COBOL, FORTRAN, and ALGOL in terms of their string manipulation features. While SNOBOL and COMIT are cited for their special text processing orientation, PL/I is considered "... the obvious choice ... where the facilities of a more general language are required..." (3, p. 419). Like Davis, Saffady isolates string processing capabilities as critical to library programming needs.

Libbey (6) describes the manners in which SNOBOL and COMIT suit library and information retrieval programming needs. Chweh (7) relates his experiences teaching the programming language SPEAKEASY. Finally, Richmond (8) goes so far as to suggest that librarians and information scientists should invent their own programming language since the existing ones are inadequate for library text processing.

Current Practice

Several of the papers mentioned judge PL/I to be the single most widely used programming language in library environments, and statistical evidence also supports this view (9). A survey of the literature on library automation reveals, for example, that papers pub-

Text processing ability is important in library environments because so many library tasks involve non-numeric information. For example, the production of new book lists, concordances, bibliographies, catalog cards, online catalogs, SDI listings, and other library products require manipulation of non-numeric textual information.

Fosdick (4, 5) establishes a set of criteria for formal evaluation of programming languages for library and information center programming. The programming needs of the profession are classified as systems programming, data processing, text processing, and library operations research. The mainframe programming languages are discussed within this context. These include the assembly languages, COBOL, PL/I, BASIC, FORTRAN, COMIT, SNOBOL, ALGOL, APL, and their variants. Like the studies mentioned earlier, the criteria recognize the special significance of the library's string processing requirements.

In addition to analysis of programming languages for library use, several articles advocate particular languages for information centers. For example, lished in the *Journal of Library Automation* over the years refer to more library projects implemented in PL/I than any other single language. In general, the literature of the field cites PL/I most frequently.

The second most-used language in the profession is probably COBOL. Several English sources substantiate this view (10–12). Fosdick (13) contrasts COBOL and PL/I.

Surveys on the teaching of computer programming in library schools further indicate the profession’s orientation toward PL/I. Two studies (14, 15) provide evidence that PL/I is the most widely taught language in library schools, and,

*Journal of Library Automation is now known as Information Technology and Libraries.*
of the four texts written specifically to illustrate library and information science programming, three are on PL/I (16–18); the fourth uses COBOL (19).

Enter Microcomputers

Despite the popularity of PL/I, COBOL, SNOBOL, COMIT and a variety of other languages for library programming on mainframes, preliminary results from a study being conducted by Nolan Pope and Lawrence Woods (20) indicate that BASIC is the most common programming language for library microcomputers. Pascal is a distant second, while PL/I and COBOL appear to be used hardly at all.* The author’s discussions with librarians at many conferences and workshops on library microcomputers confirm this situation.

Why are not PL/I and COBOL used on library microcomputers? Are they appropriate for library microcomputers, or are languages of microcomputer origins more suitable?

One criteria for determining the suitability of a programming language for library microcomputing is its string manipulation features. “String manipulation” refers to the ability to process textual data embodied in “character strings.” A character string is defined as a group of contiguous symbols, such as letters of the alphabet, punctuation symbols, and digits. The string has an implied length, a prime characteristic of strings being the unpredictability of this length.

String processing programs perform three classes of string operations: concatenation, bifurcation, and pattern matching. “Concatenation” is the joining of separate strings into a composite string; “bifurcation” is the inverse process of separating a string into its constituent substrings; “pattern matching” is the recognition of substrings within strings.

*The string manipulation languages, SNOBOL and COMIT, cannot be used because microcomputer implementations do not yet exist.

This text processing ability is important in library environments because so many library tasks involve non-numeric information. For example, the production of new book lists, concordances, bibliographies, catalog cards, online catalogs, SDI listings, and other library products require manipulation of non-numeric textual information. Such processing is quite different from the numeric data handling for which most programming languages were designed. Library requirements for programming languages are somewhat special in their need for string processing facilities (4).

String Processing in BASIC

BASIC was the first higher-level language implemented on microcomputers because it requires little memory (RAM) in which to run. The simplicity of learning this language and its ease of use have led to BASIC’s continuing popularity and its establishment as a microcomputer lingua franca (23).

BASIC’s primary defects are its lack of adequate control constructs, its lack of standardization, and its limited power in more restricted implementations. The first point is significant because “structured programming” was probably the most important development in software engineering during the 1970s (22–24). Structured programming methodology requires that program logic be expressed within the context of a limited number of control constructs which include: “Process,” “If-then-else,” “Do-while,” “Case” and “Call.” Since most forms of BASIC do not provide these constructs (25), professional programmers avoid using BASIC in larger or more complicated programming systems.

Since BASIC lacks standardization across its many implementations, programs written in one form of BASIC cannot be used on different manufacturers’ machines. It also makes discussion of the string manipulation facilities of BASIC a little difficult—the
string power of the language ranges from minimal to powerful, depending on which form of BASIC one is considering.

As defined in the 1978 ANSI standard for Minimal BASIC (26), small BASIC's are thoroughly inadequate for string processing. The ANSI Minimal BASIC standard does not include character string manipulation at all. Fortunately, most microcomputer BASIC's offer far more text manipulation capability than found in the minimal standard. In many BASIC's, functions such as SEG$, MID$, LEFT$ and RIGHT$ permit substring manipulation. Functions such as STR$ and VAL facilitate number/string conversions.

Other functions in many present-day BASIC's are similar to those of the proposed ANSI standard for a full-sized BASIC (27). These include: CHR$ and ORD, which associate characters with their numeric values; LCASE$ and UCASE$, for upper and lowercase conversions; DATE$ and TIME$, which return the date and time as strings; LEN, which gives the length of a string; and POS, which searches a string for another string. Li (28) provides a checklist comparison of string functions in the current BASIC's for PET, Apple II, Radio Shack, Atari, TI 99/4, and Exidy Sorcerer microcomputers.

The proposed "full" BASIC standard (27) also includes the ampersand (&) as a concatenation operator. It allows specification of substrings in the form LINE$(X:Y)$, where X and Y are integers specifying the positions of the first and last characters in the substring, respectively.

The bottom line in meeting library requirements for string processing is that BASIC implementations vary so widely that string capability can range from abysmal to excellent. Librarians must analyze their own BASIC implementation and look for the functions that have been described or their equivalents.

Ultimately, the most serious defects of BASIC—lack of structured programming constructs, lack of standardization—may be addressed by the proposed BASIC standard (27). This standard ensures string processing features suitable for library needs. However, if history is any guide, one must wonder whether this new BASIC standard will have any more impact than that produced by Minimal BASIC in 1978. Even if it should, its effects loom several years distant.

String Processing in Pascal

Like BASIC, the Pascal programming language has found its greatest popularity for microcomputer use. Pascal is a general-purpose language that offers features absent in the smaller BASIC's. In addition, Pascal is well-known for its comfortable fit with structured programming practices.

Pascal suffers from standardization problems far less severe than those of BASIC. Significant Pascal standards include: the original language definition of Jensen and Wirth (29); UCSD Pascal (30–32); Concurrent Pascal (33); and the emergent ISO standard Pascal (34). Since the first two language definitions have had foremost impact on microcomputer implementations, we will base our discussion on them.

The original language definition of Jensen and Wirth is commonly called "standard Pascal." It is rigorously defined in their work, Pascal: User Manual and Report 2d ed. (29). Judging by that document, the language is inconvenient for string processing. The only data type for storing character-format data is CHAR, which contains but a single character. Character strings are commonly represented as packed one-dimensional character arrays of fixed length. The procedures PACK and UNPACK allow dynamic changes to the representation of an array.

Pascal considers the size of an array to be part of its type. Since arrays of different sizes cannot be passed as arguments to subroutines, general string processing routines cannot be designed. Finally, standard Pascal does not contain predefined string functions.
The difficulties inherent in string processing in standard Pascal are formally documented in (35).

Fortunately for librarians, most microcomputer Pascals are supersets of standard Pascal. As a typical example, JRT Pascal (36) adds a "dynamic string" variable type similar to the STRING type of UCSD Pascal. Dynamic strings can be manipulated by a group of string functions that include INSERT, CONCAT, DELETE, POS, and LENGTH. These string functions facilitate a variety of substring, bifurcation, and pattern matching operations.

Other popular microcomputer Pascals, e.g., Pascal/M, Pascal/MT+, and Pascal/Z, include enhancements similar to those of JRT Pascal (37, 38). Thus, most Pascal implementations are supersets of the original "standard Pascal." Although it corrects the weaknesses of standard Pascal in string processing, UCSD Pascal includes an "operating environment" whereby the Pascal programming language is mated with its own operating system. Therefore, by choosing to use UCSD Pascal, librarians are accepting its operating system, as well as its programming language. The portability of this operating environment is one of the major goals of Soft-Tech Microsystems, the vendor of the UCSD Pascal "p-System" (39). However, should programmers ever need to work outside of this operating system, they may be subject to operating system incompatibilities. Although particular operating systems offer "bridges" to other systems, incompatibilities on this level can imply intractable difficulties.

**String Processing in PL/I**

PL/I's general characteristics include a good fit with structured programming practices, and the relative ease of learning a usable subset of the full language. Unlike BASIC and Pascal, PL/I was a popular programming language for mainframe and minicomputers for some years before being implemented on microcomputers. This longevity resulted in well-defined standards for the language. One standard subset, ANSI Subset G, is oriented specifically towards microcomputers.

Our discussion of string processing in PL/I will be based on the Digital Research's implementation of ANSI Subset G (40-42). This is by far the most popular ANSI standard implementation of PL/I on microcomputers (43). It runs on Z80- and 8086-based systems, and a 68000-based implementation is under development.

In spanning the spectrum of popular 8- and 16-bit microcomputer systems, the ANSI G standard effectively provides PL/I source code compatibility across a wide range of systems—from 8- and 16-bit microcomputers, to minicomputers such as those of DEC and Data General, to mainframes such as those of IBM and others.
PL/I was the first general-purpose programming language designed with inherent string handling capabilities (string processing features were only added as extensions to other languages developed in mainframe environments). PL/I, therefore, recognizes both character and bit strings as fundamental kinds of data. String handling functions are generally applicable to both string types. Twelve string processing functions are built into the language: ASCII, BIT, BOOL, CHARACTER, COLLATE, INDEX, LENGTH, RANK, SUBSTR, TRANSLATE, UNSPEC, and VERIFY (#1). Additionally, SUBSTR can be used as a "pseudovariable" to describe bit and character string targets, as well as sources. UNSPEC can also be used as a pseudo-variable.

Since PL/I was designed with inherent string processing features, the salient characteristic of string length unpredictability is explicitly recognized by the compiler in its provision for variable length strings. This is achieved through the use of the VARYING attribute, whereby string lengths vary as appropriate. For example, concatenation of two variable character strings via the concatenation operator (.), results in a string of length equal to the sum of the lengths of the source strings. Variable length strings (and variable length records) can be read or written to/from files with the READ Varying and WRITE Varying statements.

In sum, the ANSI subset G compilers for microcomputers retain the basic design philosophy of PL/I. This philosophy considers both character and bit strings an integral part of the language. The result is an exceptionally powerful general-purpose language for string processing. Equally important to libraries, these string manipulation abilities are included in the minimal subset of the language, assuring reasonable transportability of library programs across a wide variety of microcomputer, minicomputer, and mainframe environments. Compatibility with previous programming investments is, therefore, possible.

Summary

In Appendices A, B, C, and D, the languages discussed have been rated according to the string functions and operations they contain. BASIC is found to vary from abysmal to quite good in its string handling properties. Librarians who are considering using BASIC from the standpoint of string processing must inspect their vendor's particular implementation to judge how well the language will meet their requirements. Most larger BASIC's are reasonable in this regard. However, the lack of clear standards will result in machine-dependent code. This limits the portability of BASIC programs.

Standard Pascal is inadequate for serious textual processing. Fortunately, most microcomputer Pascals extend the basic language to include string data types and a reasonable set of string handling functions. Since these extensions are outside the definition of standard Pascal, libraries and information centers will want to ensure that these features are available in their own implementation of the language. The comments concerning BASIC's machine-dependency pertain here as well.

UCSD Pascal's string processing abilities equal those of the better extended standard Pascal's. UCSD Pascal is quite good for library string processing tasks. Another major strength is that the vendor has made portability across machines a major goal. However, since UCSD programs are bound with their "operating environment," attempts to use facilities of other operating systems can involve incompatibilities and force a library to sustain a multiple operating systems environment. An example of these difficulties is encountered when a library using UCSD Pascal wants to run one of the popular CP/M or MS-DOS based database management systems. Few of these database systems run under the UCSD operating system.

PL/I offers the strongest string processing features of the three programming languages. Since the text manipu-
lation facilities are part of the minimal language standards; PL/I string processing programs retain portability. ANSI Subset G provides a strong standard for microcomputers that includes the essential string processing power of the full language. Libraries and information centers can, therefore, share source-code PL/I programs, and this cooperative effort could include microcomputers and mainframes, as well as microcomputers.

Microcomputer PL/I complements the prior dominance of PL/I in the profession. Microcomputer PL/I extends applications compatibility in the library and information center across computers irrespective of size.

Given these advantages, why hasn't PL/I been used more widely in library microcomputer programming? In the author's opinion, library microcomputer users are merely following the trend established by the microcomputing industry in using the two predominant microcomputer languages, BASIC and Pascal. The use of microcomputers in libraries is still in its infancy, and usage has yet to mature to the point where the special needs of libraries and information centers are recognized in the profession.

The second reason PL/I is not widely used in library microcomputer programming is that Apple computers heavily predominate in library hardware (20). Apple II's can run CP/M-based languages like PL/I through use of Z80 processor cards. However, since the vendor tends to promote its own languages (especially BASIC and Pascal), it is natural that Apple owners generally use these languages.

As the sophistication of library microcomputer users increases, library professionals will recognize the need for standardized languages featuring string processing. The issues discussed here will become more pressing when librarians further integrate microcomputer technology into their professional environment.

* * *

Introduction to the Appendices

In the following tables, languages are rated on the basis of the number of string functions and operations they contain. The categories are: NONE (no provisions for strings); FEW (under five string functions/operations); SEVERAL (about five string functions/operations to roughly a dozen); and, MANY (a dozen or more string functions/operations). Based on this classification, languages are rated as: POOR, FAIR, GOOD or EXCELLENT for string processing.

It is important to recognize that the evaluations must necessarily be subjective, because string functions vary in intent and power by language. For example, many BASIC's contain the functions LEFT$, MID$, and RIGHT$ for defining substrings within a data item. Other BASIC's offer just as much power through the single function SEG$. The problem of judging equivalent functionality across languages is even more severe. Languages also vary in other respects concerning their treatment of strings. For example, the degree to which the language recognizes strings as a data type is important, as is the degree to which string processing is an integral part of the overall language design.

Given that the comparison process cannot be strictly quantitative, it is explicitly stated that the following charts are for purposes of rough comparison only. The reader is referred to the cited language standards and implementation manuals for more detailed information.
### Appendix A. String Manipulation in Language Standards.

<table>
<thead>
<tr>
<th>Language Standard</th>
<th>Number of String Functions &amp; Operations</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI Minimal BASIC</td>
<td>None *</td>
<td>Poor</td>
</tr>
<tr>
<td>Proposed ANSI BASIC</td>
<td>Several †</td>
<td>Good</td>
</tr>
<tr>
<td>Jensen &amp; Wirth Pascal</td>
<td>Few ‡</td>
<td>Fair</td>
</tr>
<tr>
<td>UCSD Pascal</td>
<td>Several §</td>
<td>Good</td>
</tr>
<tr>
<td>ANSI Subset G PL/I</td>
<td>Many *</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

* Based on literature sources (26) and (27).
† Based on literature source (27).
‡ Based on literature sources (29) and (35).
§ Based on literature sources (30–32).
* Based on literature source (47).

### Appendix B. String Manipulation in Selected BASIC Language Implementations.

<table>
<thead>
<tr>
<th>Language Implementation</th>
<th>Number of String Functions &amp; Operations</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodore PET BASIC</td>
<td>Several *</td>
<td>Good</td>
</tr>
<tr>
<td>Exidy Sorcerer BASIC</td>
<td>Several †</td>
<td>Good</td>
</tr>
<tr>
<td>Apple II Applesoft BASIC</td>
<td>Several ‡</td>
<td>Good</td>
</tr>
<tr>
<td>Radio Shack TRS-80 III BASIC</td>
<td>Many §</td>
<td>Excellent</td>
</tr>
<tr>
<td>CBASIC II (Compiler Systems)</td>
<td>Many *</td>
<td>Excellent</td>
</tr>
<tr>
<td>BASIC-80 (Microsoft)</td>
<td>Several *</td>
<td>Good</td>
</tr>
</tbody>
</table>

* Based on literature source (28).
† Based on literature source (28).
‡ Based on literature sources (44–46).
§ Based on literature sources (47) and (48).
* Based on literature source (49).
* Based on literature source (50).
### Appendix C. String Manipulation in Selected Pascal Language Implementations.

<table>
<thead>
<tr>
<th>Language Implementation</th>
<th>Number of String Functions &amp; Operations</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pascal/Z (Ithaca Intersystems)</td>
<td>Few *</td>
<td>Fair</td>
</tr>
<tr>
<td>JRT Pascal (JRT Systems)</td>
<td>Several †</td>
<td>Good</td>
</tr>
<tr>
<td>Pascal/MT+ (MT Microsystems)</td>
<td>Several ‡</td>
<td>Good</td>
</tr>
<tr>
<td>Pascal/M (Sorcin)</td>
<td>Several ‡</td>
<td>Good</td>
</tr>
<tr>
<td>UCSD Pascal</td>
<td>Several *</td>
<td>Good</td>
</tr>
<tr>
<td>IBM PC Pascal</td>
<td>Several *</td>
<td>Excellent **</td>
</tr>
</tbody>
</table>

* Based on literature sources (37) and (38).
† Based on literature source (36).
‡ Based on literature sources (37) and (38).
§ Based on literature sources (37) and (38).
⁺ Based on literature sources (30–32).
⁻ Based on literature source (51).
** The fact that IBM PC Pascal is a system implementation language (SIL) prompts this rating.

### Appendix D. String Manipulation in Selected PL/I Language Implementations.

<table>
<thead>
<tr>
<th>Language Implementation</th>
<th>Number of String Functions &amp; Operations</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL/I-80 (Digital Research)</td>
<td>Many *</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

* Based on literature sources (41) and (42).
Literature Cited

1. Drexel Library Quarterly 17 (no. 1) (Winter 1981) features several papers on software packages for library microcomputers. The two journals on microcomputers in libraries also carry much useful information concerning preprogrammed software packages: Access: Microcomputers in Libraries, PO Box 764, Oakridge, OR 97463; Small Computers in Libraries, Graduate Library School, University of Arizona, 1515 E. First St., Tucson, AZ 85721. An example of library use of a database language is found in: Wilson, F. W./"Applying the DBMS." Personal Computer Age 2 (no. 4): 34–36 (Apr 1983).


20. Woods, Lawrence and Pope, Nolan/Microcomputers in Libraries. American Society for Information Science [to be published]. This book will include results of a nationwide survey on library applications involving microcomputers. The information cited in this paper is based on preliminary results from that survey obtained in telephone conversations with Lawrence Woods.


34. Second Draft Proposal of the ISO Pascal Standard. Pascal News no. 20 (Jan 1981). Readers wishing to know the current contents and status of the ISO standardization effort can contact the ISO at this address: International Organisation for Standardisation (ISO), Case Postale 56, CH-1211 Geneva 20, Switzerland. ANSI and IEEE Pascal standards are largely based on the ISO standardization efforts and are in various stages of draft and review at the time of writing. ANSI can be contacted at this address: American National Standards Institute (ANSI), 1430 Broadway, New York, N.Y. 10018. Although the ISO, ANSI and IEEE Pascal standards will surely have major impacts on microcomputer Pascal implementations, they are not discussed at length in this paper because: 1) they are not finalized at the time of writing 2) few existing microcomputer implementations yet claim full compatibility with these standards.


40. Digital Research, PO Box 579, Pacific Grove, Calif., 93950.


43. Microsystems 3 (no. 1):28-49 (Jan/Feb 1982) features several papers on Digital Research's PL/1-80 compiler.


Received for review Oct 19, 1982. Manuscript accepted for publication Apr 1, 1983.

Howard Fosdick is a consultant based in Villa Park, Ill.
Audiovisual Material and Copyright in Special Libraries

Laura N. Gasaway

Law Library and Law Faculty, University of Oklahoma, Norman, Okla.

Copyright problems have been extensively addressed for printed materials but much less attention has been given to audiovisual materials and the unique copyright problems they present. This article focuses on audiovisual works and those that are exclusively audio or visual in nature. Specific attention is given to illustrations, photographs, drawings and maps; slides and transparencies; audio tapes and phonorecords; films and filmstrips; videotapes and videodiscs; and audiovisual packages. All of these works are subject to protection under the Copyright Act of 1976.

Audiovisual and nonprint materials have become increasingly important in special library collections in recent years. Many libraries house extensive collections of films, filmstrips, videotapes, audiotapes, phonorecords, photographs, prints, slides, and transparencies. The collections of some special libraries consists primarily of these materials rather than those in traditional print format.

A prior article discussed the general provisions of the Copyright Act of 1976 (1) and its application to special libraries and information centers (2). Audiovisual materials are subject to protection under the Copyright Act within the following categories: 1) pictorial, graphic and sculptural works, 2) motion pictures and other audiovisual works, or 3) sound recordings (3). The pictorial, graphic, and sculptural works category is defined as including "...two-dimensional and three-dimensional works of fine, graphic and applied art, photographs, prints and art reproductions, maps, globes, charts technical drawings, diagrams, and models" (4). Audiovisual works are defined in the Act as "...works that consist of a series of related images which are intrinsically intended to be
shown by the use of machines or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied" (5). Motion pictures clearly are a type of audiovisual work and are defined as "... audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with any accompanying sounds, if any" (6).

Library Practices

Problems may arise whenever a library duplicates a copyrighted work or prepares a derivative work based on a copyrighted work. There are some standard library practices which make use of pictorial and graphic works such as transparencies and photographs. Some of the materials may be original while others are duplicated in some manner from the original sources. Libraries also are involved in the creation of derivative visual works such as producing slides from photographs in a textbook and preparing transparencies from published charts. Some libraries even produce in-house audiovisual works designed to communicate information to various user groups.

Occasionally, libraries are asked to duplicate audiovisual material for clients. Even after the passage of the new Act, it may be unclear whether libraries owning such duplication equipment can legally reproduce the material for users, and if so, under what conditions the reproduction is permissible. Libraries may be asked to loan such materials to other libraries through interlibrary loan. Because of the high probability of damage to these materials from mailing and handling, many libraries refuse to loan audiovisual works. With the advent of inexpensive duplicators, however, a copy can be made for interlibrary loan making the transaction similar to the exchange of photocopies to satisfy interlibrary loan requests.

Section 108: Library Exemptions

The Copyright Act includes a section specifically for libraries and archives (7). Its purpose is to exempt certain copying which otherwise would constitute infringement. The copying of audiovisual and pictorial, graphic and sculptural works appears to be excluded from the general § 108 exemption. "The rights of reproduction and distribution under this section do not apply to a musical work, a pictorial, graphic or sculptural work, or a motion picture or other audiovisual work other than an audiovisual work dealing with the news" (8). This general section is limited, however, and the copying of audiovisual material is permitted under the following circumstances:

1) Whenever pictorial and graphic works are published as illustrations, charts, diagrams, etc., to accompany textual material, they may be copied under the same conditions as the textual portion (9).

2) For purposes of preservation, security or deposit in another library, an unpublished work may be copied (10). This appears to include pictorial, graphic and audiovisual works.

3) Copying to replace damaged or lost copies or phonorecords is permissible if the library first made a reasonable effort to obtain an unused replacement copy but found that one could not be obtained at a reasonable price (11).

Outside of these specific circumstances, Section 108 is limited to printed materials.

Section 107: Fair Use

Fair use has often been called the "safety valve" of copyright law. It originally was a judicially developed doctrine, but since its inclusion in the new Act it is a statutory concept as well. Section 107 states that reproduction of copyrighted works may be excused "for purposes such as criticism, comment, news reporting, teaching... scholarship, or research" (12). Four factors are
used to determine whether a use qualifies as fair use: 1) the purpose and character of the use, 2) the nature of the copyrighted work, 3) the amount and substantiality of the portion used, and 4) the market effect or effect on the value of the work (13).

Until recently, the fair use test had not been applied to the reproduction of audiovisual works. In *Universal Studios Inc.* v. *Sony Corporation of America* (14), the Ninth Circuit examined home off-the-air videotaping and applied the four-pronged fair use test (15). Although currently on appeal to the U.S. Supreme Court (16), the Ninth Circuit's application of the fair use factors to audiovisual copying indicates the applicability of §107 to copying outside of education and academia.

### Fair use has often been called the “safety valve” of copyright law. It originally was a judicially developed doctrine, but since its inclusion in the new Act it is a statutory concept as well.

The Court's analysis of each factor is useful in examining how §107 applies to library copying of audiovisual works. The Court applied each of the criteria in reaching its decision that home copying of videotext is an infringement of copyright (17).

1. The purpose and character of the use was found not to help defendant Sony even though home videotaping from television was noncommercial in nature. Home copying was found to be for entertainment purposes and clearly not for nonprofit educational uses (18). Library copying generally would be noncommercial and informational in nature. Research and scholarship is the most likely purpose of the use as far as special library copying is concerned, and this is certainly closer to nonprofit educational use than to either entertainment or commercial use. The term “noncommercial” does not appear in the wording of §107 but is an assumed factor by the district court (19). Since library copying is noncommercial, there should be some carryover if the Supreme Court finds the noncommercial distinction to be important.

2. Likewise, the court held that the nature of the copyrighted work failed to sustain a finding of fair use. The court indicated that the scope of fair use is somewhat broader for informational works than for purely creative products. In other words, the duplication of works that are primarily intended for entertainment purposes is less likely to be a fair use (20). A library might be asked to reproduce copies of works of both types. While special libraries are more likely to be interested in works which have information as their purpose, this is not an absolute. There are many special libraries and information centers which have large collections of television and radio programs and motion pictures. Although the original purpose of these copyrighted works was entertainment, they now are used for serious research, study, and criticism in these libraries. The nature of the copyrighted work alone, therefore, cannot define fair use for library reproduction of copyrighted audiovisual works.

3. In *Sony* the court held that the third factor, the amount and substantiality of portions used in relation to the work as a whole, also weighed against a fair use finding since home videotapers invariably were recording the entire copyrighted work (21). In contrast, a library might be asked to reproduce only a small portion of a copyrighted audiovisual work. Therefore, in order to apply this factor to library copying of audiovisual works, a critical factor would be the extent of the portion requested by the user.

4. The effect of the use upon the potential market for or value of the work appears to have been the issue of greatest concern to the *Sony* court. When examining the full scope of home video-
taping of telecasts, the court found it that such activity unquestionably tended to diminish the potential market for such television programs (22). Obviously, home videotaping affects potential sales of commercially produced tapes, but it also has the potential to diminish the market for television reruns. The same would be true for library off-the-air videotaping. When a library reproduces a copyrighted audiovisual program, the effect on the potential market may be significant. If the market for informational programs is libraries and educational institutions, any unauthorized duplication may directly harm the copyright proprietor. On the other hand, an argument can be made that the market for such works is finite, and libraries purchase the number of copies needed as permitted by their budgets. The number of copies duplicated by libraries, therefore, would not negatively impact the market.

In discussing §107, the Senate Report accompanying the new Act cautions that the attention paid to uses of copyrighted material by nonprofit educational institutions—such as multiple copying for classroom use—should not be construed as limiting fair use only for such copying; the same general principles are applicable to situations other than education, but the weight given to them may vary from case to case (23). The report specifically mentions the copying done by various organizations including the Library of Congress and the American Film Institute, to preserve pre-1942 motion pictures as well as the copying of literary works to produce talking books for the blind as other examples of fair use. Even though the copyright term may not have expired on such works, copying for these purposes would be within the fair use exception (24).

Only minimal reference is made to audiovisual works in the House Report, namely off-the-air videotaping for nonprofit educational institutions (25). The Report recommends that further guidelines be developed on fair use and off-air taping in the educational context (26). The legislative history provides no additional information on fair use copying of audiovisual, pictorial, and graphic works by libraries.

The 1909 Copyright Act (27) was a reaction to the end of the Gutenberg era and the beginning of the electronic age. The demise of this era was heralded by the advent of radio and television (28). The fair use test was developed for literary and verbal material and functions well for those works; but it may be less successful for audiovisual works (29). The fair use doctrine may have a fatal flaw, namely, its imprecision on the extent to which one may borrow from a copyrighted work. Older fair use cases primarily involved instances of plagiarism in which one author borrowed from the work of another. Even for these situations, how much may be borrowed is unclear. So-called "second-order technology," i.e., videotaping capabilities, has enabled rapid reproduction of audiovisual works. Thus, the ability to copy entire works may indicate that the fair use doctrine is inadequate to deal with reproduction of this nature (30). It is difficult to apply fair use to second-order technology as evidenced by the Sony decisions.

It has been said that examining the purpose of a use for audiovisual works under the first fair use criterion calls for arbitrary distinctions (31). Perhaps the nature of the user rather than the nature of the work should be the test for audiovisual works. Thus, researchers in all fields should be granted broad exemptions because they are engaged in "promoting the progress of science and the useful arts" in accordance with the constitutional copyright provision (32).
While copyright owners certainly should reap economic rewards for their creations, the rewards should not be such as to frustrate the constitutional purpose to advance science, art, and industry (33).

**Duplication of Audiovisual and Nonprint Materials**

A library might wish to duplicate audiovisual or pictorial and graphic works for many reasons. Preservation clearly is an important motive. The nature of such works makes handling a problem, and they are more easily damaged than printed, bound materials. Users may request copies of a portion of a work or the entire work for scholarship and research. A library may wish to duplicate a work if it is out of print and otherwise unavailable at a fair price. Also, a library may receive interlibrary loan requests for audiovisual material and may prefer loaning a copy rather than the original.

**Illustrations, Photographs, Drawings and Maps**

Graphic works are subject to copyright protection, as are photographs, drawings, and the like. Many special libraries have extensive collections of pictures, maps, drawings, and so on. Clearly, under the new Act, a library which purchases an original work of art or a photograph does not own the copyright to that work (34) unless it was a work for hire (35), in which case the library specifically hired the person to produce the work, or unless the work was produced by a library employee within the course of his or her employment. When a library does not own the copyright, any reproduction of the work is subject to §§107-108 requirements. Under the provisions of §107, fair use might allow the duplication of such material if the use meets the four fair use criteria. In the guidelines for classroom copying, an example is used which includes an illustration being copied in multiples (36). In the non-profit educational setting, therefore, the library has some flexibility in copying these materials for classroom use. There also are other instances in which fair use may allow making a single copy.

Under §108, a work may only be reproduced for preservation if it is an unpublished work (37), or if it is necessary to replace a damaged, deteriorating, lost, or stolen work (38). Generally, libraries are prohibited from copying works for users in this category, with one narrow exception—pictorial or graphic works that are illustrations or diagrams accompanying a text may be copied along with the text if reproducing the text meets the §108 requirements (39).

The Act exempts certain displays offered in the course of instruction if specific criteria are met. The primary criteria is that the display take place within a nonprofit educational institution (40). The display must involve face-to-face teaching activity and take place within a classroom. Classroom is broadly defined to include library, laboratory, gymnasium, and the like. There is no limitation on the works included in the exemption; thus, a teacher may display text or pictorial works to the class by means of a projector as long as there is no projection beyond the place where the copy is located (41). This exemption apparently carries with it the right to produce slides, transparencies, and so forth. Section 107 may permit other copying not included in these examples, but the situation is less clear.

**Slides and Transparencies**

Slides and transparencies produced as original works are subject to copyright just as are photographs, illustrations, or diagrams. The copyright considerations relative to the production of original slides and transparencies have not been a problem of much consequence to libraries and information centers since they are clearly defined as subject to copyright under §102(5). The library responsible for their creation may claim copyright for works pro-
duced in these media. The copyright difficulties libraries traditionally encounter have to do with the duplication of copyrighted photographs, diagrams, and illustrations through the production of slides and transparencies. Libraries may wish to reproduce graphics from copyrighted textual material for various reasons such as to illustrate a lecture by the librarian or for use in a multimedia presentation. Moreover, in a nonprofit educational institution, the Act appears to permit such projection of copyrighted material through a transparency or slide (42).

If paper to paper or microform photocopying of a chart or illustration for either internal library use or for a client is permissible under the Act, then preparation of the slide or transparency is permissible. Throughout §108, the phrase used is "reproduce no more than one copy of phonorecord." Clearly, a slide prepared from a copyrighted illustration, chart, or graph is a copy of the work. Publishers do not agree with one another whether permission should be sought prior to duplicating such a work in slide or transparency format (43).

A different problem is raised when a library duplicates, either in slide or transparency format, every illustration from a copyrighted work which is primarily comprised of photographs or illustrations and adds that group of slides or transparencies to the library's collection. In this situation, the library has created a second copy of the entire work which is comparable to photocopying onto paper an entire work, binding it, and then adding it to the collection. Absent the §107 and or §108 exemption, this constitutes an infringement of copyright. An additional infringement might be found in the conversion from one format to another which abridges the owner's adaptation right (44).

Should the library have a collection of copyrighted slides or transparencies (i.e., not copies of copyrighted photographs in slide or transparency format), the reproduction of those slides would be governed by §108(h). This section provides that the rights of reproduction and distribution detailed in §108 do not apply to pictorial, graphic or sculptural works, that is, works subject to copyright protection under the category "pictorial, graphic and sculptural works." Libraries, therefore, would be infringing the copyright on the slides or transparencies by such duplication. Under fair use, however, the House Report seems to indicate that libraries may duplicate works under situations not detailed in §108 (45).

Audio Tapes and Phonorecords

There are three basic reasons a library may duplicate audiocassette tapes and phonorecords: 1) for preservation, 2) in response to patron demand, and to convert the format of the material, i.e., from phonorecord to cassette. Audiocassette tapes present a unique problem relative to copying. Because of the nature of tapes and the hard use they receive in some libraries, tapes wear out and become unusable; also, they are subject to accidental erasure. While books also may be destroyed, audio tapes pose a more serious problem. Libraries serving young users may have a more difficult time with tape destruction than do special libraries, but accidental erasure of tapes remains a significant problem for all libraries.

Some librarians, in an effort to solve this problem, created a master tape file. They made one or more copies of the audiocassette tape and retained the original as a master. Should the copy be damaged, another copy could be produced from the master. If the library had permission for this duplication there was no copyright infringement. Unfortunately, many libraries paid only for one copy of the tape and did not seek permission to copy. Except for music libraries, most libraries prefer audiocassette format to phonorecord when it is available. Many libraries still have extensive collections of phonorecords, however, and they also are subject to damage from being scratched, warped, and otherwise damaged. In order to preserve their
phonorecord collections, some libraries converted them to audiocassette tape and circulated only the tape copy, thereby making the original phonorecord an archival copy. Under § 108(b) a librarian may be permitted to replace a lost, damaged, or deteriorating work but only after the destruction has occurred. The above described practice anticipates the loss, which is not envisioned under § 108. Even under § 107, it is debatable whether the above described practices qualify as fair use.

Libraries may contract with individual producers of audiocassette tapes to purchase one copy and create a master tape file through duplication of the tape. . . . Some producers are willing to allow such duplication, but permission should be requested prior to the copying.

While the goal of preserving expensive library materials is a good one, the method selected may have a negative effect on publishers' markets for their materials. (46) Record producers will sell multiple copies of tapes to assist libraries to preserve materials. If the material being copied were a book, the library would not be copying it for archival purposes in case the book might be destroyed accidentally. By analogy then, this practice of duplicating phonorecords onto tape is an infringement of copyright without the permission of the copyright owner.

Libraries may contract with individual producers of audiocassette tapes to purchase one copy and create a master tape file through duplication of the tape. Since the owner of the copyright of an audiocassette tape has the reproduction right, he or she can sell or give that right to libraries. Some producers are willing to allow such duplication, but prior permission should be requested. There usually is a charge for the right to duplicate.

Another reason some libraries duplicate phonorecords and audio tapes is to convert from one format to another. If the library has good tape equipment but an old, poorly functioning record player, a librarian may think an ideal solution is to duplicate the phonorecord onto audiocassette tape. This practice is questionable since the copyright owner has the right to determine the format in which the work will be reproduced and distributed. Conversion of format infringes the owner's adaptation right in addition to the rights of reproduction and distribution. Most producers of phonorecords also have works available in audio cassette format and will sell libraries either or both formats or license the library to do its own conversion.

In a few school libraries, a tape duplicator was placed alongside the photocopier. Users were free to make copies of tapes whether the tape existed in the library's own collection, was owned by the user, or was borrowed from another individual. Under fair use, some copying of audiovisual, pictorial, and graphic works is allowed, but the copying of an entire work as described above probably cannot meet the fair use test.

In 1973, a similar practice was involved in a non-library case. In Electra Records Co. v. Gem Electronics Distributors (47) a federal district court ruled that the duplication of copyrighted sound recordings by a record store for its clients was an infringement of copyright (48). Defendant Gem Electronics owned fifteen retail outlets for electronics supplies and equipment. It installed ten Make-A-Tape systems at these outlets to enable clients to duplicate commercially produced 8-track tapes for the price of a blank tape which defendant also sold. Additionally, the defendant maintained a library of musi-
cal recordings on 8-track tape. The user could select a recording from the library and duplicate it using the Make-A-Tape system for $1.49–$1.99 each, whereas the commercially produced tapes cost $6.00 each (49). Plaintiff copyright owners sued for a preliminary injunction which the court granted. The defendant claimed that the Make-A-Tape system was equivalent to a photocopier in a library. The court disagreed stating that instead of copying one article from a journal, the entire sound recording was copied. The court further held that while photocopies of printed materials generally are less desirable than the original, a duplicated tape is identical to the original and, therefore, is just as desirable (50). Many media specialists disagree with the court, claiming that a tape copy made from a phonorecord under such circumstances is always of poorer quality (51).

The court pointed out one further difference. While a public library makes materials available to users, the purpose is altruistic and the photocopier is a device merely to assist in the dissemination of information. The defendant in this case, in contrast, derived a source of income from the sale of blank tapes even though the loan of the tape from the store’s library was free (52). Special libraries may be public in nature or they may exist in a for-profit organization. The reasoning used by the court concerning the altruistic purpose for duplication of the tape would not necessarily be applicable to these libraries in the for-profit sector. The court’s reasoning clearly does not deal with this situation.

In all likelihood, a library which provides tape duplication equipment for its users would treat the equipment as if it were a photocopier. As long as there was no sale or profit made, the practice would comply with the above case. The problem of duplicating the entire work indicates that libraries which offer tape duplication equipment should closely examine this practice to ensure compliance with the Act.

One might argue that since a user can produce a recording at home, why not provide the equipment at a library? In 1971, in the course of hearings on the Sound Recording Act (53), the House Judiciary Committee Report contains a statement which has come to be known as the “home use exemption.”

Specifically, it is not the intention of this committee to restrain the home recording, from broadcasts or tapes or records, of recorded performances, where the home recording is for private use and with no purpose of reproducing or otherwise capitalizing commercially on it (54).

The “home use exemption” for audio tapes was not mentioned in any subsequent legislative history leading up to the passage of the Copyright Revision Act of 1976 (55). Whether this indicates congressional approval of the “home use exemption” for the recording of music is somewhat uncertain. Even if Congress clearly intends that such an exemption exists for home recording of music, it has not been extended to libraries by §107 or §108.

Under §107, it seems that some copying of sound recordings for library users is permitted. The copy should not be used for purposes other than scholarship, research or teaching and probably does not extend to the duplication of an entire work. The librarian should consider the amount to be copied in relation to the work as a whole and the prohibition against selling the copy so made for profit (56). There are neither guidelines nor specific examples from the legislative history dealing with library duplication of tapes and phonorecords, although the four fair use criteria would be applied to such a
situation to determine whether the use qualifies as fair use.

An argument could be made that libraries which engage in the duplication of audio tapes and phonorecords for users are acting for the benefit of those users. The copyrighted work has been purchased directly, leased from the copyright owner or borrowed from another library. The library that duplicates the work is merely engaged in the dissemination of information while storing the original work for future use by patrons (57).

On the other hand, the same could be said of traditional print materials. It certainly would save wear and tear on books to photocopy the entire work and circulate the copy rather than the purchased printed copy. Such a practice clearly would infringe the reproduction and distribution rights afforded copyright owners. The application of the fair use test to such copying necessarily produces a negative result. The nature of the underlying work may be a musical composition, a literary work, a dramatic work or a sound recording; the amount copied is the entire work; the economic effect is to deprive the owner of a potential sale. Only the first factor would seem to favor such copying activity by libraries—the purpose and character of the use would be for scholarship or research. Taken as a whole, however, it is unlikely that duplication of an entire audiocassette tape or phonorecord for a user would satisfy the fair use test.

Films and Filmstrips

The duplication of films and filmstrips present problems for libraries similar to those for audiotapes. There are, however, some additional problems. For purposes of this article, films and filmstrips are used synonymously with the term motion picture. The potential damage to this material from users is somewhat reduced because films and filmstrips may not be circulated. The library may arrange a showing, i.e., a performance of the film, or in the educational setting, the film may be loaned to an individual teacher for showing to a class. Unlike the audiotape, the number of loan transactions is likely to be small. Most 16mm films now carry a warning printed on the cannister or attached thereto indicating that duplication of the film is considered an act of piracy. Anyone who duplicates a film carrying this warning certainly cannot be considered an innocent infringer.

Special libraries in which serious film study is conducted have additional problems regarding copyrighted films. One must assume that §107 would allow some copying for teaching purposes. In examining film making techniques, an instructor or scholar may want to copy portions of various copyrighted films or motion pictures in order to present or study them in a particular sequence. The library may be asked to copy portions of films for such purposes (58). Although the law prohibits the creation of multiple copies of anthologies through photocopying under the guise of fair use (59), a film anthology is exactly what is needed for serious film study. Should the creation of a visual anthology be allowed under fair use, the addition of that anthology to a library’s collection raises additional problems related to the creation of audiovisual instruction packages (60).

In applying the fair use test to library copying of films and filmstrips, the problem criteria are likely to be: nature of the work, amount copied, and economic effect. It has been argued that the nature of the copyrighted work factor should not weigh so heavily in evaluating copying of films. Since the fair use test evolved in dealing with printed works, there is virtually no historical precedent for the fair use of motion pictures (61). Film educators were not particularly active in the copyright revision process, and their influence was little felt. The Act reflects the film industry’s restrictive distribution system, with little attention given to scholarship and research activities centering on motion pictures and film (62). Because copyright owners are rigorously pursuing
commercial film pirates (63), it is unlikely their immediate attention will be focused on libraries and educational institutions where serious film research is being conducted, but this does not insulate libraries from liability for copyright infringement.

Obviously, a library engaged in converting the format of a motion picture from 16mm to videotape is depriving the copyright owner of revenue (64); moreover, the artistic integrity of the work may have been altered. For example, while Super-8 is a vast improvement over 8mm film, it is limited for use in small rooms due to image clarity and size problem. The impact of a motion picture originally offered in 16mm may be altered by the conversion to another form (65), thus presenting an issue of interference with artistic integrity in addition to copyright infringement.

The market effect of duplicating motion pictures and educational film is potentially serious. In describing the sales potential of film, an executive of a small production company described the normal costs and market for such films. If a film costs $20,000 to produce, the company will need to sell 285 prints in order to recoup costs. During the average life of a film, 500 to 800 prints may be sold. The profit from prints subsequent to number 285 provides the capital for producing new film (66).

Libraries engaged in the duplication of films—whether the films are purchased, rented or borrowed—may have a serious impact on the producer’s market. When the ultimate market is small, even one unauthorized copy may produce a negative impact. On the other hand, film producers take into account the potentially small market for their product and price the film accordingly. It can be argued, therefore, that few sales are lost through duplication since sales made have already exhausted the market.

Some libraries engage in the in-house production of audiovisual works for various purposes. In determining how much of a copyrighted motion picture or film can be used to create a new work, the following guidelines have been suggested: 1) the amount of copying should be small in relation to the overall length of the copyrighted motion picture; 2) any copied portion should not be the meritorious portion of the film, that is, it should not be exceptionally valuable or hard to reproduce; 3) if the portion copied from the film should represent only a small portion of the finished product, the copying should be fair use if the other criteria are satisfied. If these three criteria are met, it is arguable that the fair use test has been satisfied (67).

**Video**

Although motion pictures certainly are visual media, for purposes of this article, “video” means videotapes and videodiscs. The Copyright Act differentiates between motion pictures and audiovisual works, making it clear that motion pictures are a type of audiovisual work (68). Videotapes also are a type of audiovisual work; the technical difference between video and motion picture lies in the fixation process. In cinematography, the recording is made on film; in video, images and sounds are fixed in the tape or disc by a magnetic, mechanical, or electronic process (69). There are other differences in the two media including the means of projection; the motion picture involves the use of a projector while video uses television set. Also, it is far less expensive to reproduce video programs than to duplicate films (70).

In many library settings, the reproduction of video materials parallels the reproduction of audio tapes. Libraries may have been tempted to purchase one copy of a videotape and duplicate sufficient copies to distribute to branch libraries without permission of the copyright owner. Occasionally libraries have made a duplicate copy of a videotape for circulation purpose while retaining the original purchased videotape as a “master.” Should the circulating copy be damaged, a new circulating copy is produced from the master.
As with audio tapes, the purchase of a video cassette tape from the producer does not give one the right to make additional copies of it. This is a direct infringement of the copyright holder's reproduction right. Some producers of videotapes offer the right to duplicate their materials. A videotape is sold for one price; the tape along with the right to duplicate copies is sold for a higher price (71). In order to market their products, producers are devising various plans to induce purchase. It is likely that there will be more creative marketing techniques devised to permit library reproduction of videotapes after payment of some type of royalty that will be included in the purchase price.

Video material also is destructible, but the availability of home tape recorders/play back units far exceeds that of video recorders. For the present, library users are more likely to view a videotape within the confines of a library while taking an audio tape home. This reduces the potential destruction of tapes since the library staff can exercise control over equipment and may even load and unload video playback units for the user. As the number of home units continues to increase, however, destruction of copyrighted videotapes may become an increased problem for libraries.

The conversion of format from ½ inch Beta or VHS to ¾ inch videotape creates the same problem as converting audio formats, i.e., the reproduction of an additional copy could infringe the adaptation, reproduction, and distribution rights. Video producers normally make their products available in both widths, and conversion should not be undertaken without the permission of the copyright holder. Due to the expense of videodisc reproduction equipment, there is little likelihood libraries will convert tape to disc at the present time, but the problems with format conversion remain the same.

Television programs have the same characteristics as motion pictures relative to serious scholarship and research. The Act recognizes the importance of archival collections of television programs and grants libraries the right to videotape off-the-air television programs dealing with the news (72). Additionally, the Radio and Television Archives was established at the Library of Congress (73) to house off-the-air recordings.

Various television archives have been created in academic institutions, as well as in private foundations and corporations, for the serious study of telecasts. Probably the largest of the university-housed television archives is at UCLA. There the regents of the University of California and the Academy of Television Arts and Sciences established a television library in 1965. Material from that collection may not be copied and does not circulate off the premises. Additionally, the Museum of Broadcasting in New York is a heavily used research facility (74). Libraries desirous of creating a television archives must negotiate with networks to videotape or purchase their programs, with the exception of the news. Normally, these materials may not be copied nor removed from the premises; this restriction is likely to be contained in the contract between the network and the library relative to videotaping.

Scholars and research libraries may need to create anthologies similar to those needed by film scholars. There is a strong public policy argument to allow copying to the extent that it encourages the serious study of television. Television is the modern portrayer of our culture, and students need the opportunity to view both the cultural and social aspects of the development of this media (75).

The need to provide materials for serious television study, however, does not give libraries free rein to videotape off-the-air. Libraries in nonprofit educational institutions are subject to the guidelines recently developed for off-the-air taping for nonprofit schools. The guidelines were developed by a Negotiating Committee appointed by Representative Robert Kastenmeier, chairman of the House Subcommittee on...
Courts, Civil Liberties and Administration of Justice. The Committee was comprised of members representing educational and library organizations, copyright proprietors, creative guilds, and unions (76). The guidelines provide more flexibility than did the Act as originally passed in which off-the-air taping appeared to be limited to public producers or negotiate a license for off-the-air taping directly with the copyright holder. A network's primary concern is the illegal duplication of videotapes and loss of the rerun market. Such license agreements surely will require the payment of royalties to the copyright owner for the privilege of duplicating and retaining the program.

In response to the degree of public interest surrounding home videotaping, there have been several congressional solutions proposed. These run the gamut from a statutorily granted exception for private home videotaping to a strong royalty system.

While the Act states that the provisions of §108 do not permit the copying of audiovisual materials (80), the House Report's language intimates that §107 may be available for duplicating audiovisual programs (81). These two provisions appear to conflict, but discussions of statutory interpretation and the weight to be given legislative history in interpreting a statute are not within the scope of this article. Nevertheless, while some exception to the owner's rights may exist under fair use, librarians should cautiously approach unauthorized reproduction of video materials.

The controversy surrounding home off-the-air videotaping from television eventually may affect libraries. In Universal Studios, Inc. v. Sony Corporation of America (82), the Ninth Circuit Court of Appeals dealt with home videotaping and ruled that such activity constituted infringement of copyright (83). Although the case deals exclusively with home use, the ultimate disposition also may affect libraries (84). In response to the degree of public interest surrounding home videotaping, there have been several congressional solutions proposed. These run the gamut from a statutorily granted exception for private home videotaping to a strong royalty system (85). The response Congress is most likely to choose is H.R. 5705 which
proposes a compulsory license for the privilege of home video recording. The license would be in the form of a tax or additional charge tacked onto the price of video recording equipment and blank tapes (86). As a compromise solution, this proposal is rapidly gaining congressional support; such a compulsory license is consistent with the Act and has four precedents in the current statute (87).

Should H.R. 5705 become law, it is problematic whether libraries also would pay the license fee for equipment and blank tape. If fees are paid, would libraries then have a license to video-record off-the-air? Could a pricing structure be established and maintained so that the compulsory license fee is collected only for home video recording?

Libraries make much use of video-recording which does not involve copyrighted works. Libraries film guest speakers, law schools record moot court sessions, and medical schools regularly videotape operations. A surcharge would be unfair if tape and equipment used for these purposes were taxed. Libraries are concerned about the outcome of the Sony case as evidenced by the number of library associations that joined in the amicus brief filed in Sony. These associations include the American Library Association, the American Association of Law Libraries, and the Association of Research Libraries, in addition to the American Council on Education. Librarians and educators have expressed a preference for paying royalty fees for individual uses of copyrighted videotapes not exempted by fair use rather than any compulsory license (88).

Because of the publicity this matter has received, few libraries would assume that videotaping for users outside of the news in nonprofit educational institutions is permissible. Copyright owners have demonstrated through the Sony suit the seriousness with which they view this issue. Under the 1909 Act, the situation regarding videotaping was much less clear. In a recent case, Encyclopedia Britannica Educational Corp. v. Crooks (89), a federal district court ruled that under the 1909 Copyright Act (90), off-the-air videotaping conducted by a cooperative which videotaped for 19 schools in the Buffalo-New York area was an infringement of copyright (91). The cooperative neither obtained permission for such copying or retention of the programs nor paid royalties for the privilege of doing so (92). After applying the fair use test, the court issued a permanent injunction to stop the copying but did not order destruction of the tapes, although this is a standard remedy provided under §503(b) of the Act. The court declined to order erasure in order to give the parties an opportunity to meet and determine whether some type of purchasing arrangement could be reached (93). In light of the Encyclopedia Britannica case, even libraries in nonprofit educational institutions should closely examine their collections of pre-1978 recorded videotapes to determine whether to pay for previously videotaped materials or to erase them. Clearly, post-1978 off-the-air videotaping should comply with the guidelines discussed earlier.

If producers of audiovisual programs are to continue to make such works available to libraries and schools, they must be afforded adequate financial reward for the creation of copyrighted works.

If producers of audiovisual programs are to continue to make such works available to libraries and schools, they must be afforded adequate financial reward for the creation of copyrighted works. There is a need for a fair and easily administered system for paying copyright royalties for the duplication of audiovisual material (94). Even the expanded use of videodisc technology will not alleviate copyright problems.
While videodisc is primarily a playback medium, discs now can be converted to videotape. Moreover, the possibility of central bank storage may eliminate the need to copy the material at all. Anyone with access to the central bank information system will be able to call up the material at any time (95). Thus, current copyright problems surrounding videotapes will carry over into a newer technology if they are not solved. More scholarly material is likely to become available in video format. For example, some universities now permit masters’ theses to include video presentations. Videotapes are becoming a common part of scholarly presentations at conferences, seminars, and workshops. Even the most erudite special libraries will recognize the contribution of scholarly works in video formats and include these in their collections (96).

**Audiovisual Packages**

Increasingly, all types of libraries are engaging in the creation of in-house audiovisual packages. Slidetape shows in which copyrighted slides (or slide reproductions of copyrighted photographs), poetry, and music are presented simultaneously provide a good example of traditional audiovisual package. An audiovisual work does more than tell a story. It is the simultaneous presentation of sights and sounds along with information that engages the senses of the audience (97). In the production of such packages, libraries infringe all of the rights of the copyright owner—from reproduction, distribution, and adaptation to performance and display. Once created, the audiovisual package itself is eligible for copyright protection, provided permission has been received from the owners of the portions used.

An audiovisual instruction program may consist of film clips, reproductions of pages from textbooks, workbooks, and so on, as well as original material along with background music. Originally of interest to schools and colleges as individualized learning “kits,” their use and creation has seen a dramatic increase. Instruction programs may be used to introduce users to the library, to train staff members, or to instruct users in the use of particular research material in the library’s collection. Librarians in the for-profit sector also are engaged in designing and using audiovisual packages. Since these programs are developed for repeated use, most are destined to form part of a library’s permanent collection.

Section 108 contains no mention of the creation of audiovisual materials by libraries. One must, therefore, turn to other sections of the Act for guidance on the copyright status of these works. Normally, Section 107 would apply and the fair use test may be used as a guide. Outside of fair use, permission should be sought from the copyright owner for copyrighted materials duplicated and included in audiovisual packages. The problem often is compounded if the library duplicates the program to allow simultaneous use by more than one user (98). Audiovisual packages are the wave of the future. As they become more common, libraries must learn to cope with the myriad of copyright problems that will in all probability attend their uses.

**Conclusion**

Prior to the advent of the printing press, there was no need for strictly enforced copyright laws for it was not possible to produce copies of works in such numbers as to economically harm the copyright proprietor. When print became the medium for rapid production of copies of works expressing ideas, notions, and aesthetic values, copyright, and later fair use as an exception, were developed to create a balance between the rights of the creator of the work and the public. As previously mentioned, the technological era has raised serious questions concerning the applicability of traditional fair use principles (99).

A prime example of the different problems presented by print versus au-
diovisual material occurs in the application of one of the fair use factors—the substantiality of use. A scholar can excerpt portions of literary works and still get a feel for the author’s style and taste. On the other hand, for materials such as paintings, photographs, drawings, and audiovisual works, the use often must copy the entire work in order to sample the creator’s style or taste. (100).

One scholar has proposed a new fair use test for audiovisual works. Instead of the traditional §107 four-pronged analysis, the following should be substituted: 1) Does the reproducer belong to the class of persons engaged in the advancement of science, arts and industry or in the dissemination of information and ideas? 2) Is the purpose intended to advance science, arts, and industry or the dissemination of information? If the first two questions are answered in the affirmative, then the reproducer has a fair use defense. The next inquiry centers on whether that person should pay royalties. 3) Will the intended use of the copy affect the potential market for or value of the copied work? 4) Is the use made of the material likely to produce substantial profits? If the answer to these two questions is yes, then royalties should be paid to the copyright holder. If the answer is no, then the reproducer may copy without incurring liability for royalties (101).

Of great concern to libraries is the recent Report of the Register of Copyrights on §108 (102) and the applicability of the fair use doctrine to libraries. The Register does not address the problems of reproduction and second-order technology or how fair use is applied in this modern era. Rather, the Register states that §108 permits copying not otherwise permitted under §107 and that fair use does not permit broad copying once the limits of §108 have been reached (103).

Does this mean that the Register considers §107 inapplicable to library copying of copyrighted audiovisual, pictorial, and graphic works? Are libraries to be strictly limited to §108 which allows the reproduction of such works only under the narrowest circumstances? The Report states that a user’s rights accrue under §107 (104). Should a library circulate copyrighted audiovisual works to users and encourage them to make their own copies for §107 purposes? This seems unrealistic given the cost of these works and the expense of duplication equipment as contrasted to the simplicity of the coin operated photocopier for printed materials. It also seems naive in light of what is actually happening in the world of technology. More materials are becoming available in audiovisual formats, and demand for the information contained in these works does not necessarily change based on the format in which works are published.

All of this philosophy is predicated on user demand; libraries are not duplicating materials for their own purposes but in response to user requests. There is no commercial gain.

Thus, current copyright problems surrounding videotapes will carry over into a newer technology if they are not solved.

The Register’s Report is merely a report to Congress as required by §108(i). Congress may not be at all receptive to the report or to the recommendations it makes. None of the recommendations relate specifically to audiovisual, pictorial or graphic works and, even if adopted and passed into law, they would not produce a substantive change in the way libraries handle such works.

The rights granted in §108 of the Act apply to all types of libraries which comply with the provisions of §108(a). This includes special libraries, whether the parent organization is in the for-profit sector or not. All libraries engage in similar activities to meet the information needs of their respective user
groups. The user of a public library is not required to state the purpose for information requests. Any library may serve a user from a for-profit organization. Academic libraries, while primarily serving the academic community, also provide information and copies of copyrighted works to users in the profit sector. The library charges nothing for disseminating the information, but the end user may be engaged in profit-making activities. The same is true of public libraries. The distinction whether a library is public in nature or attached to a for-profit organization is, therefore, not as clear as some might think. The photocopying issue and the commercial/noncommercial dichotomy have been clarified. Surely the distinction is applicable to the duplication of audiovisual, pictorial, and graphic works.

The reproduction of copyrighted audiovisual and nonprint media by libraries presents some unique problems. Clearly, more guidance is needed to assist librarians in applying the law to particular situations. Library associations and media producers should continue to work together to develop non-statutory, voluntary guidelines aimed at assisting libraries to fulfill their missions while assuring fair returns to media producers.

Literature Cited

4. Id. at §101.
5. Id.
6. Id.
7. For a discussion of §108 generally, see Gasaway, supra note 2, at 158–59.
9. Id.
10. Id. at §108(b).
11. Id. at §108(c).
12. Id. at §107 (1976).
13. Id. For a detailed discussion of §107, see Gasaway, supra note 2, at 158.
14. 659 F.2d 963 (9th Cir. 1981).
15. Id. at 969–74.
17. 659 F.2d 963, 974–77 (9th Cir. 1981). It should be noted that the district court’s decision held that home videotaping was within the boundaries of fair use, see 480 F. Supp. 429 (C.D. Cal. 1979).
18. 659 F.2d 963, 972 (9th Cir. 1981).
20. 659 F.2d 963, 972–73 (9th Cir. 1981).
21. Id. at 973.
22. Id. at 973–74.
24. Id at 66.
26. Id.
29. Id. at 202–06.
31. Id. at 458.
32. Timberg, supra note 28, at 221–22.
33. Id. at 223.
35. Id. at §201(b). A work for hire is defined as . . . “a work prepared by an employee within the scope of his or her employment, or . . . a work specifically ordered or commissioned . . .” Id. at §101.
37. Id. at §108(b).
38. Id. at §108(c).
39. Id. at §108(h).

65. Mast, supra note 58, at 85.
67. Miller, supra note 64, at 52.
70. Id. at 155, 167.
76. Videotaping Guidelines, supra note 76.
77. The Television Licensing Center (TLC) is a national clearinghouse designed to provide educators with information about off-the-air videotaping and with licenses to record, duplicate and retain television programs. The TLC is administered by Films Incorporated. TLC, 1144 Wilmette Ave., Wilmette, Ill. 60091.
78. Id. at 976. For a discussion of the case and fair use, see text at notes 14-22.
79. The case currently is before the U.S. Supreme Court; cert. granted 102 S. Ct. 2926 (1982). While the effect of the Court's decision is likely to be quite narrow, the issues raised by the case may have enormous consequences for libraries.
80. See, H.R. 4794, 97th Cong., 1st Sess. (1981), which proposes that home videotaping for noncommercial uses be a specific exemption to the owner's
exclusive rights; and H.R. 5488, 97th Cong., 2d Sess. (1982), which would permit the continued sale of video equipment and blank tapes upon the payment of a reasonable royalty fee at the time of purchase.


87. Compulsory licenses exist for cable television systems, 17 U.S.C. §111(d) (1976); juke box royalties, id. at §116(b); mechanical license fees for phonorecords, id. at §115(a); and for public broadcasting, id. at §118(b).


89. 342 F.Supp. 1156 (W.D.N.Y. 1982).


92. Id. at 1159.

93. Id. at 1187–88.

94. There is no organization similar to the Copyright Clearance Center (CCC) for collecting and distributing royalties for the copying of audiovisual works. The CCC was established for the purpose of collecting and distributing royalties for photocopies made in excess of fair use.


100. Id. at 318–19.

101. Id. at 324.


103. Id. at 97–102.

104. Id. at xii.

Laura N. Gasaway is director, Law Library, and law professor, University of Oklahoma, Norman, Okla.
Cataloging Software

Mercedes Dumlao and Sherry Cook

Bechtel Data Processing Library, San Francisco, CA

Cataloging software as practiced at a corporate data processing library is discussed. The generation of a catalog of computer programs is examined in terms of justification, entries, production, and distribution.

Locating, cataloging and disseminating information about computer programs is vitally important to a multinational corporation. The constant threat of possible litigation in nuclear engineering design work has created a need for a central repository of program information. To meet this need, a unique library has been created—the Bechtel Data Processing Library (DPL).

Few precedents exist in the literature for computer software cataloging. Because of the challenges involved in this new medium, DPL has developed methods and procedures to catalog computer information.

In 1975, a computerized nonbibliographic database was developed on the Univac mainframe computer. This database enabled DPL to track and report on the inventory of all software developed or acquired by any division in the company. To achieve worldwide distribution of this information, a book catalog was produced. The Bechtel Catalog of Computer Programs (affectionally known as BECCAT) tracks and reports on all aspects of software applications at Bechtel.

Justification

BECCAT is the key to management of computer programs. Even when existing programs cannot be modified economically, their design concepts can often be translated into new program codes at a fraction of the cost of starting anew.

BECCAT includes one element of information most likely to be of value to a person considering whether to use a particular program: the names of the individuals who control each Bechtel computer program with respect to fund-
ing, quality, maintenance, and proper utilization. These people are the best source of information on the program's capabilities. Because there were relatively few cost constraints in developing the form and content of the BECCAT catalog, a wide variety of indexes and alternative search strategies have been used. Subject, acronym, title and host computers are all listed.

Entries

All software applications are listed by a unique program number. This five digit alpha-numeric designation (AANNN) is used as the basis for tracking, controlling, and reporting on Bechtel computer programs. An alpha character denotes program discipline (e.g., WE—weather engineering, NE—nuclear engineering), while numerics uniquely identify programs. Bechtel's activities are worldwide; therefore, the classification scheme must also be infinitely expandable.

The entry contains the title of the program, the acronym and an abstract (see Figure 1). The abstract is a brief synopsis of the purpose and capabilities of the program. The release level is also listed to identify the currently operating release of the program.

Host computers on which the program operates is crucial information in our multi-computer environment.

Security class is another important item in the entry for each application. The level of security assigned to programs varies with a user's "need to know." Unclassified programs are available for general use within Bechtel, whereas confidential programs are available for use only with written consent of the program sponsor.

Program classification indicates the conformance to certain standards, guidelines, or codes. Two classifications are used. "Production programs" indicate those programs conforming to the internal standards published by the Data Processing Library. "Standard computer programs" cover programs based on Nuclear Regulatory Commission standards for design work.

Program documentation currently available and date of issue are important information for the user. Copies of all documentation are available from the Data Processing Library.

Figure 1. Sample Program Entry Format.

<table>
<thead>
<tr>
<th>EE400</th>
<th>ELECTRICAL ENGINEERING DESIGN PROGRAM</th>
<th>EEDESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT-</td>
<td>THE ELECTRICAL ENGINEERING DESIGN PROGRAM IS AN AID IN DESIGNING ELECTRICAL DISTRIBUTION SYSTEMS. IT CONTAINS THE TABLES AND FORMULAS REQUIRED TO PERFORM THE ROUTINE CALCULATIONS INCUMBENT IN THE DESIGN OF ELECTRICAL SYSTEMS. THE PROGRAM COMPUTES EACH LOAD, AND TOTALIZES THE LOADING FOR EACH BUS. IT THEN REFLECTS THE LOAD THROUGH TO THE Feeder BUS, ETC. UPWARD TO THE AUXILIARY TRANSFORMER. THE PROGRAM COMPUTES FOR EACH LOAD, AS REQUIRED, TRANSFORMER LOADING, BUS LOADING, STARTER SIZES, CABLE SIZES, CIRCUIT BREAKER RATING, CONDUIT SIZES, ETC. THE PROGRAM ADDS LOAD VERTICALLY IN WATTS AND VARS. THEN total WATTS, VARS AND THE POWER FACTOR ARE CALCULATED. IN ADDITION, EACH DEVICE, CABLE SIZE, CABLE LENGTHS, ETC., ARE LISTED. THE TOTAL FOR EACH TIME IS COMPUTED AND LISTED.</td>
<td></td>
</tr>
<tr>
<td>RELEASE- 4</td>
<td>COMPUTERS OPERATING ON- BEC82B</td>
<td></td>
</tr>
<tr>
<td>SECURITY CLASS- UNCLASSIFIED</td>
<td>SPONSORING ORG/OFF- LAPD /NOR</td>
<td></td>
</tr>
<tr>
<td>PROGRAM CLASSIFICATION- PRODUCTION &amp; STANDARD COMPUTER PROGRAM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANUALS- USERS, THEORETICAL, VERIFICATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPONSOR- KINE, PERRY L.-LAPD /NOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECH. SPECIALIST- KINE, PERRY L.-LAPD /NOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAINTAINER- KINE, PERRY L.-LAPD /NOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCIPLINE- ELECTRICAL ENGINEERING</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

July 1983
Sponsoring organization names the organization that developed the program or for which the program was acquired. More than twenty-five subject disciplines exist for Bechtel computer programs. These categories range from nuclear engineering to corporate financial statements.

Reviewing New Applications

Program authors, with coaching from the library staff, fill out a standard library control form to describe their program (see figure 2). As many as 21 items must be provided to complete the description of the program.

The cataloging librarian reviews the completed library control form to check for consistency, accuracy, and completeness. Problems are resolved through discussion. The cataloger also edits the information, and ensures that elements such as release level and current documentation are in the proper form. Librarians assign key-words and subject terms to develop a thesaurus. Work continues on a controlled vocabulary of essential subject words tailored to the scope of the collection.

Figure 2. Library Program Control Form.
The date the form is prepared.

**PROGRAM NUMBER**
The program number assigned by the library. This number represents a single computer application or a group of computer programs comprising a system. Only one program number is issued to a computer system.

**PROGRAM RELEASE**
Specify the previous and current program release. If a release is not being made, specify the previous release. The library uses a sequential numeric release numbering system beginning at 1. Program maintainers may utilize preceding alpha designations for their own record keeping. In such cases, the library numeric will follow a hash designation. For example, F4-10, F4 # 1 user designation, the library designation indicates this is the tenth release of the program.

**PROGRAM TITLE**
A title of 75 characters or less.

**ACRONYM**
A sequence of letters (10 characters or less) used as an alternate name and some times derived from the leading letters of the program title.

**ACTIVITY TYPE**
The activity or activities that dictate completion of this form. See Instructions for Use Chart for details and required form entries.

**PRODUCTION PROGRAM CLASSIFICATION**
A classification assigned to the program that indicates conformance to one or more published standards. See appropriate publication for program requirements.

**PROGRAM SOURCE** — Always check two boxes.

Bechtel Developed — The program documentation and computer code were developed by Bechtel.

Bechtel Controlled — The program documentation and computer code are under Bechtel control.

Outside Developed — The program documentation and computer code were not developed by Bechtel.

Outside Controlled — The program documentation and computer code are not controlled by Bechtel.

Outside Supplier — Indicate the supplier of the outside developed and/or controlled program.

**SPONSORING ORGANIZATION/OFFICE**
The Bechtel division, service, or special operation having management responsibility: billing code for the program and the office location of the sponsoring organization.

**ORGANIZATION CODES**

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Bechtel Energy Systems</td>
</tr>
<tr>
<td>BBD</td>
<td>Bechtel Energy Systems</td>
</tr>
<tr>
<td>CM</td>
<td>Corporate Marketing</td>
</tr>
<tr>
<td>CMH</td>
<td>Computer Systems</td>
</tr>
<tr>
<td>CMH</td>
<td>Executive Management</td>
</tr>
<tr>
<td>ES</td>
<td>Executive Services</td>
</tr>
<tr>
<td>FANC</td>
<td>Finance</td>
</tr>
<tr>
<td>GM</td>
<td>General Management Operations</td>
</tr>
<tr>
<td>GPD</td>
<td>Garth under Power Division</td>
</tr>
<tr>
<td>H&amp;F</td>
<td>Hydro &amp; Community Facilities</td>
</tr>
<tr>
<td>IA</td>
<td>Internal Auditing</td>
</tr>
<tr>
<td>IS</td>
<td>Information Services</td>
</tr>
<tr>
<td>JAT</td>
<td>Job Operations - Asia</td>
</tr>
<tr>
<td>JU</td>
<td>Jakarta</td>
</tr>
<tr>
<td>M7</td>
<td>Missionary Divisio</td>
</tr>
<tr>
<td>M8</td>
<td>Marketing &amp; Sales Division</td>
</tr>
<tr>
<td>NFF</td>
<td>Nuclear Fuel Operations</td>
</tr>
<tr>
<td>PCE</td>
<td>Petroleum &amp; Chemical Eastern</td>
</tr>
<tr>
<td>PIV</td>
<td>Personnel</td>
</tr>
<tr>
<td>PR</td>
<td>Public Relations</td>
</tr>
<tr>
<td>Proc</td>
<td>Programs</td>
</tr>
<tr>
<td>R&amp;C</td>
<td>Research &amp; Chemical</td>
</tr>
<tr>
<td>R&amp;E</td>
<td>Research &amp; Engineering</td>
</tr>
<tr>
<td>SEC</td>
<td>Security</td>
</tr>
<tr>
<td>SDF</td>
<td>San Francisco Power Division</td>
</tr>
<tr>
<td>SNS</td>
<td>Special Management Services</td>
</tr>
<tr>
<td>SP</td>
<td>Special Projects</td>
</tr>
<tr>
<td>STP</td>
<td>Trust &amp; Thrift</td>
</tr>
<tr>
<td>UE</td>
<td>Uranium Enrichment</td>
</tr>
<tr>
<td>WDC</td>
<td>Washington, D.C.</td>
</tr>
</tbody>
</table>

**COMPUTERS OPERATING ON**
The host computers on which the program operates. If the program operates on computers outside Bechtel, specify outside service bureau. Use the following codes to designate computers.

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Apple Microcomputer</td>
</tr>
<tr>
<td>BEC81A</td>
<td>Bechtel Unix 1100/81 A System</td>
</tr>
<tr>
<td>BEC81B</td>
<td>Bechtel Unix 1100/81 B System</td>
</tr>
<tr>
<td>BEC82C</td>
<td>Bechtel Unix 1100/81 C System</td>
</tr>
<tr>
<td>UC81</td>
<td>University Computing Unix 1100/81</td>
</tr>
<tr>
<td>CCGCS</td>
<td>Computer Graphics System</td>
</tr>
<tr>
<td>CCCDC</td>
<td>Central Data Cyber System</td>
</tr>
<tr>
<td>CS</td>
<td>General Cyber</td>
</tr>
<tr>
<td>IBM</td>
<td>IBM 370</td>
</tr>
<tr>
<td>IE</td>
<td>IBM Personal Computer</td>
</tr>
<tr>
<td>ISM10</td>
<td>IBM 5/3 Model 10</td>
</tr>
<tr>
<td>ISM15</td>
<td>IBM 5/3 Model 15</td>
</tr>
<tr>
<td>S3</td>
<td>IBM 370</td>
</tr>
<tr>
<td>S3B</td>
<td>IBM 370</td>
</tr>
<tr>
<td>R20</td>
<td>IBM 2020</td>
</tr>
<tr>
<td>H360</td>
<td>Honeywell 6600</td>
</tr>
<tr>
<td>DFSB</td>
<td>Honeywell 8/44 Distributed Processing System</td>
</tr>
<tr>
<td>HSGX</td>
<td>Bechtel Hewlett Packard 3000 Computer System</td>
</tr>
<tr>
<td>HPSS</td>
<td>Bechtel Hewlett Packard 3000 San Francisco System</td>
</tr>
<tr>
<td>HPLA</td>
<td>Bechtel Hewlett Packard 3000 Los Angeles System</td>
</tr>
<tr>
<td>MCAU</td>
<td>McDonnell Douglas IBM 370</td>
</tr>
</tbody>
</table>

**MICROFORM RECORDS RETENTION**
The number of years (at most 40) that micro records for program source code and documentation are to be retained.

**DISCIPLINES**

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical/Design</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Architectural/Design</td>
<td>Chemical Process Engineering</td>
</tr>
<tr>
<td>Civil/Structural Engineering</td>
<td>Civil/Structural Engineering</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Employee Compensation &amp; Information</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Engineering - General</td>
<td>Engineering - General</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>General Administrative &amp; Planning Support</td>
<td>General Administrative &amp; Planning Support</td>
</tr>
<tr>
<td>Hydraulics-Hydrology</td>
<td>Hydraulics-Hydrology</td>
</tr>
<tr>
<td>Investment Administration &amp; Financial Analysis</td>
<td>Investment Administration &amp; Financial Analysis</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
</tr>
<tr>
<td>Marine Engineering/Demography</td>
<td>Marine Engineering/Demography</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Statistics</td>
<td>Statistics</td>
</tr>
</tbody>
</table>

**SECURITY CLASS**
The security level assigned to the program.

Unclassified — Available for general use within Bechtel. The documentation will be provided to any Bechtel employee on request. The production computer file is accessible by all computer users.

Confidential — Available for use only with written consent of program sponsor. Documentation and/or production computer file access is controlled by the program sponsor.

**PROGRAM LANGUAGE**
The program language(s) used to code program.

**APPROVED DOCUMENTATION**
The titles and revision designations for each applicable program manual. A record copy of each manual must be provided to the library for reference and for records retention purposes.

**NARRATIVE ABSTRACT**
Give a brief description of the program’s capabilities and functions when registering the program and releasing the program for the first time.

Use this space on subsequent program releases to redefine the abstract if program capabilities have changed. As applicable, also convey other pertinent information to program users.

**USAGE RESTRICTIONS**
Note any restrictions placed on the program. Statements such as “For preliminary design only” or “Consult sponsor prior to using program” are appropriate.

**DOCUMENT PREPARER**
The person responsible for the preparation of the program documentation.

**DOCUMENT REVIEWER**
For Standard Computer Programs Only. The person responsible for the review of the documentation. Each of the documents shall be reviewed for scope and adequacy by an individual other than the preparer or the Program Sponsor, selected by the Program Sponsor, who has a level of qualifications at least sufficient to prepare the document. The reviewer should not be the immediate supervisor of the individual(s) responsible for the preparation of the documentation unless the supervisor is the only individual(s) qualified to be the reviewer. The Program Sponsor will indicate this condition by initialling below the reviewer's signature or initials.

**TECHNICAL SPECIALIST**
The person responsible for the technical integrity of the program. The technical specialist ensures the soundness of the theoretical basis, the accuracy of the results, and the adequacy and completeness of the documentation.

**SPONSOR**
The person responsible for all activities related to the program. Consult Bechtel Management Instruction Number 6, Computer Program Principals for details and specific responsibilities outlines in this manual.

By signature on the control form, the sponsor approves all aspects of the program. The sponsor may delegate his signing authority, but he remains responsible for all transactions on his behalf. A sponsor's alternate signature card is maintained in the library.

**July 1983**

**243**
Error Checking

There are no software error checking functions. Instead, editorial-type checks are placed on certain items. Those items are 1) limitations on the number of characters in a title, 2) restrictions on the number of lines in an abstract, and 3) correct entry of the sponsor, technical specialist, and maintainer. Beyond these error checks, BECCAT is manually edited at the terminal by the librarian.

Producing the Catalog

Raw Data

The raw data is entered into the BECCAT database via a CRT terminal. The raw data field is limited to 132 characters, horizontally spaced. To key in all the necessary information within this space limitation, codes must be used. For example, in column 46 of the raw data sample (figure 3), “C5” is coded for host computers. In a similar fashion, column 48 contains codes for program language.

Cobol Interface Program

After the data is input, a Cobol interface program is used to produce BECCAT. The Cobol interface program translates all program codes used in the database into the user friendly English which appears in BECCAT. For example, the cryptic code of “C5” in column 46 of the raw data will appear as BEC82B, BEC82C, CDCCDC, and CDDCUC in the hard copy book catalog.

Next, this same interface program selects the print font type that will be used in the final catalog. BECCAT contains five font styles, and the interface program dictates how words and headings are printed.

The page formats are also established through the Cobol interface program. The footings which contain date and page numbers, as well as the running headings, are produced for each page of BECCAT.

The interface program creates an index of all information within an entry. A table is kept internally on subject, acronym, title, and host computer information. These record fields are then softed alpha-numerically by the Cobol interface program for BECCAT’s four indexes.

Finally, all unnecessary data is stripped. The raw data contains columns of extraneous material which disappear in the final BECCAT catalog.

A tape is created by the interface program which is run through communi-
cation channels to the Xerox 9700 electronic printing system. The xerox system processes the computer generated magnetic tape and produces BECCAT on 8½" × 11" paper.

Cost

Production of the BECCAT book catalog tends to be expensive. Initial development of the program required about 40 hours of professional time. Entry of the information is an ongoing effort occupying three professional librarians on a full-time basis. The average monthly cost to maintain the BECCAT database is roughly $5,000.00. Printing of a master BECCAT and 600 copies of the book catalog in the winter of 1982 cost $6,500.00. Therefore, the estimated cost of each BECCAT is $10.80.

Distribution

The BECCAT catalog was first published in 1975. Since that time, it has been published semiannually. Currently, it is distributed to more than 500 Bechtel managers and users internationally.

Indeed, the Central Data Processing Library is the repository of computer information at Bechtel. The centralized software cataloging which produces the BECCAT catalog is crucial for Bechtel's worldwide computer-related work.

Received for review Jan 5, 1982. Revised manuscript accepted for publication Apr 8, 1983.

Sherry Cook and Mercedes Dumlao are librarians, Bechtel Data Processing Library, San Francisco, CA.
The Status of Audiovisual Materials in Networking

Patricia Ann Coty

Science and Engineering Library, State University of New York, Buffalo, NY

Greater progress has been achieved in the area of bibliographic control for print media than for audiovisual works. The role of networks in correcting the inadequacy of audiovisual standards, as well as the recommendations proposed by Project Media Base in its report to NCLIS on the status of audiovisuals, are discussed.

Audiovisual materials have been generally defined as those materials not totally dependent on printed words to transmit meaning. These materials may take the form of motion pictures on film or magnetic storage devices (video-tape); audio information on magnetic tape or pressed into vinyl discs; computer-generated graphics; and many other formats (1). Most, although not all, audiovisual media require some sort of display equipment. Audiovisual media, as devices for storing information, differ from print media only in their method of storage.

Bibliographic control, while highly developed in the print realm, is painfully inadequate in the area of audiovisual media. A unified approach to bibliographic control is needed to present information to all library users about the wide variety of formats currently available. Because inadequate bibliographic control affects the availability of, and the consequent demand for audiovisual materials, libraries are experiencing difficulty in servicing user needs for these items. How can users request items unless they are aware of their existence, and their location? How can librarians help their users, when often even the librarian does not know what is available?

Networking advances in the last dozen years have done much to correct this insufficiency and promise much more in the future. Having bibliographic access to materials is the first step; making materials available

*An expanded version of this article will appear in Media Librarianship (Neal Schumann Press; John Ellison, ed., in publication).
through interlibrary loan networks is the second. These are areas where computerized networking can have, and indeed is having, its greatest impact.

Libraries have achieved much greater control of print media. One of the contributing factors in this disparity is the development of audiovisual collections outside of traditional library settings. In many cases, the standardization of bibliographic formats was not deemed a high priority by the audiovisual personnel or by those who had possession of the audiovisual collection(s).

Another factor is that many librarians view the cataloging of audiovisual materials as a more difficult enterprise than cataloging print items; audiovisual items commonly require more fields, or data elements, than do print media. Examples of additional fields include producers, rental sources, media formats, running time, and so on. Owing to this real or perceived difficulty, audiovisuals have been given a low cataloging priority in many libraries. Additionally, rapid technological changes in the field are continually creating new cataloging needs, and it is a challenge to plan systems which will accommodate this rapid change.

A third factor is the failure of audiovisual librarianship to develop a universal terminology in the field. Even basic terms such as "audiovisual," "non-print," and "media" appear without apparent differentiation in the literature. What one librarian calls a "kit" will be designated a "sound-slide program" by another and a "sound-recording" by a third. Some librarians refer to microforms as "print" media, while others delegate them to the realm of "audiovisual." The problem is compounded when an identical piece of information is encoded onto two or more different formats; one may be considered "print" while the others are not, for example, a monograph copied onto microfilm, videodisc, or computer software.

Information encoded into print, such as books and journals, tends to have some type of accompanying guide, such as a table of contents or an index. This allows the library user to rapidly scan or browse the material to ascertain its suitability. Audiovisual media, however, usually lack a mechanism for quickly browsing their contents. Even the purely descriptive information sometimes supplied by the producer or distributor is often incomplete or inaccurate. For this reason, it is important that detailed abstracts of the contents be included in databases dealing with audiovisual media. Although there are many abstracting and indexing services which offer this analysis for print materials, there are few that do the same for audiovisuals. Of those that exist, most are distributed in print format and are not available online. Their usefulness is quickly outdated. The fact that content abstracting is not readily available for most audiovisual materials does not make the task of establishing a comprehensive database any easier.

Copyright considerations pose additional constraints on the creation of audiovisual databases. Since duplication of certain media is easy and inexpensive, whereas the cost of purchase is steep, audiovisual materials are vulnerable to copyright infringement.* Additionally, some audiovisual materials, unlike books, have "residual rights" or royalty fees, applicable each time the item is used. The free flow of these items through networks would require a complex system for determining and motivating the collection of fees by the various parties involved. For these reasons, there is a hesitancy among producers and distributors of audiovisual materials to become involved in networking activities.

Whereas most large collections of audiovisual materials are found in academic, public and school libraries, audiovisual collections are also growing

* For a fuller discussion of the provisions of the Copyright Act pertaining to the use and duplication of audiovisual materials, see Laura Gasaway’s article, "Audiovisual Materials and Copyright in Special Libraries," on pages 222–239 of this issue.
in special libraries, government agencies, museums, galleries, and historical societies. The current state of audiovisual collections in the majority of institutions discourages networking. Many libraries differ in their policies for interlibrary loan of print and audiovisual items; audiovisual collections are often partially or poorly cataloged, based on locally produced cataloging systems; interlibrary loan departments and audiovisual departments tend to be physically separate and speak different languages; and the special packaging and handling requirements of audiovisual media create obstacles.

Libraries' reluctance to become involved in audiovisual networking forces users to make innumerable telephone calls and trips to different locations to determine whether suitable material exists. Even when they are lucky enough to find something, they may yet be faced with restrictions on borrowing the material.

In spite of all of the obstacles, progress is being made. Various audiovisual databases are operational and further development of these systems is anticipated. The good news for librarians is that we can look forward to more comprehensive and useful systems in the future.

**Project Media Base**

Jointly sponsored by the National Commission on Libraries and Information Science (NCLIS) and the Association for Educational Communications and Technology, Project Media Base was created in 1976 to examine the status of audiovisual materials as they relate to the NCLIS objective "to plan, develop, and implement a nationwide network of library and information services" (2). The hypothesis of Project Media Base was that "there is ample evidence that all the essential elements for a national bibliographic system for audiovisual informational resources currently exists, and that there is, therefore, no apparent reason why a national system cannot be developed, operated, and fully utilized to provide access to these resources" (2, p. 5).

In examining existing machine-readable audiovisual databases, the Project identified over 40 systems currently in operation, over half of which consisted of less than 5,000 entries. Most existing systems were reported to be multidisciplinary, with the exception of the National Library of Medicine's AVLINE. Almost half of the existing systems use locally developed bibliographic standards, specifically designed to meet local needs. Over half of the systems use subject headings other than LC or Sears. Only a third of the systems reported compatibility of their records with the MARC format.

Thus the audiovisual materials that are within some form of database structure are dispersed throughout the country, recorded in all types of bibliographic conventions and in various degrees of completeness. They are serviced and controlled by a host of organizations and cooperative bodies at different levels—from local to national—and supported by the public, private, and not-for-profit sectors or by multisector combinations. An added difficulty is that these materials are dispersed among different types of communities, generally categorized as library and nonlibrary. These communities often do not share the same philosophies of free and unrestricted use.

To create a nationwide database of audiovisual media, compatatability of records is requisite, with agreement on a system of bibliographic control. Without this agreement and subsequent modification of existing databases, there is small chance of the possibility of unifying the bibliographic information presently available.

As long as databases continue to be created and maintained as separate, localized units, the characteristics of their bibliographic control can be individually adapted to suit their specific needs; but if a national database is to be created, the use of standardized bibliographic conventions is imperative. It is hoped that the relatively new MARC
formats for audiovisuals and the ISBD (NBM) (International Standard Bibliographic Description for Non-Book Materials) formats will assist toward this goal.

Project Media Base concluded that the principle uses of a nationwide data base for audiovisuals would be:

- **reference**—searching for material to fill stated needs, and verification of data for publication of catalogs and/or mediographies;
- **collection building**—assessment and preliminary judgement about items considered for purchase;
- **acquisition**—for purchase, rental, or loan;
- **cataloging**—subjective and descriptive;
- **processing**—production of labels, booking and circulation cards;
- **publication**—checklists, catalogs, promotional literature;
- **statistical support**—for collection management and for monitoring gaps, redundancies, replacements, and so on;
- **production support**—including market analysis, determination of items already available, comparisons of formats, subject coverage, currency, and so on.

Other user needs identified by the project were the need for holdings statements, statements of physical condition of media, circulation and use data, and analytical content treatment (e.g., scene analysis in films, and so forth) (2, pp. 18+).

Let us take a look at just a few of the audiovisual data bases and network systems currently enjoying success.

**NICEM**

The National Information Center for Educational Media (NICEM), headquartered at the University of Southern California, first published a computer-generated film catalog in 1959. This automated catalog aroused such interest that in 1964 a grant was awarded from the U.S. Office of Education for the purpose of examining the cost-effectiveness of producing unique catalogues for selected schools through a central computer. Within two years, the project had established guidelines for automated cataloging of audiovisual material and had produced more than 350 computer-generated catalogs of holdings for schools and universities throughout the United States. The 12,000 item records for films and filmstrips deposited by project participants formed a substantial database.

NICEM gathers data from three sources: participants, media producers and distributors, and the Library of Congress. The criteria for bibliographic formatting are the Association for Educational Communications and Technology’s Standards for Cataloging Nonprint Materials and the ALA Anglo-American Cataloging Rules.

Over half a million items are accessible through the NICEM database, with 40,000 to 50,000 being added yearly. The database is accessed online via the Dialog system and is also available for purchase in book or microfiche format. Formats represented in the database include films, filmstrips, audio tapes, overhead transparencies, video tapes, records, and slides. Dialog has created a number of searchable fields, and the availability of this searching flexibility is an asset which cannot be matched in manual searching of the printed indexes. It should be noted that NICEM does not provide information on how the materials in the database may be borrowed or rented, or even basic holdings information. It is strictly a source of bibliographic data.

**The Consortium of University Film Centers**

The Consortium of University Film Centers (CUFC) is an organization of 50 major film rental centers in the United States, whose purpose is to share information related to collection development, distribution of resources, and an enhanced availability of audiovisual materials. The CUFC’s main accom-
plishment toward these purposes has been the creation of a data bank of the holdings of all its members, published by Bowker in 1977 (and revised in 1981) as the Educational Film Locator. This was a monumental task which took years to complete and was long awaited by media librarians throughout the country. Approximately 50,000 titles are included in the Locator, almost exclusively in 16mm film format.

The Locator contains full technical and descriptive bibliographic citations, with additional rental and ordering information for each title. Also included are annotations, analyses, and evaluations. Entries are indexed under 1,000 subject categories with thousands of subject cross-references. Bowker and the CUFC began assigning ISBN numbers to each title in 1976.

AVLINE

The National Library of Medicine, in cooperation with the Association of American Medical Colleges, has developed an online information and retrieval system for audiovisual materials in all aspects of medicine, nursing, dentistry, health, and related biomedical sciences. AVLINE (Audio Visuals On-Line), is a subset of the MEDLINE database and is available internationally to qualified health professionals and related personnel. Available online by those who have access to a terminal, AVLINE services are also available via telephone or mail from the National Library of Medicine.

AVLINE contains bibliographic data for over 10,000 items with 100 to 200 additional entries per month. All media formats are represented: films, video recordings, audiotapes, slides, overhead transparencies, models, and so on. A network of over 1,500 medical schools, hospitals, research institutions and health-related businesses currently use the MEDLINE system, and thus have access to the AVLINE records. Since MEDLINE charges are low, this system is cost-effective for its users.

In addition to full bibliographic information, most records in AVLINE contain reviews and abstracts supplied by the Association of American Medical Colleges, which maintains a data bank of about 2,500 reviewers in major specialty areas. Materials are given a review rating (e.g., "highly recommended," "recommended," "not recommended," "no review," "pending") in addition to the full review text available as part of the online record.

AGRICOLA

Begun in 1970 as the CAIN (Cataloging and Indexing) database, AGRICOLA (Agricultural On-Line Access) contains the cataloging and indexing files of the National Agricultural Library; substantial files on food and nutrition from the Food and Nutrition Information and Educational Resources Center (FNIC); files on agricultural economics from the American Agricultural Economics Documentation Center; Environmental Impact Statements; and the Brucellosis subfile. The National Agricultural Library produces and maintains AGRICOLA to support research in the agricultural sciences, including such areas as farm management, forestry, animal breeding, entomology, veterinary medicine, and rural sociology.

FNIC maintains a collection of audiovisual materials (motion pictures, filmstrips, slides, games, charts, audiotapes, and videocassettes). These items, which number over 1,000, are included in the AGRICOLA tapes. A controlled vocabulary is used for subject access to the AGRICOLA system, which is available through BRS, Dialog, or SDC.

National Film Board of Canada

The National Film Board of Canada (NFBC), in cooperation with the University of Toronto Library Automation Systems (UTLAS), began work in 1978 toward a national information and distribution system for Canadian audiovisual materials. The goal of the project
is the creation of a complete delivery service for Canadian audiovisual materials, to assist film producers and libraries in the selection, acquisition, and use of Canadian audiovisuals.

The plan combines three related media projects and is designed to bring about the development of one or more audiovisual networks. These projects are: The Standard Catalogue of Canadian-Produced Non-Print Materials and the PRECIS (Preserved Context Index System), both by the University of Toronto Centre for Research on Librarianship; and the Information/Distribution System for Canadian Audiovisual Products, sponsored by the National Film Board of Canada.

Data-gathering for the NFBC file was begun in 1978 with a drag of five UTLAS databases which contained significant audiovisual holdings. UTLAS dumped all records from these bases which contained any form of the NFBC name, in either the imprint or added entries, into a newly created file. Duplicate titles were eliminated and remaining records were edited into consistent format, including MARC-compatible coding, ISBD, and AACR conventions. PRECIS indexing was added to each record as the form of subject access. Additional data was obtained from the Canadian Film Institute, the LC MARC films Source File, and other libraries in the UTLAS network. Also, producers and distributors of audiovisual materials have been invited to provide the NFBC with information on their new releases.

From its database of audiovisual materials, NFBC has been able to create computer-generated subject lists. Reciprocal file sharing agreements through UTLAS provide online availability of bibliographic data among libraries, reducing the need for original cataloging. The NFBC file is available for use by other libraries through the UTLAS system.

Bibliographic Utilities

OCLC began accepting materials covered by AACR Chapter 12 in 1976. Loading of Library of Congress MARC tapes for maps and films occurred in 1979 (3). As of February 1982, OCLC holdings included records for over 184,000 audiovisual titles; 94,000 maps; and 195,000 sound recordings. An in-depth study produced in May 1981 revealed that about a third of the audiovisual records on OCLC were motion pictures; another third were filmstrips; and the remainder were divided among other formats, such as slides, overhead transparencies, video recordings, and kits (4).

Since OCLC records include cataloging data, as well as library holdings, it is possible to use the file for interlibrary loan purposes. However, the interlibrary loan policies of the various holding libraries differ; it is not possible to tell from the citation whether the library listed as the holder of the material will be willing to lend it. The OCLC online interlibrary loan system allows fairly quick response to a loan request, so that one can ascertain the status of a request within days.

OCLC is the only major bibliographic utility which does not, at this time, offer accessibility of records via subject. Records are accessible via title, author, series, and other routes. Audiovisual materials are placed in separate files, and it is possible to limit a search by format.

Online acquisition and cataloging of films, maps, music scores, and sound
recordings are available through the Research Library Group's Research Libraries Information Network (RLIN). Citations on the RLIN database are accessible by subject, as well as by title, author, and other modes. RLIN offers cataloging information and holdings data for each title. Online access to LC MARC records for maps and films is available in addition to access to member's holdings. As of February 1982, the RLIN database included 204,000 records (not individual titles) in the films, maps, sound recordings, and music formats (including musical scores) (6). RLIN has a message system whereby the status of an interlibrary loan request can be ascertained within a matter of days.

The University of Toronto Library Automated Systems (UTLAS) contains thousands of records for media of all formats, including films, filmstrips, kits, sound recordings, videotapes, and braille materials. Both English and French programs are included. Over 50,000 LC film records are on the system. An electronic mailbox exists for the transmission of interlibrary loan requests, and responses are usually generated within days.

UTLAS allows subject searching of its files in addition to access by author, title, series title, and so forth. The audiovisual titles are not placed into a separate file, however, so searching by specified format is not possible.

The Washington Library Network (WLN) includes approximately 210,000 records for projected media (films, slides, videotape) in its database. Since WLN discourages duplicate records for identical items, this number is probably a good indication of discrete titles available through WLN member libraries. These audiovisual titles comprise about 9% of WLN's database. Sound recordings, maps, and manuscripts are planned for inclusion in the future. Records are input from LC MARC tapes, and locally cataloged materials are accepted from WLN member libraries. Although there is currently no message-switching system for interlibrary loan requests, many WLN members use the OnTyme electronic mail service to communicate interlibrary loan messages.

Subject searching is possible on the WLN system, in addition to other modes of access. Searching by format is possible to the extent that format types are included as Library of Congress subheadings.

Conclusions

Project Media Base identified five major conclusions in its final report to NCLIS which are appropriate to review here: 1) the library community and the audiovisual community differ in a number of ways, and have often developed separately; 2) much more progress has been achieved in the bibliographic standardizations for print media than for audiovisuals, making the formation of networks an easier proposition for print items than for audiovisuals; 3) to date, efforts to establish such standards have been productive but, in the meantime, separate efforts are growing in size and complexity making the possibility of unification even dimmer; 4) this lack of agreement on standard conventions is a major barrier to the development of a unified national network for audiovisual resources; and 5) in spite of these problems, the essential elements for a national network do exist (2, pp. 43-44). As progress in this regard moves slowly forward, librarians must continue to serve their users as best they can with the resources that currently exist, while exploring the problems that must be resolved before viable alternatives can be established. Many special librarians have access to one of the bibliographic utilities for acquisitions and cataloging information, and to one of the database vendors (BRS, SDC, Dialog) which offer the various specialized networks such as NICEM, AVLINE, and AGRICOLA. Bowker's Educational Film Locator can be purchased inexpensively for those who are interested in 16mm films.

Through a realization that audiovisual materials are increasingly impor-
tant sources of information for users, it may some day be possible to grant these formats a status equal to that of our old friend the book. At that time, the dream of free and unrestricted access to information, regardless of its packaging, might finally be realized.

Literature Cited


Bibliography


Slusser, Margaret G. "NICEM, the Non-print Data Base." Database 3 (no. 3): 63-67 (Sep 1980).

Received for review Jun 28, 1982. Manuscript accepted for publication Apr 5, 1983.

Patricia Ann Coty is former associate director, Public Services, Science and Engineering Library, State University of New York, Buffalo, N.Y.
Crisis and Growth
SLA, 1918-1919

Robert V. Williams and Martha Jane Zachert

College of Library and Information Science, University of South Carolina, Columbia, S.C.

In 1918, nine years after it was founded, Special Libraries Association was in a crisis situation. Membership was down, finances were in arrears, and leadership was lacking. By the end of 1919, these conditions were almost completely reversed and a foundation had been firmly laid that would ably serve the Association in the coming years. The reasons for this crisis and the subsequent revival are examined in detail.

In November 1918, the war to "make the world safe for democracy" ended, and the United States began a return to—as Warren G. Harding expressed it—"normalcy." In that same month, Special Libraries Association officially began its tenth year. Though the founding gesture had been made in July 1909, complete organization had not taken place until November when a constitution was adopted and a full slate of officers was elected (1). From 1909 to about 1917 the Association maintained a satisfactory and consistent growth in membership and financial power as it set about fulfilling its avowed purpose of promoting the interests of special libraries in a variety of private and public settings. Its members were enthusiastic and their initial efforts resulted in contributions to the development of the concept of special libraries in American society (2).

The year 1918-1919, however, was to be a crucial one, as unmarked by "normalcy" for the Association as for the country at large. Though it could not be described precisely as moribund, SLA had become a passive organization, unresponsive to the challenges inherent in the growing special libraries movement. Membership decreased, financial strength was at its lowest point in the decade, and activities appeared enfeebled. Yet within a year or so the situation had reversed; for the year of crisis contained the seed for a healthier future.

To understand the conditions within SLA, as well as the society in which it
and special librarians existed, five factors can be identified as having influenced major changes in the Association’s life in 1918-1919. Stated generally, these factors were:

1. The syndrome of war economy, with its characteristics of narrow focus, disruptions, and dislocation was followed by a renewed outpouring of money, people, technology, and information into the national economy at the end of 1918.

2. The loss of active leadership in the Association early in 1918 was followed by the infusion of a new, more dynamic leadership on almost every level by the end of the year.

3. The lack of a specific communication pathway to respond quickly to the needs of the SLA membership was remedied by the provision of a forum for this explicit purpose.

4. The deterioration of SLA’s ability to attract new members encouraged the Association to initiate an enthusiastic and successful membership drive.

5. The intensification of SLA’s estrangement from the American Library Association provided the justification to hold separate annual meetings and to develop autonomous SLA programs.

Whereas the combination of negative factors had resulted in a passive organization during 1918, by midyear 1919 the positive factors were in the ascendency, enabling the organization to again become dynamic and effective.

The War Syndrome

The best indication of the impact of World War I on SLA can be found within the pages of Special Libraries (2). Even before the official entry of the United States into the war, there are scattered references to resignations, transfers, and changes in jobs of SLA members and special librarians in general. In the months following April 1917, these references appear more and more frequently. Eventually, the war would have a positive effect on libraries and on special libraries in particular, but during the period 1917-1918, the affairs of the new association and its members were disrupted.

A similar effect was taking place within the nation as a whole as it mobilized all its resources for war. Industries and businesses not critical to the war effort were shut down, over two million men were conscripted into service, and hundreds of thousands of women joined the work force. Banks and large investors who formerly had funded the establishment of new businesses now poured their money into the war effort through Liberty Bonds and similar efforts. The War Industries Board was given authority to set economic priorities and allocate resources. All, however, were to be directed towards winning the war (3).

The period from early 1917 to late 1918 was a difficult time for the nation, as well as the struggling SLA. Energies of all types were being redirected, and even those special librarians who were not directly affected by the war in terms of job loss or change were likely to be taking on new responsibilities that were in some way related to the war. These disruptions to the affairs of the Association and its individual members, like those to the nation itself, began slowly after April 1917, but increased at a rapid pace within the next year. These effects were at their height in the nation and within the Association in the first half of 1918.

Once victory in Europe was achieved in late 1918, the Association began its revival. The war brought about fundamental changes in the nature of U.S. industry, business and government, all of which began to grow and prosper at unprecedented rates. With these changes also came new opportunities for special librarians and their Association.

SLA Leadership

The infusion of a new and dynamic leadership following the July 1918 annual meeting proved to be the crucial factor in the revival of SLA. Dr.
Charles C. Williamson had been elected President of SLA sometime before October 1916 to succeed F. N. Morton, who resigned because of illness. (4). Williamson had been a member of SLA for a number of years, and was in 1916 Vice President of SLA and President of an affiliate organization, the New York Special Libraries Association. As municipal reference librarian of New York City and as director of the Economics Division of New York Public Library, he had considerable experience as a special librarian and appeared to be well-qualified for his responsibilities as SLA President (5).

Williamson’s term (November 1916–April 1918) was not a distinguished one, however; in fact, little seems to have been accomplished. His presidential address of 1917 was an uninspired account of traditional activities. Even these activities, as reported in Special Libraries and Library Journal, appeared to have declined as did both membership and financial resources (6). In April 1918, Williamson resigned as President of SLA. The Executive Board did not replace him immediately and, as a consequence, the Association drifted without top leadership for several months (7).

The exact reasons for Williamson’s inability to provide aggressive leadership are not known; nor is conjecture made easier for the historian by the absence of official records for this period. Apparently he tried, for, in his presidential address he made a strong plea for certain improvements in the Association. Though these suggestions later proved to be of value, Williamson made no apparent effort to implement them during his own term. He did make a routine attempt to improve the financial status of the Association and to recruit new members (8); however, little action and no success resulted.

It may have been that war conditions did not lend themselves to any great improvement in the status of library associations. Perhaps Williamson did not have the cooperation of his fellow officers and SLA members generally, or he may have devoted less time and interest to SLA than was needed during this crucial period.

Williamson had been involved for some time with the Carnegie Corporation. In May 1918, shortly after his resignation from his SLA post, he began full-time work as a statistician for the Corporation (9), and in October 1918, he also resumed his position as director of the Economics Division of the New York Public Library (10). Questioned in 1949 on what he considered the highlights of his tenure as SLA President, Williamson could not remember the dates of the administration (11).

Perhaps Williamson was distracted by personal affairs during this important time for the Association. Unfortunately the record makes plain that no other SLA officer picked up the reins. The decline was evident during the 1918 annual meeting at Saratoga Springs (8, 12).

Shortly after July 1918, a special committee of SLA elected Guy E. Marion as President. As one of the Association’s founding members, he had remained active in its affairs (13). After serving first as business manager of Special Libraries (1909-1910), Marion was elected secretary-treasurer, a post he held until 1915 (14).

Marion was a keen advocate of special libraries and an acknowledged practitioner of the concept. In his study of early industrial libraries, Kruzas describes Marion’s library at American Brass Company as one of the first information centers in the United States (15). As librarian of Arthur D. Little, Incorporated, in Boston, and later as a private special library consultant and organizer, Marion continued to build and advance his ideas (13, 16). When he assumed office as President of SLA at the age of 36, he spoke with the driving
enthusiasm of youth. In his first public
written notice to the membership after
he became President, Marion sounded
the note of confidence and belief in the
special library idea that was to be char-
acteristic of his administration and of
his life—a note that had been lacking in
the immediate past.

In times of unending change such as we
are witnessing today, this Association
has boundless power for accomplishing
things, such as it never possessed be-
fore. New Special Libraries are
springing up everywhere. New opportu-
nities for service are being pre-
sented. You must enlist the support,
active, not passive, of every Special Li-
brarian with whom you come in contact
(17).

Because of his experience as an officer
during the earlier administrations,
Marion was able to pinpoint one of the
major reasons for the decline of the
Association:

Your new president is undoubtedly
favored with the unusual background
which comes from years of service as
Secretary-Treasurer . . . but those were
days of beginning and construction only.
The Association is now coming into its
own, and its fortunes can no longer be
guided by a select few. We have, without
warning (as it were), passed a time when
a small gathering around the dinner table
could solve the problems of this organi-
zation. The Association from now for-
ward must stand or fall upon the loyal
support of its members everywhere (17).

Armed with this conviction, Marion
pressed for an expansion of the Associa-
tion's communications structure as a
major goal of his administration. He be-
lieved that a channel from the member-
ship at large to the Executive Board was
essential for Board decisions to reflect
accurately the desires of the members.

In the implementation of this goal,
Marion was extremely fortunate to have
several strong individuals as members
of his Executive Board. As Vice-
President, Edward D. Redstone, Massa-
chusetts State Librarian; as Secretary-
Treasurer, Caroline E. Williams of E. I.
Dupont de Nemours; as Board members
Edith Phail of Waterbury, Connecticut,
and J. H. Friedel of the National Indus-
trial Conference Board. Friedel also
served as editor of Special Libraries
beginning late in 1918 (18).

These five were able to work together
enthusiastically and effectively—a rare
phenomenon. It was Marion, Williams,
and Friedel, however, who were the
prime movers of change. Using his
knowledge of the Association's history
and its internal workings, Marion was
able to organize his energies toward
correcting its weaknesses and building
its strengths. Williams managed to un-
tangle the financial affairs and helped to
move the organization into a solid fiscal
position. Marion gave Williams the
credit in his presidential address of
1919, and the extant records reflect her
careful management.

No small part of the improved finan-
cial position accrued from Friedel's
change in policies regarding the distri-
bution of free copies of Special Libraries
to a large mailing list. Friedel, who
could probably be dubbed the first
"militant" advocate for special librar-
ies, was able to convince the member-
ship of the need for enthusiasm and
cooperation. Through editorials in Spe-
cial Libraries and articles and letters to
the editor of Library Journal, he never let
the reader forget that special libraries
and SLA represented the wave of the
future:

Librarianship is tending more and more
toward the special library and the special
library methods. . . . We are learning al-
ready to think in terms of knowledge and
print, rather than in terms of book covers
and title pages. The future librarian will
be a specialist (19).

Friedel was able in a unique way to
make the pages of Special Libraries re-
fect the trends of the new administra-
tion in every respect. Enthusiasm for
special libraries was on virtually every
page. He made the drive for new
members into a personal crusade. The
change in subscription prices for the
journal (an important factor in impro-
vining finances) was capably explained.
The need for serving a great variety of members was filled by developing an editorial board representative of various types of special libraries, and by publishing bibliographic issues devoted to their special interests. The deepening conflict with the American Library Association was openly aired to the members, and a vision for the future of the Association was established.

Thus, in the space of less than a year a new and successful leadership took over the SLA helm. It designed a new communication role for members, revived flagging interest, and provided direction for the future. Guy Marion’s ability to weld such a team at this particular time was probably his major service to the cause of special librarianship.

The Advisory Council

In his first letter to the Association membership, Marion had pointed out that the time was past when a few members sitting around a dinner table could decide the affairs of the Association. At the first Executive Board meeting at which he presided as President, he placed the matter of Board-membership communications on the agenda (20). Following the discussion, Marion was empowered to “revivify the National Advisory Board” (21). The National Advisory Board had been created in early 1912 and consisted of the “district heads” of the 14 “responsibility districts” into which the entire United States had been divided. The districts, much like current-day chapters, were to be the local representation of SLA in all its various aspects. The district heads were to organize existing special librarians in their areas, aid and promote the establishment of new special libraries and, in general, serve as advocates for the concept of special libraries and SLA. The district heads, initially appointed by the Executive Board, were to be elected once the districts were sufficiently organized (22). These groups did organize themselves during 1912, and reports on their activities appear in Special Libraries during the period 1913–1918.

Apparently, however, the plan to have the Board function as an advisory body was not successful because it became necessary to revive it in 1919. How successful Marion was in doing this is difficult to determine because of the sketchy nature of the Executive Board records of the time. Based on these records and the published reports in Special Libraries, it appears that the National Advisory Board did report to and advise the Executive Board but that its influence was not particularly strong. And, for at least a few years, its influence would not be as strong as the soon-to-be-formed subject-division based Advisory Board. Nevertheless, the idea of geographically based groups of special librarians having an influence on national association affairs was a firmly established one that would continue to endure and make SLA a distinctive organization.

In partial implementation of his objective to improve the Association’s management, Marion appointed Friedel on May 21, 1919, to “suggest a plan for the better management of the affairs of the Association . . . .” Friedel was commissioned to report to the next annual meeting “to call upon the other members of the Executive Board for such advice and information as was necessary (23).” Friedel agreed with Marion that improved management depended on improved communication. In his report during the June 1919 Executive Board meeting, Friedel expressed the philosophy of the Executive Board as follows:

... that the Association’s work might be improved if the various elements in the Association were given . . . some method of expressing their opinion on various questions or policies involved in the Association . . . .” (23, p. 29).

Friedel recommended a structure that would allow members from similar libraries to function in groups. Each group would be represented by two
members of its own choosing on an "advisory or conference committee to advise your Executive Board and your offices of your ideas, of your wishes, so that each section will be able to express itself best and everyone will feel the Association is trying to cover the broad field which has been growing during the whole ten years" (23, p. 29).

It should be noted that in this broad-sweeping plan, Friedel proposed not only an advisory council but, through the formation of interest groups, the divisions themselves. In a single recommendation, Friedel devised the structure which has, with increasing formality and complexity, characterized Special Libraries Association for six decades.

When Friedel's plan was put to a motion before the Association, it generated considerable discussion. The idea of representing the various interests in SLA in the forum of an advisory council passed easily; the matter of how these representatives should be chosen and whom they should represent took a longer time and required more discussion. Some members thought the representatives should be chosen at large and should represent a specified number of members without regard for common interest other than that of the total Association. After lengthy debate, however, this method of representation was rejected. The way was opened for the adoption of Friedel's original plan for representation by interest groups.

Though the membership was too large to take immediate action to implement an important decision, such as that of the formation of interest groups and the election of representatives. The 75 members present recessed into seven groups: commercial libraries, financial libraries, insurance libraries, legislative/reference libraries, technical and engineering libraries, industrial libraries, and welfare libraries. Each group elected two of its members to represent it on the newly authorized Advisory Council. In ten minutes time the job was done: SLA had subject interest groups and an Advisory Council (24).

The groundwork was well-laid. Within the next two or three administrations the Advisory Council was functioning as a dynamic and valuable part of the Association. In one master stroke the decision-making apparatus had been broadened, members had achieved a greater degree of self-government, and a springlet of fresh ideas flowed directly from all parts of the special library world. The Marion administration could close on a note of assurance.

Renewal of Interest

Two of the most serious problems facing Guy Marion as incoming president of SLA in 1918 were the sharp decline in membership in the Association and a resulting decline in financial resources. Both membership and finances had been on the decline since 1915, Marion's last year as Secretary-Treasurer (25).

In 1915 SLA had 354 members and collected, from all revenue sources, $839.56; at year's end, with all expenses paid, there was a balance of $23.79 (26, 27). In 1916 membership had declined to 300, money collected to $640.50, and the year end balance again was reported to be $23.79 (28). Figures for 1917 differ in various sources, but in December of that year Williamson, in a special plea to members to pay dues, noted that "fifty or sixty" members had been lost and that a deficit of $40.47 existed on the official books (8, p. 170-
By June, 1918, membership had declined even further, and the Secretary-Treasurer reported a balance of only $10.00 (29).

The need for emergency measures was clear. At his first Executive Board meeting, Marion asked for ideas and cooperation. The Board responded with a three-part plan to be implemented in a crash period of three months.

The keynote of this plan was publicity. In the first phase of its plan the Board reactivated an idea that had proved useful in the early days of the Association; it initiated a survey of special libraries, emphasizing statistical data on the libraries with which members were affiliated but including, as well, all special libraries about which data could be provided. Tear-out questionnaire forms were included in *Special Libraries* with the idea that they could and would be duplicated and distributed to any special library a reader might know about. Since the survey was designed as a continuing one, it was publicized over a period of time, in order to increase the awareness of members, subscribers and readers alike to the growing number of special libraries recorded.

The Board made extensive plans to have an exhibit on special libraries shown at the imminent joint meeting of SLA and American Library Association. Supplies of membership applications were ordered for use at the exhibit booth to sign up members without delay, and extra copies of *Special Libraries* were printed for free distribution (23, p. 30). Some months earlier, Friedel, as editor of *Special Libraries*, had appointed a group of contributing editors, each representing a variety of special libraries which he wished to emphasize in the journal. During 1918, monthly issues of the journal focused attention on descriptions of collections, facilities and services of each variety of library in turn. Numerous subject bibliographies were published. To the earlier enthusiasm evidenced in *Special Libraries* was now added considerable substance as Friedel's effort to mold the journal into a stimulating medium for exchange of information about special librarianship took shape.

The third prong of the Board's plan was the specific recruitment of new members. This responsibility was assigned to a committee with R. H. Redstone, SLA Vice-President, as chairman (23, p. 30). The exact methods of the campaign are not known, but the success of the total effort is clear. By the time of the June 1919 annual meeting membership had climbed over the 400 mark. Money collected had risen to $1273.60, and the year ended with all expenses paid and a balance of $759.12 (30).

Perhaps the most dramatic evidence of renewed interest is shown in the attendance figures for the 1918 and 1919 meetings. In 1918 the average attendance at sessions of the annual meeting had been under 40; in 1919 several sessions ran over 250 (31).

The growing distribution list of *Special Libraries* also played its part. Thanks to new policies of exchanges and gifts, as well as the increase in membership, the *Special Libraries* distribution list increased from 325 in late 1918 to 430 by June, 1919 (32). Though some of these changes appear modest in actual numbers, they were important percentage gains, and their combined psychological value is incalculable. Once again, SLA was on an upward swing, one that would increase steadily as time passed.

**ALA vs. SLA**

The founding of Special Libraries Association in 1909 did not create much of a disturbance among the membership of ALA or its leadership. From the beginning, John Cotton Dana had urged the ALA Executive Board "... to interest itself in the growth of special libraries, and to take over, as a part of the ALA, the new movement ...", but his advice was "... definitely ignored. ..." (33). Exactly why this attitude existed and continued for the next few years can only be a matter of speculation. In a letter to the Editor of Library
Journal in 1919, Dana stated that it was because of “. . . the very clumsy form of the ALA organization” (33).

Whatever the reasons for the continuance of this attitude, it became an increasingly sore point to SLA members, many of whom were also members of ALA. The feeling of disenfranchisement reached its height during the war years. At the June 1917 convention, ALA had formed a War Service Committee and charged it with the responsibility of aiding in the war effort in any way it could. The Committee immediately established official relations with the War Department and set up headquarters at the Library of Congress. Its work for the remainder of the war was remarkable: it collected and distributed to soldiers in the United States and overseas several million volumes of books and magazines; well over a million dollars was raised by ALA alone to finance its operations (over 700 people were employed in the effort at one point); and it built libraries and library buildings in hospitals, camps, prisons, and ships (34, 35).

Throughout the war ALA continued to ignore SLA even though page after page of the 1917-18 issues of Special Libraries urged members to cooperate in any way possible with the war effort, and SLA was, at one time, officially a part of the ALA War Service Committee.

SLA attempted to join in the effort but was soundly rebuffed by ALA. In August 1917, only two months after ALA had formed its Committee, SLA appointed a committee on war service to work with the ALA committee. The SLA committee outlined the purpose and plan of its work to “. . . cooperate closely with the American Library Association committee, preferably working as a sub-committee . . .” by the following means: 1) “Reach special classes out of the scope of the general [ALA] committee;” 2) cooperate in any way possible with the war effort, and SLA was, at one time, officially a part of the ALA War Service Committee.

The war experience left many special librarians with a bitter feeling toward ALA. There was talk, at the 1918 meeting, of having SLA hold its annual conference at a time and place separate from ALA’s, but nothing came of the proposal. In his presidential address Marion urged that “all library systems” (38) work in harmony, and editorials in Special Libraries and Library Journal
urged the same viewpoint, commend-
ing his attitude to all librarians (39).

At the 1919 conference there were
lengthy and spirited debates on the
breakdown of relationships between
the two organizations. A strongly
worded resolution, criticizing ALA's at-
titude towards special librarians, was
drafted to send to the ALA Council.
Even though the final resolution was
narrowly defeated, a committee was ap-
pointed to study the matter of official
relations with ALA (40).

Fortunately, a total break with ALA
did not occur at this time. The SLA
Executive Board decided to hold its 1920
annual meeting at a time and place dif-
ferent from ALA's. This decision was
made for the convenience of SLA
members and was not the result of bit-
teress. The ALA meeting was to be
held in Colorado Springs, and the SLA
Executive Board felt that more special
librarians would attend a meeting on
the East Coast (41). Consequently, SLA
scheduled its meeting in New York,
thus beginning the trend to hold sepa-
rate meetings.

Troubles between the two organi-
zations, however, would continue to
divide their efforts to provide the best
library service to American society. As
Thomison put it so well in describing
relationships between the two organi-
zations during the period 1918–1922,
"... it was thus becoming clear that an
accumulation of affronts, neglect, care-
lessness, and selfishness was straining
the once friendly relationship between
the two sister organizations" (42).

Summary

Guy Marion stated in his presidential
address to the Association on June 24,
1919: "A few years ago we, too, stood 'at
the crossroads. The affairs of this asso-
ciation were at a critical position" (38).
It was true: the Association, perhaps
even the concept of special libraries,
was dormant. The times and the lack of
imagination, enthusiasm, and leader-
ship made it so.

By 1919, however, the situation had
reversed. Imagination, enthusiasm and
positive leadership gave the Associa-
tion new life and a vision for the future.
During his tenure as president,
Marion directed and witnessed new
beginnings: membership was in-
creased; finances were stabilized; Spe-
cial Libraries was revived; a definition of
"special library" was formulated; the
Advisory Council was formed; a survey
of special libraries was started; and a
public relations campaign promoting
the concept of special library was ini-
tiated.

Persons of action and vision
are rare. Guy E. Marion was
such a person as were his fel-
low workers on the Executive
Board of 1918-1919.

Marion also recommended the estab-
lishment of certain internal organiza-
tional improvements which, when im-
plemented in the future, would prove to
be of great benefit to the Association.
He strongly urged the employment of a
permanent secretary; he advocated a
paid editor; he advised the separation
of the office of secretary-treasurer; and
he urged that research be done on the
nature of the special library field (43).

Persons of action and vision are rare.
Guy E. Marion was such a person, as
were his fellow workers on the Execu-
tive Board of 1918-1919. There have
been, undoubtedly, others of equal,
perhaps greater, stature in the years
since 1909. Unfortunately, we know lit-
tle of these people and the work they
did in the critical or the benign years of
our Association's history. Their stories,
though buried in dusty documents and
hazy memories, deserve the telling.
Without such backward glances our
past is uninterpreted, our continuity in-
complete, our perspective on our future
diminished.
Literature Cited

1. Minute Book No. 1, Special Libraries Association Archives.
6. Williamson, C. C./“Presidential Address . . . 1917.” Special Libraries 8 (no. 7):100-103 (Sep 1917). Although the Minute Books of the Secretary-Treasurer for the years 1917 and 1918 have disappeared, deductions can be made by comparing figures for 1916 and 1919 and by careful reading of Special Libraries and Library Journal for this period.
12. “Special Libraries Association.” Library Journal 43 (no. 8):621-622 (Aug 1918); Special Libraries v. 9 (no. 6):143 (Jun 1918); v. 10 (no. 6):152 (Sep 1919).
17. Marion, Guy/“To Our Membership.” Special Libraries 9 (no. 7-8):176 (Sep-Oct 1918).
19. Friedel, J. H./“We, Our Association, the Future.” Special Libraries 10 (no. 1-2):15-17 (Jan-Feb 1919).
20. Calendar for Executive Board Meeting, SLA, Nov 16, 1918. Minute Book No. 4, p. 9, SLA Archives.
23. Minutes of the Executive Board Meeting, SLA, May 21, 1919. Minute Book No. 4, SLA Archives, p. 16.
25. Information relating to membership and finances has been gathered from a number of sources, some exact and some approximate. Different accounting methods used by different incumbents in office have made it difficult to compare annual figures with accuracy. Also, as noted earlier, some official records from these years are missing and secondary sources are not in precise agreement.
27. Minutes of the Executive Board Meeting, SLA, Sep 29, 1915.
29. Special Libraries 9 (no. 6):143 (Jun 1918); Special Libraries 10 (no. 6):152 (Sep 1919).
30. Special Libraries 10 (no. 6):155 (Sept. 1919); Minutes of the Executive Board Meeting, SLA, June 23, 1919. Minute Book No. 4, p. 2, SLA Archives.
32. Special Libraries 10 (no. 6):155 (Sept 1919).
33. Dana, John C. / Letter to the Editor in “The Open Round Table.” Library Journal 44 (no. 7):481 (Jul 1919).
35. Thomison, Dennis / A History of the American Library Association, 1876-1972, Chicago, ALA, pp. 64-70.
37. Minutes of the Executive Board Meeting, SLA, July 4, 1918. Minute Book No. 4, pp. 1-2, SLA Archives.
40. Minutes of the Executive Board Meeting, SLA, June 25, 1919. Minute Book No. 4, pp. 1-19, SLA Archives.

Received for review Jan 7, 1983. Manuscript accepted for publication Feb 18, 1983.

Robert V. Williams is assistant professor and Martha Jane Zachert is professor, College of Library and Information Science, University of South Carolina, Columbia, S.C.
Talkback Telephone Network
Techniques of Providing Library Continuing Education

*Ruth W. Wender*

University of Oklahoma Health Sciences Center
Library, Oklahoma City

Four lectures on solving medical reference requests were given over a talkback telephone teleconference network which links 110 hospitals throughout the state. Participants in the course were librarians in nonurban public libraries, systems libraries, and small hospital libraries. Professional librarians as well as library personnel with little training took the course. Techniques were developed for providing continuing education over this telephone network to individuals located in remote areas. These techniques are described including analysis of their advantages and disadvantages.

In April 1981, the University of Oklahoma Health Sciences Center (OUHSC) Library cooperated with the Oklahoma Department of Libraries (ODL) and the hospital-controlled Oklahoma Talkback Medical Education Network to bring a program of continuing education to public and hospital librarians. Talkback telephone network facilities, materials, expertise, resources, and manpower were shared among the participating groups. Through use of the talkback telephone network, this continuing education undertaking extended throughout Oklahoma, permitting librarians to learn in their own geographic areas.

The OUHSC Library had used this network in 1980 for a series of nine lectures on "Management of the Small Hospital Library" (I). Techniques for providing library continuing education through this telephone network developed in the 1980 course were perfected in the 1981 series of lectures.

**Background**

The OUHSC Library provides backup document delivery and reference help to two library networks, the TALON (Texas, Arkansas, Louisiana, Oklahoma, New Mexico) regional medical library network and the Oklahoma Tele-
communications Interlibrary System (OTIS), headquartered at the state library, Oklahoma Department of Libraries. In this dual networking capacity, the OUHSC Library became aware of a need to train librarians in nonurban areas to provide health-related information.

Small public libraries, staffed either by subprofessionals or by professionals with no expertise in handling biomedical reference, often referred health-related requests to the OUHSC Library reference department through the OTIS network. Similarly, small hospital libraries staffed by individuals with other full-time jobs in the hospital, commonly referred requests for medically related information to the OUHSC Library through the medical network. The OUHSC reference department found many of these relayed requests difficult to understand since many library personnel in the small nonurban institutions had no training in answering medical reference requests or in conducting a medical reference interview. Additionally, many public librarians had professional expertise but little special knowledge of medical reference.

Providing medical information for the public is not a problem unique to Oklahoma. With recognition of the patient's "right to know," public libraries increasingly have been called on to serve the public's quest for health-related information. At the same time, hospital librarians are receiving many of the same kinds of "public" requests. Thus, requests both for patient and consumer health information are on the rise.

In recognition of this expanding needs, the Medical Library Association (MLA) passed a resolution endorsing consumer health information and appointed an ad hoc committee to "collect data on existing consumer health information and develop recommendations for the appropriate role of health science librarians, libraries and MLA in the provision of consumer health information services" (2). The April 1980 Bulletin of the Medical Library Association details of the joint efforts of an academic health science library and a large public library to approach the problem of handling health-related questions asked by the general public (3).

**Project Aims**

With this partnership of a public and an academic medical library as an example, the OUHSC Library and ODL cooperated in sponsoring a four-part talkback teleconference lecture series titled "Solving Medical Reference Requests." One goal of this project was to improve the ability of public and medical librarians in nonurban areas of Oklahoma to give medical reference service to their users and to encourage cooperation between hospital and public librarians in the development of medical reference services. Another aim was to use and perfect techniques for teaching via the telephone. Objectives were defined as follows:

- To perfect telephone network teaching techniques developed in 1980.
- To write materials for this teleconference.
- To provide a list of inexpensive medical reference tools.
- To have the participants develop medical reference interview techniques.
- To acquaint librarians with public library and medical library networks.
- To acquaint public librarians and medical librarians with the resources in each other's institutions.

**Talkback Telephone Network**

To accomplish these goals and objectives, the OUHSC Library and ODL made use of a third statewide system, the Oklahoma Area Medical Education Network. This is a talkback telephone network developed in the late 1960s to bring lectures via a radio/telephone hookup to hospital personnel, thereby reaching out to all geographical areas of the state. The 110 cooperating hospitals are divided into five separate continu-
ing education (CE) centers, each employing a continuing education coordinator. Each CE site works directly with a group of satellite hospitals linked by teleconference lines. Programs can be sent through the entire 110-hospital network, or to one or more of its five parts.

The CE centers use a combined microphone/party-line telephone concept to provide continuing education to health care professionals. The program operates with four dedicated telephone wires bridged together at a technical control center at the offices of the Oklahoma Hospital Association in Tulsa, Oklahoma. In each of the 110 hospitals, the teleconference is heard through a Darome convener, which has outlets for up to four desk microphones. Thus, each conference area in the individual hospital has one-to-four microphones. When the bar at the base of the microphone is pressed down, the speaker can be heard over the entire system. This enables participants to ask questions at any time.

Although Oklahoma did not make use of the talkback teleconference network for library continuing education until 1980, library courses were given earlier over both the Texas and the Wisconsin Telephone Networks. Robert Berk’s account of a Wisconsin network course designed for professional librarians and sponsored by the Medical Library Association and the University of Wisconsin Middleton Medical Library appeared in the Bulletin of the Medical Library Association (4). Other MLA courses have been given since the one reported by Berk. In 1981 MLA’s “CE 256, Management by Objectives,” was taught by Richard Lyders over the Georgia Hospital Association Network which had previously rebroadcast the 1980 Oklahoma program. In 1982 “CE 454, Neoplasia” by Ada Seltzer was taught over the Wisconsin Network (5). Although the Oklahoma, Texas, Wisconsin, and Georgia networks are the only ones known by the author to have participated in medical library continuing education efforts, there are at present 20 talkback telephone networks operating in the continental United States, in addition to one in Alaska and one in Canada. More than 10 networks associated with universities offer college credit courses (6).

Talkback Teleconferencing Techniques

The OUHSC Library and ODL developed materials written specifically for the shared telephone teleconference course of four lectures called “Solving Medical Reference Requests.” The techniques employed in the course development and the lectures were designed for adult continuing education. Since the adult learner is frequently an individual with field experience, adult education is most effective when it is problem-oriented and geared to the work situation. The telephone enables the participant to hear but not to see the lecturer.

Providing medical information for the public is not a problem unique to Oklahoma. With recognition of the patient’s “right to know,” public libraries increasingly have been called on to serve the public’s quest for health-related information. At the same time, hospital librarians are receiving many of the same kinds of “public” requests. Thus, requests both for patient and consumer health information are on the rise.

Lacking eye contact, the methods used must insure that the audience does not lose interest. Therefore, the following techniques were developed for library continuing education via the telephone:

1. Lecturers with practical experience must talk in a panel format, rather than read a prepared lecture, and must speak no more than fifteen minutes without a break of some
kind. (Breaks were provided by different voices, questions asked, simulations, and so on.)

2. Lecturers must answer questions quickly and to the point.

3. Lecturers must make participants feel a part of the lecture series by having them sign in, ask questions, and so on.

4. Reading materials must be clear, practical, and written at the level of the participants. A needs assessment should determine the level.

5. Short reading assignments for each lecture must be given at the beginning of the course.

6. There must be a non-threatening measuring instrument.

7. All materials must be developed and sent to the participants before commencement of the lectures. Sessions must be recorded.

The requirements for lecturers were easily met by experienced hospital librarians willing to participate in the training program, and by the public library system directors who participated in discussions and gave simulated reference interviews. The joint sponsors wrote a five-chapter, 47-page manual entitled “Solving Medical Reference Requests,” designed specifically for this course (7). The exercises following each chapter consisted of simple true-false, matching, and completion questions. This series of exercises served as a non-threatening measuring instrument. The answer sheets were mailed to the on-site coordinators at each hospital before the commencement of the lecture series. In addition, the lecturers went over the answers at the beginning of each session.

Making the participants feel a part of the lecture series was achieved by having participants at each site check-in verbally. At strategic times during the hour and at the conclusion of each lecture participants were asked, “Are there any questions?” Questions were welcome at any time, but in order to encourage discussion, the course developers arranged in advance with hospital librarians and public librarians from different institutions to ask questions. Also, librarians at selected participating sites gave simulated reference interviews with each lecture. The design of these simulated interviews was developed in advance, and they turned out to be high points of the entire series.

Advantages and Disadvantages

The talkback teleconference network presented both advantages and disadvantages. The advantages are obvious. Individuals and lecturers can remain at their institutions while learning. The programs are cost effective for the institution which neither has to pay travel costs nor loses a full day or more of the employees’ working time. The individual has an opportunity to study and practice skills between lectures, which reinforces learning. An audiocassette of each lecture was produced so that it could be listened to again. A long-distance call makes it possible to include lecturers from anywhere. Surprisingly, some of the lecturers who are not fond of speaking before a live audience found the teleconference microphone to be non-threatening.

However, there are also some disadvantages associated with the talkback teleconference network. Certain library skills can be learned only by doing. Because of the time and visual constraints, one cannot use the same kinds of real situation problems that occur when working with trainees in a workshop or institute.

Certain library skills can be learned only by doing. Because of the time and visual constraints, one cannot use the same kinds of real situation problems that occur when working with trainees in a workshop or institute.
how well the message is being comprehended. Although it is possible for the user to ask questions, the participants do not always do so. In the absence of questions and eye contact, some lecturers feel isolated. Occasionally, a speaker will continue with the lecture, not realizing that he has been disconnected from the network. Atmospheric conditions such as rain, thunder, and lightning, sometimes caused bad line noises on the Oklahoma system.

One of the most beneficial byproducts of the lecture series was cooperation: among the three separate agencies involved in the undertaking; among the small public libraries who were the invited guests of the hospitals; and among librarians within the same town who often did not know of each others' existence. Hospital librarians learned what was available in public libraries, and public librarians discovered the existence of the hospital libraries and the specialized nature of their resources. The experience also taught the librarians where to search locally for materials and help before referring questions to a network.

Evaluation

Evaluation of the program indicated a great appreciation for the talkback teleconference system. The evaluation instrument, developed by Mary Hardin of the Oklahoma Department of Libraries, asked the following questions:

1. Did these teleconference lectures help to increase your skills in filling medical reference interview requests?
2. Did this series help to increase your understanding of online computerized searching? (For these two questions, there were three choices: "very much," "somewhat," or "not at all.")
3. Was the teleconference system a satisfactory way of participating in a workshop for you?

With the exception of two public librarians who had one hour's travel time to find a hospital teleconference site, the answer to question three was "yes." In questions one and two, the answers were divided equally between "very much" and "somewhat." The number of individuals participating in the course was gratifying—32 public librarians of whom 28% were professionals, and 35 hospital librarians. In the 1980 course, the participants had ranked each lecture on a scale of 1 to 5 with 5 being excellent. Overall score for the nine lectures was 4.4

Conclusions

This training course on the talkback telephone network has confirmed the OUHSC Library's belief that the telephone is an excellent medium for the delivery of continuing education for both professionals and library technicians. The teleconference library CE series has been beneficial, enhancing communications between different types of librarians and a health-related telephone network. It has involved professional hospital librarians, academic health science librarians, public librarians, and hospital CE coordinators in a team effort to provide basic reference skills. It has been a good experiment in cooperation, and it has developed techniques for giving successful continuing education over the telephone. A major contribution of the course has been to enable staff in geographically remote institutions to receive training in their own areas.

July 1983
Acknowledgements

The author is grateful to the Oklahoma Department of Libraries for the assistance it gave to the teleconference series of lectures by printing and distributing Solving Medical Reference Requests, and to Clinton M. Thompson, director, OUHSC Library, for his support and his participation in the lectures. A sincere “thank you” goes to my coauthors of Solving Medical Reference Requests, Joanne Callard of the OUHSC Library and Mary Hardin of the Oklahoma Department of Libraries, who were also codevelopers of the lecture series. I wish to acknowledge the assistance of Jan Gillie, Continuing Education Manager of MPSI, without whose guidance the program series would never have been aired.

Received for review Jun 14, 1982. Revised manuscript accepted for publication Feb 7, 1983.

Ruth W. Wender is associate director, University of Oklahoma Health Sciences Center Library, Oklahoma City Campus.

Literature Cited

Church and Synagogue Library Association

Fifteen Years of Ecumenical Concern for Quality Service in Religious Libraries

Claudia Hannaford

Church and Synagogue Library Association, Bryn Mawr, Pa.

The Church and Synagogue Library Association (CSLA), serving a rapidly-growing segment of special librarianship, this year observes the 15th anniversary of its founding. It was formed in 1967 to provide guidance in the establishment and maintenance of effective library service for religious congregations. It operates as a channel for interested persons to help one another by sharing information and experiences.

The congregational library consists of materials gathered to meet the needs of the individual church or synagogue and its members. It provides resources for the study of doctrinal teachings, religious history, devotional materials, and curricula not generally found in the local public library.

The congregational library is a special library in the sense that it is designed to serve the institution in which it is housed. It is recognized as a vital part of the institution's educational and spiritual ministry. The library's selection of materials can help clarify and deepen the layperson's understanding of his or her religious heritage and its meaning in life.

Although some congregational librarians are professionals, most libraries are headed by volunteer laypersons untrained in library procedures. The
founders of CSLA envisioned a number of ways in which assistance could be offered to these persons. The 15 years of steady growth in the organization's life has already seen many of these goals become a reality.

History

During the American Library Association Annual Conference in 1966, 28 persons responded to an invitation to meet to consider the formation of a nationwide, ecumenical church and synagogue library association. They represented the major faiths and denominations, library schools and associations, councils of churches and publishers of religious literature.

John F. Harvey, Dean of the Graduate School of Library Science at Drexel, Philadelphia was responsible for bringing this group together. For several years Drexel Institute of Technology had displayed interest in religious librarianship. In 1961 Drexel held its first Seminar in Synagogue Librarianship. This was followed by annual church library conferences, sponsored in cooperation with Protestant and Roman Catholic groups. Greater numbers of people attended each year, many traveling from far distances. This led Dr. Harvey to propose the establishment of a religious library association which would not be tied to one geographic area. He outlined the following goals and activities:

(1) A national conference with high level programming and exhibitors representing religious publishers and library supply and equipment manufacturers. Visits to superior congregational libraries in the conference city could be incorporated in scheduled events.
(2) A national newsletter could stimulate and focus publication of significant contributions for its practitioners and also represent that group to the wider church and library community.
(3) The association would publish guides, manuals, and other bibliographical projects.
(4) Regional workshops would provide training otherwise not available for all denominations or areas of the country.
(5) Possibilities for cooperation with accredited library schools included the offering of formal and correspondence courses and workshops in church and synagogue librarianship, as well as research projects to compile data on this special branch of librarianship.

These and other services are now being provided by the Church and Synagogue Library Association.

Membership

During the organization's first year, 186 members were recruited; today the number is over 1,500. Membership is drawn from the United States, including Alaska and Hawaii, and most Canadian provinces, as well as from Africa, Cyprus, and Puerto Rico.

Membership is open to all upon application and payment of dues. Categories are provided for individuals, churches or synagogues, institutions (such as publishers), affiliates (previously organized regional groups wishing to be in communication because of similar concerns), and contributing members. The latter encompasses any of the above who provide a grant (minimum $100) for the work of the Association.

CSLA is registered as a nonprofit organization by both the federal and the Pennsylvania governments. Gifts and bequests are tax-deductible.

Organizational Structure

Today CSLA employs a full-time executive secretary, as well as part-time personnel, including a publications director, publications secretary, and office assistant. This headquarters staff is directed by a professional librarian, Dorothy Rodda, who serves as executive secretary and carries out administrative responsibilities under the president.
The first vice-president succeeds to the presidency; the second vice-president is in charge of the annual conference. The treasurer is elected for a two-year term. Elected officers, including the immediate past-president, comprise the Executive Committee of which the executive secretary and publications director are nonvoting, ex officio members. This group meets at the call of the president.

The Executive Board consists of the Executive Committee and appointed chairpersons. It meets at least twice a year to act for the membership between meetings of the Association. In addition to the usual administrative committees, there are chairpersons for library services, chapters, and continuing education.

All individual members and designated representatives of church or synagogue members may vote, hold office, and serve on committees. Members receive a discount on purchases of CSLA publications. The membership year begins July 1; the fiscal year coincides with the calendar year. The original constitution and bylaws have been revised by membership vote several times as the developing Association attempts to be responsive to needs and interests of its members.

Chapters

Along with the growth in membership has come the establishment of regional chapters. The first was the Delaware Valley Chapter formed in the greater Philadelphia area in 1970. Today there are 18 chapters and 5 affiliate groups. (2) They extend from Florida to British Columbia, from Texas to Manitoba and Ontario, and include persons in the states of Alabama, Arkansas, Connecticut, Delaware, Georgia, Indiana, Kansas, Michigan, Mississippi, Missouri, New Jersey, New Mexico, Ohio, Pennsylvania, Tennessee, Texas, and Virginia.

Chapters offer mutual learning and fellowship opportunities within defined geographic boundaries. Their purpose is not only to encourage improvement of existing congregational libraries, but also to assist persons interested in developing skills needed in organizing new libraries.

Chapters may be formed upon application of ten members and with the approval of the Executive Board. While advice and certain staff assistance is available from the CSLA-Chapter Coordinator, chapters elect their own officers, name their own committees, plan their own programs, and are self-supporting. Some issue newsletters; most hold annual workshops.

Workshops and Conferences

In regions where there is no chapter, workshops may be sponsored by CSLA in cooperation with public libraries or religious denominations.

A three-day national conference is held annually in varying locations. Conferences have been held in eastern seaboard states, the Midwest, the Pacific Northwest, and the Southwest. Generally, they take place in late June on a college campus.

CSLA business matters are handled in a general membership meeting at which officers for the coming year, chosen in a mail ballot, are announced and installed.

Programming includes speakers, workshop sessions, seminars, and discussion groups. An important part of every conference is that of exhibits provided by publishers of religious materials and producers of library supplies and equipment. A block of time for browsing, with no conflicting activity, is set aside in the agenda. Often tours of representative or unique libraries in the host city are among scheduled events. An awards banquet is another feature of the annual conference.

News Bulletin

Sidney August, librarian, Pedagogical Library, Board of Education, Philadelphia, edited the Association's News Bulletin when it was first issued in the
The Publications

Publications are issued with particular attention to the needs of the general membership which is periodically surveyed. A Guide series includes manuals on setting up a library and promoting its use. Recent Guides deal with formulating a policy and procedure manual and the handling of archival materials. Basic instruction in cataloging, a subject heading list for church and synagogue libraries, and a greatly abridged Dewey Decimal Classification schedule are among the available titles.

Through joint publishing agreements with The Seabury Press, three paperbacks, more in depth than the Guide series, have been printed. Written by Ruth S. Smith, the Association's first president, they are Cataloging Made Easy: How to Organize Your Congregation's Library; Getting the Books Off the Shelves: Making the Most of Your Congregation's Library; and Running a Library: Managing the Congregation's Library with Care; Confidence, and Common Sense.

The first bibliography issued by the Association was a listing of church and synagogue librarianship resources. Now in its third edition, this work is a compilation of known materials currently available for persons desiring information about congregational library manuals, periodicals, nonbook materials, furnishings, equipment, and so on.

Other bibliographies include a suggested basic book list for church libraries and one related to bibliotherapy, "Helping Children Through Books."

Two tracts are designed for distribution to individual members of the congregation. One outlines ways the family and library can benefit each other; the other describes the partnership relationship between the library and religious educators. William Gentz is publications director for the Association.*

*For a list of publications and ordering information, write to: CSLA, P.O. Box 1130, Bryn Mawr, Pa. 19010.
Standards

The designation of a standards chairperson was among the first Executive Board positions created when CSLA was founded.

In its tenth anniversary year, CSLA published the first set of standards formulated for church and synagogue libraries. Guidelines are presented for establishing goals and periodic self-evaluation of materials and services for beginning, developing, and established congregational libraries. The standards evolved over a period of several years' study and discussion.

Participation in the Professional Library Community

CSLA was a sponsor of National Library Week in 1969. The following year, CSLA became a member of the Council of National Library and Information Associations. The Executive Secretary and an appointed Executive Board member regularly attend Council meetings.


The Association was represented at the White House Conference on Library and Information Services in 1979. A CSLA position paper was accepted and distributed to delegates and alternates prior to the Conference. It defined church and synagogue libraries, explaining that they are particularly rich in resources that might not be found in other libraries and should be considered potentially valuable participants in library and information network plans.

In 1980, Special Libraries Association and CSLA arranged for an exchange of representatives. Elizabeth Burton, a member of both Associations, alternately represents SLA and CSLA at their respective annual conferences and provides a written report of each conference to the Association she is representing. There is also a complimentary exchange of exhibit space at the national conferences.

In 1981 The American Theological Library Association and CSLA scheduled a joint dinner during their annual conferences which were held back-to-back in St. Louis.

Relationship with Library Schools

The first known correspondence course on “Church and Synagogue Librarianship” was begun in 1977 by the University of Utah Division of Continuing Education. To date, its instructors have been members of CSLA who are qualified not only as professional librarians but also as church pastors. Upon successful conclusion of 15 lessons and an optional final examination, the student receives a Certification of Completion and two Continuing Education Credits.

CSLA grants full scholarships for this correspondence course to members selected from applicants to the Association. Designated the Muriel Fuller Scholarship, it was established in 1978 through funds contributed to honor the memory of this former continuing education chairman of CSLA and officer of CLENE.

Another notable contribution to church and synagogue librarianship is that of the University of Wisconsin’s Extension Division. Utilizing a unique instructional medium, the Division’s two-way audio delivery system connects students throughout the state with its Educational Telephone Network.

Last fall, a course titled “Special Library Management: Focus on the Church/Congregational Library” was offered. It consisted of four workshops which had been offered at the national CSLA Conference. Workshop leaders from Tennessee, Oregon, Ohio, and Georgia conducted the class sessions using a special telephone hook-up. University personnel reported that the series was enthusiastically received and
they are planning to offer it again this year, choosing topics and leaders from the next CSLA Conference.

A growing number of other college and public libraries across the country provide guidance in congregational librarianship to persons in their areas. Learning opportunities may be in the form of evening sessions or one-day workshops sponsored by the library or presented in cooperation with CSLA.

**Awards Program**

At CSLA's first conference, an awards program was initiated with the presentation of an honorary membership to Josephine H. Kyles, Metropolitan Detroit Council of Churches, in recognition of her service as a religious educator. Three others have been awarded honorary memberships: John F. Harvey, a founder; Ruth S. Smith, first president; and Joyce White, a former executive secretary. An awards committee receives nominations and makes recommendations to the Executive Board to recognize achievements in librarianship. Those endorsed by vote of the Board are announced at the annual conference.

The Outstanding Congregational Library Award is presented to the church or synagogue library which has responded in creative and innovative ways to reach and serve members of the congregation and/or wider community.

The Outstanding Congregational Librarian Award is given to the church or synagogue librarian in recognition of distinguished service to the membership and/or community through devotion to the congregational library.

The Outstanding Contribution to Libraries Award is given to the person or institution who has provided inspiration, guidance, and leadership or resources to enrich the field of church or synagogue librarianship.

The Helen Keating Ott Award was established in 1979 as a memorial to one of CSLA's leaders and author of the bibliography, "Helping Children Through Books.” The award is presented to an individual or institution for a significant contribution to children's literature.

**The Future**

In *Church and Synagogue Libraries*, John F. Harvey conservatively estimates that there are more than 25,000 congregational libraries in the United States and that the number "is likely still to be growing rapidly."* The book is a pioneer anthology of 20 papers which describe the present state of development and the future direction of Protestant, Catholic and Jewish congregational libraries. The introduction states: "Church and synagogue staff professionalism has lagged well behind that of many other social institutions, and this has had a negative influence on their libraries. Beyond the minister and organist, professional qualifications have not been sought. However, a slow improvement has occurred in the staffing area, and the libraries have profited from it.”

Dr. Harvey once commented that "Persons working in the field have been left to educate themselves. . . ." To meet the need for training, he and others founded the Church and Synagogue Library Association. The constitution stresses this educational purpose. For fifteen years CSLA has expressed in its publications and programs an ecumenical concern for quality service in religious libraries.

As John Cotton Dana, SLA's first president, predicted in May 1911: "If churches and the library unite, the efficiency of both will be greatly increased.”**

---


Appendix A. Chapters.

Alabama
Austin (Texas) Area
Connecticut
Delaware Valley (Greater Philadelphia Area)
Florida
Greater Kansas City Area
Greater Richmond (Virginia) Area
Indiana
Maumee Valley (Toledo, Ohio Area)
Metro Atlanta
Mid-South (Memphis, Tennessee Area)
New Mexico
North Texas (Greater Dallas Area)
Northeastern Ohio
South Central Kansas
Southwestern Michigan
Southwest Pennsylvania
Tennessee Valley

Appendix B. Affiliates.

Church Library Council (Washington, D.C. area)
Church and Synagogue Librarians Fellowship (Baltimore, Md, Area)
Northern Virginia Church and Synagogue Library Council
Church Library Association (Eastern Ontario, Canada)
Congregational Libraries Association of British Columbia (Canada)

Received for review May 18, 1982. Manuscript accepted for publication Feb 7, 1983.

Claudia Hannaford is a CSLA Councilor to the Council of National Library and Information Associations. A charter member of CSLA, she has served in many capacities on the Executive Board.
The Nigerian Institute of International Affairs Library
Its Resources and Services

John U. Obasi

NIIA Library, Victoria Island, Lagos, Nigeria

The Nigerian Institute of International Affairs Library plays a central role in supporting the Institute's research programs and goals toward the advancement of Nigerian foreign policy and international relations. The Library's holdings, special collections, and user services are described, as well as its cooperative activities with counterpart institutions in Africa and the world. Recommendations are offered for improvements in library service, collection development, and future programs.

THE Nigerian Institute of International Affairs (NIIA), at Victoria Island, Lagos, is widely recognized for its role in African and international affairs. The Institute was founded in 1963 as an independent, nonpolitical and nonprofit organization by a number of prominent Nigerians who included the late Sir Abubakar Tafawa Balewa, the first prime minister of independent Nigeria; Sir Adetokunbo Ade-mola, former chief justice of the federation; Chief Simeon O. Adebo, Nigeria's former permanent representative to the United Nations; and Professor Kenneth O. Dike, former vice-chancellor of the University of Ibadan, to name only a few.

Until it was taken over by the federal military government in 1971 (1), the Institute was privately funded and received financial assistance from both the federal and regional governments. Foreign governments and foundations, too, made handsome financial contributions to the Institute. For example, grants from the British Government went toward the construction and furnishing of the NIIA complex at Victoria Island; the Conference Hall was funded by West Germany, the marble flooring was contributed by G. Cappa, an Italian businessman in Lagos; and the American government made contributions toward library books and equipment. Indeed the salaries of the early chief librarians and the research staff, as well as the maintenance of library services, were funded by grants from the Ford Foundation (2).
Objectives of the Institute

The charter which established the NIIA sets forth the aims and objectives of the organization as follows:

- To encourage and facilitate the understanding of international affairs and of the circumstances, conditions, and attitudes of foreign countries and their peoples;
- To provide and maintain means of information upon international questions and promote the study and investigation of international questions by means of conferences, lectures, and discussions, and by the preparation and publication of books, records, reports, or otherwise as may seem desirable so as to develop a body of informed opinions on world affairs;
- To establish branches of the Institute in Nigeria and to organize, maintain, and coordinate their activities so as to facilitate the study and discussion of the objects aforesaid; and
- To establish contacts with other organizations with similar objects.

The Role of NIIA in Foreign Policy

Much has happened in Nigeria since the early years of the Institute. Criticism of Nigerian foreign policy during the civil war gave impetus to a review of NIIA services to determine how research studies conducted by the Institute could be used to improve the country’s international relations.

The period also marked a new phase in the style of leadership and direction of Nigerian foreign policy. The involvement of the superpowers in the Angolan conflict in 1975 became a test case for the new military regime under General Murtala to prove its total commitment to the African cause. The government abandoned the “softly, softly” over-cautious approach to international issues that had been characteristic of Nigeria’s foreign policy posture during the preceding 15 years.

The arrival of Dr. Akinyemi at NIIA, the recruitment of more Nigerian social and political scientists of differing ideological perceptions to its Research Department, and the active involvement of Nigerian university intellectuals, civil and military personnel, and other intelligentsia, to meet, debate, analyze and propose what Nigeria’s future foreign policy ought to be, proved most welcome and necessary developments. Through its many research studies, seminars, conferences and dialogues with similar institutions overseas, the Institute made significant contributions toward improving foreign policy and international relations, thereby fulfilling the aspirations of Prime Minister Balewa, one of its founding members:

As an independent and non-political organization it is my hope that this Institute will by its study of international questions assist the Government of the day in its foreign policy-making. It is also my hope that this Institute, with its great potentialities, will create in this country a more interested, more informed, more analytical and more active public.

Educational Training

Although the Institute is not intended to serve as a teaching establishment, a further component of its work in recent years has been to train new recruits to the Nigerian foreign service. NIIA offers an intensive six-to nine-month program toward a diploma in international relations and diplomacy. Applicants have tended to come from the Nigerian armed forces and civil service, as well as from radio and television journalism. As the only institution of its kind in black Africa, applicants from other African countries may start to take advantage of this training program once the reputation and the standard of its diploma is established.

Lectures and Symposia

While research continues to be the major focus of NIIA activities, other functions include organizing public lectures and seminars to promote the
study and understanding of international relations. With the active support of the Library, the Institute also holds "Dialogues" with similar organizations overseas in which Nigerian businessmen, writers, academics, and military personnel actively participate. Most recently, such meetings have been held with China, Brazil, and with East European Socialist countries. Through these activities, the Institute has put into practice the ideals expressed by Sir Ademola, Chairman of the Council, at the Institute's Foundation Day Ceremony in September 1964:

The troubles of Asia and Europe, and of the Americas are no longer "other people's" troubles; they have become ours as well. All the nations, whether they are considered good or bad, are now our neighbours and all ideas dwell among us, as the variety of nations represented at this gathering vividly demonstrates. Therefore, the NIIA hopes to work simultaneously on three levels—as a Nigerian institute in Lagos, an African institute in Nigeria and a world institute in Africa (4).

Publications

NIIA has become an important research and publishing center for the study and interpretation of world events from an African perspective. Some of its major serial publications include: Survey of Nigerian Affairs, first issued in 1975; The Nigerian Journal of International Affairs, which began publication in 1975; and the Nigerian Forum, a factual and authoritative monthly aimed at the general reader who wants to keep abreast of current international issues. Yet whatever achievements may be credited to the Institute would be impossible without the active support of the Library and its staff.

The Library

The NIIA Library started in 1964 with a meagre collection of some 111 volumes and 112 new journals and serials. By 1982, it had experienced impressive growth, with over 35,544 volumes, 1,082 serials and about 164,000 ephemeral materials including pamphlets, press clippings, unpublished conference and seminar papers, microfilms, and phonotapes which will form the nucleus of the proposed Foreign Policy Oral Documentation Collection (5). Its staff currently numbers nine professionals and four semi-professionals. Today, NIIA maintains one of the best collections of social science documents and provides the best library facilities in Nigeria for the study of international politics and diplomacy. Its modern research library is housed in a facility covering an area of 1,400 square feet with shelving space to accommodate 100,000 volumes. The Library Department occupies the ground and first floors of the main building which also houses the directorate, administration, and research blocs.

The Readers and Bibliographic Services on the ground floor has responsibility for reference and circulation services. This section is planned to accommodate about eighty readers for study purposes. Adjacent to the reference and circulation section are two L-shaped buildings which serve as workspace for the library staff, stack room for lending materials, and a temporary office for the chief librarian, who has the title of Director of Library and Documentation Services. This same bloc contains the Periodicals Receipt and Processing Room. On the first floor is the Press Library and the new Documentation Services. There are study carrels on this floor for up to 18 readers.

Social Science Collections

The main stock of the Library's collections is in the social sciences, with emphasis on comparative government/political science/administration, international law, international economics, economic development and planning in the Third World, military science, and disarmament and peace. In acquiring library materials, preference has always been given to post-World War II publications in the following order of prior-
ity: Nigeria, Africa, and the world (especially the Third World).

The library has a good selection of basic materials on the United Nations and other international organizations, in addition to the ones for which the Institute has depository arrangements. The collection also includes important British and United States primary documents on international affairs, such as *Documents on American Foreign Policy*, published by the Council on Foreign Relations; *Public Papers of the Presidents of the United States, Containing the Messages, Public Speeches and Statements of the Presidents, 1928-1966*; and *United States Treaties and Other International Agreements, 1950-1971* (U.S. Government Printer). British sources include *Documents on International Affairs, 1929-1961* (published by Oxford University Press for the Royal Institute of International Affairs), and *Documents on British Foreign Policy, 1919-1939*.

**Periodicals**

Periodical literature is of particular importance to the research activities of the Institute. It is the most commonly used collection and occupies more space than all the rest put together.

Periodicals are shelved alphabetically by title on open access shelves, separate from other reference items on the ground floor. All issues of a title are found together in bound or single volumes, except for a selected number of the most recent issues which are arranged on display racks in the Reading Room. As new issues of a periodical are received, they are quickly scanned for articles to be included in the *PERIODOC* or in the Periodicals Card Index (6) maintained at the Readers’ & Bibliographic Services librarian’s desk.

Since the Library has been in existence for just over 18 years, some of the serial holdings start from the 1960s. Older files and first editions, which are often out-of-print, are in frequent demand but, unfortunately, are often lacking. Attempts are made to fill serious gaps and new titles are added all the time. But in the absence of a comprehensive and informative national union catalog of periodical holdings and facilities for prompt photocopying, the Library must find a way of cooperating more fully with other libraries to minimize this problem.

**Readers and Bibliographic Services**

First and foremost, the Library exists to serve the needs of the organization’s staff, especially the research fellows and registered members of the Institute. In addition to meeting the known requests of its users, the Library notifies them of the existence of information that is relevant to their work through the publication and circulation of a library bulletin of references to current literature and the accessions lists. On an international level, the Library participates in cooperative exchange programs to supply documents and information regularly to researchers investigating current developments in African and international affairs.

The Readers and Bibliographic Services (RBS) section is the hub of the Library Department’s service to its clientele. It has responsibility for lending items to approved readers, handling reference and bibliographic inquiries, and referring readers to other sources of information. The section is headed by a senior librarian assisted by three other librarians of various ranks.

RBS liaises with the other sections of the Library Department, such as Technical Services, which is responsible for the acquisition and processing of publications and documents, library equipment, and other mechanical devices. It produces the card catalogs and accessions lists. The Chief Librarian is in charge of overall administration of the Department and is assisted by his Deputy.

The nature, range, and quality of the user requests RBS receives far exceed those which other libraries in Nigeria have to handle. In spite of the large number of special libraries in Nigeria, none has the material resources or per-
personnel to provide comparable facilities and services to researchers. Although the NIIA's Library cannot be compared to such centers as the Royal Institute of International Affairs (Chatham House), London, or the Council on Foreign Relation, New York, which have been in existence for seventy years, it is the only special library in Nigeria to which researchers, scholars, and writers can readily turn for virtually any inquiry bordering on international politics and foreign relations. On request, RBS staff will conduct literature searches and prepare select reading lists and subject bibliographies. This includes the preparation and upkeep of comprehensive subject indexes in all printed documents, books, reports, periodicals and other sources, and the holdings of printed catalogs of other libraries with similar subject interests.

Based on an analysis of the most frequent bibliographic and subject inquiries received, the Library started producing reading lists and bibliographic compilations on the following subjects during 1979-1981: Nigerian-French relations, African military capabilities and strategy; ECOWAS; energy resources in Africa; arms control and economic development. The following guides have been issued in the NIIA Bibliography Series:


Photocopies of these and additional lists can be obtained on application to the Chief Librarian or head, Readers' and Bibliographic Services Division.

In 1979, the Library produced the first issue of its journal, *PERIODOC: An Index to Current Periodical Articles at the NIIA Library*. Published fortnightly, it carries short, indicative abstracts arranged in broad subject and geographical order. Originally intended as a current awareness service to research staff and members of the Institute, the journal has proved to be popular and useful to libraries overseas, as well. Issues of the journal now contain articles in French but their abstracts appear in English language.

Other special projects of RBS include regular exhibitions and book displays to highlight special events or occasions. On the occasion of the World Conference on Apartheid in 1977, an exhibition was mounted at the National Arts Theatre to highlight the evils of apartheid. The following year, during the Nigerian-Soviet Dialogue in 1978, the Library produced a display on Nigerian-Soviet Relations, as well as a special bibliography of relevant documents.

**Photocopy Service**

This service also falls within the ambit of RBS activities. For a fee, photocopies can be supplied of most materials held in the Library. For serials and other documents which cannot be borrowed, the service is the only means by which a reader can obtain a copy of the desired article. As a rule, photocopies are supplied on a "first come, first served" basis but preference is given for urgently needed requests which can be dealt with immediately.

**Press Library Service**

The Press Library houses a unique collection of archival materials. It contains over 151,000 press cuttings gleaned from domestic and interna-
tional newspapers on many aspects of international affairs—politicso-social, legal, economic, and military. However, emphasis is placed on Nigerian, African, and Third World issues. The Library receives at least one major newspaper from each foreign country, as well as a subscription to the Swedish Institute of International Affairs’ “Archives 69 Clippings Service.” This service provides press cuttings from a wide selection of notable international papers. The monthly and annual cumulative indexes which the Library receives are also extremely useful aids in the use of the clippings.

Foreign press coverage of events in Nigeria and Africa is of particular relevance to research work at the Institute since it enables Nigerians to see themselves as others see them. The role of the press in international affairs, with particular reference to the Nigerian civil war, is highlighted in three studies by Dr. Akinyemi (7) and another by the Scandinavian Institute of African Studies (8).

The Library’s newspaper cuttings are filed chronologically in broad subject order. The Press Librarian maintains a special subject classification scheme which covers both subject location and content. A detailed analysis and classification of the clippings are planned when adequate staff resources make it possible. A cross-reference system links articles to other relevant subjects in stock. The scheme is constantly revised and made flexible enough to permit insertion of new entries and to reflect any changes in the domestic and external environment. To keep other members of the library staff informed of activities in the Section, the Press Librarian includes in her Monthly Report a list of new subject indexes to documents and clippings added to the files. Since newspaper publishers do not appear to appreciate the importance of producing monthly or annual indexes to their dailies, such resources in the NIIA Press Library are of inestimable value to researchers.

The Press Library houses a unique collection of archival materials. Foreign press coverage of events in Nigeria and Africa is of particular relevance to research work at the Institute since it enables Nigerians to see themselves as others see them.

Although there is no separate catalog of Press Library holdings, a Visible Index is available. Removal of Press Library items for use elsewhere in the Library, such as in the main Reference Room, is permitted as long as the material being removed is signed for and all records of such temporary “loans” destroyed as soon as the item is returned to the issuing officer.

### Documentation and Translation Services

A new Documentation and Translation Service was introduced in 1979 to handle those documents from international organizations with which the Library has depository responsibility, such as the Economic Commission for Africa, Organization for African Unity, and the World Bank. While repeated applications to the Economic Community of West African States (ECOWAS) to accept the NIIA Library as a depository for its documents have so far been unsuccessful, the post of ECOWAS Bibliographer was created for the Readers’ and Bibliographic Services.

The Documents Librarian works closely with the Press Library and RBS
Staff. His responsibilities include systematic searching of press cuttings and pamphlet files to identify, index, and annotate any items of information on Nigeria's foreign policy. In 1979, a bibliography of Nigeria's African Policy since 1960 was initiated, making extensive use of the documents in the section. When completed, this work will prove to be, by far, the most important research guide for Nigerianists, Africana librarians, and other scholars of African affairs.

User Policy

While the NIIA Library has always been willing to accommodate the requests of all inquirers who apply to use its resources, it is a special library geared primarily toward the Institute's Research Department and the registered members of the Institute. There are three categories of paid membership:

1) **Full membership** is open to citizens of Nigeria. Full Members receive all publications and lectures of the Institute free.
2) **Associate Membership** is open to post-secondary students who are permanent residents in Nigeria and, in the opinion of the Council, are likely to make adequate use of the facilities. They are entitled to receive the Institute's lectures free but have no voting rights.
3) **Corporate Membership** confers full voting rights and a free subscription to all Institute publications.

Recommendations

Achievements and improvements in library services at NIIA have been quite noticeable and are a credit to those who have contributed toward this success. However, there still remain certain areas of service and stock provision where further improvements and expansion would be desirable. These areas are in the main concerned with special collections.

**African Affairs Collection Development**

Since independence, all the Nigerian governments and national political parties have regarded Africa as the cornerstone of Nigeria's foreign policy (9). The main objectives in the conduct of this policy have been: the maintenance of good neighborly relations with all states in general and with our immediate neighbors in particular; cooperation with other African states to prevent Africa from becoming an area of crisis and world ideological conflict among the superpowers; to work zealously toward fostering African unity and to free all African territories under foreign domination; and the eradication of all forms of racial discrimination. The Ministry of External Affairs, Department of African Affairs is responsible for Nigeria's relations with all Africans at governmental, societal and individual levels.

In order to attain these objectives, it is imperative for the future of Nigerian foreign relations that its journalists, civil servants, members of parliament, and above all, its policy and decision makers must be well-briefed, not only at governmental level but also about the social culture and the state of public opinion in every African state. This requires meticulously planned acquisition, storage, and retrieval of documents and data on African countries.

The NIIA Library already contains valuable research materials on a number of individual African countries, and they form a useful base from which a special collection on African affairs could be developed. A well-pointed and expanded acquisitions policy is needed to collect the much neglected non-book documents in the form of pamphlets, reports, maps and other kinds of materials commonly found in African literary markets.

The Library, because of its special nature, could play a vanguard role in a campaign to establish in Nigeria a center *par excellence* for Africana publications and documents of every viewpoint. A full-time librarian, appointed...
to develop this service, is needed to improve the Library’s coverage of French-speaking African states and the Republic of South Africa.

Archival and Rare Book Collection

At present, certain archival and rare documents are shelved together with ordinary library material. A majority of these documents is found in the Press Library and is often undistinguishable from other items. Research papers, books, and other publications by members of the Institute should be carefully assembled for bibliographic recording. These records and documents will provide invaluable source material for any research work on the Institute itself.

Inevitably, individual researchers in the course of their work accumulate useful data and documents. It is strongly recommended that every considerable collection held in these “private libraries” should be obtained for entry in the Library’s catalog. The Chief Librarian and his sectional heads should try to locate all such collections, identify rare and out-of-print items dispersed within the Institute, and withdraw them from general circulation, so that they may be housed in the Documentation and Translation Section. Important government reports, commissions of inquiry and tribunals, communiqués by Nigerian and visiting foreign heads of state and ministers, treaties with other countries and international organizations, debates of the Nigerian Constituent Assembly, as well as the Report of the Constitution Drafting Committee containing the Draft Constitution are examples of documents which require special treatment in handling and preservation (10).

The Library already holds British parliamentary debates (Hansard) on the Nigerian civil war, as well as similar debates in Canada, the United States, and Sierra Leone. Every attempt must be made to either buy or solicit the donation of such documents from ministers or commissioners, political party leaders, writers and university lecturers on international affairs, or any of the dramatis personae during Nigeria’s troubled years.

Nigerian Television and Radio Newstalks

These two national industries for mass communication have from time to time broadcast important programs in the form of news talks and interviews on topical international and national issues. For some of the programs, the NIIA Library has provided research assistance to the producers. Some of these interviews are vital primary sources which are unavailable in any other form and would be lost forever to scholars unless collected and preserved by libraries.

The NIIA Library would be a most suitable repository for preserving these documents. Arrangements should be made to acquire and preserve them as gifts from their authors and the corporations, and when a donation is not possible, to try to secure films, phonotapes, or transcripts of these programs.

Cooperation with Other Libraries

Cooperation with other libraries in Lagos chiefly concerns interlibrary loan. Due to lack of adequate searching aids and the constant breakdown in telephone services, inquiries for a loan often involve time-consuming journeys to a library in order to borrow or to consult a document, only to find that the particular document or serial is not in stock.

Generally, interlibrary loan activities have been one-sided; the NIIA Library tends to lend more items than it is able to borrow from others. Until a nationally coordinated scheme of library cooperation is established, the Chief Librarian will have to devise a better method for gaining access to library resources within the Ministries of External Affairs and Defense and those of the Nigerian Institute of Social and Economic Research, National Institute for Policy and Strategic Studies, relevant university research institutes, and the
legal depositories for United Nations, European Economic Community (Yaounde & Lome Convention) (II), and ECOWAS official documents.

Guides to Special Sources and Collections

The NIIA Library may decide in the future to publish a printed catalog of its collections but, for the present, it could at a more modest cost undertake the compilation of narrative guides to sources of information—whether in books, periodicals, institutions or collections—of data on various subjects in the Reference Room. The areas to be highlighted might be the series of League of Nations/United Nations documents, yearbooks and annuals dealing with military affairs, disarmament and peace, interregional organizations, liberation movements, and other basic source materials for research on any aspect of the social sciences in Nigeria. Reliable reference works, especially those for African sources and collections without any European or American published equivalents, would be of immense help to researchers, scholars, and students of African problems.

The Library has an alphabetical Title Index to its periodical holdings but the usefulness of this list could be further enhanced by incorporating a Subject Index. The Library also has a selection of subject, foreign, national, and other bibliographies on various aspects of international politics and foreign policy. These are shelved in the Quick Reference section of the Reading Room in classified order. A descriptive bibliography of these bibliographies, including those forming part of another work or serial, could be compiled to publicize their existence to a wider audience.

Searching Aids

The bibliographic and abstracting journals held by the Library should be arranged to form a collection separate from the textual editions. The collection should also include indexes to periodicals published as separate works, such as Social Science Index, International Index to Periodicals, Social Science Citation Index, PAIS—Public Affairs Information Service, British Humanities Index, African Index and the International Bibliography of the Social Sciences, to name only a few. These are essential reference tools for most literature searches within the social sciences. A good start has already been made by transferring the Library’s bibliographic and abstracting journals, other libraries’ accessions lists, and subject guides to periodicals to shelves near the RBS librarian’s desk. This operation needs to be continued and expanded to improve access to the Library’s RBS Section.

Domestic Binderies

Since the number of items the Library annually sends to commercial binders is relatively small, an in-house binding workshop would, at this time, be inadvisable for economic reasons. There are, nevertheless, substantial advantages to the Library and its readers if one were to be set up in the future. The materials sent out for binding are mainly periodicals and report literature. These effectively are out of circulation while they are at the commercial binder who may be several miles away from the Library, while those documents within a library’s own bindery retain their availability. On the average, it takes between 10-16 weeks for periodicals and pamphlets to reappear on the shelves after they are sent to a commercial bindery. This is a long time for researchers to have to wait, especially for a journal needed in connection with a study in hand. Anything that can be done to shorten the turn-around time will be a welcome improvement in library service for research staff and other users.

Telex and Direct Telephone Services

Reference and searching activities in any library require prompt and immediate action, and this is especially true at NIIA. Good telex and telephone services can immeasurably improve such services. The Press Library and RBS
need access to direct telephone lines so that inquiries can be received and answered in these two departments without first going through the operator, as is the case at present. There is also a need for the Library Department to have its own telex service or to share one freely with other departments without undue internal delays. Another advantage of the telex over other quick forms of communication is that for interlibrary loan requests, a written record of what is needed is provided at each terminal.

Other Considerations

A new library facility and the purchase of new equipment is planned following the proposed move of the Institute to the new Federal Capital at Abuja. It would be advisable to consider a Reference and Circulation Division with adequate shelving area to accommodate the materials presently housed in RBS, in addition to the lending documents which are now kept in closed stocks.

Although any of the lending items can usually be obtained within a few minutes by the library staff, experience has shown that most users prefer direct access to the collection in order to browse and choose the books or documents they want to borrow or purchase. Open-access facilities would also reduce the number of stack publications that have to be reshelved daily—a necessary but monotonous routine performed in every library.

The impending transfer to Abuja also gives the Library the opportunity to introduce some facilities that are presently lacking or inadequate at Victoria Island. Although the Library now has carrels that can accommodate up to ten readers, the new facility should also include sound-proof booths to enable researchers to use typewriters, dictation machines, and tape recorders without disturbing others.

Library security could also be improved through the provision of cloakrooms and lockers. At present, security officers are stationed at the entrance door to take custody of users’ personal belongings and to search every person who leaves the Library. This arrangement has worked reasonably well; however, the service is being overstretched and will need to be reassessed once the library membership and the flow of visitors increases.

Conclusion

In 1981 the exercise of formal supervisory authority of the Institute was transferred from the Ministry of External Affairs to the Executive Office of the President.

It is hoped that this change will augur well for the Institute, and that it will in no way impair the independence and the nonpolitical character of the institution and its Library.

The transfer is certain to bring about increased workloads for the library staff. For in the absence of any alternative or comparable library facilities elsewhere, the heavy information requirements of the “President’s men,” e.g., the national security, foreign policy, and economic advisers, the special Foreign Relations Committees of the Senate and the House of Representatives, and other specialist functionaries in the legislative and judicial arms, will surely tax the Library’s present resources.

The imminent move to Abuja (though temporarily disadvantageous in view of possible staff losses) will give the Library the opportunity to take stock of its existing facilities and resources and to plan for needed changes in service to cope with future challenges.

Yet, continued improvement in the Library’s holdings and services will ultimately depend on the ability of the Department to attract and retain suitable personnel at every level of service. It will be necessary to have the freedom of action to constantly review and evaluate methods and services, and to be receptive to suggestions from users for improvements or for the introduction of new facilities.
Literature Cited


4. Nigerian Institute of International Affairs/Foundation Day Ceremony, Sep 26, 1964. Speech by the Chairman, Sir Adetokunbo Ademola.


11. Yaounde, EEC-ACP Lome Convention. The European Community maintains relations with the developing countries through Associate membership. The Yaounde Convention of Association was first signed in 1963 and included 18 African states and Madagascar which were former French and Belgian colonies. Membership was enlarged to include Commonwealth African countries, the Carribean, and Pacific (ACP Lome Convention) states.

Received for review Sep 14, 1982. Revised manuscript accepted for publication Jan 18, 1983.

John U. Obasi is currently assistant chief librarian, College of Technology, Owerri, Nigeria.
Name Authority Control in a Communication System

Cathy Ann Elias

Graduate Library School, University of Chicago, Chicago, IL

C. James Fair

Standard Oil Company (Indiana), Chicago, IL

Many corporations are considering the use of electronic office systems for the storage, retrieval, and effective dissemination of large amounts of information. Because many people are involved in creating, indexing, and inputting data into these systems daily, a system for authority control must be implemented for effective information retrieval. This discussion examines how one company recognized the importance of authority control to maintain the effectiveness of its electronic office system.

AUTHORITY control is the process by which the same or related names, phrases, or titles are brought together in a particular place in the catalog. For every item that comes into the library, each element of information that will be used as an access point in the catalog has to be verified. A library cataloger must check the form of the author’s name, the title, and the subject terms in some type of authority file. This is because several types of problems may arise.

Many times the form of an individual author’s name will vary slightly from one of his books to another, e.g., Smith, John vs. Smith, John T. Both refer to the same person but the variant forms of the name will scatter his works in the card catalog. On the other hand, the catalog entries for distinct people with the same name may end up interfiled. To distinguish between two John J. Smiths, for example, something, such as birthdates, must be added to the entries. Similar difficulties also may occur with titles or subject headings (e.g., aeroplanes vs. airplanes).

Since one of the purposes of the catalog is to bring the same or related items together and to separate unrelated ones, these distinctions must be made. Therefore, librarians create subject, title, and author authority files to help them...
maintain catalog integrity. Clearly, how well the catalog functions as a finding tool is directly related to how well authority control has been implemented.

The degree to which authority control is needed can vary from one library to another depending on two factors: the purpose of the library and its size. For example, most patrons of a large academic library will use it for research. Consequently, the user will place great emphasis on being able to find all items in the library on a particular topic; this may be absolutely vital to his work. Thus, rigorous authority control is of the utmost importance when dealing with such an extensive collection. Without such control, retrieval of all relevant items on a single subject is impossible.

A small community library needs less rigorous authority control than a large research library because its collection is smaller and its purpose is different. Its users are likely to visit the library for pleasure reading or to gain general knowledge of particular subjects rather than for in-depth research. Authority control is less crucial because the collection is smaller (and easier to search) and retrieval of all relevant information is seldom necessary.

For many years authority control was primarily connected to developing effective methods for collecting the same or related material in the card catalog. With the introduction of computers into library services, new capabilities for retrieval became possible. By using computer systems, one no longer had to worry about the order in which the items were placed. They could be retrieved by individual words selected from the title, subject words, author, date of publication, publisher, or combination of these using Boolean operators.

Having multiple access points has made it easier to retrieve an item for which one does not have a complete bibliographic citation, because there are many more ways, and combinations of ways, to gain access to the work. But even when items have many access points, it still will be hard to retrieve all the material on a particular topic or by a particular author if good authority control is not implemented from the start. Without authority control, the same problems associated with the card catalog will occur in a computer system. Items with variant forms of authors' names, variant spellings of titles or subject headings, or syntactical problems in subject headings (such as homographs and synonyms) cannot be easily retrieved if the proper form of the access point is not known.

The degree to which authority control is needed can vary from one library to another depending on two factors: the purpose of the library and its size.

In addition to the difficulties already mentioned, users who search for information on a computer system face a new kind of problem. By combining fragments of information about an item with Boolean operators, one will retrieve many items that match the search key but are irrelevant to the given subject.

This is not a problem when dealing with a small amount of material, but once the amount of material in the system becomes significant, serious problems can result. With rigorous authority control, items are placed in specific categories, allowing them to be retrieved without a lot of extraneous material. Thus, authority control is just as important when using computer systems to retrieve information as it is when using the card catalog.

New retrieval functions create added dimensions in the process of developing good authority control. In addition to establishing the proper form of the data, fitting it into a variety of possible formats, and manipulating it with the many capabilities of the system, coordinating the entire operation can be a difficult task.
Computer systems are now being used for information processing in the offices of large corporations. These are basically communication systems designed to facilitate the day-to-day office work, to make the flow of information faster, and thus make the whole operation more efficient. The capacities of these systems vary, but typically they are designed to create documents, store and retrieve them using Boolean operators, and transmit them electronically to other physical locations. These systems are quite powerful, and many companies may rely on them heavily in the future. Since they are new, the implications of their use are not yet fully realized.

In any system containing a large amount of material, authority control is bound to become an issue. Just as the added search capabilities of computer systems in library services caused new problems in the authority control process, a communication system in an office adds even more because many people are simultaneously creating, indexing, and storing documents. The more people who are involved in inputting data in uncontrolled ways, the greater are the chances for variance among supposedly identical terms.

The amount and type of authority control that is needed again depends on two factors: how much actual information the system is intended to contain, and how much emphasis is placed on retrieving all material on a particular subject. A large business has needs similar to those of a research library— the collection is large and a high percentage of recall and precision is needed (1). Because of the added features of the communication systems, new methods for authority control must be explored. How well the system functions as a finding tool is directly related to the quality of authority control.

The Public and Government Affairs department of Standard Oil Company (Indiana) is one business organization that is using an electronic office system and discovering the need for proper authority control.

Standard Oil Company (Indiana)

Standard Oil is a parent company concerned with the overall policy guidance, financing, coordination of operations, staff services, performance evaluations, and planning for its subsidiaries. Standard and its consolidated subsidiaries form a large integrated petroleum, chemical, and minerals company that conducts worldwide operations.

The Public and Government Affairs department at Standard Oil is responsible for public and government relations activity worldwide. It is based in the company's general office in Chicago, with field offices scattered throughout the United States and several foreign countries, each reporting to the Chicago headquarters.

The Public and Government Affairs department has three major objectives: to gain public support for conditions under which the business can continue to be privately managed, fully competitive, and financially sound; to create and maintain favorable public opinion toward the company and its operations; and to counteract unfavorable public opinion.

The three major functions that the department performs for the company are: to advise management on public issues; to advise management on public relations implications of corporate activities before, during, and after an action is taken; and to identify, interpret, and communicate corporate positions in order to create an environment of understanding between the corporation and the public.

In order to fulfill these objectives and tasks in the most effective manner, the department is divided into five major sections: Government Affairs, Planning and Programs, Communication Services, Operations, and Foreign Affairs. Each section performs a different but related function for the company (2).

Since the Public and Government Affairs department has a number of area and satellite offices, the task of keeping information flowing in a controlled
fashion can be difficult. However, it is important that department members in different locations have simultaneous access to the same information in order to respond with a single policy statement to media queries concerning company positions; inconsistent responses might appear to be an attempt to mislead the public. To improve the flow of information, the department has adopted the Electronic Office System.

The Electronic Office System

The Electronic Office System, is a communication system marketed under the name “PROFS” by IBM. Developed by IBM with the help of Standard’s Tulsa Research Center, the main computers for the system are located in Tulsa. More than 10 of Standard’s Public and Government Affairs offices throughout North America have groups of terminals connected to these computers via communications lines.

Document creation, storage, retrieval using Boolean operators, and dissemination by electronic mail are among the many functions that can be performed on the system. Because the department is chiefly responsible for writing and disseminating information, document creation is one of the more heavily used functions. The ability to create special formats is one of the more valuable features of this function. For example, a news release is formatted differently from a report written in response to an inquiry from the media. Using the system, one can create special formats, for media queries or news releases, that can be called up when needed to facilitate the process of dissemination.

Once a document is created, it can be dated, assigned a specific document number, subject indexed in the author’s mail log*, and stored in the database by using the document storage function.

* A mail log is an index of all documents written by a particular person.

A document can be retrieved by searching an individual’s mail log using Boolean operators, or by directly calling it up from the database by the document number. One can use the electronic mail function to send messages, send notes, and mail documents. The message feature is quite simple. One can call up the message format, type a short message, and hit the enter button to send it to anyone on the system at any location. The message will arrive almost instantly.

The note feature works somewhat differently. One can call up the note format, type the note, and send it. A message will appear on the receiver’s CRT screen indicating that a note has been sent. All notes sent to a particular person are collected and indexed in a personal computer file called the “in-basket.” If the recipient of the note is not logged on, the note will be stored and saved in this file.

The mail document feature is valuable for formal communications. After an important document or letter is created on the system, one can electronically mail it to another location by using this feature. Once the document is mailed, it cannot be called up from the database and changed by another user; thus, there is no danger that someone may accidently or purposely change the information in an important document.

Corporate Media Relations

Corporate Media Relations, a division of Communication Services, uses the Electronic Office System extensively. The primary role of the Media Relations staff is to gather, record, and disseminate relevant news to the company and the general public. For the most part, Media Relations deals with the news media on a one-to-one basis. Its functions include: 1) answering questions from representatives of magazines, the press, TV, and radio, and recording and indexing the responses online; 2) creating, indexing, and disseminating news releases about
The overall goals of Media Relations are to: 1) develop national media relationships that foster fair treatment of the company; 2) represent the company to the national media; 3) disseminate information to the Public and Government Affairs field offices, and serve as their resource for corporate information; 4) monitor press coverage of the company in order to serve as a resource for management; and 5) coordinate the approval and distribution of press statements that have corporate significance (3).

The Media Query File

The Corporate Media Relations group in Chicago receives an average of 12 telephone calls a day from reporters who have questions about company activities and policies. To avoid image and accuracy problems, each staff member must know and disseminate the same information on a particular issue when questioned by different media representatives. After each telephone conversation with the media, the staff must write down what was asked and how it was answered.

The Electronic Office System facilitates this process through the use of a special format called "media query." All one has to do is call up this format on the CRT and fill in the appropriate information (see Figure 1). The format also allows index terms to be added.

Once the media query is completed, it is stored in the database and indexed in a mail log called "chimedia," an acronym for Chicago media. All media queries are indexed here, and, at the same time, appear in the in-baskets of personnel in the Chicago office and the company's field offices. The name of the person who created the document is automatically placed in the subject index so that one can conduct a search using his name.

Variant Entry Problems

In the Chicago office, three professionals handle most of the media queries. After six months of creating, indexing, and storing these queries on the system, certain retrieval problems began to develop because of a lack of a name authority control. Since no authority control system had been created, each staff member indexed the names of the various media in whatever fashion was easiest at the time. This resulted in an online index with many variant forms of the same name. Be-

---

**Figure 1. Sample Media Query.**

<table>
<thead>
<tr>
<th>Reporter: Dick Schaffer</th>
<th>DATE: 07 17 81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media: Wall Street Journal, Boston</td>
<td>TIME: 12:17 p.m.</td>
</tr>
<tr>
<td>Phone: (212) 889-9402</td>
<td>Status: Pending</td>
</tr>
<tr>
<td>Questions: Reporter, who writes a technology column for the Journal, called to talk to John J. Gilman at Naperville. Reporter, who is based in Boston, says that Gilman, who is identified as manager of corporate research, has done a paper published in the magazine, Industrial Research &amp; Development. In that paper, which he said was generally a discussion of corporate creativity, Gilman seems to have concluded that the larger the corporation, the less creative it was. According to the reporter, Gilman took the number of patents issued and related them to the sales or revenues or assets or something. At any rate, I attempted to call Gilman; found him out of town until Monday and left word. The reporter said he didn't have to talk to him today; he could put the column item off until next week. However, he persisted in wanting to talk to Gilman.</td>
<td></td>
</tr>
</tbody>
</table>
cause of the inherently creative nature of individuals, a single staff member would often index the same entry in several different ways, further compounding the problem.

For example, three staff members had chosen 20 different ways to input the heading for the *Wall Street Journal*. A sample of these variant entries includes: Wall Street Journal; Wall Street Jnl; Wall St. Journal; WSJ; Wall St. Jnl; Wall Street Journal, Chicago; Wall Street Journal—Chi.

Normally, if a staff member wanted to retrieve all documents relative to telephone conversations a particular professional had with reporters from the *Wall Street Journal*, a Boolean search would be performed using the name of the professional (Thompson) and the medium (*Wall Street Journal*). Unfortunately, the searcher would not succeed in retrieving all pertinent documents if Thompson had input *Wall Street Journal* in several different ways. Figure 2 shows a typical example of a name heading indexed two different ways by the same individual on the same day, one right after the other.

Indexing the names of radio and TV stations created the most problems of all, for without any authority control a specific or correct form of the name did not exist. Besides the problem of variant forms of the same name, many of the headings did not contain enough information to allow the searcher to retrieve or even correctly identify them. Some of the forms of the headings created online for TV stations included: the call letters only; the call letters and the channel; the city and the channel; the call letters and the city.

The following example of incomplete headings was taken from the media query index: Channel 4—Detroit; St. Louis, Channel 4; Channel 4. The problem with the first two headings is that Channel 4 in Detroit is NBC and in St. Louis, CBS. This information is important and must be part of the heading. The third heading, Channel 4, does not contain enough information to correctly identify the station.

The next example illustrates the problem of incomplete headings compounded by the use of variant forms: ABC Channel 7; ABC—TV; ABC—TV

<table>
<thead>
<tr>
<th>CRN NUMBER</th>
<th>ACT</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY JODY KLEINMAN</td>
<td>MEDIA QUERY RICK MELCHER</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY FLOYD MORRIS</td>
<td>MEDIA QUERY JERRY THURSTON</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY ANNA SOMMER</td>
<td>MEDIA QUERY TERENCE MURPHY</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY TERENCE MURPHY</td>
<td>MEDIA QUERY JERRY THURSTON</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY JODY KLEINMAN</td>
<td>MEDIA QUERY RICK MELCHER</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY JODY KLEINMAN</td>
<td>MEDIA QUERY RICK MELCHER</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY JODY KLEINMAN</td>
<td>MEDIA QUERY RICK MELCHER</td>
</tr>
<tr>
<td>61203CT71006</td>
<td>MEDIA QUERY JODY KLEINMAN</td>
<td>MEDIA QUERY RICK MELCHER</td>
</tr>
</tbody>
</table>

*The subject section has been omitted for purposes of space.
network—NYC; Channel 7; ABC TV network; ABC—Channel 7. With this many variants, serious problems may occur when trying to retrieve items. Because some members of the department retrieve queries by "anding" together the name of the specific media group with their own names, a system of name authority control was needed.*

Problems Resulting from Ineffective Name Authority Control

Because the chimedia file serves as a primary source for Media Relations and field personnel when they respond to reporters, the inability to rapidly and accurately retrieve media queries can be both embarrassing and costly. Attention to authority control procedures is fairly simple during slow business periods; during such slow periods, errors in input can more easily be spotted because there are fewer items being fed into the system. Maintaining proper authority control becomes difficult—but even more important—under the time pressure that develops during a "media crisis." Such a crisis might be a Mideast oil supply cutoff that forces up the price of crude oil and, eventually, gasoline. Under such circumstances, offices of Standard Oil could receive a multitude of queries about the price of gasoline—had it increased, and why. Under such high-pressure conditions, considerably more information is being input, updated, and disseminated.

Let us assume that during this period a reporter from the Wall Street Journal calls every day for several days, each time asking to know the current price of gasoline and the company's views on the shortage. The same member of the Media Relations staff handles each call and files a query in each instance. However, the staff member is inconsistent in the way he indexes "Wall Street Journal," sometimes listing it as "WSJ" or "Wall St. Journ."

After several days, a reporter from a different newspaper calls a different member of the Media Relations staff asking for the latest price of gasoline and the company's views on the shortage. Since this Media Relations staff member knows that another member of the group has been answering similar questions from the Wall Street Journal, he conducts a search using the other staff member's name and "Wall Street Journal." However, the latest query filed about the Wall Street Journal was indexed incorrectly under "WSJ"; therefore, the latest price and shortage information is not retrieved, and the reporter is provided with incorrect information that conflicts with that recently given to another reporter.

When the conflicting figures began to appear in various publications, the public will assume that the company is unable to provide a single answer. Media Relations will appear to be disorganized and could lose credibility with the press. The company's image with its service station dealers could also be damaged, if they read in the paper that the wholesale price of gasoline is much less than the price they are paying.

Such inconsistencies, which can create obvious and severe problems, can be avoided only through accurate authority control. Obviously, the usefulness of the Electronic Office System is significantly diminished for the Media Relations section if such control is not maintained.

Developing a Name Authority Control System

The first step in developing a name authority control system was to generate a printout of the chimedia mail log index. Fortunately, when this was done the system was quite new and only 23 pages of index terms had been input. The next step was to make a collocated list of the names of the media groups and their variants. After the names and their variants were collocated, a tentative media query authority list was created. The list was 12 pages long.

* Subject authority control is also an important issue but is not discussed in this paper because it must be handled differently.

july 1983
It became apparent that an authority control list would never do because the department members were under considerable pressure and did not have time between telephone calls and office work to check a media query authority list before inputting data. It also was anticipated that when the field offices started to send their documents to the Chicago office, the number of variants would continue to multiply.

After a careful analysis, it became clear that the names of the different media groups indexed fell into five categories: TV, newspapers, radio, magazines, and news services. The solution was to create a special form heading with rules for each of the categories. This information was sent to the personnel in Media Relations. Once the patterns were learned, the headings could be input easily without checking a long list. For example, the TV stations were handled as follows:

A. For specific network shows (other than the news) and syndicated shows, just write the name of the show, followed by the network if it is not a well-known show. Example: 60 Minutes, or show name, network.

B. If it is network news just write the call letters. Example: CBS-TV.

C. If it is a local station write the call letters, channel, and location, plus the name of the show if it is other than news. Example: WBBM-TV Channel 2, Chicago, show name.

So far this system of authority control has worked well, and retrieval has been much less of a problem since its implementation.

**Conclusion**

Technological developments in mass communications in the twentieth century have made our society media-oriented. These developments have led to an information explosion; each year, more white collar workers are needed to manage the flow of data. Although "providing effective access to recorded knowledge has always represented the primary business of the librarian" (4), librarians' skills in performing these services are now in greater demand, outside, as well as inside, the traditional setting of the library. Librarians are using the latest advances in information technology—computers, databases, COM, microforms, and so on—to make the dissemination of information as fast and effective as possible.

Yet, despite all these technological developments, librarians still must perform the same basic tasks, such as cataloging, albeit in new ways. There always will be a need for authority control, whether filing is done in the card catalog or on a computer terminal.

**Literature Cited**


2. The material in this section is from an unpublished corporate paper, "An Introduction to the Public and Government Affairs Department of the Standard Oil Company (Indiana)." Some changes have been made.


Received for review Oct 4, 1982. Manuscript accepted for publication Apr 4, 1983.

Cathy Ann Elias recently completed her MA in library science at the University of Chicago, where she now is completing her doctorate in musicology. She served as a summer intern the past two years at Standard Oil Company (Indiana). C. James Fair is a Senior Media Relations Representative for Standard Oil Company (Indiana) in Chicago.
On the Scene

SLA's 75th Anniversary: Alpha...

This month begins the year-long celebration of our Association's 75th Anniversary. Many activities are planned during the coming months, with the culmination occurring during the New York Conference. One of the highlights is a series of four consecutive papers published in Special Libraries starting with this issue, all concerned with our anniversary. This first one is by our Association President, Pat Molholt, and is in a sense a dedication, or maybe even a rededication.

The second piece (October 1983) will be a "thumbnail sketch" of the Association's 75-year history written by Robert V. Williams and Martha Jane K. Zachert. The third (in January 1984) will concern various long-range planning priorities which are now under consideration Association-wide. This discussion will be handled by Vivian Arterberry. And the final paper (April 1984) will be a "blue sky" presentation on developments that will probably (or maybe hopefully) shape the future of the Association. One of SLA's past presidents, Joe Dagnese, has prepared a striking review of topics that must be addressed during the post-1984 Conference period.

The Anniversary Committee hopes these articles will, among other things, set the stage for one aspect of our celebration and that as many members as possible will be in New York to partake in the climax, the 75th Annual Conference (.... omega).

Robert G. Krupp, Chairman
75th Anniversary Committee

july 1983

297
75 Years of Service
Reconsider . . . Redefine . . . Reconfirm

Pat Molholt
President, Special Libraries Association

In this age of rolling five-year plans and budgets that gyrate around spiraling inflation, one can be sure there is very little around us that is static. This century has seen dramatic change in the areas of manufacturing, transportation, and communication; all of this change has rippled out to touch every aspect of our lives.

To survive change, particularly that which strikes deep at the roots, is a Darwinian accomplishment. To expand and to thrive in the face of it, is to earn special recognition and applause.

July 2, 1983, marks not only the survival but the significant and continuing growth of Special Libraries Association as it observes the 75th Anniversary of its founding. We, its current members, deserve a moment of self-congratulation, a surge of pride; we can enjoy the good feeling that comes at this milestone in our history. There will be ample time at our 75th Anniversary Conference in New York to celebrate our sense of joy and our feelings of pride. In fact, the entire year leading to that event will be filled with Chapter events commemorating the anniversary.

The opportunity to reflect, however, must not be ignored. We need to reconsider our past, with its accomplishments and its hard lessons, and apply the perspective history affords to the task of redefining our objectives; and we must reconfirm our goals, stimulating our imaginations to create challenges that will tax our abilities. We have a responsibility to look ahead and to move the Association toward enhanced effectiveness in the coming years. Congratulations and planning can wait while we recall, for an instant, where we have been.

Reconsider . . .

Reviewing the past is a continuous process. The formal chronicling of the Special Libraries Association has been done by others, notably Mitchell (1) and McKenna (2), and the second in this series of articles will focus on our history. I want to go beyond the record of who, when, and what, to reflect on the broader concept of our profession and how it has, or has not, changed. 

Pat Molholt is Associate Director of Libraries, Rensselaer Polytechnic Institute, Troy, New York 12181.
There is little argument that information, the raw material of our profession, has evolved in nature and scope. What is collected today was frequently ignored or discarded in the past, as many of us have occasion to regret. Our methods of handling information, the techniques of storage, transmission, access and dissemination, have been convulsed by the computer. This revolution, with its attendant complexities and frustrations, has transformed our profession in this century as nothing else has. We are now capable of sharing collections more effectively through online public access catalogs and computer-based interlibrary loan systems, of ordering material electronically from a range of vendors, and of examining collection-use patterns with automated circulation systems. Looking even modestly ahead, we can foresee radical changes in these and other areas with the development of electronic publishing and "production-on-demand." Among other consequences, the effect will be to decrease our concern about copyright and copying fees. Increasingly, the royalties will be built into the cost of accessing the material. For-profit and not-for-profit distinctions will also concern us less. All will pay, regardless of status.

The computer revolution also underlies another change—that of information as an economic entity, bought, sold, traded, or embargoed. Without access to an ever-growing and current supply of information, some industries here and abroad would simply collapse. This reality was dramatically demonstrated last August when the U.S. Government ordered Dresser Industries in this country to "end all technical communications with its French subsidiary . . . and somebody flipped the switch"(3). The almost immediate result was to paralyze Dresser-France.

And what, amidst all this, has happened to our profession? It is nearly unchanged. Heretical? Not at all. When one considers the basic tenets of the profession, set forth long before the Association began, one finds the principles of acquiring, organizing, preserving, and making information available, still hold. It took the Association until 1958 to formulate "professional standards" dealing with certification. On the occasion of the Association's 50th Anniversary in 1959, Elizabeth Owens, a past president, challenged the Association to develop "work standards," by which she meant codifying practices for acquiring, organizing, and preserving information.

To be sure, our methods have changed; our technology has grown. Along with lawyers, scientists and other professionals, we use computers, lasers, and satellites. Like them, we find it necessary to improve productivity by acquiring and processing information at increasing rates. Elizabeth Owens can be pleased, however; the standards have been developed, and most of them enhance rather than interfere with our work. More importantly, let those who have been subject to the question "Is librarianship a profession?" take heart. It is the function, the substance, and the canons of ethics that make a profession, not the gadgets, or the specific "work standards."

Among other consequences, the effect of electronic publishing and "production-on-demand" will be to decrease our concern about copyright and copying fees. Increasingly, the royalties will be built into the cost of accessing the material. For-profit and not-for-profit distinctions will also concern us less. All will pay, regardless of status.
**Redefine...**

In redefining our mission, we must ask whether we are using change appropriately. Are we doing all we can to make use of the opportunities facing us? To the extent we are not, I suspect self-imposed isolation is a principal reason. We do not always exchange ideas as freely within our profession as we might, nor do we envisage solutions with sufficient breadth and openness. As a result, there is unwarranted competition over labels such as "information specialist" or "information manager."

There is also a certain fear of exploring or experimenting—an attitude that "we've always done it this way." In the industrial world, this is referred to as the "not invented here" syndrome. The nemesis in this battle to defend parochialism has been automation. It has forced the doors to compliance and cooperation in areas we were too stubborn to consider before. Economic stringency, the other stick-wielder in this arena, is equally difficult to ignore if somewhat easier to manipulate.

Willful or not, isolation expresses reluctance to assume a more instrumental role in shaping the change that surrounds us, a reluctance to push rather than be pushed. I urge that we stop issuing complaints of being left out or ignored, and instead, take steps to be at the core in solving the information handling problems facing the organizations we serve. Often that will mean moving out of the library and into the laboratories and offices of those seeking information. In many organizations, computer networks have made collection access available in these same offices and laboratories. We need to follow that information outward and make our skills as accessible as our collections have become.

While many of our boundaries are being redefined by changes in technology—what form our collections take, how we process and store them—we must recognize that technology also erodes the legitimacy of boundaries between associations and between disciplines. This Association can point to some notable collaborative efforts, but they are not pervasive enough.* We can also point to conference and chapter programming, featuring prominent individuals from other disciplines. However, it is curious and disturbing to note the lack of participation by librarians in programs outside our profession. The best way to affirm and assert our professional status is by demonstrating unique competence and letting our contributions speak for us.

---

I urge that we stop issuing complaints of being left out or ignored and, instead, take steps to be at the core in solving the information handling problems facing the organizations we serve.

If the change of ideas remains limited primarily to our own profession and we continue to learn more from others than we teach them, our isolation will be reinforced. The loss will not be ours alone. Ours is a vitally needed profession, particularly now when the ability to deal mechanically with information is threatening to hide the fact that access and use are still human, intellectual operations.

Technological innovations have changed the way we acquire, process, store, access, transmit, and use information. Putting 50,000 images on a video disc is, however, an empty technical achievement if there is no effective means to retrieve the one image needed to solve a problem. Our users confront an avalanche of information with tools...

---

* Examples of such efforts include the "Minnesota Memo/Transfer," a joint SLA/ASIS Newsletter, joint continuing education courses with the Medical Library Association; and joint programs with the International Federation of Library Associations and Institutions and SENTOKYO at the SLA Hawaiian Conference in 1979.
and habits barely adequate to the printed-card catalog era. Yet it is their access to the information they need on which our budgets, gadgets, and, ultimately, our jobs depend. There is much work to be done, including basic and applied research before these problems are solved, and it must not be left entirely to others.

Reconfirm . . .

Doubt and criticism are normal aspects of examination and definition, instrumental steps in moving forward. But, progress is fueled by confidence, as well as by challenge. It remains then, to reconfirm the goals of the Association and of the profession so that we can confidently proceed.

Human change is far slower than technological change. The challenge, to our abilities and our imaginations, is to meld the two areas of change and so harness the "information explosion." Joseph Becker, a futurist with a good track record in our profession, offers a similar challenge: "In this new information society, special librarians are destined to play an increasingly greater role in shaping and establishing new information connections among libraries, information centers, and people" (4). These information connections must incorporate both the technological and human aspects of information transfer.

The Association was formed around a need to communicate and to share, as our motto states, for the purpose of putting knowledge to work. If we view the Association as a gateway rather than an enclosure, if we eschew boundaries that have no real purpose, we can better serve our needs which are, in fact, not ours but those of our users. If, within the information society, we assert for our Association and for our profession the pivotal role to which it aspires and of which it is capable, and if we are prepared to carry the responsibility this role entails, we will do more for our profession and our image than anything we have attempted in the first 75 years.

Literature Cited

Combining Study and Pleasure: Educational Programs in Britain

Thomas P. Slavens

Both students and professional librarians may do well to plan continuing education programs in Britain during July and August. My wife, who is a school librarian, and I have participated for two summers in the program offered by the International Graduate Summer School in Librarianship and Information Science. Perhaps others will be induced to plan similar trips after learning about the benefits of our summers there.

The International Graduate Summer School (IGSS) is sponsored by the College of Librarianship Wales and the Graduate School of Library and Information Sciences of the University of Pittsburgh to further study and promote interest in the international and comparative aspects of the profession. Begun in 1973, IGSS has since become an annual event. While the School offers courses for graduate library science students, the major corpus of the participants are professional librarians from more than 30 countries who come to enlarge their knowledge or to update their professional competence in an international atmosphere. Instruction is given in English. Courses may be audited or taken for graduate academic credit, received from the College of Librarianship Wales or the University of Pittsburgh. Many schools in Canada and the United States accept these courses for graduate credit.

With the availability of low-cost flights to Britain, it is not expensive to get to London or Manchester and then by train to Aberystwyth where the School is located. Upon arriving, one has the impression of having entered an enchanted fairyland. The ruins of the castle, the mysterious monument rising above the small city, the University College of Wales, the architecture, the busy shops, the promenade, and, perhaps most important, the seemingly endless sea and shore combine to make Aberystwyth one of Britain's most popular seaside resorts and a wonderful place to spend the summer.

The College of Librarianship Wales is not only the largest library school in Britain; it is also international. Within five years after its opening in 1964, the School had more overseas students than all the other British library schools combined.

Another striking aspect of the School is its spacious facilities, which include a library science library, (with a staff of over thirty), a media services unit, a lecture theater, an academic building, a research center, an exhibition and design center, a children's literature center, a social center, and halls of residence.

All student rooms are singles and modern with maid service. Meals are served in the dining room of the social center. Within walking distance are a number of important libraries, including the National Library of Wales and the libraries of the University College of Wales, where Prince Charles studied.

In addition to furnishing room and board, the tuition also includes travel expenses and most meals for a study tour. The tour provides an inside look at some of Britain's more interesting libraries and information centers and also allows a great deal of free time for people who normally are not attracted to tours.

Visiting the Historic Libraries

On the first day of our tour, we were led by the staff of the IGSS into what seemed like every nook and cranny of the British Museum Library. After walking through the stacks and the technical service departments, one of the participants frantically told the tour director that she had left two books in the stacks somewhere and wanted to get back to find them. He informed us that the library recently transferred 90 miles of books to another location; he was du-
bious, therefore, about her ability to find the two books. They will probably appear in the Catalogue as gifts to that collection!

The next day, we visited the library of the London Borough of Camden, which is located within a stone's throw of Dickens' House (if you have a small stone and are very strong). We asked which authors are most widely read there. Apparently, they are the same ones read in America: Agatha Christie, Harold Robbins, and, of course, Barbara Cartland. Neither Dickens, Chaucer, Shakespeare, or Milton were mentioned.

On our visit to the library of the Bank of England we were greeted at the front door by two elegantly dressed guards. They were resplendent in their costumes but would have been unprepared to ward off a bank robber or anyone else more vicious than a wayward tourist. The librarian invited the IGSS participants into his office where we were served tea and biscuits. This library holds many of the standard reference works which would be in any major library in the English-speaking world. It also contains a great many financial records as well as rare books. We were shown a first folio of Shakespeare, a copy of Johnson's Dictionary, and other rarities.

The Bank also has a museum which contains, among other oddities, the tally sticks used for centuries in England, and a letter from George and Martha Washington, which reportedly is the only extant letter signed by both. In this epistle, which is dated during the period of the War of American Independence, they ask for the interest on the principal of the money they had deposited in the Bank of England. I doubt if George led the charge at Yorktown with the words, "Keep your money in the Bank of England, boys!"

The next day we left London for Oxford where we were entertained by Blackwells. After a tour of this huge jobber's operation, with the computers winking and blinking as they recorded transactions with libraries throughout the world, we were entertained by the firm for dinner. The wine flowed like water, the staff was much in evidence, and the food was delicious.

In a few days we were in York, where we were addressed by the University Librarian. An energetic, personable man, he was one of the better speakers we encountered on the study tour of English libraries. One of the keys to his success in captivating us was that quite early in the speech he modestly indicated that he had made a mistake in setting up the library by constructing a classification scheme based on several others.

During the afternoon, we visited the British Lending Library Division at Boston Spa. In the warehouses are books which are loaned to institutions throughout the world. It is an efficient operation—a book can be checked out, wrapped, and mailed in a matter of minutes. We were warned to stand back from the machines lest we find ourselves in a box of books on its way to Australia. It would be a cheap way to take a long trip, and one would have some good reading en route.

Soon after, we visited the John Rylands Library in Manchester. This "British Museum of the North" houses a magnificent collection of rare books. We also visited Cheetham’s Library, which is reported to be the oldest public library in the world.

Back in Aberystwyth, we made several individual excursions to such places as Bath, Salisbury, and Stonehenge. We also went with the IGSS tour to Haye-on-Wye, a small town which has book stores filled with hundreds of thousands of used books on most subjects. The owner, who calls himself a King and claims to be withdrawing from the United Kingdom, owns a medieval castle which he is restoring. He invited us to lunch at his home, and we spent the afternoon visiting many of his buildings filled with used books.

In brief, the International Graduate Summer School is a highly recommended way to spend a summer. The curriculum is varied enough to meet the needs of most librarians. Inquiries about the school, which normally closes immediately before the meeting of the International Federation of Library Associations, should be sent to Frank Hogg, Director, International Graduate School, College of Librarianship Wales, Aberystwyth, Wales, Great Britain.

Thomas P. Slavens
Professor, School of Library Science
The University of Michigan, Ann Arbor

July 1983
In President Janet Rigney's inaugural address, delivered at the Detroit Conference, she spoke about the necessity of keeping up "with the electronic revolution going on in our information world. . . ." This statement effectively combines various aspects of previous conference topics and allows the possibility of focusing on the effects of the new technology, on the removal of barriers to information, on the realities of the eighties, and on strategies for formulating change. Almost any area of the information field is now involved with the electronic explosion, and this broad theme gives those who submit papers a great deal of leeway.

The Association's 75th anniversary will be celebrated during the New York Conference, and some contributors may wish to focus on the history and development of SLA.

You are invited to submit any paper which illustrates the Conference theme or which focuses on SLA's history. General papers will be presented at the Contributed Papers Sessions. Very specific papers will be referred to the appropriate Divisions.

To have a paper considered, the following guidelines must be met:

1. A 250-500 word abstract, submitted with the form below, which accurately conveys the scope of the paper, its depth, conclusions, and the way it contributes to the Conference theme, or the history of SLA, must be submitted by October 14, 1983. Full text of the paper is due April 2, 1984.

2. Papers must not have been presented previously to any national or international group or have been previously submitted for evaluations.

3. Papers will be accepted only if the author expects to be present and only if the abstract has been submitted for evaluation.

All papers are the property of Special Libraries Association and will be considered for publication in Special Libraries.
Scholarship Fund Contributions Received Jan–Dec 1982

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. W. Wilson Foundation</td>
<td>$ 5,000.00</td>
</tr>
<tr>
<td>Anonymous Trust Income</td>
<td>$4,687.44</td>
</tr>
<tr>
<td>Standard Oil of California</td>
<td>$300.00</td>
</tr>
<tr>
<td>Texas Chapter</td>
<td>$200.00</td>
</tr>
<tr>
<td>Heart of America Chapter</td>
<td>$185.00</td>
</tr>
<tr>
<td>San Andreas Chapter</td>
<td>$141.00</td>
</tr>
<tr>
<td>Barbara J. Armstrong</td>
<td>$50.00</td>
</tr>
<tr>
<td>Martha J. Bailey</td>
<td>$50.00</td>
</tr>
<tr>
<td>South Atlantic Chapter (in memory of Charles Bauer)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Evelyn Butler (in memory of Isabelle Bronk)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Margaret C. Dorfman</td>
<td>$50.00</td>
</tr>
<tr>
<td>Nuclear Science Division (in memory of Ruth Perks)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Cleveland Chapter (in memory of Jesse H. Shera and James V. Jones)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Carolyn S. Kirby</td>
<td>$45.00</td>
</tr>
<tr>
<td>Alice C. Kingery</td>
<td>$40.00</td>
</tr>
<tr>
<td>Judy Field (in memory of Charles Bauer)</td>
<td>$25.00</td>
</tr>
<tr>
<td>Patrick Bova</td>
<td>$25.00</td>
</tr>
<tr>
<td>Eileen C. Donahue</td>
<td>$25.00</td>
</tr>
<tr>
<td>Virginia L. Duncan</td>
<td>$25.00</td>
</tr>
<tr>
<td>Ruth Fromkes</td>
<td>$25.00</td>
</tr>
<tr>
<td>Harry C. Hall</td>
<td>$25.00</td>
</tr>
<tr>
<td>Ellen Todd Hanks</td>
<td>$25.00</td>
</tr>
<tr>
<td>Katharine O. D. Lockett</td>
<td>$25.00</td>
</tr>
<tr>
<td>Vilia H. Ma</td>
<td>$25.00</td>
</tr>
<tr>
<td>Anita Newell</td>
<td>$25.00</td>
</tr>
<tr>
<td>Ruth E. Reed</td>
<td>$25.00</td>
</tr>
<tr>
<td>Cecily Surace</td>
<td>$25.00</td>
</tr>
<tr>
<td>Martha J. Zachert</td>
<td>$25.00</td>
</tr>
<tr>
<td>Total other contributions under $25.00</td>
<td>$1,354.32</td>
</tr>
<tr>
<td>Total</td>
<td>$12,627.76</td>
</tr>
</tbody>
</table>

Special Programs Fund Contributions Received Jan–Dec 1982

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Dagnese</td>
<td>$100.00</td>
</tr>
<tr>
<td>Mrs. W. F. Fitzgerald</td>
<td>$100.00</td>
</tr>
<tr>
<td>Doris Schild</td>
<td>$50.00</td>
</tr>
<tr>
<td>David R. Bender</td>
<td>$25.00</td>
</tr>
<tr>
<td>Total other contributions under $25.00</td>
<td>$75.35</td>
</tr>
<tr>
<td>Total</td>
<td>$350.35</td>
</tr>
</tbody>
</table>

Audit Report

January 1, 1982–December 31, 1982

To the Board of Directors
Special Libraries Association, Inc.

We have examined the statement of assets, liabilities and fund balances of Special Libraries Association, Inc., as of December 31, 1982, and the related statements of revenues, expenses and changes in fund balances and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of Special Libraries Association, Inc.; as of December 31, 1982, and its revenues, expenses and changes in fund balances and changes in financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Weber, Lipshie & Co.
Certified Public Accountants
March 11, 1983
New York, New York
### Revenues

<table>
<thead>
<tr>
<th>Description</th>
<th>All Funds</th>
<th>General Fund</th>
<th>Nonserial Publications Fund</th>
<th>Scholarship Fund</th>
<th>Special Programs Fund</th>
<th>Building Fund (Note 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dues and fees</td>
<td>$611,422</td>
<td>$611,422</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscriptions and advertising</td>
<td>165,984</td>
<td>165,984</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net receipts from conference, less allocation below</td>
<td>175,321</td>
<td>175,185</td>
<td></td>
<td>$ 136</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net receipts from education program</td>
<td>41,933</td>
<td>41,933</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net receipts from mailing list service program</td>
<td>37,739</td>
<td>37,739</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest, dividends and net loss on sales of investments</td>
<td>66,774</td>
<td>54,687</td>
<td>$ 1,682</td>
<td>6,296</td>
<td>$ 2,781</td>
<td>$ 1,328</td>
</tr>
<tr>
<td>Sales of nonserial publications</td>
<td>69,894</td>
<td>69,894</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gifts</td>
<td>31,514</td>
<td>5,000</td>
<td></td>
<td>12,628</td>
<td>351</td>
<td>13,535</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1,292</td>
<td>1,286</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery of unrealized loss on short-term marketable securities</td>
<td>12,944</td>
<td>8,544</td>
<td></td>
<td>4,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,214,817</td>
<td>1,101,780</td>
<td>71,576</td>
<td>23,466</td>
<td>3,132</td>
<td>14,863</td>
</tr>
</tbody>
</table>

### Costs and expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Funds</th>
<th>General Fund</th>
<th>Nonserial Publications Fund</th>
<th>Scholarship Fund</th>
<th>Special Programs Fund</th>
<th>Building Fund (Note 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allotment of funds to sub-units</td>
<td>132,035</td>
<td>132,035</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, wages and benefits (Note 1)</td>
<td>384,235</td>
<td>384,235</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office services and occupancy costs</td>
<td>149,100</td>
<td>149,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional fees and services</td>
<td>41,396</td>
<td>41,396</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel and entertainment</td>
<td>29,847</td>
<td>29,847</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member services and promotion</td>
<td>70,715</td>
<td>70,715</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs of periodical publications sold, including allocation below</td>
<td>176,404</td>
<td>176,404</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs of nonserial publications</td>
<td>69,668</td>
<td>69,668</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scholarships and stipends</td>
<td>16,000</td>
<td>16,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3,773</td>
<td>3,768</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>18,078</td>
<td>18,078</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocation of above expenses to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs of periodical publications</td>
<td>(26,665)</td>
<td>(26,665)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference</td>
<td>(35,802)</td>
<td>(35,802)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other funds and programs</td>
<td>(10,797)</td>
<td>(21,146)</td>
<td>10,349</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,017,987</td>
<td>921,965</td>
<td>80,017</td>
<td>16,005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Excess (deficiency) of revenues over expenses before provision for income taxes

<table>
<thead>
<tr>
<th>Description</th>
<th>All Funds</th>
<th>General Fund</th>
<th>Nonserial Publications Fund</th>
<th>Scholarship Fund</th>
<th>Special Programs Fund</th>
<th>Building Fund (Note 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess (deficiency) of revenues over expenses</td>
<td>196,830</td>
<td>179,815</td>
<td>(8,441)</td>
<td>7,461</td>
<td>3,132</td>
<td>14,863</td>
</tr>
<tr>
<td>Provision for income taxes (Note 1)</td>
<td>14,000</td>
<td>14,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>196,830</td>
<td>179,815</td>
<td>(8,441)</td>
<td>7,461</td>
<td>3,132</td>
<td>14,863</td>
</tr>
</tbody>
</table>

### Fund balances

<table>
<thead>
<tr>
<th>Description</th>
<th>All Funds</th>
<th>General Fund</th>
<th>Nonserial Publications Fund</th>
<th>Scholarship Fund</th>
<th>Special Programs Fund</th>
<th>Building Fund (Note 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund balances—beginning</td>
<td>630,601</td>
<td>431,149</td>
<td>62,531</td>
<td>113,814</td>
<td>23,107</td>
<td>10,000</td>
</tr>
<tr>
<td>Fund transfers</td>
<td>(14,500)</td>
<td>(14,500)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fund balances—end</strong></td>
<td>$ 813,431</td>
<td>$ 582,464</td>
<td>$ 54,090</td>
<td>$121,275</td>
<td>$30,739</td>
<td>$24,863</td>
</tr>
</tbody>
</table>

See accompanying notes to financial statements.
Funds provided
Operations
Excess (deficiency) of revenues over expenses $ 182,830 $ 165,815 $ (8,441) $ 7,461 $ 3,132 $ 14,863
Charge not affecting working capital
Depreciation 23,116 23,116
Funds provided by (applied to) operations 205,946 188,931 (8,441) 7,461 3,132 14,863
Decrease in other assets 2,679 2,679
Transfer to Special Programs Fund (4,500) 4,500
Transfer to Building Fund (10,000) 10,000
208,625 177,110 (8,441) 7,461 7,632 24,863
Funds applied
Purchases of furniture and fixtures 13,002 13,002
Increase in marketable securities 19,975 13,708
Increase in marketable securities 32,977 26,710
6,267
Increase (decrease) in working capital
$ 175,648 $ 150,400 $ (8,441) $ 1,194 $ 7,632 $ 24,863
The changes in working capital were represented by an increase (decrease) in:
Current assets
Cash $ 228,907 $ 195,657 $ 1,682 $ 1,821 $ 7,714 $ 23,308
 Marketable securities 1,591 (230) 1,821
Accounts receivable 2,856 553 2,054 249
Interfund receivable (payable) 14,136 (15,545) (1,204) (23) 2,636
Inventory of nonserial publications and insignia 3,191 3,196 (5)
Prepaid expenses 4,660 4,660
241,205 214,776 (8,613) 1,407 7,691 25,944
Current liabilities
Subscriptions, dues, fees and contributions received in advance 61,707 60,337 17 213 59 1,081
Accounts payable—trade 735 735
Withheld taxes and accrued expenses payable 4,015 4,204 (189)
Income taxes payable (900) (900)
65,557 64,376 (172) 213 59 1,081
Increase (decrease) in working capital
$ 175,648 $ 150,400 $ (8,441) $ 1,194 $ 7,632 $ 24,863
See accompanying notes to financial statements.
### ASSETS

**Current assets**
- Cash (Note 2): $712,115
- Marketable securities, at cost (Notes 1 and 3): 189,289
- Accounts receivable, net of provision for doubtful accounts of $3,300 in General Fund, $900 in Nonserial Publications Fund: 35,035
- Interfund receivable (payable): 104,158
- Inventory of nonserial publications and insignia (Note 1): 46,115
- Prepaid expenses: 53,587

Total current assets: $1,086,712

- Marketable securities, at cost (Notes 1 and 3): 79,175
- Furniture and fixtures at cost, net of accumulated depreciation of $49,463 (Note 1): 53,587

Other assets: 22,759

### LIABILITIES AND FUND BALANCES

**Current liabilities**
- Subscriptions, dues, fees and contributions received in advance (Note 1): $360,137
- Accounts payable—trade: 46,756
- Withheld taxes and accrued expenses payable: 13,909
- Income taxes payable (Note 1): 8,000

Total current liabilities: 428,802

**Fund balances**
- General Publications Fund: 813,431
- Scholarship Fund: 121,275
- Special Programs Fund: 30,739

Total fund balances: $1,242,233

See accompanying notes to financial statements.
Notes to Financial Statements

1. Summary of Significant Accounting Policies
The accounting policies that affect the significant elements of the Association's financial statements are summarized below.

Operations
The Association encourages and promotes the utilization of knowledge through the collection, organization and dissemination of information. It is an association of individuals and organizations with educational, scientific and technical interests in library and information science and technology.

 Marketable Securities
The marketable securities of the General and Scholarship Funds are combined and managed as one fund for investment purposes, with participating percentages in income and gains and losses based on respective participation accounts at the end of the year. Marketable securities reflected as current assets are valued at the lower of cost or market and those reflected as noncurrent assets are valued at cost. It is the Association's intention not to utilize the noncurrent portion of these assets in the normal course of operations.

 Inventory
Inventory of nonserial publications and insignia is stated at the lower of average cost or market.

 Depreciation
Depreciation of furniture and fixtures is provided on the straight-line and accelerated basis at various rates calculated to extinguish the book values of the respective assets over their estimated useful lives.

 Subscriptions, Dues and Fees
Except for subscriptions to the periodicals Specialist and Special Libraries, membership in the Association is based on either a December 31 or June 30 year. Dues, fees and subscriptions are credited to income as earned.

Pensions
The Association has a contributory group annuity defined contribution retirement program with an insurance company covering substantially all qualified employees. There is no unfunded past service cost to be paid by the Association. Pension expense for the year was approximately $16,500.

 Donated Services
A significant amount of the Association's functions are conducted by unpaid volunteer officers and committees. The value of this contributed time is not reflected in the accompanying financial statements because it is not susceptible to objective measurement or valuation.

 Income Taxes
The provision for income taxes is based on unrelated business income, which consists of net advertising income and net mailing list service income. The Association's remaining activities are exempt from Federal income taxes under Section 501 of the Internal Revenue Code.

2. Cash
The Association's total cash assets include $639,357 in savings accounts, of which $35,589 is in time deposit accounts which have maturity dates in April 1985 and July 1986 and are subject to interest penalties upon early withdrawal.

3. Marketable Securities
See Table 1 on next page.

4. Lease Commitment
The Association occupies offices under a noncancellable operating lease which expires in 1987. The lease provides for minimum annual rentals of $24,000, plus certain taxes and maintenance costs.

5. Building Fund
In October 1981, the Board of Directors of the Association authorized the establishment of the Building Fund, effective January 1982.
Table 1. Marketable Securities

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Market</th>
<th>Net Appreciation In Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$24,441</td>
<td>$24,441</td>
<td>$23,064</td>
</tr>
<tr>
<td>Common stocks</td>
<td>187,912</td>
<td>187,912</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$189,289</td>
<td>$212,353</td>
<td>$23,064</td>
</tr>
<tr>
<td><strong>Noncurrent assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Government obligations</td>
<td>$39,550</td>
<td>$42,687</td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>27,400</td>
<td>27,400</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$79,175</td>
<td>$70,087</td>
<td></td>
</tr>
</tbody>
</table>

This ad is for all those who ever wonder why your company runs a United Way campaign.

When it comes right down to it, you're probably the best reason your company has for getting involved with the United Way.

You see, they know almost all of the money given to the United Way goes back out into the community to help people.

So if you, or the people you work with, should ever need any of our services, like day care, family counseling or health care, we'll be right there to help. In fact, there are tens of thousands of United Way-supported programs and services in cities and towns across the country. That means help is nearby wherever you are.

And your company knows that could mean the difference between keeping or losing a valuable employee.

That's why they give. And that's why they ask you to give. Because there may come a day when you need help yourself.

United Way
Thanks to you, it works for ALL OF US.

A Public Service of This Magazine & The Advertising Council
Reviews


This slender volume begins well, with an explication of the functions of classification (noting that its two functions, information retrieval and filing arrangement, may conflict), some good diagrams of Africa comparing the way different schemes classify the geographic areas of that continent, and a well-organized approach to the analysis of different methods of map classification. It also ends well, with appendices and references. In between, there are serious weaknesses.

When discussing the International Geographical Union classification, Merrett notes that it may not be relevant to a general map collection; however, he does not give the reason, which is that the majority of maps published are of political areas; thus, the IGU scheme—based as it is upon geographic areas—is not relevant to the facts of publishing or of map collections.

The author scores a few telling blows against Library of Congress classification: e.g., towns go directly under country (except in North America) instead of administrative district, and “topography yet again functions as the default class” (p. 15). His discussion of Boggs and Lewis, of Parsons, and of the American Geographical Society systems also points out some problems. What he terms the University of Washington system is actually titling, and by no means originated at that institution.

The most fascinating part of this work is a comparison of the schemes in practice. Unfortunately, this is marred by errors, at least in LC (on p. 20, G8200 F81 should be G8201.F81, and so forth), and the diagram on p. 25 could have used a professional printing approach rather than an amateur pencil shading.

It is in his conclusions that Merrett’s ideas are most divergent from those of the U.S. map library community. Most map librarians believe that LC classification is the best system, not only because it provides, as a general rule, the best compromise between precision of notation and ease and speed of application but because LC is the standard used by the national library of the United States; in these days of networking, it is just common sense to use LC classification. Merrett, however, opts for the Universal Decimal Classification as consistently providing precise terminology with notation for thematic content. This may well be so, but given the choice between classing a map of Table Mountain, South Africa, as 912 (6871)”197”(084.33) and G8512.C2, most will probably take the latter (the LC notation), particularly since classification is not meant to carry the whole show on its shoulders, but rather, should serve as a complement to cataloging. Merrett states that there is no reason why a map librarian shouldn’t take two systems and make a hybrid. This map librarian really must protest such a suggestion, since it is one that U.S. map collections that followed it in the past eighty years have come to rue.

Overall, this is a stimulating work, but it is certainly not attuned to the theoretical and philosophical realities of library life in the United States.

Mary Larsgaard
Arthur Lakes Library
Colorado School of Mines
Golden, Colo.
"Controlling serials is like nailing Jello to the wall," writes Anne Marie Allison, one of the contributing authors in this new monographic supplement to The Serials Librarian. Automation can surely be the firming agent if not the nail in serials control.

This collection of papers discusses topics critical to serials librarians in adapting to the new technology of automation. The first offering is Allison's excellent survey and selected bibliography. The next group of papers discusses a number of automated serials systems: the University of California's several stages of automation; Northwestern University's Luis System (an online public system); the conversion of serials holdings to both machine-readable format and an online system; and a cooperative serials data conversion project.

Various aspects of automated cataloging are discussed: the effects of AACR2 on serials cataloging, the advantages and disadvantages of shared-cataloging, and a call for revised bibliographical and cataloging standards. The networking systems of OCLC, RLG, and WLN are analyzed, and the Library of Congress's plans to identify and support national networking are reviewed.

Of interest to the special library are the papers: "Cataloging in the Time of Change" by Mary Ellen Soper in which she discusses the decisions a library must face using the new AACR2 rules and the possibility of automated cataloging; "The OCLC Serials Control Subsystem" by Pauline F. Micciche, an examination of the OCLC system; and an article by H. Kirk Memott, K. Paul Jorden and John R. Taylor entitled, "On-line Serials at Brigham Young University" in which they show the progression from a manual check-in system to a sophisticated, automated serials system.

Writing from the perspective of a librarian working in a small company library, this reviewer would have liked to see a few articles discussing a small library's solutions to the serials dilemma; the book's focus is on the large university operation.

This collection of papers not only allows the reader to see how the larger libraries are coping with serials control but also to peek into the future of the smaller libraries as they convert the knowledge acquired to their own uses.

Susan Jackson
Company Library
Pacific Power & Light Company
Portland, OR


This work carries a somewhat misleading title since it focuses on national libraries and international cooperation rather than on international information services and information retrieval systems. The book consists of three sections. The first deals with intergovernmental organizations. The author traces the developments within UNESCO and its older NATIS and UNISIST programs, which have been replaced by the General Information Program, IFLA, FID, and other international organizations.

In the second section, the author describes in more detail national library developments in some 50 countries and regions. This section is arranged by geographical region: the Americas, Western and Eastern Europe, North Africa and the Arab World, Asia and Oceania. For each country or region, information on the following subjects is given: authority and legislation, national collections, international collections, lending services, information services, coordination roles, international roles (including international cooperation), research development, national bibliographical services, and automation projects.

The third section provides information about recent Conferences of Directors of National Libraries and their involvement in international bibliographical cooperation. In Chapter 10, Chandler summarizes the re-
The results of a survey conducted in 1978 on the role of national libraries in national and international systems. Some interesting statistical data are included. For example, we learn that 30% of the 48 national libraries that responded to the survey questionnaire act as national centers for foreign inter-library lending and borrowing, but only half of them process more than 90% of all requests; 15% of the national libraries control all libraries in their respective countries!

The book also contains two valuable appendices: Appendix I gives details of the resolutions of the 1979 International Conference of Directors of National Libraries held in Canberra, Australia. Appendix II contains the results of the survey questionnaire discussed in the text.

Johan Van Halm
Van Halm & Associates
Amersfoort, Netherlands


The scarcity of women managers is nowhere more evident than in the library profession. What is it that has kept women out of the managerial ranks? Is it a lack of education, societal or familial demands, or sex discrimination? Women and Library Management: Theories, Skills and Values is one of a number of recent books and articles which tries to explain this situation and to offer constructive, practical suggestions for anyone wishing to become a manager.

This book is the proceedings of a conference, “Women and Library Management,” held at the University of Wisconsin in 1981. The speakers were from various disciplines, as well as library science. Their diverse backgrounds broaden the appeal of this book beyond librarianship.

The conference focused on three main topics: leadership, professional participation, and publishing—all subjects which should concern women who wish to move into management. In addition, the topics of personal growth, conducting meetings, men and women in the workplace, and women as managers were addressed.

By far the most interesting and helpful articles are those which do not distinguish what women should do to become good managers, but rather, what anyone, male or female, should do to move into management and be effective.

The author has not always used the most recent sources available, e.g., both a description of Euronet in Western Europe and the new Staatsbibliothek Preussischer Kulturbesitz (State Library) in Berlin—a landmark in library building—are not mentioned, while smaller mistakes such as “F121, F122 . . . F128” for “F122 . . . F128” (German subject-oriented specialized information centers) could have been prevented. However, the text is useful and is accompanied by many reproductions of original documents produced by the nations involved in international library cooperation and development.


The scarcity of women managers is nowhere more evident than in the library profession. What is it that has kept women out of the managerial ranks? Is it a lack of education, societal or familial demands, or sex discrimination? Women and Library Management: Theories, Skills and Values is one of a number of recent books and articles which tries to explain this situation and to offer constructive, practical suggestions for anyone wishing to become a manager.

This book is the proceedings of a conference, “Women and Library Management,” held at the University of Wisconsin in 1981. The speakers were from various disciplines, as well as library science. Their diverse backgrounds broaden the appeal of this book beyond librarianship.

The conference focused on three main topics: leadership, professional participation, and publishing—all subjects which should concern women who wish to move into management. In addition, the topics of personal growth, conducting meetings, men and women in the workplace, and women as managers were addressed.

By far the most interesting and helpful articles are those which do not distinguish what women should do to become good managers, but rather, what anyone, male or female, should do to move into management and be effective.

This book is the proceedings of a conference, “Women and Library Management,” held at the University of Wisconsin in 1981. The speakers were from various disciplines, as well as library science. Their diverse backgrounds broaden the appeal of this book beyond librarianship.

The conference focused on three main topics: leadership, professional participation, and publishing—all subjects which should concern women who wish to move into management. In addition, the topics of personal growth, conducting meetings, men and women in the workplace, and women as managers were addressed.

By far the most interesting and helpful articles are those which do not distinguish what women should do to become good managers, but rather, what anyone, male or female, should do to move into management and be effective.

The author has not always used the most recent sources available, e.g., both a description of Euronet in Western Europe and the new Staatsbibliothek Preussischer Kulturbesitz (State Library) in Berlin—a landmark in library building—are not mentioned, while smaller mistakes such as “F121, F122 . . . F128” for “F122 . . . F128” (German subject-oriented specialized information centers) could have been prevented. However, the text is useful and is accompanied by many reproductions of original documents produced by the nations involved in international library cooperation and development.

Johan Van Halm
Van Halm & Associates
Amersfoort, Netherlands


The scarcity of women managers is nowhere more evident than in the library profession. What is it that has kept women out of the managerial ranks? Is it a lack of education, societal or familial demands, or sex discrimination? Women and Library Management: Theories, Skills and Values is one of a number of recent books and articles which tries to explain this situation and to offer constructive, practical suggestions for anyone wishing to become a manager.

This book is the proceedings of a conference, “Women and Library Management,” held at the University of Wisconsin in 1981. The speakers were from various disciplines, as well as library science. Their diverse backgrounds broaden the appeal of this book beyond librarianship.

The conference focused on three main topics: leadership, professional participation, and publishing—all subjects which should concern women who wish to move into management. In addition, the topics of personal growth, conducting meetings, men and women in the workplace, and women as managers were addressed.

By far the most interesting and helpful articles are those which do not distinguish what women should do to become good managers, but rather, what anyone, male or female, should do to move into management and be effective.

The author has not always used the most recent sources available, e.g., both a description of Euronet in Western Europe and the new Staatsbibliothek Preussischer Kulturbesitz (State Library) in Berlin—a landmark in library building—are not mentioned, while smaller mistakes such as “F121, F122 . . . F128” for “F122 . . . F128” (German subject-oriented specialized information centers) could have been prevented. However, the text is useful and is accompanied by many reproductions of original documents produced by the nations involved in international library cooperation and development.

Johan Van Halm
Van Halm & Associates
Amersfoort, Netherlands
an embrace of the male model for all female managers. The articles would have been more readable had they been published as written papers rather than as oral presentations. The anecdotes and jokes are fine for oral presentations, but in most cases they do not transfer well to a written format.

Another criticism is that the credentials of the individual presenters are not given with each article; they are collected alphabetically, at the end of the book. Readers are likely to discover this only after reading the entire collection, all the while wondering who these people are and what qualified them to speak at such a conference.

Despite these few problems, *Women and Management: Theories, Skills and Values* should appeal to men, as well as women; to librarians, as well as nonlibrarians; and to professionals, as well as managers. It should appeal not only to those who plan to pursue a management career but also to anyone who wishes to attain a higher level of visibility and professionalism in his or her career.

Gloria J. Zamora  
Technical Library  
Sandia National Laboratories  
Albuquerque, N.M.

---


The American Library Association reported that incidences of censorship increased 500 percent in the second half of 1981. Censorship, in any form, represents a lack of trust in the judgment and discrimination of the individual. The passage of time, perhaps, provides the best perspective for sorting the wheat from the chaff.

In the meantime, this work provides librarians, publishers, educators and other interested citizens with a cogent and succinct presentation on several facets of a complex, kaleidoscopic phenomenon.

According to the editor’s statement, the seven papers assembled “provide a forum in which several persons who have committed themselves to defending principles of intellectual freedom . . . speak out on important issues related to current censorship problems such as textbook censorship and self-censorship by librarians.”

“*You Shall Know the Truth*: The New Christian Right and Censorship” by Charles W. Murray, Jr. (Worcester Public Library, Mass.) and L.B. Woods (University of Rhode Island) documents such religious groups and political action associations as the National Christian Action Coalition, the Coalition for Better Television, and the Moral Majority. Bruce A. Shuman (Queens College, CUNY) delves further into the latter’s tactics and political goals in his essay, “The Moral Majority and Popular Issues.”

Judith Serebnick (Indiana University, Bloomington) examines how popular political issues are related to the contemporary wave of oppression in checklist-based research, a frequently used method designed to obtain measures of self-censorship among librarians. “*Toward an Intellectual Freedom Theory for Users of Libraries*” by David K. Berminghausen (University of Minnesota) explores in depth the theoretical foundations for maintaining intellectual freedom for library users.

When ideas conflict with community standards, those ideas are frequently censored. The battle lines are drawn. The conflict between ideas and ideals can polarize an entire community. In her contribution, Eleanore H. Richardson (Limestone College, Gaffney, S.C.) deals with selected facets of the emotionally charged, controversial subject, “*Textbook Censorship and Intolerance in the Classroom*.”

Eli M. Oboler (Idaho State University) addresses free speech in a global context and approaches the topic of how intellectual freedom fares in various nations in “*International Aspects of Intellectual Freedom*.”

Each of the six papers has been thoroughly documented with references and citations. The volume concludes with an excellent bibliography by Editor Charles H. Busha (Liberty, S.C.). It spans the years 1970–1981 and is titled “*Censorship and Intellectual Freedom*.”

This is a convenient, handy little volume to have around. It addresses an important and socially significant issue which won’t go away.

Vivian D. Hewitt  
Carnegie Endowment for International Peace  
New York, N.Y.

This practical and plainly written book is designed to be immediately useful managers at all levels: corporate or small business, nonprofit, government, federal, state, and local. The author, a practicing systems manager for nearly a quarter of a century, is the director of the Management Research Society. He has conducted countless seminars, workshops, and classes for management executives.

Advertised as “the only book of its kind” (a not entirely original claim among publishers), its thesis is to enhance efficient, effective management by the use of “documents,” classified into six rather familiar categories: organization charts, job descriptions, management principles (policy statements), action documents (procedures), “approval authority” (assignment of responsibility), and communications.

An introduction comments on the sad state of the “Documental Crazy Quilt.” It is followed by six succinct chapters on each of the categories, replete with lively line drawings, diagrams, illustrations, charts, checklists, and understandable examples. These are followed by two brief chapters listing common errors in documentation and the qualifications desirable for the developers of documents.

The book concludes with a page of “Recommended Reading,” citing only six titles from among the hundreds currently available on the subject of management—a parsimony particularly delightful to this bibliographer’s sated eye. It is not surprising that two of the six are by Mr. Matthies: Management Systems (Wiley, 1976) and The New Playscript Procedure (Office Publications, Inc., 1977). The American Management Association’s excellent Classics in Management, edited by Harwood Merrill; Henri Fayol’s masterpiece, General and Industrial Management; Management Plus, by Richard Le Tourneau; and Discipline or Disaster, by Magoon and Richards, complete this rather unusual list. An index is provided.

Charlotte Georgi
Graduate School of Management Library
UCLA


This work is intended to provide a guide for establishing a microform collection with related services in small-or medium-sized libraries. The authors have included sufficient information to enable a librarian to plan, select, and acquire microforms, and to become aware of the environment and maintenance involved in setting up the collection.

Divided into four parts followed by a glossary, bibliography, two appendices, and an index, the book also includes a list of micropublishers and a list of organizations with micrographics interests. Part 1 discusses the impact of microforms on the library, reasons for establishing micrographics services, and the basics of software and hardware. Part 2 covers selections, acquisition of microforms, and how to organize and maintain the collection. In Part 3, the physical setting and staffing and financing factors are discussed, including a lengthy account of COM (Computer Output Microfilm) catalogs. Part 4, “Recommendations and the Future,” is the shortest and weakest of the chapters. Consisting mainly of comments drawn from the literature of the seventies, it offers limited implications for the future.

The authors have included about 270 references in their bibliography, and with the exception of a very few from 1980-1981, almost all of the references are drawn from the period of the seventies, a time of development of high technology in the industry. However, some of the references can be considered to be of historic interest rather than high priority reading for today’s librarian who has limited time for reading and planning. A more selective list of references with a brief annotation for each would reduce the need to select from such a long list. Notes at the end of chapters are pertinent and useful in most cases. The language is nontechnical, and the layout is excellent.

July 1983
The book will not take the place of discussions with representatives of local manufacturers, reading current trade journals such as *Journal of Micrographics* and others that cover office procedures, or visits to the manufacturers and dealers exhibits. More emphasis could have been placed on the importance and use of standards. More information could have been given on how to prevent pitfalls of purchasing; for example, the use of cartridge and cassette.

Credit for assistance in preparing the book is given to a number of librarians in university and public libraries, as well as to members of the industry. Unfortunately, Special Libraries Association has been omitted as a valuable source of information on micrographics in business, banking, industry, and government libraries.

This book is recommended for the novice, for use in library schools, and as a review and guide for librarians at the early and intermediate stages of planning and organizing the micrographics collection.

Loretta J. Kiersky
Information Center
Airco, Inc.
Murray Hill, N.J.

---

The Future of Information Brokers in Europe by Stern, Doré and Degoul on behalf of ANVAR. Paris, CIBD [Centre d’Information des Banques de Données], 1982. 227 p. $65.00 (Can.) Available from Espial Productions, Box 624, Station K, Toronto, Canada M4P 2H1.

North American readers interested in the state of information brokerage in Europe have few sources of information—a fact that makes the deficiencies of this work all the more regrettable.

The problems begin with an inadequate definition of information broker: "organisations whose principal activity is the dissemination of information to a large number of users, including small firms, large companies and other organisations". At times it appears that the authors have equated the use of online database searching with information brokerage, while at other times one wonders if they are not describing academic and special library reference services. In common with American works on the same subject, the authors erroneously accept a variety of library-related services, such as indexing, cataloging and software design, as being part of information brokerage.

Confusion reigns. What, for example, is the difference between "few," "not often," "seldom," "1 or 2 per country," "rare," and "very rare," all in the same table? Terms are hardly ever defined. Few paragraphs escape without typographical and grammatical errors, many of which pass from being merely annoying to being seriously confusion. Bibliographical citations, if they are given at all, are incomplete. In fact, the authors do not give us even their own first names.

Brokers described, except perhaps in France, appear to be unrepresentative and the treatment of brokerage in the various countries is extremely inconsistent. In addition, there are contradictory statements; we are told that the price of a service does not affect its use but that brokers lose clients when their prices rise.

It is not only the dearth of information on this subject that makes one wish this report offered more. The European situation, with governments eager to emulate American progress by assisting the information industry, is interesting and deserves study. Clearly, the authors understood their subject and make a number of valuable comments. They point out, for instance, that while brokers expected to serve smaller businesses with inadequate access to information, they discovered that their clients were primarily larger firms in which the managers had a better understanding of the need for that information.

Many of the recommendations are interesting, as well: for example, governments should finance customers, rather than brokers, with vouchers which would leave the customer free to choose which broker to patronize.

Perhaps the authors will return to this subject to give it its due. In the meantime, the wealth of detail in this report, including long lists of names and addresses of brokers, give those interested in the field a place to start.

Susan Klement
Information Resources
Toronto, Ont.
NEW: 5th Edition of the Translation Services Directory

- Compiled & published by American Translators Association (ATA)*
- For users in advertising, banking, export/import, legal, manufacturing, medicine, patents, printing & publishing, research, science & technology, religion, special librarianship, other fields
- Indexed by over 40 language combinations into and from English, over 90 subject specialties
- Language/subject specialty/experience profiles on over 700 ATA translators
- Informative ads by translation bureaus.
- Issued Aug. 30, '83. Price/copy: ATA member (own use only) $12; non-member $24; 1/3 discount on orders received by July 15. To book price add $1.25/copy postage. Send check or money order in US funds drawn on US bank to:

American Translators Association
109 Croton Avenue
Ossining, New York 10562
Tel: (914) 941-1500

*ATA is a non-profit organization founded in 1959

Computer Literature Index

The Only Complete Bibliographic Service for the Practicing Side of the Computer Industry.

Published Quarterly With Annual Cumulation.

The Computer Literature Index is the bibliographic service for computer users, consultants, students, equipment manufacturers, and software suppliers. It covers over 100 periodicals plus books and special reports, classifying them into over 300 quick reference subject categories.

Published quarterly in April, July, October and January, an annual Cumulation issue combines all four quarterlies for permanent reference.

The Computer Literature Index highlights articles and books that are important contributions to their field. It also provides an author index as an alternative means of locating articles. The Index was formerly called the Quarterly Bibliography of Computers and Data Processing. Annual Cumulations are available from 1968.

The Computer Literature Index is $95 per year ($120 other countries). To start your subscription, or for a free review issue, call (602) 995-5929 or write to Computer Literature Index, Dept. SL, P.O. Box 9280, Phoenix, AZ 85068.
Commonwealth Agricultural Bureau

AGREP

Permanent Inventory of Agricultural Research Projects in the European Communities

Published by the Commonwealth Agricultural Bureaux on behalf of the Commission of the European Communities

The only comprehensive source of information on the latest agricultural research projects in the European Community countries

Since the first edition was issued in 1976, AGREP has become established as the only comprehensive source of information on the latest agricultural research projects in the European Community countries. Projects which in most cases have not been reported in currently available documentation.

AGREP enables you to identify research in your own subject area which is currently being undertaken or has only just been initiated without having to wait for the reports. The code attached to each entry enables the user to obtain from the index the name and full address of the research institute involved, thus enabling direct contact to be established.

AGREP covers agriculture in the broadest sense with sections on:

- Natural Resources
- Agricultural Engineering and Building
- Plant Protection
- Food and Nutrition
- Animal Production
- Economic and social aspects

Altogether more than 50 research fields are included

The entries contained in Volume I consist of 825 pages, classified according to the research fields which are subdivided by subject area. A second Volume contains indexes of subject areas, scientists names and research institutes.

Volume I: Main List of Research Projects
ISBN 0 85198 512 2
159 x 225mm, Laminated paper, xxiv + 885pp., (1982)

Volume II: Indexes
159 x 225mm, Laminated paper, ix + 284pp., (1982)

Price — Vols I and II (inclusive of postage) ............... £59.00 US$124.00

Orders can be made direct to CAB or through your usual bookseller or agent

Commonwealth Agricultural Bureaux, Central Sales (J. No. 256), Farnham House, Farnham Royal, Slough SL2 3BN, UK.
Tel: Farnham Common (02814) 2662 Telex: 847964 Cables: Comag, Slough

26A special libraries
Announcing
the 1983-1984
Collections Catalog.

Our new Research Publications' Academic Collections Catalog has grown to approximately 70 microform collections. Each collection is fully described with a synopsis on its content, bibliographic aids, specifications, and pricing. New Collections available and described in the catalog are:

- American Fiction: 1774-1910
- Goldsmiths'-Kress Library of Economic Literature
- Early English Newspapers
- Newspapers from the Russian Revolutionary Era
- Faber Birren Collection of Books on Color
- Archives of the Destruction
- Eighteenth Century
- Papers of the American Board of Commissioners for Foreign Missions
- Witchcraft in Europe and America

Research Publications, Inc.
12 Lunar Drive, Drawer AB
Woodbridge, CT 06525
(203) 397-2600
TWX: 710-465-6345
FAX: 203-397-3893

For Europe, Africa & Asia:
Research Publications Ltd.
P.O. Box 45
Reading, RG1 8HF England
TEL: 0734-583247
TELEX: 848336 NADL G

Free Catalog.

Please forward your 1983-1984 Collections Catalog.

Name ____________________________
Title ____________________________
Institution ________________________
Address __________________________
City ______________ State _______ Zip ______
Phone ____________________________
NEW

**SCIENCE MEDIA** announces . . .

**THE FIRST PROGRAM IN A NEW AUDIOVISUAL SERIES IN ROBOTICS**

For the student and practicing professional

**AN INTRODUCTION TO ROBOTICS**

**PROGRAM TOPICS INCLUDE:**

**Part I**
- Current status
- Future projections
- Evolution of technologies
- Classification of robots
  - Geometry of manipulators
  - Power sources
  - Electronic control

**Part II**
- Economic and social implications
  - Justification of robots
  - Resistance to change
  - Employment
  - Retraining
  - Education
  - Job opportunities

Program components consist of a set of 54 visuals in 35mm slide format, 2 audio cassettes, approximately 40 minutes in total length, pulsed for use with manual and automatic slide advance equipment, text and glossary. The materials are designed for both group presentation and autotutorial study. Cat. No. 7010 Price: $150.00

Orders may be placed directly with **Science Media**, P.O. Box 910, Boca Raton, Florida 33432. Phone: (305) 391-0332. Prices are FOB, Boca Raton.

Foreign Orders: Add $20.00 to your order for airmail postage and handling. Remittances must accompany all foreign orders.

**AUDIOVISUAL PROGRAM IN THE INFORMATION SCIENCE SERIES FROM SCIENCE MEDIA**

<table>
<thead>
<tr>
<th>Program</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A GUIDE TO BEILSTEIN</td>
<td>$100.00</td>
</tr>
<tr>
<td>A GUIDE TO CHEMICAL ABSTRACTS</td>
<td>100.00</td>
</tr>
<tr>
<td>A GUIDE TO SEARCHING THE BIOLOGICAL LITERATURE</td>
<td>165.00</td>
</tr>
<tr>
<td>A GUIDE TO SEARCHING THE ENGINEERING LITERATURE</td>
<td>165.00</td>
</tr>
<tr>
<td>THE CARD CATALOG: A USER’S GUIDE</td>
<td>80.00</td>
</tr>
<tr>
<td>A GUIDE TO GMELIN</td>
<td>100.00</td>
</tr>
<tr>
<td>A GUIDE TO SADTLER</td>
<td>100.00</td>
</tr>
<tr>
<td>AN INTRODUCTION TO ON-LINE SEARCHING</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Each program is comprised of visuals in 35mm slide format, audio cassette(s) and text. For additional information, contact Science Media at the above address.

28A

special libraries
the "bible" of chemical technology

New Third Edition — in 25 volumes

KIRK-OTHMER
ENCYCLOPEDIA OF
CHEMICAL TECHNOLOGY

VOLUMES 23 and 24 DUE FALL 1983; INDEX VOLUME 25 DUE APRIL 1984

"...the quality, accuracy, and selection of information is excellent..."
—Journal of the American Chemical Society

"...a whole new encyclopedia...well illustrated...really impressed with the quality."
—Chemical Engineering

"Kirk-Othmer is universally regarded as a reference work of par excellence. It stands supreme in the field of chemical technology."
—The Chemical Engineer

"...an invaluable source of authoritative information..." —Chemical Processing

Price per volume when ordered individually
$180.00
Subscription price per volume
$165.00
Supplement Volume
March 1984
Price (not part of subscription)
$150.00

NEW FROM WILEY!

ENCYCLOPEDIA REPRINT SERIES

Selected volumes of reprint articles grouped by subject from the 3rd Edition of the Kirk-Othmer Encyclopedia of Chemical Technology.

ANTIBIOTICS, CHEMOTHERAPEUTICS, AND ANTI-BACTERIAL AGENTS FOR DISEASE CONTROL
Leading authorities discuss almost all substances used to control infection and fight disease.
544 pp. (1-87359-4) 1982 $49.50

ENCYCLOPEDIA OF COMPOSITE MATERIALS AND COMPONENTS
Some 50 articles on virtually every aspect of composite materials.
1,161 pp. (1-87357-8) 1983 $99.50

ENCyclopedia OF SEMICONDUCTOR TECHNOLOGY
A collection of authoritative articles on theory and fabrication of semiconductors as well as amorphous and organic semiconductors. Also many related articles concerning solid state materials.

INFORMATION RETRIEVAL IN CHEMISTRY AND CHEMICAL PATENT LAW
Authoritative articles provide thorough coverage of the print sources of chemical and patent law information for professionals and students.
116 pp. (1-89057-X) 1983 $17.95
Reprint volumes edited by Martin Grayson

For a free prospectus or to order any Wiley book, write to Nat Bodian, Dept. 4-1106, or call this toll-free number
800-526-7809

In New Jersey call collect
201-797-7809
Order Code #4-1106

WILEY-INTERSCIENCE
a division of John Wiley & Sons, Inc.
605 Third Avenue
New York, N.Y. 10158
In Canada: 22 Worcester Road, Rexdale, Ontario MOW 1L1
Prices subject to change without notice 4-1106

july 1983
29A
Imagine the LC National Union Catalog from 1898 to 1982 in convenient, easy to use microfiche.

Now, ALS offers exclusively, this multi-purpose reference source; indispensable in cataloging, acquisitions, bibliographic verification, interlibrary loan, reference and research.

CONVENIENT — The NUC microfiche edition, consisting of 693 volumes, can be conveniently located at your fingertips and literally stored at a single microfiche reader station.

DURABLE — The NUC on microfiche will outlast the printed editions.

SAVES SPACE — The collection is contained in 54 linear inches, saving 94% shelf space.

LOW PRICE — The ALS NUC microfiche edition saves 75% over the printed edition.

OTHER LC CATALOGS ON MICROFICHE — Also available, the COMPLETE Subject Catalog from 1950-82 and Audiovisual and Music Catalogs, 1953-82. Individual annuals and quinquenniums may be purchased.

NEW NUC ON MICROFICHE.

In 1983 ALS will publish four new NUC in index/register format. The new LC catalogs allow you to select the NUC most suitable for your specific needs.

FOUR SEPARATE INDEXES.

Now you can access the NUC by Name, Title, Subject and Series.

SINGLE LOOK-UP.

In most cases a single look-up will complete a search in a matter of seconds with the fully cumulated indexes.

TIMELY DELIVERY.

The NUC will be rushed air mail for earliest use in your library, increasing its use.

LOW PRICES-BEST VALUE.

The new ALS COM-produced NUC is offered at the lowest price available. No other work — print, fiche, or on-line — is a better value.

For information, use the coupon, or call (617) 470-0610.

Advanced Library Systems Inc.
93 Main Street
Andover, MA 01810, U.S.A.
(617) 470-0610

Serving Libraries Throughout the World.

Please rush me complete information on LC micropublications:

☐ National Union Catalog  ☐ Audiovisual Catalog
☐ Subject Catalog  ☐ Music Catalog
☐ 1983 Current National Union Catalogs

Name
Title
Organization
Address
City, State, Zip-Code

30A
# New from Noyes

Available Spring 1983

<table>
<thead>
<tr>
<th>Title</th>
<th>ISBN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>New from Noyes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEMICAL HAZARDS TO HUMAN REPRODUCTION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The key facts on every U.S. 4-digit SIC industry – now in a single, all-inclusive book

"The Structure of U.S. Business" presents the essential facts about all U.S. industries compiled from many sources, including the Census Bureau's publications on mining, manufacturing, trade and service industries; the Standard Industrial Classification Manual; the EIS Database; and other government and trade publications.

Among the facts derived from the EIS Database are financial concentration data and identification of industry leaders. The book also furnishes summary tables which show the number of establishments, employees, and payrolls for each industry for 1977 and 1980; and payrolls by Census Region for each industry.

Ordering Information
“The Structure of U.S. Business” contains 184 pages, plus special summary tables. Cost of the book is $100. Order by phone from Economic Information Systems (212 697-6080) or use the coupon at right.
Library Automation?
ILIAS Is The Answer
To A Total Service

Monographs
• On-line MARC II cataloging
• Professional cataloging to your specs
• On-line, book, COM and card catalogs

Journal data
• On-line or printed catalogs of library holding, binding, personal subscription and routing data
• Binding and routing slips
• Union lists for multi-location systems

Private Files
• On-line data base management for report or special collections
• Simplified input format easily adapted to your needs

INFORONICS, INC.
550 Newtown Rd. Littleton, MA 01460
617/486-8976

If . . . you’re interested in library technology,
. . . you’ve been keeping it at arm’s length,
. . . you’re involved but want to know more,
. . . you’re an expert and willing to share,
LITA’s National Conference is for you.

Information and Technology:
At the Crossroads
September 17-21, 1983
Baltimore, Maryland

For more information and to register: Don Hammer, LITA, American Library Association, 50 E. Huron St., Chicago, IL 60611; 312/944-6780.
For exhibit information: George Abbott, Exhibits Manager—LITA ’83, 311 Stonecrest Dr., Syracuse, NY 13214; 315/423-2438

The Library and Information Technology Association (LITA) convenes its first national conference in Baltimore. The conference agenda covers all areas of information technology, with particular emphasis on library applications.

• Four General Sessions
• Panels on integrated systems, automated authority control systems, online catalogs and more
• State-of-the-Art Programs on consumer electronics, cable TV, retrospective conversion and other developing technologies
• Hot Shops—hands-on workshops to sample latest technology wizardry
• Microcomputer Software Swapshop
• Electronic Mail Center
• Video Showcase/Swapshop
• Demo/Expo to demonstrate current applications of information technology
• Full-day Workshops on cable communications and telecommunications
• Preconference Tutorial for the uninitiated
• Exhibits
• Tours to area institutions for demonstrations
• Deluxe Midnight Cruise aboard Baltimore’s M.V. Port Welcome

Information and Technology are at the Crossroads . . . and so are Librarians. Come to Baltimore to discover the road you’ll take.
INFO/DOC conquers a world of information.

Write, Phone, Telex or Online Order INFODOC... and you're on your way.

Light years in advance of most search companies, INFO/DOC offers a range of unique, invaluable services at down-to-earth fees. As our name implies, we research, retrieve and deliver both information and documents. And we do it at speeds you may find close to cosmic. Thanks to our location, computers and expertise, the countless resources of Washington, D.C. are available to us immediately. Additionally, through our satellite communication link, the rest of the world is quickly at our fingertips.

We furnish U.S. government publications, documents, Freedom of Information items, domestic and foreign patents and literature. We are authorized distributors for National Technical Information Service products and Government Printing Office publications. We can provide military, federal and industrial specifications and standards dating back to 1946. And, needless to say, we enjoy access to the Library of Congress, National Library of Medicine, government agencies, and departments, business organizations, trade associations, and professional societies.

Call us for further information. We welcome all inquiries and accept VISA, Mastercard and American Express. Investigate the advantages of INFO/DOC. And take a giant step toward a new horizon.

Box 17109 • Dulles International Airport • Washington, D.C. 20041
Tel: (703) 979-5363 or (703) 979-4257
Telex: 90-3042 (INFO DOC) Online: ORDER INFODOC
SERVING THE OLDER ADULT
A Guide to Library Programs and Information Sources
By Betty J. Turck. The rise of the aging population in this country means that services and information for the older adult are increasingly important. This is the first book to offer a comprehensive overview of the information needs of older adults, and of how librarians and allied professionals can meet these needs. A volume in Bowker's Serving Special Populations Series. ISBN 0-8352-1487-7. 277 pp. January 1983. $29.95

WOMEN RELIGIOUS HISTORY SOURCES
A Guide to Repositories in the United States
Edited by Sister Evangeline Thomas, with the assistance of Joyce L. White and Lois Wachler. This guide to the archival and manuscript repositories of Catholic, Episcopal and Orthodox sisterhoods and Lutheran, Mennonite and Methodist deaconesses is the result of a four-year national survey funded by the National Endowment for the Humanities and the National Historical Publications and Records Commission. The guide is arranged alphabetically by state with alphabetical subheadings by city and congregation/community name. ISBN 0-8352-1681-0. 329 pp. March 1983. $65.00

Bowker—
updating standard references
and offering coverage of
vital new areas for library
professionals.

THE BOWKER ANNUAL OF LIBRARY AND BOOK
TRADE INFORMATION 1983 28th Edition
Compiled and edited by Joanne O'Hare. Consulting editor, Frank L. Schick. Sponsored by the Council of National Library and Information Associations, Inc. Find out how recent federal legislation affects library funding and book buying...discover how libraries are using new technology...keep abreast of trends in publishing and the information industries...determine the estimated dollar size of the library market by segment...predict next year's spending and buying trends...and much more with this annual containing feature articles, surveys, tables, charts, statistics, names, addresses, and news stories by experts in the field. ISBN 0-8352-1680-2. 704 pp. May 1983. $55.00

BIOGRAPHICAL BOOKS 1876–1949
This unprecedented bibliography captures in a single source virtually every biography, autobiography, collective biography, journal, diary, letter collection, biographical dictionary and directory published or distributed in the United States since the inception of Library of Congress cataloging to 1949. More than 39,000 titles are classified under some 15,000 personal name headings and 8,000 LC subject headings in the Main Index, while a separate Vocation Index provides access to some 10,000 personal names. ISBN 0-8352-1602-0. 4,700 pp. June 1983. $195.00, the 4-vol. set

RELIGIOUS BOOKS 1876–1982
This sourcebook provides comprehensive access to every title pertaining to any area of religion and the related areas of philosophy published or distributed in the United States from the inception of Library of Congress cataloging to the present. More than 130,000 titles are classified under some 29,000 Library of Congress subject headings in the Main Index, with each title receiving a fully cataloged entry. ISBN 0-8352-1602-0. 4,700 pp. June 1983. $195.00, the 4-vol. set

PUBLISHERS WEEKLY YEARBOOK
A blend of statistics, reports from the field, summaries of major events, and interpretive essays, all of which are original to this volume. Here are statistics covering every aspect of the book business, reports on the climate for sales, articles covering everything from mergers to electronic publishing—with in-depth coverage only industry insiders can provide. Compiled and edited by the staff of PUBLISHERS WEEKLY in collaboration with the Book Division, R.R. Bowker. ISBN 0-8352-1689-6. Approx. 300 pp. May 1983. $39.95/hardcover ISBN 0-8352-1691-8. $29.95/paperback Social offer: 20% off through June 15, 1983

BUSINESS AND ECONOMICS BOOKS 1876–1982
Offering a comprehensive, retrospective coverage for the first time, this volume provides access to the entire literature of business and economics. More than 150,000 titles are listed under some 50,000 Library of Congress subject headings in the main Subject Index—with coverage extending from the inception of Library of Congress cataloging to the present. ISBN 0-8352-1614-4. 5,245 pp. August 1983. $195.00 the 4-vol. set

THE PRINTWORLD DIRECTORY OF CONTEMPORARY PRINTS AND PRICES 1983/84
Edited by Selma Smith. Published by Printworld, Inc., and distributed exclusively to libraries, bookstores, and academies by R.R. Bowker. The unique, up-to-date volume lists more than 10,000 valuable prints by 825 established and new artists. (200 more artists than the previous edition). Artists' entries list biographical facts, including current mailing address. Prints are listed with information on where to order them, when they were printed, their color, size, number printed, and original and current prices. ISBN 0-943636-01-2. Approx. 450 pp. April 1983. $49.95/paper

WHO WAS WHO ON SCREEN Third Edition
Compiled by Evelyn Mack Trust. This biographical directory is a collection of over 1,000,000 facts on 13,000 film personalities who died between the years 1905 and 1981. Each of the entries—not just film stars, but character actors, animals, stuntmen, screen writers, set designers, etc. who have at least one American film credit—gives a clear, readable biography including positions held within the movie industry, awards, and a year-by-year list of all screen credits. The third edition includes approximately 4,000 additional entries not listed in the second edition. ISBN 0-8352-1578-4. 800 pp. March 1983. $65.00

R.R. Bowker Company
Order Dept., P.O. Box 1587, Ann Arbor, MI 48106 or call our Toll Free number: 1-800-521-8110

july 1983 35A
If you liked the book, you’ll love the screen version.

Coming soon—dissertation abstracts online.

DAI, the indispensable reference work that allows you to gain access to thousands of dissertations each year, is finally coming to the screen. Your terminal screen.


Abstracts online was designed as an enhancement to CDI online—the citation search service.

Abstracts online provides you with the full-text of every available abstract in the DAI paper edition.

Now you will be able to conduct a more thorough keyword search to locate those titles most relevant to your research. With full-text abstracts to work with, your search will access not only citations, but the entire text as well. Quickly and inexpensively.

Best of all, you get all this information—citations and abstracts—for the same low monthly rate you paid for the CDI service alone.

For more information about this enhanced dissertation resource, call our toll-free number: 1-800-521-0600 and ask for the database specialist. We'd be happy to talk with you about abstracts online. Coming soon to a terminal near you.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106
**BUSINESS OPPORTUNITY**

Exclusive franchise in America’s most profitable and dynamic industry is being offered for the first time in your area. International company will place qualified individual in “Turn Key” business, train key people, provide inventory, finance your customers, and pay you thousands of dollars “up front” on orders where your customers pay only on future energy savings. Existing customers of our franchisees reads like “Who’s Who” of Fortune 500.

If you qualify, you will be flown to Los Angeles for a tour of installations and personal interview. Minimum investment of $29,500 cash required. Call president at 1-800-323-6556, ext. R-137.

**FEDERAL ENERGY SYSTEMS, INC.**

Suite 200, 336 N. Foothill Road, Beverly Hills, Ca. 90210

THIS IS NOT AN OFFERING TO SELL

---

**Foreign-Language Research**

accurate and concise

*Translations from into Any Language*

**technical - legal - financial**

**NARRATIONS - DUBBING - VOICEOVERS**

**INTERCONTINENTAL BUREAU OF TRANSLATORS AND INTERPRETERS, INC.**

285 Madison Avenue
New York, N.Y. 10017
(212) 689-8810

145 Natoma Street
San Fran. CA 94105
(415) 495-0285

---

**Planning the Electronic Library**

- Automation
- Productivity
- Space Management
- Facilities

Oct 6–7, 1983 Los Angeles
Dec 8–9, 1983 New York City

**Space Planning & Practical Design for Librarians**

Nov 10–11, 1983 New York City

Fee: $275

Authors: Planning the Electronic Office, McGraw-Hill, 1983

**Aaron Cohen Assoc.**

RFD 1, Box 636
Teatown Rd.
Croton-on-Hudson, NY
10520
(914) 271-8170

---

**ORBIT™ practically has a patent on patents.**

ORBIT has so many exclusive patent files—like WPI and U.S. Patent Alert—we really have no competition. So call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue, Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**PRT SEL**

Only ORBIT™ does write by you.

Others can only read. ORBIT writes—turning print records into search terms automatically. Do the write thing for easy searches. call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**Only ORBIT™ does write by you.**

Others can only read. ORBIT writes—turning print records into search terms automatically. Do the write thing for easy searches. call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**FEDERAL ENERGY SYSTEMS, INC.**

Suite 200, 336 N. Foothill Road, Beverly Hills, Ca. 90210

THIS IS NOT AN OFFERING TO SELL

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**ORBIT™ practically has a patent on patents.**

ORBIT has so many exclusive patent files—like WPI and U.S. Patent Alert—we really have no competition. So call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**ORBIT™ practically has a patent on patents.**

ORBIT has so many exclusive patent files—like WPI and U.S. Patent Alert—we really have no competition. So call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**Only ORBIT™ does write by you.**

Others can only read. ORBIT writes—turning print records into search terms automatically. Do the write thing for easy searches. call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**ORBIT™ practically has a patent on patents.**

ORBIT has so many exclusive patent files—like WPI and U.S. Patent Alert—we really have no competition. So call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**ORBIT™ practically has a patent on patents.**

ORBIT has so many exclusive patent files—like WPI and U.S. Patent Alert—we really have no competition. So call ORBIT first.

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811

---

**SDC Information Services**

2500 Colorado Avenue. Santa Monica, CA 90406
In U.S. call (213) 453-6194 Europe UK (0) 734-866811
# INDEX TO ADVERTISERS

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Library Systems, Inc.</td>
<td>30A</td>
</tr>
<tr>
<td>American Chemical Society</td>
<td>22A</td>
</tr>
<tr>
<td>American Library Association</td>
<td></td>
</tr>
<tr>
<td>LITA National Conference</td>
<td>33A</td>
</tr>
<tr>
<td>American Psychological Association</td>
<td>21A</td>
</tr>
<tr>
<td>American Translators Association</td>
<td>25A</td>
</tr>
<tr>
<td>Bibliographic Retrieval Service, Inc. (BRS)</td>
<td>6A</td>
</tr>
<tr>
<td>R. R. Bowker Company</td>
<td>35A</td>
</tr>
<tr>
<td>Chemical Abstracts Service</td>
<td>19A</td>
</tr>
<tr>
<td>Aaron Cohen &amp; Associates</td>
<td>37A</td>
</tr>
<tr>
<td>Commonwealth Agricultural Bureaux</td>
<td>26A</td>
</tr>
<tr>
<td>Computer Literature Index</td>
<td>25A</td>
</tr>
<tr>
<td>Control Data Economic</td>
<td></td>
</tr>
<tr>
<td>Information Systems</td>
<td>32A</td>
</tr>
<tr>
<td>Dialog Information Services</td>
<td>18A</td>
</tr>
<tr>
<td>Ebsco Subscription Services</td>
<td>9A</td>
</tr>
<tr>
<td>Elsevier Science Publishing</td>
<td></td>
</tr>
<tr>
<td>Company, Inc.</td>
<td>8A</td>
</tr>
<tr>
<td>Erde International</td>
<td>20A</td>
</tr>
<tr>
<td>F. W. Faxon Company, Inc.</td>
<td>10A</td>
</tr>
<tr>
<td>Federal Energy Systems, Inc.</td>
<td>37A</td>
</tr>
<tr>
<td>Gale Research Company, Cover IV</td>
<td></td>
</tr>
<tr>
<td>Gaylord Brothers, Inc.</td>
<td>24A</td>
</tr>
<tr>
<td>Highsmith Company</td>
<td>15A</td>
</tr>
<tr>
<td>Information/Documentation</td>
<td>34A</td>
</tr>
<tr>
<td>Information on Demand</td>
<td>17A</td>
</tr>
<tr>
<td>Inforonics, Inc.</td>
<td>33A</td>
</tr>
<tr>
<td>Institute for Scientific</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>12A, 13A</td>
</tr>
<tr>
<td>Intercontinental Bureau of Translators and Interpreters</td>
<td>37A</td>
</tr>
<tr>
<td>Interlink Press Service</td>
<td>5A</td>
</tr>
<tr>
<td>Kodansha Encyclopedia of Japan</td>
<td>2A</td>
</tr>
<tr>
<td>McGraw Hill Book Company</td>
<td>23A</td>
</tr>
<tr>
<td>McGregor Magazine Agency</td>
<td>4A</td>
</tr>
<tr>
<td>Med Tech</td>
<td>25A</td>
</tr>
<tr>
<td>Noyes Data Corporation</td>
<td>31A</td>
</tr>
<tr>
<td>Pergamon International Information Corporation</td>
<td>14A</td>
</tr>
<tr>
<td>Pergamon Press</td>
<td></td>
</tr>
<tr>
<td>Research Publications, Inc.</td>
<td>27A</td>
</tr>
<tr>
<td>Science Media</td>
<td>28A</td>
</tr>
<tr>
<td>Sigma Data, Inc./DATALIB</td>
<td>1A</td>
</tr>
<tr>
<td>Special Libraries</td>
<td></td>
</tr>
<tr>
<td>Association</td>
<td></td>
</tr>
<tr>
<td>Cover II</td>
<td></td>
</tr>
<tr>
<td>Standard &amp; Poor's Corporation</td>
<td>11A</td>
</tr>
<tr>
<td>Swets, N.A.</td>
<td>38A</td>
</tr>
<tr>
<td>System Development</td>
<td></td>
</tr>
<tr>
<td>Corporation</td>
<td>33A, 37A</td>
</tr>
<tr>
<td>United Nations Publications</td>
<td>17A</td>
</tr>
<tr>
<td>University Microfilms</td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>36A</td>
</tr>
<tr>
<td>John Wiley &amp; Sons, Inc.</td>
<td>29A</td>
</tr>
<tr>
<td>H. W. Wilson Company</td>
<td>16A</td>
</tr>
</tbody>
</table>
Announcing a major new project in economics

THE

MALTHUS
LIBRARY COLLECTION

Pergamon Press is proud to announce the culmination of a major new project in its History of Economics series — the Malthus Library Collection.

Published in conjunction with its subsidiary, Microforms International Marketing Corporation (MIMC), this Collection covers more than 2,000 monographs held in the Malthus Library at Jesus College, Cambridge University. Pergamon is making available to scholars and librarians around the world both microfiche and hard copy reproductions of these monographs.

The Malthus Library Collection has four segments:

The Malthus Library Catalogue
Published for the first time, this full listing of the works now at Jesus College from Malthus’ private library is an invaluable aid to the scholarly antecedents to this great thinker’s theories. The volume is introduced by the world’s leading Malthus scholars.

Microfiche editions
Microfiche editions of all volumes in the Malthus Library may be ordered individually. In addition, Ryozaburo Minami, the doyen of Malthus scholars, has recommended a selection of titles from the collection which may be ordered as a group.

Books on demand
Hardcover and softcover reproductions of any book in the library, as well as the group selected by Professor Minami, may also be ordered.

Malthus’ References to the Essay on Population
Over 100 monographs Malthus used to substantiate his principle of population, whether found in his library or not, are included in this microfiche collection. The collection includes comprehensive bibliographical guides for each monograph, and is micropublished in two segments, the first is now available.

Pergamon has been filming the entire Malthus Library at Jesus College since the beginning of 1982, but will give priority to those items not yet filmed but requested by librarians and scholars.

Orders and inquiries should be addressed to:

PERGAMON PRESS INC.
Maxwell House, Fairview Park, Elmsford, NY 10523
914/592-7700
ATTN: DR. EDWARD GRAY
### Checklist of Selected Gale Reference Books

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contemporary Authors</strong></td>
<td>Volume 107 brings the total coverage to over 72,000 writers and media personalities. Cumulative indexes in even numbered new volumes. $76.00/vol. (SO) <strong>CA New Revision Series</strong>. Vols. 1-8 in print. $76.00/vol. (SO)</td>
<td>$76.00</td>
</tr>
<tr>
<td><strong>Contemporary Issues Criticism</strong></td>
<td>Gathers excerpts from many critics on a wide range of contemporary issues, all fully indexed by writer, critic, and subject. About 60 writers per vol. About 600pp. per vol. Vol. 1 in print. $66.00/vol. (SO)</td>
<td>$66.00</td>
</tr>
<tr>
<td><strong>Biography Almanac</strong></td>
<td>2nd ed. A guide to biographies of over 23,000 newsworthy persons, past and present. Entries include data for quick identifications. Vol. 1. 1,352 pp. 1983. $48.00. (SO) Vol. 2, Chronological Index by Year, Chronological Index by Date, Geographic Index. 1,272 pp. 1983. $48.00. (SO) $84.00/set. Supplement will cover 2,500 persons. Softbound. 200pp. 1984. $35.00. (SO)</td>
<td>$48.00/set</td>
</tr>
<tr>
<td><strong>Something about the Author</strong></td>
<td>Heavily illustrated child-oriented reference tool. Each volume contains articles on 150-200 juvenile and young adult authors and illustrators. About 250pp. per vol. Vols. 1-30 in print. $52.00/vol. (SO)</td>
<td>$52.00</td>
</tr>
<tr>
<td><strong>Children's Literature Review</strong></td>
<td>Provides excerpts from current criticism on past and present authors of children's books. About 50 authors per vol. Illustrations, starting with vol. 4. Vols. 1-4 in print. $58.00/vol. (SO)</td>
<td>$58.00</td>
</tr>
<tr>
<td><strong>Magill's Literary Annual</strong></td>
<td>Each annual two-volume set furnishes critical evaluations and summaries of the previous year's 200 most significant books. About 900pp. per set. Annuals for 1978-1982 in print. Published by Salem Press. Available in North America from Gale. $50.00/set. (SO)</td>
<td>$50.00/set</td>
</tr>
<tr>
<td><strong>Dictionary of Literary Biography</strong></td>
<td>A multi-volume series designed to fill a long-standing gap in literary biographical scholarship. Each volume focuses on a specific literary movement or period, so the entire series will ultimately encompass all who have contributed to the greatness of literature in America, England, and elsewhere. Vols. 1-17 in print. (SO) <strong>Write for details</strong></td>
<td>$48.00</td>
</tr>
</tbody>
</table>

(SO) These titles are available at Gale's 5% Standing Order discount. All Gale books are sent on 90-day approval. Deduct 5% if you send check with order. Customers outside the U.S. and Canada add 10% to prices shown.