San Jose State University
SJSU ScholarWorks

Special Libraries, 1969

Special Libraries, 1960s

11-1-1969

Special Libraries, November 1969

Special Libraries Association

Follow this and additional works at: https://scholarworks.sjsu.edu/sla_sl_1969

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

Recommended Citation

Special Libraries Association, "Special Libraries, November 1969" (1969). *Special Libraries, 1969*. 9. https://scholarworks.sjsu.edu/sla_sl_1969/9

This Magazine is brought to you for free and open access by the Special Libraries, 1960s at SJSU ScholarWorks. It has been accepted for inclusion in Special Libraries, 1969 by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

special libraries



November 1969, vol. 60, no. 9

Computer Produced Book Catalog Preservation Programs Dwight D. Eisenhower Library Exportation of Technical Data Mechanized Serials Handling

SPLBA 60 (9) 571-624 (1969)

On June 24, 1970, will you be in Barcelona?

f you have a professional interest in renal function, perhaps you should be. Several hundred of your colleagues from around the world will be there, attending the 7th European Congress on Dialysis and Transplants.

Not your field? What about metallurgy (Conference on Heat Treatment of Engineering Components, London, December 17); agronomy (Annual Meeting of the American Society of Range Management, Denver, February 9, 1970); propulsion engineering (Gas Turbine Conference and Show, Brussels, May 24, 1970); statistics (2nd International Congress on Project Planning for Network Analysis, Amsterdam, October 6)?

With each passing year, the professional meeting is assuming greater importance within the international scientific-medical-technological community. It permits instant communication of new data-formal publication often lags a year or more. It denotes the state of the art, the "now" in the time-line of work in progress. And perhaps most valuable of all, it provides opportunity for face-toface communication, for the crossfertilization of theories and concepts.

But as the value of meetings has increased, so has their number-over 2,000 a year throughout the world. WORLD MEETINGS, published by CCM Information Corporation, is the definitive reference to upcoming meetings. One edition covers the U.S. and Canada, the other, Outside U.S.

19	970	JUNE			1970	
S	М	Т	W	Ť	F_	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

and Canada-published quarterly, each is \$\$5.00 a year. The indexes to U.S. and Canada meetings are available as a separate publication on a quarterly basis at \$5.00 a year.

Each is completely revised and cumulated every quarter. Listings include the subject content of the meeting, its sponsor, and other pertinent information. Thus, should you be interested in possibly attending the 7th Congress of the European Dialysis and transplant Association, a glance at WORLD MEETINGS will tell you that the meeting will be held in Barcelona, from June 24 to 27; that the official in charge of arrangements is Dr. L. Ribera, whose address is the Instituto Policlinico, Platon, 21, Barcelona; that more than 50 papers will be presented, and that deadline for abstracts is March 15, 1970 (full texts of the papers presented will be available-in French and English-in January 1971).

You will further learn that attendance is expected to be 400 to 500, and that the meeting will include some 90 exhibits. Should you be interested in presenting an exhibit of your own, Dr. Ribera is the man to write to. To facilitate usage, the full contents of WORLD MEETINGS are indexed in five different ways: by date, location, deadline; sponsor and keyword identifying the field of interest (e.g. analysis instrumentation, climatology, fertility, forensic sciences, information display, laser engineering, superconductivity, ultrasonics in medicine, VTOL systems).

All information listed comes directly from the sponsoring organization, and is updated as further details become available.

Meetings may be listed in WORLD MEETINGS as much as two years in advance. At the same time, because of its rapid cycle of publication and input processing technique, WORLD MEETINGS can also report on the many important meetings which are called on short notice to consider significant development on the research fronts.

CCM Information Corporation, publishers of WORLD MEETINGS, is one of the leading and fastestgrowing companies applying advanced computer and microform processing to satisfy information needs, particularly in the sciences, technology and education.

If that meeting in Barcelona, or Denver, is worth your attendance, we want to make sure that you at least know it is taking place. For your subscription to WORLD MEETINGS, write to: CCM Information Corporation-909 Third Ave., New York, New York 10022 Dept. M-38

WORLD MEETINGS A PUBLICATION OF CCM INFORMATION CORPORATION A subsidiary of Crowell Collier and Macmillan, 909 Third Avenue, New York, New York 10022 Spearheads Soviet research in information theory and data transmission

PROBLEMS OF Information transmission

Problemy Peredachi Informatsii

Faraday Advisory Editor: M. Levison, University of London

Soviet Editor: V. I. Siforov

An outstanding publication of interest to researchers in all fields concerned with the R & D of communications systems. Contents include statistical information theory: coding theory and techniques; noisy channels; error detection and correction; signal detection, extraction and analysis; analysis of communications networks; optimal processing and routing; topics in the theory of random processes; and bionics.

Prof. V. I. Siforov is well known for his research contributions in radioelectronics, signal detection and analysis, and the design of advanced communications systems. Among the notable members of the editorial board are Prof. M. A. Gavrilov of the Institute of Automation and Remote Control of the USSR Academy of Sciences, and Acad, A. N. Kolmogorov, Dean of the Mathematics and Mechanics Faculty at Moscow University and Chairman of the International Association on the Use of Statistics in the Physical Sciences. Kolmogorov has won both the Lenin and Stalin Prizes for research on the theory of functions of a real variable, and he also has recently developed a major modification of the theory of information which introduces an algorithmic approach employing recursive functions. Other members of this distinguished board include B. S. Tsybakov, R. L. Dobrushin, and M. S. Pinsker who have specialized in coding theory and problems of error detection and correction; L. M. Fink and V. N. Roginskii who have contributed significantly in the area of complex signals: M. L. Tsetlin who is renowned for his work in game theory; as well as such well-known researchers in large-scale information and communications systems as 0, B. Lupanov, V. A. Uspenskii and A. M. Yaglom,

Sample contents include: Three Approaches to a Quantitative Definition of Information • Binary Codes Capable of Correcting Incorrect One's • The Capacity of a Memoryless Gaussian Vector Channel • Realization of Boolean Functions by Networks of n-Input Threshold Elements • Certain Properties of Symmetric Functions in Three-Valued Logic • Using Ordered Texts for Expanding the Capabilities of Mechanical Readers • A System for Determining Optimal Routing • Cyclic Codes and a Technique for Majority Decoding • A Method for Increasing the Reliability of Finite Automata • On Several Examples of Simulation of the Collective Behavior of Automata • A Quantitative Investigation of Limited-Access Systems • Optimal Routing in Information Transmission Systems • The Quantity of Information Transformed by a Nonlinear Device with Internal Noise • A Topological Evaluation of the Memory of a Multicycle System • An Ideal Physical Information Transmission

Annual subscription (4 issues): \$100.00

Documents the increasingly prominent role played by Soviet mathematical linguists

AUTOMATIC DOCUMENTATION AND Mathematical linguistics

Selected articles from Nauchno-Tekhnicheskaya Informatsiya

Faraday Advisory Editor: L. Cohan, Polytechnic Institute of Brooklyn

Soviet Editor: A. J. Mikhailov

Focuses on experimental methods of analyzing, translating, encoding, searching and correlating scientilic and technical information. Covers problems in the development of information languages, classification and indexing, and automatic analysis of texts. Describes new projects in automatic documentation, mechanical translation, mathematical linguistics and information retrieval.

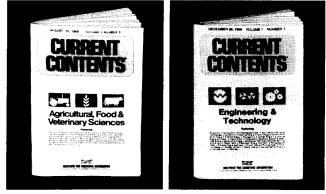
Academician Mikhailov, Director of the USSR Institute of Scientific and Technical Information (VINITI), is acknowledged to be one of the world's most eminent authorities in the theory and design of information systems. VINITI employs over 4,000 specialists and has been involved in countless research projects relating to the theory, methodology and automation of scientific and technical documentation. Such leading mathematical linguists as Yu. A. Shreider, G. E. Vleduts and I. A. Mel'chuk have directed in-depth research dealing with problems of generative-transformational grammar, semantic analysis and synthesis, syntactic and morphological analysis and natural-language to information-language conversion. Under the guidance of Prof. D. A. Bochvar, one of the most outstanding Soviet specialists in the field of mathematical logic, a special Semiotics Division was created at the Institute to conduct research in information analysis, logical semantics, structural linguistics and other disciplines which are designed to make available to the new science of informatics the exact methods currently employed to create automated information systems.

Sample contents include: Preparation of Secondary Scientific Documents • Improving the Format of Scientific Documents • A Linguistic Description of the Nomenclature of Organic Chemistry • Some Causes of Loss and Noise in Document Information Retrieval • The Concepts "Information" and "Sign" • Fundamentals of Scientific Abstracting Methods • The Problem of Translation and Modern Linguistics • Documentation and Problems of Classifying Sciences • Problems of Information Storage and Retrieval • Grammars Describing the Relationships between Natural Languages • Automatic Textual Analysis • Analysis of Information Flow as a Means for Predicting the Future of Research Projects • Research on Qualifications for Information Specialists in Chemistry • Optimal Structures for Subject Indexes of Abstract Journals • A Distributive Theory of Sentences with Bound Regions • An Approach to Definition of Certain Fundamental Notions in Information-Retrieval Languages • Syntactical Homonymy in Russian (from the Viewpoint of Automatic Analysis and Synthesis).

Annual subscription (4 issues): \$145.00

THE FARADAY PRESS, INC. 84 Fifth Avenue New York, N. Y. 10011





Two new editions of Current Contents® are being born.

The next two noises we make in your library will be titled: Current Contents—Agricultural, Food & Veterinary Sciences and Current Contents—Engineering & Technology. Their goal is the same as yours. To help make the library a more efficient, meaningful source of information.

These are the sixth and seventh Current Contents® offspring of the Institute for Scientific Information. (The others: Physical Sciences; Life Sciences; Chemical Sciences; Education; Behavioral, Social and Management Sciences.) If they enjoy as much success as the rest of the family has known, we'll be very proud parents, indeed. These new editions of Current Contents, like the others, will be published weekly. They will each cover over 700 significant journals in their respective fields.

And they will be current. Many contents pages appear in advance of the publication's arrival in your library.

If your library doesn't use Current Contents, let us send you a free copy so you can evaluate its great worth for yourself.

If you are one of the many Librarians who already subscribe to other editions of *Current Contents*, let us send you free copies of these newest members of the family for your perusal.

After that we promise to be quiet...at least until we announce the arrival of the next edition of *Current Contents*.

	cientific Information nestnut Street, Philadelphia, Penna. 19106
Please send me a free copy of the new Current Contents —Agricultural, Food & Veter- inary Sciences and Current	NAME
Contents — Engineering & Technology.	ADDRESS

SPECIAL LIBRARIES

special libraries

SPLBA

Editorial	571	Robert W. Gibson, Jr.
The Computer Produced Book Catalog	573	I. A. Warheit
Preservation Programs in New York State	578	Hannah B. Friedman
The Dwight D. Eisenhower Library	590	John E. Wickman
U.S. Controls on the Exportation of Unclassified Technical Data	596	William C. Petru
Mechanized Serials Handling System	601	Marion C. Szigethy
Miss Fibblesworth, Doctors, Bedpans and Such	606	Ralph W. Lewis
	SLA Nev	vs
New Florida Chapter Installed 609		Continuing Education

	Continuing Education	609	New Florida Chapter Installed
616	for Librarianship	610	tions by the Board of Directors
618	Members in the News	613	Chapters & Divisions
618	SLA Authors	615	Candidates for 1970/71

Vistas

Information Hang-Ups	619	Letters	622
Have You Seen	620	Reviews	622
		Pubs	624
Placement	16a	Index to Advertisers	18A

Editor: F. E. MCKENNA

Ac

Publications Assistant: FRANCIS J. RUTH

Special Libraries Committee

Chairman: ANDREW V. IPPOLITO, Newsday MARY KLANIAN, Advanced Systems Development Division, IBM MRS. ANNE J. RICHTER, R. R. Bowker Company

Special Libraries is published by Special Libraries Association, 235 Park Avenue South, New York, N. Y. 10003. © 1969 by Special Libraries Association. Ten issues per year: monthly except double issues for May/Jun and Jul/Aug. Annual index in December issue.

Second class postage paid at Brattleboro, Vermont 05301. POSTMASTER: Send Form 3579 to Special Libraries Association, 235 Park Avenue South, New York, N. Y. 10003.

Special Libraries Association 1969/1970

President

ROBERT W. GIBSON, JR. General Motors Corporation Research Laboratories Library 12 Mile & Mound Roads Warren, Michigan 48090

President-Elect

FLORINE OLTMAN Air University Library Maxwell Air Force Base Alabama 36112

Advisory Council Chairman

HELEN J. WALDRON The RAND Corporation 1700 Main Street Santa Monica, California 90406

Advisory Council Chairman-Elect KEITH G. BLAIR General Dynamics Convair Division Library Post Office Box 12009 San Diego, California 92112

Treasurer (1967/70) JEAN DEUSS Federal Reserve Bank of New York Federal Reserve P.O. Station New York 10045

Past President

HERBERT S. WHITE Leasco Systems and Research Corp. 4833 Rugby Avenue Bethesda, Maryland 20014 Directors (1967/70)

MRS. GLORIA M. EVANS Parke, Davis & Company Production and Engineering Library Detroit, Michigan 48232

EFREN W. GONZALEZ (Secretary of the Board) Bristol-Myers Products Scientific Division 1350 Liberty Avenue Hillside, New Jersey 07207

Directors (1968/71)

ROSEMARY R. DEMAREST Price Waterhouse & Co. 60 Broad Street New York 10004

BURTON E. LAMKIN National Agricultural Library Beltsville Maryland 20705

Directors (1969/72)

EDYTHE MOORE The Aerospace Corporation Charles C. Lauritsen Library (A4/108) Post Office Box 95085 Los Angeles, California 90045

LOYD R. RATHBUN Massachusetts Institute of Technology Lincoln Laboratory Library Lexington, Massachusetts 02173

Executive Director

GEORGE H. GINADER Special Libraries Association 235 Park Avenue South New York 10003

Subscription Rates. Free to SLA members. Nonmembers, USA and Canada, \$20.00 per calendar year; add \$1.50 postage for other countries. Single copies (recent years) \$2.75.

Back Issues & Hard Cover Reprints: Inquire Krause Reprint Corp., 16 East 46th St., New York, N. Y. Microfilm & Microfiche Editions (1909 to date): Inquire University Microfilms, Ann Arbor, Michigan. 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 Subscription Department, 235 Park Avenue South, New York, N. Y. 10003. Claims for missing numbers 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 Subscription Department (see above) of a change of address, or because copy is "missing from files."

Special Libraries Association assumes no responsibility for the statements and opinions advanced by the contributors to the Association's publications. Editorial views do not necessarily represent the official position of Special Libraries Association.

Indexed in: Business Periodicals Index, Documentation Abstracts, Historical Abstracts, Hospital Literature Index, Library Literature, Library Science Abstracts, Management Index, and Public Affairs Information Service.

Membership

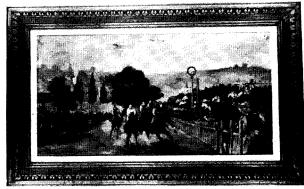
DUES. Active, Associate or Affiliate \$30; Student \$5; Emeritus \$5; Sustaining \$100. The one-time payment for Active (Paid for Life) Membership is \$350.



C-106 CLAUDE MONET: "Haystacks, Setting Sun". 1891

C-107 PAUL CEZANNE: "The Gulf of Marseilles, Seen from L'Estaque". 1886-1890

C-103 EDGAR DEGAS: "Woman at her Toilette". 1903



C-104 EDOUARD MANET: "The Races at Longchamp". 1864



C-102 MARY CASSATT: "Mother and Child", 1888



C-108 AUGUSTE RENOIR: "The Wave". 1897



C-101 VINCENT VAN GOGH: "Still Life with Fruit", 1887



C-105 PAUL GAUGUIN:"The Burao Tree". 1892

What could be more effective art education than viewing the originals in museums?

Nothing . . . but you can't always get there. And if you do, what you want to see isn't always on exhibit. And if it is, your feet, a crowd or a museum guard interferes.

Now, along with twenty masterpieces of 20th Century American Art from the Whitney Museum, you can have ChromographicTM Art Editions of pre-1900 Impressionists from the Art Institute of Chicago. Eight major Impressionists are represented in this limited, numbered edition.

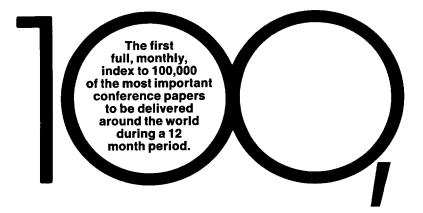
A new electronic method called Chromography re-creates paintings in such exact detail that experts find it difficult to tell the Chromograph from the original. One difference is the size, which has been deliberately modified at the suggestion of museum officials "to avoid possible confusion."

To see an actual Chromograph, simply fill out and mail the coupon.

CONNEX SYSTEMS Incorporated 29 East 10th Street/New York, N.Y.

CONNEX SYSTEMS INCORPORATED 29 East 10th Street/New York, N.Y. 10003 I am interested in examining a Chromograp pre-1900 Impressionist painting. Please hav representative call me for an appointment.	SL-1169 h of a e your
Name	
Title	<u>,</u>
Address	
City	
StateZip	

Now, From CCM Information Corporation:



to the scientific community, the conference paper has assumed somewhat the same function as the special report in industry. It is the first public disclosure of events-inthe-making, the first report on work in progress.

Now, thanks to a unique acquisition and input procedure, and advanced computer processing capability, CCM Information Corporation is able to provide scientists and librarians with a current awareness service on new papers in chemistry, engineering and the life sciences, in many cases a month or more *before* formal presentation of the actual paper.

The three new publications are:

CURRENT INDEX TO CONFERENCE PAPERS IN CHEMISTRY

CURRENT INDEX TO CONFERENCE PAPERS IN ENGINEERING

CURRENT INDEX TO CONFERENCE PAPERS IN THE LIFE SCIENCES

Each will be published monthly and will contain three sections:

A Subject Index giving the paper's title, the author's name and his address when available.

An Author Index giving the author's name and the subject heading under which his paper appears.

A Conference Data Section containing the name of the conference, its date, location and sponsor, and ordering information of preprints, reprints, translations, abstract volumes, etc. Cumulations will be produced semiannually in printed form. The entire project is under the professional direction of the World Meetings Information Center, whose editors produce world meetings and CALL FOR PAPERS. To help assure the inclusion of every important scientific and technical paper, a distinguished International Advisory Board has been appointed to assist in selecting all significant conferences and meetings to be covered-some 2,000 a year.

In time—often a year or more—the vast majority of these papers will find their way into the journal literature in their fields.

But given the rate of current scientific progress, a year can be a very, very long time.

\bigcap	$\mathbf{\mathbf{N}}$	\mathbf{h}
	人	J

		CORPORATION De ell Collier and Macn	•	
909	Third Avenue, Ne	w York, New York 10	022	
Please	enter my subscrip	tion to the services o	hecked below	
		to Conference Pa ription, \$75 🗌 index		istry (monthly)
		to Conference Pa ription, \$95 🗋 index		eering (monthly)
		to Conference Pa ription, \$90 📋 inde		ciences (monthly)
	Special combi □ \$235 □ witt	nation price for all n indexes, \$320	three service	25
Please	send a sample cop Current Index	to Conference Pa		ences
Name			Title	
Organiz	zation			
	5			
Address				

ORDER FORM

Now ... a continuous information service that automatically will inform your engineers of all pertinent information published in the world each month.

COMPENDEX

A monthly tape information service that pays for itself by eliminating the costly time of manual information retrieval.

Compendex, the computerized version of Engineering Index Monthly, can perform a vital service for every library serving a large staff of engineers. By being programmed to a system of *selec-tive printouts*, your computer can quickly scan COMPENDEX tapes containing over 5,000 abstracts monthly from 3,500 sources of engineering literature and *auto-matically* retrieve all data needed by your engineers. No information is lost or overlooked; hours of slow, costly manual searching are eliminated and engineers will be kept fully informed of all important engineering developments without having to read a huge quantity of engineering literature.

For complete information on this remarkable new COMPENDEX service, including prices and a personal presentation, contact:



COMPENDEX Division Engineering Index, Inc.

345 East 47th Street, New York, N.Y. 10017 • Phone: (212) 752-6800

Who Are We?

A RECURRING self-criticism within SLA is that we do not know enough about ourselves. Who are we? Who are our employers? Who are our clients? Why can't we answer these questions from our membership records?

Our new 1969/70 Membership Directory was distributed a few months ago. But quick scanning of this directory erases any notion that it can correctly characterize our membership. Almost 60% of our members record only their home addresses.

Recently, the Association's Headquarters staff needed to know the libraries in *Fortume's* "500" listing. Unbelievable though it seems, more than 55% of the "500" companies did not appear in our membership roster. Why are so many of you unwilling to use your business address?

I have long been aware that a high proportion of our members do not use their business addresses; but I am astonished that more than half of you are so inclined. Over the years, I have heard several reasons put forth for the use of home addresses. For example, in large libraries, internal mail deliveries are slow and/or personal periodicals are misdelivered to the serials department. Or employment is in a government agency and personal mail must be addressed to one's residence. Surely, half of our members do not fall into these categories. Most frequently heard has been the statement that business addresses are withheld because SLA's address list was available at a fee to vendors. It is hard to believe that we, collectively, did not wish to receive announcements of new publications and new services. But if this was once a cogent reason, it is no longer. Because of the Internal Revenue Service campaign against certain forms of income of non-profit associations, the SLA addressing service had to be discontinued two years ago because of income tax considerations—in spite of its minute contribution to our total annual income.

As I have scanned Chapter Directories, it appears that many of our members list their business addresses in the local directories, but give only their home addresses for the Association's records. What is the reason for this Dr. Jekyll and Mr. Hyde approach?

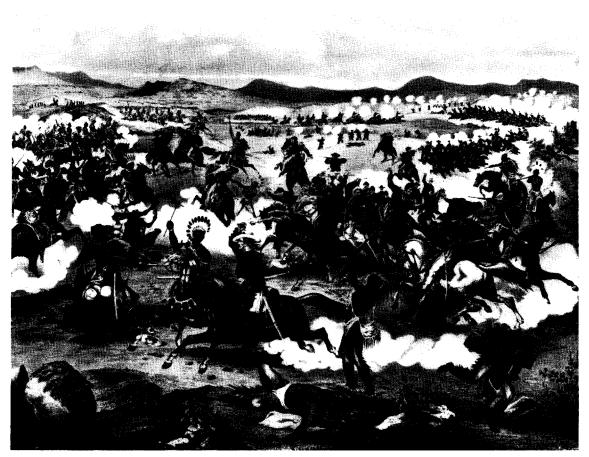
A professional directory is most useful during business hours. I, for one, would prefer not to receive a telephone call at home in the evening!

You can well ask, "How can my business address contribute to SLA's welfare?" There is the obvious answer that if we know ourselves better, we can plan for more effective action programs. But of equal importance there are financial advantages to the Association. *This Journal* is supported in part by its advertising income. Advertisers wish to spend their budget wisely to reach the bull's eye of their market.

Today, we cannot delineate our readership with any accuracy. With your cooperation and good will, we can improve the sharpness of our profiles.

When you renew your Association membership for 1970, may we have your business address?

ROBERT W. GIBSON, JR.



Need hard-to-find details on Custer's last stand? You'll find them easily in back volumes of The NewYork Times Index.

Everyone knows that General Custer was defeated at Little Big Horn.

But where can your patrons quickly find *specific details* about this and other events since 1851?

Thousands of librarians rely on The New York Times Index. Here, for example, your patrons will discover that General A. H. Terry wrote the official report of the massacre. That Rain-in-the-Face mutilated Custer's body. That Congress introduced a bill to erect a statue of Custer.

The New York Times Index is the best place to start a search—and often the only reference source needed. And since each entry contains a date reference, your patrons can also find the text of stories in newspapers and magazines. For details, or to order any back New York Times Index on approval for 30 days, write to The New York Times, Library Services/Information, Box SL-11, 229 West 43d Street, New York, N.Y.10036.



special libraries

The Computer Produced Book Catalog

I. A. Warheit

IBM, San Jose, California 95114

Book catalogs were a historical curiosity to the average American library user until a new technology made it possible to update, publish and distribute book catalogs with ease and flexibility. Book catalogs are now appearing everywhere and are being used as finding tools by the general public as well as by library staff. Increasing demands for improved library services are forcing librarians to provide additional services and to increase access to collections (including remote locations). Duplicate card catalogs are expensive to produce and to maintain. As card catalogs age, they deteriorate; cards are lost and destroyed. Deletions and revisions are neglected; and vandalism is always a threat.

TNTIL about ten years ago, the American library patron essentially knew only the card catalog. Book catalogs were a historical curiosity that one could see at the British Museum, or they were the ponderous bibliographic tools with which catalogers panelled their offices and occasionally consulted for mysterious and esoteric reasons. Suddenly, beginning in the middle 1950's book catalogs began to appear everywhere and to be used as finding tools not only by librarians but also by the general public. Book catalogs were to be found in public libraries, medical libraries, technical libraries in companies, undergraduate college libraries, university libraries, government research laboratory libraries and even in bookmobiles.

There are a number of reasons for the resurrection of the book catalog. The rising

demands for library services are forcing librarians to provide additional services, to establish more branch libraries, provide mobile services via bookmobiles, build undergraduate and departmental libraries, provide library service at remote locations, expand interlibrary loans, transfer and rotate collections and, in many ways, increase access to the collections and spread library services over larger and larger areas. Union catalogs, library networks, centralized processing and other systems and techniques are being adopted to meet these increasing demands. It is very expensive and, in many cases, quite impossible to provide duplicate card catalogs for all these outlets. Increasingly, therefore, librarians are turning to the book catalog to provide bibliographic control to their expanding domains.

In addition, card catalogs are proving hard to maintain. As they age, they deteriorate. Cards are lost and destroyed. Deletions and revisions are neglected, and vandalism is always a threat.

But the most important reason for the recent popularity of the book catalog is the fact that a new technology has made it possible to update and publish book catalogs with great ease and flexibility. Business and industry were quick to grasp the potential of using data processing equipment to produce directories and parts catalogs and librarians were not far behind.

My office started receiving so many inquiries from the IBM field representatives about book catalog problems, that finally in self-defense I prepared an IBM manual on the subject. This was issued in September 1969 as IBM Manual E20-0333, *Library Automation—Computer Produced Book Cata-* *log.* This manual will be available from local IBM representatives.

The manual does not discuss the utility of the book catalog nor is it concerned with the bibliographic aspects of the catalog. The manual concentrates primarily on the techniques involved in using data processing equipment to produce book catalogs. In this paper, only a few highlights are presented.

Input Devices

First, to use a data processing expression, the record has to be captured. There are a number of different devices that can be used and a number of different work forms. The best known and most used device is, of course, the keypunch. It is cheap, efficient and readily available. Its major deficiencies are that special coding is necessary to produce upper and lower case characters, proofreading the output is awkward and, since it does not produce continuous copy and a bibliographic record fills a lot more than one punch card—it usually takes eight or more cards special controls must be exercised to keep the decklets of cards together.

It is better, therefore, to use a keyboard device, like a typewriter, that records a continuous record on paper tape or magnetic tape and at the same time types the information on paper for proofreading. Paper tape, though, has several deficiencies. It is difficult to correct errors on paper tape and, on occasion, error is introduced by the mechanism that punches the paper tape; because such errors are not recorded on the typed copy, they cannot be caught by the proofreader.

The recording on magnetic tape can be easily erased and corrected, and since the hard copy which is proofread is generated from the magnetic record and not directly from the keystroke, the printout is a true copy of the record. The major drawback of the key-to-magnetic-tape recorder is that it is a more expensive device. However, its versatility and the ease by which data input can be accomplished, as well as the fact that it can be used for many other purposes in the library-it can produce catalog cards, spine labels, form letters, serials lists, offset masters for book catalogs, etc.-are influencing a number of libraries to adopt a magnetic tape recorder.

The bibliographic record can also be captured by means of an optical character reader. Using an IBM Selectric typewriter with a special type font, the catalog record can be typed on paper. The paper copy is scanned by an optical scanner, and the information is recorded in machine readable form on punch cards, paper tape, or magnetic tape. Because of the expense and the very large capacity of the optical scanner, it is not feasible for a library to do its own optical scanning. Several libraries, however, have made arrangements with service bureaus to have typewritten copy scanned and converted to magnetic tape at costs that are competitive with other conversion methods.

It must be emphasized that there are no optical character recognition devices presently available that can be used with printed library catalog cards. The present character readers are limited to restricted fonts and to special man-machine recognizable characters which have fixed spacing. The scanners or readers cannot handle proportionally spaced characters nor the great variety of fonts encountered on catalog cards. Even more important is the fact that our present catalog cards lack such essential information necessary for computer processing as the language of bibliographic items and field designators.

The best and certainly the most expensive means for capturing data is by a direct online terminal connected to the computer.

Information can be encoded directly into the computer via typewriter or visual display terminals. Such on-line preparation of inputs can take advantage of the powerful editing capabilities of the computer. On-line operation not only permits the capture of information while the actual record is being prepared, but, in an integrated or "total" library system, such capture begins with the first acquisitions record. Erroneous data can be "erased" during initial typing. Changes, additions and reorganization of text can be made simply by updating the necessary portions of the original information in storage. Manual retyping of corrected draft or final text is eliminated. Information, therefore, can be captured as it is generated, eliminating the cost and time of retranscription by a keypunch operator.

Although the greatest benefits from on-line operation are obtained as records are being

created, this method is also used for the conversion of existing cataloging information into machine readable form. This seems to be especially attractive where the amount of material to be converted is very large.

The more expensive, sophisticated devices have higher throughputs and provide savings in labor costs. They are, therefore, attractive when a large amount of data must be captured. It also explains why the actual reported conversion costs using different input equipment are about the same. As a rule, the economics seem to be affected primarily by the volume of material to be processed and not by the equipment used.

Work Forms

With unit record systems and with some of the early computer systems, librarians and data processing personnel were very concerned about the accuracy of their inputs, notably the recording of data in specific columns of the punch card. As a result, the work sheets were ruled into 80 columns like the IBM card and each letter was carefully written in the proper square. This process is being abandoned in favor of a preprinted work sheet in which each data element of the bibliographic record is set out in a separate box or field. In order for the computer to detect and identify the various data elements contained in a bibliographic record such as author, call number, title, publisher, date, etc., each element has to be identified by a tag or field designator. The tag can be either numeric or alphabetic, the latter usually in the form of a mnemonic. Mnemonics have been used in order to help the cataloger, reviser, and keypunch operator remember and identify the field designators. It was soon realized, however, that the tags were really just a computer problem and the cataloger and reviser need not be involved at all with the tags. Nor did the keypunch operator have to remember them if these tags were preprinted on the work form. In other words, the human involvement with tags should be minimized as much as possible.

Where a library already has printed catalog cards or proof slips, it is unnecessary to make a work sheet. In such cases the catalog card or a reproduction of it can be superimposed on a work sheet outline and the fields indicated, or the card itself marked, preferably in red or some other contrasting color. In some instances where the keypunch operators are part of the cataloging staff, they have been trained to assign codes or tags, and then no editing of the catalog card is necessary. The assignment of codes, however, slows down the keypunch operators and reduces both output and efficiency.

Of course, where the cataloging is done on-line and the cataloger himself prepares the inputs and stores them in the computer, then no work sheets are required. In such a case, the cataloger can assign the field designators as he enters each field or, in more advanced systems, as the terminal calls for each field (author, title, imprint, etc.) the stored program assigns the field designator. In such systems, every effort is made to keep from burdening the cataloger with any of the computer housekeeping, and to enable him to communicate with the computer, via the terminal, in a language as close to natural language as possible.

Programs

Book catalogs may be produced by using the available program modules of a "total" or integrated library system or by using a separate book catalog program. From a set of library programs, the normal catalog creation, selection and extraction modules can be supplemented by standard publishing or formatting programs.

Since "total" library systems are just getting under way, all book catalogs to date have been produced by separate catalog programs.

The special programs usually involve the normal card-to-tape and edit modules as well as the various sort and format modules to set up the individual outputs desired: shelf list, author catalog, and subject catalog—the title breakdown usually being combined with the author or subject catalog. There may be other programs such as special cross reference print, special merge modules to print cumulations, authority list prints, especially for catalogs which include report literature where corporate author, contract, and report number cross reference lists are required.

The most important program and one too often neglected is the maintenance program.

Since library records are considered to be very stable, and to require few changes, most programmers have not provided special maintenance capabilities. As a rule, when part of a record has to be changed, the whole entry or major portions of it are removed and replaced by a new record. Experience has shown, however, that records are more dynamic than expected. This is especially true for catalogs of several libraries, such as union catalogs or catalogs prepared for libraries in a consortium. Also, catalogers find it a chore to prepare complete work sheets just to make a minor change in an entry. It is strongly recommended, therefore, that a good maintenance program be provided which will expedite the changing of a catalog record.

As part of the card-to-tape program there should be an editing module which checks the validity of the inputs. Some of the possible validity checks are:

- Various field lengths such as the LC card numbers are checked.
- Sequences of fields and date ranges are verified.
- Specific fields such as call number, title and imprint must be present in every record.
- If LC classification is used, then the initial character of the call number must be alphabetic and a capital.
- Data which must be numeric such as number of copies, Dewey class number, and line numbers or tags are checked to see that they are numeric and not alphabetic.
- Termination symbols must be present.
- The number of lines for an entry must not exceed a preset limit.
- Duplicate entries must be noted.
- Maintenance messages are accepted only for existing records and the code designating the action must be present.
- Codes for field designators and location symbols as used to designate branch and departmental libraries are verified.

Filing Order

Filing order is, of course, very important for library catalogs. Depending on the construction of the heading of the entry a sort key or tag is created which is used by the sort program in alphabetizing the entries. Since library filing has special requirements and because they vary from library to library, the librarian must take special pains to indicate all exceptions to the normal sequence or collation of the computer. Since word by word filing is generally used in libraries, the presence or absence of a blank is an important consideration especially when used with abbreviations. For example, U.S. will file differently from U. S.

Two devices are used to indicate exceptions to machine filing:

• Symbols may be placed around a word that is to be ignored in filing—initial articles for example; or

• A non-printing sort field can be set up. The latter is especially useful for the proper sequencing of Roman numerals and B.C. dates as well as handling such special cases as multipart names. Care should be taken to select as non-printing symbols those characters which are not required in cataloging. The greater than (>), less than (<), and (a) are examples of characters seldom if ever used in a bibliographic record. Therefore, they may be used as non-printing symbols. Care must also be taken to determine how the computer files punctuation marks, special symbols, ampersands (&) and diacritical marks. In some equipment they are interpreted as a blank, in others they are ignored entirely and in a few they may change the value of a character.

For monographic materials, a primary or major sort key of 80 to 100 characters seems to be adequate. The major sort key is formed from the first 80 to 100 characters of the entry. The minor sort key is formed from the first 40 to 80 characters of the element that follows the heading, usually the title. A third minor sort key of from 5 to 10 characters for the edition statement or date may also be necessary. Public library catalogs have been produced with 40-16-4 sort keys for author and title catalogs and 70-16-5 for the subject section. College and university library catalogs, however, have found the longer sort keys necessary. A few librarians feel that a longer major sort key is necessary in order to file properly the very long corporate author and serial title entries. The total sort field, however, should not exceed 256 characters (bytes); otherwise sorting costs are increased appreciably.

Machinable Inputs

The discussion so far has been restricted to entries generated in the library. Where an entry is received in machine readable form from an outside source, as for example a MARC input, then some additional program modules are required. These programs must be able to read the input, select the records desired and reformat them to fit the format requirements of the library's catalog program. The MARC tapes, for example are in USASCII code. For those installations using EBCDIC codes, it will be necessary to use a formatting program which reads MARC tapes, converts USASCII to EBCDIC and selects records from the input tape and writes them onto an output tape. This program should also be able to select (on the basis of any MARC tag number or the bibliographic data associated with a particular tag number) and then selectively print any designated field, thus performing all selection and extraction functions. It also should punch an identifying card for all or selected records. Such a program is presently in use to match MARC and BNB (British National Bibliography) records.

Printing

The IBM manual includes some discussion of publishing schedules and formats of catalogs, including cumulations, as well as the arrangements necessary for successful coordination of library operations with the keypunch, data processing and printing departments. These are large topics that cannot be covered in this brief review. They are, however, extremely important for the success of any book catalog.

Methods of reproduction are also analyzed including:

- 1. Directly by the computer line printer as an original plus carbon copies.
- 2. Directly by the computer line printer onto offset masters with subsequent printing from these masters.
- 3. Photoreduction of line printer copy with subsequent printing by offset.
- 4. Electrostatic reproduction directly from paper copy printed by the computer printer; the reproduction is either full size or reduced.
- 5. Machine composition with the MT/SC (Magnetic Tape/Selectric Composer)

and other Selectric machines.

- 6. Photocomposition with inputs taken directly from the computer or magnetic tape.
- 7. Microfilm copy either as roll film in a cartridge or as microfiche.
- 8. Electrostatic printed copy produced from microfilm input.

The various reproduction methods must be carefully considered if one is to have a successful product.

Special Catalogs

One last word is necessary. Special librarians are very often concerned with materials that are neglected because, for one reason or another, they are not amenable to standard cataloging practices. Such materials can be brought under bibliographic control by KWIC (Keyword-In-Context) or better, KWOC (Keyword-Out-of-Context) systems. These are very inexpensive yet extremely effective methods for the preparation of catalogs.

The preparation of such book catalogs requires very little or no additional effort on the part of the librarian. Practically all the work—extraction of the author and subject entries, the bibliographic identification, the sorting, formatting and printing—are all computer controlled and produced. Such catalogs are easy to use and hence, very popular.

Book catalogs, although almost as old as libraries themselves, are only now, with today's technology, becoming a very powerful bibliographic tool.

Received for review Jun 25, 1969. Accepted Oct 3, 1969.



Presented at the Documentation Division's meeting, "State of the Art of Documentation in Special Libraries," on Jun 3, 1969 during SLA's 60th Annual Conference in Montreal. Dr. Warheit is concerned with Information Systems Marketing in IBM's Data Processing Division at San Jose.

Preservation Programs in New York State

Existent and Non-Existent

Hannah B. Friedman

The New York Public Library, New York 10018

■ The rapid deterioration of library materials has been of major concern to most libraries. This paper examines how some libraries are solving their problems and what their needs and recommendations are for more effective preservation. This is revealed by means of questionnaires sent to 141 libraries and the replies received from 84 libraries in New York State. The need for further studies in the field of preservation of library materials is very obvious.

EARLY in 1967, the Technical Committee of the Resources and Technical Services Section of the New York Library Association selected "Preservation of Library Materials" as its topic of investigation. The committee with Rudi Weiss, Head of Technical Services, Westchester Library System, and the author of this paper as co-chairmen—set out to accomplish these objectives:

• Study the extent of the problem of book deterioration and arrive at a possible solution;

• Prepare a questionnaire related to preservation for completion by libraries in New York State; and

• Compile an exhaustive bibliography on the subject.

The first phase of the project turned into an overall program for the Resources and Technical Services Section on the occasion of the annual conference held in Rochester in Oct 1967. That program took the form of a symposium, and the papers delivered there have been published in the May and Oct 1968 issues of *Special Libraries*. The second phase, the questionnaire, is the topic reported here. The third phase, compilation of the bibliography, was abandoned because of the publication of George Cunha's *Preservation* of *Library Materials* (1) early in 1968; it contains a bibliography of about 2,000 items on the subject of preservation.

On Oct 2, 1967, 141 questionnaires were mailed to 22 public library systems, 31 college and university libraries and 88 special libraries, all in New York State. The purpose of the questionnaire was to determine what was being done by libraries to preserve their collections and to gain further understanding of the problem. It consisted of eleven basic questions relating to preservation; the last question asked whether the library would be willing to participate in a more detailed study. A definition of preservation as applied to books and libraries was included in the questionnaire.

As a whole, the answers (Table 1) constitute an account of the state of the art of preservation in the libraries which answered the questionnaires. Current practices and thinking on the subject were revealed directly or indirectly. In general, it is valid to state that preservation has achieved a limited but steadily growing status among the three groups involved. In general, of those who answered (84) slightly over 50% had some sort of preservation program (45). Twenty-five of the 45 preservation programs are systematic programs, while the remainder are of limited scope, either due to lack of funds or lack of concern for preservation. The limited status of preservation is indicated to some extent by the fact that only two respondents out of 84 have programs of a formal enough nature to present a written statement. In many of the replies that indicated no preservation program, the nature of the responses showed a general lack of concern for preservation regardless of the needs. In several areas of the survey, it is apparent that the most urgent need is the dissemination of some form of preservation guidelines and information to libraries and institutions.

Responses from the three groups of the survey (public library systems, college and university libraries, and special libraries) show that the heaviest concentration of preservation programs is in the special libraries sector. This may be due to the greater availability of funds, or to the type of use and users of the collections or to several other factors which can be observed from the replies. The difference in the number and scope of preservation programs between the first two sectors and the last one is the survey's most outstanding contrast, in spite of the fact that the size of public and private collections may necessitate more preservation (Tables 2-4).

The questionnaire itself was generally quite effective in eliciting useful and detailed data. An area of confusion arose from interpretations of the meaning of and difference between *active* programs and *systematic* programs. Confusion of answers also resulted between a statement of local needs and the responsibilities of the profession as a whole.

Many significant observations can be made by studying and relating the data accumulated. Most respondents were insistent enough about the need for advice and guidelines to make such observations very important indeed. Some samples of replies—with emphasis on needs and recommendations—are reported here; these apply not only to their own libraries but to libraries in general.

SPECIAL LIBRARIES.

American Museum of Natural History. Recommends foundation support to carry out a systematic program of preservation. "Possibly this is one thing that could be brought to the attention of the President's National Advisory Commission on Library and Information Science. The matter of what is to be preserved, how, the order of priority, etc., would seem to be matters calling for further discussion."

Explorers Club. Suggests greater publicity to make libraries aware of the problem so that emphasis would be on preserving and not only on acquiring books.

Long Island Historical Society. "The profession should be encouraging universities and library schools to place more emphasis on preservation techniques—perhaps more seminars and workshops. Textbooks on preservation tend to be highly technical. . . . The searcher . . . needs in this field to have fingertip information with clear illustration. . . ."

Metropolitan Museum of Art. Received a fund of \$100,000 for rebinding, laminating and general preservation of book and non-book material.

New York Academy of Medicine. Under a grant, received through the Medical Library Assistance Act, a professional restorer was assigned for the care and repair of the collection. Part of the grant was also used for restoration by the Barrow method, and for microfilming of medical journals. A copy of statistics for the rehabilitation project was enclosed with the questionnaire. The chief aim of the library is to "above all, do no harm" and apply "tender loving care" to its old and fragile material. Their greatest need is more money. Recommends alerting libraries to the

Preservation of a library collection is defined as the maintenance of the resources in lasting physical condition through retention, restoration and replacement of library materials based on a clearly defined policy.

Table 1. Summary of Survey Response

Response

No. Questionnaires Sent No. Respondents Per Cent of Sample Responding	141 84 60%
Locus of Respondents	
Public Library Systems	20
Colleges & Universities	17
Private & Institutional	47
Total	84

Cooperation with Other Libraries or Organizations

	Respond		No	
	ents	No	Info.	
Public Library Systems	20	3	17	0
Colleges & Universities	17	3	П	3
Private & Institutional	47	8	33	6
			_	-
Total	84	14	61	9

Definite Preservation Budget

Respondents with Preservation Programs

				No
	Yes*	Ltd.†	None	Info.‡
Public Library Systems	6	5	9	0
Colleges & Universities	2	8	7	0
Private & Institutional	18	7	21	1
				-
Total	26	20	37	1

	Re-		Pri-		
	spond-	Own	vate		No
	ents	Funds	Funds	No	Info.
Public Library Systems	20	7	0	13	0
Colleges & Universities	17	4	0	12	1
Private & Institutional	47	15	4	27	2
			-		-
Total	84	26	4	52	3

Types of Programs

			None;		
	Respondents	Existg. Programs	but under consideration	Microforms	Policy Statement
Public Library Systems	20	11	0	6	1
Colleges & Universities	17	10	4	2	0
Private & Institutional	47	25	9	9	1
	—	_	_	_	-
Total	84	46	13	17	2

Needs, Problems & Recommendations

	Money	Physical Requirements	Need Advice	No Need	No Response	Possible Future Response
Public Library Systems	2	4	7	4	8	11
College & Universities	2	2	5	2	2	12
Private & Institutional	9	9	7	0	23	34
		—			_	
Total	13	15	19	6	33	57

* All "Yes" answers are recorded as "Yes."

The discrepancy between the number of programs and the number of budgeted programs is probably because some of the preservation programs are limited programs; and the respondents answered "No" to the question of whether or not they did have programs. The size of the collection and the size of the budget are important variables not included in the tabulation above (for example, one respondent has 32,000 volumes and \$3,000 while another respondent has 2,000,000 volumes and no preservation budget). Two other important variables are the nature of the collection and the kind of preservation in progress.

[†] Response to survey question was "No," but in each case a limited preservation program was in progress.

[‡] No specific answer to question.

fact that "materials of the last 100 years need care and attention as much, if not more, than incunabula."

New York Botanical Garden Library. The greatest need is financial support; simple manuals of instruction; readily available information on sources of supplies for book repairs. Recommends setting up workshops; need for a centralized source of information on all aspects of preservation of library materials.

New York Society Library. Submitted "A Proposal for a Cooperative Library Conservation Association" (4), a typescript of 20 pages, by George Cunha (Boston Athenaeum) who is also the author of Ref. (1).

Staten Island Institute of Arts and Sciences. Has received a special grant for preservation from the New York State Council on the Arts. The emphasis is on preservation of nonbook materials. The library is deeply concerned with the lack of space, lack of organization of library materials and inadequate preservation of its materials.

YMCA Historical Library. This library enclosed minutes of a meeting in 1954 dealing with binding, repairs and preservation of photographs (5). A 1962 report (6) is devoted exclusively to preservation; it concludes with a statement of the need for protection of unique records against loss. "These materials will continue to be a vital concern for preservation during the coming years."

YIVO Institute for Jewish Research. Suggests that assistance be given to libraries to obtain funds for implementation of preservation programs. An enclosure consisted of an excerpt from the Jewish Book Annual (7) describing the urgency of the preservation problem and the need for storage space.

College & University Libraries.

C. W. Post College. Wants guidelines for a systematic approach to preservation.

City University of New York. While no formal policy has been adopted, the library microfilms, xerocopies, repairs, and vacuums books. Special collections are housed in air conditioned rooms.

Cornell University. No recommendations are made and no needs are cited, but has an ongoing preservation program consisting of repairs, fumigation, etc. Rare books are in humidified stack areas.

Hunter College. Needs staff and money; recommends training program for library technicians.

State University of New York at Buffalo. Needs staff to identify needs.

Yeshiva University. Recommends publication of a "very concise" pamphlet on preservation. Long-range recommendation is to have a joint laboratory, experimentation, concise and frequent "reportage."

PUBLIC LIBRARY SYSTEMS.

Buffalo & Erie County Public Library. Suggests more extensive programs for microreproduction, rebinding and repairs. While the library buildings are temperature and humidity controlled, there is need for more money for restoration and filming. Also recommends research and experimentation in the preservation techniques with published findings.

Finger Lakes Library System. While \$1,000 a year is available for binding and rebinding, and several hundred dollars is allocated annually for preservation supplies, there is a lack of storage space.

Mid-Hudson Libraries. Suggests working on preservation through the 3R's program and recommends coordination of all preservation programs.

New York Public Library. Research Libraries. Has an ongoing preservation program and a written statement of policy (2). Needs more funds, staff, space and air conditioning; recommends setting up workshops, seminars, manuals on preservation. A more detailed report of the state of the art of the Research Libraries of the New York Public Library has been published (3).

New York State Library. Needs temperature, humidity, and dust controls in stack areas. Recommends manuals on preservation practices and training in restoration techniques. Urges enforcement of revised binding standards.

Upper Hudson Library Federation. Suggests study and research on preserving film and tape.

(Text continues on page 589)

NOVEMBER 1969

Table 2. Special Libraries

	1		Preservation Program	n			1	Written Statement of
	Volumes/ Pamphlets	Present	Annual Budget	Future	— Emphasis	Needs Stated	Recommendations Stated	Preservation Policies
American Baptist Historical Society	50,000 (200,000 pamphlets)	Yes	33%	No	Preservation of research material; use of Xerox and microfilm.	None	None	No
American Jewish Historical Society	32,000	Yes	\$3,000	No	Restoration of rare books, manuscripts, broadsides; rebind- ing.	Adequate funds	None	No
American Museum of Natural History	190,000	No	None	No	None	Adequate funds	Foundation support for preservation; discuss what to preserve.	No
American Museum of Natural History, Hayden Planetarium	5,000	No	None	No	Air conditioning; some repair & restoration as needed; special section for books before 1880.	None	None	No
Board of Missions Methodist Church	20,000	Yes	\$900	No	Book binding; some lamination			No
Brooklyn Museum. Art Reference Library	57,000	No	None	No	None	Gradual degener- ation of wood pulp papers.	None	No
Buffalo & Erie County Historical Society	50,000	Limited	No separate budget	No	Newspaper microfilm program with twice the library budget.	Vast number of volumes; need funds to repair.	Encourage high standards in micro- filming & book repair; seek funds.	No
Cathedral Church of St. John the Divine	10,000	Yes	Small part of budget	Yes	Rebinding; cleaning; use of an air humídifier and air conditioning.	None	None	

Engineering Societies	212,000	No	None	No	None	Age, more than usage, of early periodicals.	None	No
Explorer's Club	16,000	No	None	Yes	Oiling and treating leather- bound books; minor re- pairs.	Adequate space and temp/humidity for rare books.	Publication of avail- able information by library organiza- tions; local seminars.	No
Fashion Institute of Technology	23,000	No	None	No	None	Deterioration of special materials.	None	No
Hispanic Society of New York	100,000	Limited	60%	No	Binding because of heavy use or physi- cal format; some microfilming of pre- 1701 material on request; manuscript cases.	Binding and manu- script cases.	None	No
Juilliard School of Music	35,000	Yes	No	No	Rebinding; preser- vation of rare but deteriorating items.	None	General enlighten- ment as to the possibilities; educa- tion of craftsmen.	No
General Theological Seminary	160,000	Yes	10%	Yes	Cleaning; oiling; fine binding; air conditioning.	None	None	No
Long Island Historical Society	150,000	Yes	Funds set up as memorials and income from these used for preservation.	No	Microcard replace- ment of genealogi- cal materíal; intensive Mss program.	Funds	More emphasis on techniques; possibly seminars; publica- tion of lucid instruc- tions & advice.	No
Memorial Sloan-Kettering Cancer Center	20,000	Yes	Not part of budget	No	Deacidification, lamination of rare cancer classics; rare book room; rebind- ing.	Guidelines; authori- tative price & dealer guides; medium to exchange information.	"The profession should take the initiative."	No
Metropolitan Museum of Art	22,000	Yes	\$100,000	?	Rebinding; lamina- tion; replacement; humidity controlled building; slide and photo preservation.		•••	• • •

(Table 2 continues)

Special Libraries

Table 2. Special Libraries (contd.)

			Preservation Program				1	Written Statement of
	Volumes/ Pamphlets	Present	Annual Budget	Future	Emphasis	Needs Stated	Recommendations Stated	Preservation Policies
Museum of Modern Art	20,000	No	No	Yes	Considering consoli- dation of museum archives under satisfactory technical conditions.	Space, budget, policy.	ייזיי	No
New York Academy of Medicine	364,000/165,000	Yes	0.5%; \$1,000 for archival restoration; \$1,500 for rebinding; special grant this year, \$70,000 Medical Library Assistance Act.	Yes	Archival restoration; mending; rebinding; Barrow method of restoration; reor- ganization; very limited microfilming; deacidification & lamination; weeding program.	Funds	None	No
New York Botanical Garden	75,000	Yes	\$7,000	No	Repair of damaged volumes; rebinding; oiling of leather.	Financial support; trained personnel; information on sources of supplies; manuals of instruc- tion.	Workshops; cen- tralized information center; expanded testing operations such as LTP.	No
New York Genealogical & Biographical Society	54,000/22,000	Yes	<i>У</i> 4%	Yes	Unifying catalog; considering reor- ganization of Mss catalog.	Better paper; micro- cards; Personnel and funds.	None	<u> </u>
New York Historical Society	450,000	Yes	Not a separate item	No	Silking Mss; mount- ing prints; micro- filming newspapers.	None	None	No
New York Law Institute	No reply	Yes	\$2,000 rebinding	No	Rebinding & re- placement of worn books; some micro- filming.	Funds	None	
New York Society Library	165,000	Yes	2% for 1 special collection	Yes	Dusting, cleaning, oiling rare books; refurbishing special collection; binding.	Funds	Extensive proposal for a regional con- servation center.	No

Pierpont Morgan Library	70,000	Yes	7%	No	Conservation of bindings & of ob- jects on paper and vellum.	None	None	No
Staten Island Institute of Arts & Sciences	30,000	Ltd.	None; \$7,000 Grant from NYS Council on the Arts.	Yes	Increase availabil- ity; improve cata- loging; some bind- ing.	More staff, binding; budget & space; microfilm reader- printer.	Regional union catalog for special collections; then uniform standards.	No
Union Theological Seminary in the City of New York	395,000	No	No separate item except for staff time and expense.	No	Binding, rebinding & repair of normal items; specia! lubrication.	None	None	No
YIVO Institute for Jewish Research	280,000	Ltd.	No	Yes	Limited microfilming.	Funds	Assist libraries in obtaining funds for implementing pro- grams.	
YMCA Historical Library	11,000 + 900 bound box archives	Yes	\$150		Boxing of archives and some lamina- tion; early records are rebound.	More personnel.	More microfilming.	Yes

Table 3. College & University Libraries

			Preservation Prog	Iram				
	Volumes	Present	Annual Budget	Future	Emphasis	Needs Stated	Recommendations Stated	Written Statement
C.W. Post College	189,000	No (limited)	None	Yes	Preservation of rare books and repair of library materials.	Under consideration.	Guidelines for a systematic approach to preservation.	No
City College	827,000	No (limited)	None	No	Measures taken where needed. Fumigation, etc. on moving. Vacuuming; some microfilm.			No

(Table 3 continues)

Table 3. College & University Libraries (contd.)

		1	Preservation Progr	am			1	
	Volumes	Present	Annual Budget	Future	Emphasis	Needs Stated	Recommendations Stated	Written Statement
Cornell University	3,067,000	No (limited)	None	No	Repair, humidifica- tion of rare books. Microfilming deteri- orating newspapers. Purchase of micro- film; fumigation; restoration.			No
Fordham University	560,000	No	None	No	None		"Research methods"	No
Hofstra College	210,000	Yes	3%	No	Preventive mainte- nance. Replacement of worn out ma- terials. Preservation special collections.	Uncertain	Others should follow our procedures.	No
Hunter College	402,000	No (limited)	\$15,000	No	Binding periodicals; some retrospectively; some repair.	People and money.	Promote training programs for library technicians where possible.	No
NYC Community College	28,000	No	Yes	Yes	Photographic reproduction.	A physical plant more conducive to preservation.	Better advisory and consultative services to libraries.	No
New York University		No	<u> </u>		Binding, repair & - replacement as occasion demands.		No formative program.	
Pace College	96,000	No	None	No		None yet; library is relatively young.		No
St. Johns University	370,000	No (limited)	None	No	Binding and repair dept. responsible for examination & care of material.		i en en	No
SUNY/Buffalo	878,000	No (limited)	None	No	Clean & treat fine bindings; process manuscripts as in recommended prac- tices.	Adequate staff to carry out specific preservation tasks with a new collec- tion.	Identify important & unique materials. Seek national pro- gram.	No

SUNY/Fredonia	128,000	No	None	No	None	"No particular needs. About the same as other li- braries."		No
SUNY/Oneonta	152,000	No	None	No	None			
SUNY/Stony Brook	104,000	No (limited)	Binding	No	Prefer binding over microforms; system- atic replacement; building with con- trolled humidity and air conditioning.		No reply.	No
Syracuse University	1,272,000	Yes	None	Yes	Preservation under proper conditions; acid-free manuscript boxes.	Money	Get funding.	No
University of Rochester	1,063,000	No	None	No	No	Nothing to report.	Nothing to report.	No
Yeshiva University	423,000	No (limited)	None	Yes	Restoration & pres- ervation up to WW 11, but esp. 19th century and after.		Publication of a very concise pam- phlet. Long range lab experimentation.	No

Table 4. Public Library Systems

		Preservation Program						
	Volumes	Present	Annual Budget	Future	- Emphasis	Needs and Problems	Recommendations Stated	Written Statement
Buffalo & Erie County Public Library	1,288,000 (Central) 2,237,000 (System)	Yes	\$126,000 Preserva- tion & Salaries \$ 16,000 Supplies \$ 58,500 Binding \$ 4,500 Microforms	No	*	More money for restoring and film- ing.	Stimulate more re- search & experimen- tation in preserva- tion techniques and publish findings.	No
Finger Lakes Library System	421,000	Yes	\$1,000 for rebinding. Several hundred dol- lars for preserva- tion supplies		**	Lack of storage space for older less used material worthy of preserva- tion.	"We do not have any original ideas to contribute."	No

Table 4. Public Library Systems (contd.)

			Preservation Program		1	1		
	Volumes	Present	Annual Budget	Future	Emphasis	Needs and Problems	Recommendations Stated	Written Statement
Mid-Hudson Libraries	77,000	Yes	Yes (as needed)	No	Replacement of material in demand	More photographic reproduction & reading facilities	Work through new 3R agencies to coordinate preser- vation.	Policy im- plied in book selec- tion policy.
New York Public Library	5,500,000	Yes	\$75,000/yr.	Yes	Film, fiche, photo- stat, Xerox; deacidi- fication, lamination; reprinting, binding.	More funds & staff- space to offset on- going program.	Continued coopera- tion; teaching pres- ervation techniques.	Yes
New York State Library	2,205,000	Yes	\$7,000 Restoration \$20,000 Rebinding	No	Binding, rebinding, restoration, replace- ment. Some micro- filming	Inadequate temper- ature, humidity and dust controls in stack area.	Updated manual on the problem; train- ing in techniques	No
North Country Library System	251,000	No	None	No	Limited lamination & rebinding to pro- long public life of book	NCLS book collec- tion supplies cur- rent titles & info. to members; few rare books	None	No
Schenectady County Public Library	254,000	None (limited)	Small part of total for binding, etc.	No	Rebinding, repairing and replacing as necessary	Lack of space in present building to carry on such work.	None	No reply
Southern Tier Library System	62,000	Yes	\$1,200-1,500	No	Rebinding valuable old county histories & gazeteers. Limited classic rebinding.	No present major problem.	No opinion	No

SPECIAL LIBRARIES

^{*} Wherever possible, efforts are made to restore original volume through repair, mending or binding. Missing pages in books are Xeroxed and reinserted. We stress early detection of damage in books among all staff and urge them to send them to our repair staff of twenty persons. The more valuable items are sent to a skillful hand-binder in town. Trade books and journals are sent to six different binderies. We custom-make cases of acid-free paper for fragile publications which cannot be bound and occasion-ally send an item to the Lakeside Press in Chicago for special restoration. Occasionally, total volumes are Xeroxed and bound. We also acquire materials in microfilm, card, fiche and other forms. Replacements are in reprint and new editions. Temperature and humidity controls are checked regularly in stacks. ** Binding and rebinding; replacement of lost and damaged or worn out materials; reinforcement or binding of all paperback materials. Simple mending of books on a selective basis. Supplies to member libraries for preservation.

Preservation includes photographic reproduction; setting up of special quarters for certain materials; temperature and humidity control; pest control; care, repair and restoration of books and other library materials; and systematic replacement where appropriate.

Conclusions

It is worth noting that although no courses in preservation or the general care and repair of books are given at any of the library schools in the country, the Ballard School of the YWCA in New York City offers two classes related to preservation. These are part of the school's "library clerical courses." One is titled "Care and Repair of Books"; the second, "Book and Repair Workshop" (8). Both courses are given by Mrs. Nancy Russell, formerly a restorer with the New York Academy of Medicine and now employed at The Metropolitan Museum of Art in the same capacity. These may well be the only preservation-oriented library courses in the country.

The need for more money, space, personnel, equipment and know-how is common to all libraries. To meet these needs, and as a follow-up to the questionnaire, the Technical Committee of the Resources and Technical Services Section of NYLA is planning to set up seminars and workshops to supplement NYLA's annual conference.

Received for review Jan 4, 1969. Accepted for publication Sep 11, 1969.

Literature Cited

- Cunha, George Daniel Martin / Conservation of Library Materials. Metuchen, N.J., Scarecrow Press, 1967. 405p.
- New York Public Library. The Research Libraries / Preservation of the Collections. Tech.Memo. no.5. (Mar 23, 1967)
- 3. Friedman, Hannah B. / Preservation of Library Materials; the State of the Art. *Special Libraries* 59:(no.8) 608–13 (Oct 1968)
- 4. Cunha, George Daniel Martin / A Proposal for a Cooperative Library Conservation Association. To be submitted to a select group of librarians for their consideration with the recommendation that they organize such an effort, establish policy, elect trustees, obtain foundation support and then invite others to join. n.p., n.d. 20p. Typescript.
- YMCA Historical Library / Minutes Library Committee. (Nov 28, 1956) p.1. Typescript.
- YMCA Historical Library / Report of Library Services. 1962. p.5. Preservation. Typescript.
- 7. Abramowitz, Dina / The YIVO Library. Jewish Book Annual, 1967/68. v.25. p.102.
- 8. YWCA. Central Branch. Ballard School / Catalog, 1968/69 p.38; Special Libraries 60:(no.2) 94 (Feb 1969)



NOVEMBER 1969

Since May 1969 Hannah B. Friedman is chairman of the Ad Hoc Committee on Preservation, RTSS/NYLA. Dr. Felix Reichman, assistant director of the Cornell University Libraries is co-chairman. The committee is now planning a pre-conference session on preservation of library materials at NYLA's 1970 Conference in New York City. Mrs. Friedman is Collections Preservation Coordinator of the Research Libraries, New York Public Library. Reader reaction and comments are invited by the author.

The Dwight D. Eisenhower Library

Its Goal Is Infinity

John E. Wickman

Dwight D. Eisenhower Library, Abilene, Kansas 67410

■ The nature of their holdings makes the potential for research and education at presidential libraries unlimited. The recent history of the Dwight D. Eisenhower Library illustrates a presidential library's work to fulfill these potentials.

Preserving and providing research facilities for work in presidential manuscripts is only one part of the job of a presidential library. Equally important are the interpreta-

N April 2, 1969, former President Dwight D. Eisenhower was buried with full military honors in the limestone chapel at the presidential library named for him in Abilene, Kansas. For the staff of the Library this event marked a change in activity and pace. During the eight years of the Eisenhower post-presidential career, the staff at the library had been in almost daily contact with the former President and his staff at Gettysburg, Pennsylvania. The continual and full deposit of each year's files by his office meant that General Eisenhower and his staff needed continuing reference service in the archival holdings of the library. Each new book or article produced by General Eisenhower was preceded by a corresponding demand for such service.

This continuous contact provided many opportunities for information and assistance from the former President for the library's tions from museum exhibits of the history of that particular presidency, and the periods before and after the presidential terms. The large holdings of other materials besides manuscripts, such as photographic collections, audio tape collections and museum collections, provide a continuing challenge to the staffs of presidential libraries as they seek to make these items available to scholars and other potential users.

program of manuscript acquisition. With his death and the resulting final shipment of manuscript material from Gettysburg, the library will move further into the task of interpreting General Eisenhower's life, and readying for research the materials which are associated with it.

In the broadest sense, the work of the presidential library system, operated by the National Archives and Records Service, General Services Administration, is one continually directed toward professionally oriented programs of historical research and interpretations. The implications of this situation are highlighted in even a brief résumé of the parts and programs of the Eisenhower Library.

Unlike its more unified "siblings," the Eisenhower Presidential Library is housed in four separate buildings, on a land area of 13.4 acres, but administratively under the immediate control of the director of the library.* In addition to the chapel and the library building proper, there is also the family home on its original site, where General Eisenhower and his brothers grew up, and a separate museum building housing approximately 18,000 items. In terms of visitors the combination of all these elements has a drawing power which brought more than 150,000 persons annually to the library before General Eisenhower's death. The number of visitors has increased to 454,000 persons in the period from April 2 to August 13, 1969. From an administrative view this growth in visitors, and the opportunity to educate them in the history of the Eisenhower Administration, has resulted in almost equal demands for attention from the archival and museum sides of the institution.

16,000,000 Pages of Manuscript

The simple enumeration of the physical dimensions of this presidential library gives some clue to one of the things which sets it apart from others of its kind. Its job of interpretation is more complex because General Eisenhower was a man of three separate careers: *first*, as a soldier who became one of the free world's great heroes because of his leadership in the Second World War; *second*, as President of the United States for two terms; and *third*, as a former President whose advice and counsel were eagerly sought by members of both major American political parties for a period of just over eight years.

Since the primary purpose of each presidential library is to preserve the papers of its subject administration—and related areas —a closer look at those collections is the best place to start this survey. The manuscript collection at the Eisenhower Library has grown at the rate of roughly one million pages each fiscal year, after the original accession of White House material. On July 1, 1966, the manuscript holdings numbered more than 13,280,000 pages. The fiscal year 1969/70 will close out with approximately 16,000,000 pages. The present volume bulk of the papers is over 5,500 cubic feet.

In addition to papers there are now more than 16,000 volumes in the printed materials collection of the library, and 50,000 still photographs. Audio tapes and motion picture films are also to be found in proportional amounts in the holdings. Statistical renderings, however, do not do an adequate job of describing the opportunities and challenges which face this growing institution.

As a research institution the Eisenhower Library has developed steadily during the last three years. Its collections were officially opened for research in November 1966. Since that time 93 researchers have used materials at the library, while about an equal number have purchased microfilm and photocopies for research use elsewhere.

The research projects which have been worked on at the library include:

- biographical studies of General Eisenhower;
- various aspects of the Civil Rights movement in the 1950's;
- several studies of the Army-McCarthy controversy;
- an investigation of agricultural programs in the Eisenhower Administration; and
- studies of economic policy during that administration,

to mention only a few of the more popular topics. Geographical distribution of the researchers has included 30 of the 50 states, as well as one from England.

Cabinet Officers and Generals

In addition to the White House Central Files, the holdings include staff and personal files of many cabinet officers. Among them are the files of James P. Mitchell, Secretary of Labor; William P. Rodgers, Attorney-General; Secretaries of State Dulles and Herter; Neil H. McElroy, Secretary of De-

^{*} A partial picture of the existing presidential libraries was presented by Virginia R. Cole, in her article, "Presidential Libraries," *Special Libraries* 59:691–697 (Nov 1968). As brought out by Mrs. Cole, the basic resource is essentially an archives, but there is also, in each of the existing libraries, a museum function which far outweighs other considerations in the minds of the average visitor. At the Dwight D. Eisenhower Library this situation is complicated by the physical plan of the library wherein the museum is housed in a separate building.

16 January 1944

GO 4

ASSUMPTION OF COMMAND

Ho ETOUSA

By direction of the President, I assume command of the European Theater of Operations, effective this date.



DWIGHT D. EISENHOWER General, United States Army Commanding.

Dwight D. Eisenhower Library

fense; Frederick H. Mueller, Secretary of Commerce; and Joseph M. Dodge, Director of the Bureau of the Budget.

The fastest growing collection of manuscript materials in the library is that which pertains to military activities with which General Eisenhower was associated during the Second World War. To date, there are 23 separate collections related to that period of his life, and these include the papers of General Walter Bedell Smith; Lt. General Willard S. Paul; Major General Terry de la M. Allen, Commanding General of the 1st and 104th Infantry Divisions, 1942-1943; Diaries of the Operations Division, War Department, 1941-1946; Records of the General Board, United States Forces, ETO, 1942-1946; Selected Records of the War Department War Plans Division, and other divisions of the Allied Force Headquarters, as well as selected records of other ETO staff offices.

In addition to the manuscripts in the holdings which pertain to the military, there are also on microfilm the following: selected papers of Mark W. Clark; Major General Horace L. McBride; Major General Charles Hunter Gerhardt; Records of the Historical Section, Headquarters ETO, United States Army, 1941–1946; and communiques of the Supreme Headquarters Allied Expeditionary Force, 1944–1945. Microfilmed After Action Reports are held for the following: the 1st Infantry Division, 1940–1945; the 1st Armored Division, 1942–1947; the 4th Infantry Division, 1940–1945; and the 82nd Airborne Division 1943–1946.

Personnel in the manuscript solicitation program of the library currently are working with 24 former members of General Eisenhower's several military staffs as they prepare their papers for inclusion in the holdings of the presidential library.

Publication of the President's Writings

Another facet to this interest in the military history of General Eisenhower's era, is the relationship between the presidential library and the Johns Hopkins University project for publishing the writings of Dwight D. Eisenhower. In 1964 the Johns Hopkins University initiated a project, under the editorship of Dr. Alfred D. Chandler, Jr., to publish the personal papers of Dwight D. Eisenhower. By the terms of that project cooperation between personnel of Johns Hopkins and that of the presidential library was assured. The library will be the site of deposit of the materials gathered together for this publishing project. The first four volumes of papers, covering the years from December 1941 to May 1945, will appear beginning in 1970.

The book collection at the Eisenhower Library, as is the case in presidential libraries generally, is a mixture of the personal reading material of the President compounded



Dwight D. Eisenhower Library

by thousands of gift volumes from friends and admirers. Some of these are very rare examples of the art of fine binding. The library purchases materials which support the labors of staff and researchers, but this is a small fraction of the total of 16,500 volumes. Finding ways to make this collection more accessible to potential users beyond those who research at the library is one of the continuing activities engaging the librarian in charge of the collection, Nancy V. Menan.

An Oral History Program

In order to preserve and make available the widest range of materials on General Eisenhower's life, the library has an oral history program which is divided into three parts. The most active part is that which relates to the period of the presidency. This program is run in cooperation with the Oral History office at Columbia University. The magnetic tapes of interviews and the typed transcripts are deposited at Columbia and the Eisenhower Library under equal restrictions. At present 63 finished interviews have been so deposited. This type of institutional cooperation has been extremely important to the library, for it meant that this important work could go forward at a time when the staffing pattern of the library was not able to support specialists in this activity. In the areas of General Eisenhower's early life, and post-presidential career, the library is running its own program as resources are available.

That which tends to distinguish presidential libraries from other manuscript depositories is not the extent, or specialized nature of their holdings. It is rather the total concept of them as institutions which bring into a creative juxtaposition the manuscripts, museum objects, and physical settings associated with a former President. In this setting a professionally equipped and dedicated staff can both continuously educate the seasonal visitor while carrying on the primary job of making papers available to the academic researcher.

Conferences of Scholars

The vitality of presidential libraries comes out of the interrelationship between research, interpretive museum work, and changing views of the subject period over time. Nowhere is this vitality more apparent than during the conferences of scholars and other professionals held periodically since 1966 at the Eisenhower Library.

The first conference of any magnitude was held in November 1966 in connection with the opening of the manuscript collection for research. On that occasion 150 scholars gathered to hear Dr. Malcolm C. Moos, former White House staff member in the Eisenhower Administration, and nationally recognized political scientist, read a paper on sidelights to the administration which could form the basis for future scholarly investigations. The impetus of this conference was such that the number of researchers has grown steadily from a total of five before the conference to a total of 93 active scholars, representing the disciplines of history, government, economics and sociology. This initial conference was followed by four others, each pointing up some aspect of potential research or service which the library can render.

In March 1969 a conference on the history of the American West was held at the Eisenhower Library. In the planning stages for over six months, this conference received General Eisenhower's enthusiastic support. His own interest in the history of the West, the physical location of the library in one of the great cattle towns of the boom years in the early 1870's, and the special holdings of the library, especially in works of art related to the history of the West and its interpretation, made the conference especially appropriate.

Three highly original papers were presented to an audience of 150 scholars of the American West, representing 30 institutions of higher learning in the Middle West and West. The speakers included Dr. John A. Hawgood, Professor of History, University of Birmingham, England; Dr. Joe B. Frantz, well-known author and lecturer on the American West, and former chairman of the Department of History, University of Texas; and Dr. William Unrau, author of several articles on Kansas history, and Professor of History at Wichita State University, Wichita, Kansas.

In addition to the papers and commentary, the conference initiated the month-long art show of Russell and Remington bronzes from the library's own collections as well as paintings by both 19th-century and 20th-century Western artists.

The next two conferences held at the library were in a large measure an outgrowth of the unique position which the library enjoys in its geographic setting. The staff of the Eisenhower Library has always been cognizant of the potential it has as a resource for professional advancement in its geographic area. This recognition resulted in two conferences called to aid museums, and the development of their staffs, in Kansas. At the first meeting, March 6, 1969, 150 persons from a cross section of the 120 museums in the State of Kansas were registered. The featured speakers were Kyran M. Mc-Grath, Director of the American Association of Museums in Washington, D. C., and James B. Shaeffer, Director of the Stuhr Museum in Grand Island, Nebraska.

Following this conference a second one was called in April 1969, at which time the Kansas Museum Association was formed. Mr. W. K. Jones of the Eisenhower Library museum staff was elected president of the organization, and the foundation was laid for continuing work in spreading information and expertise by means of the association to the member museums across the state.

D-Day 25 Years Later

The most recent effort to use the scholarly orientation of the library as a stimulus for research and learning at all levels came on June 6 and 7, 1969. On those two days a symposium was held during which leading scholars looked at the D-Day invasion of Europe, June 6, 1944, from the perspective of 25 years. This program was the result of two years of planning between General Eisenhower and the staff of the library. In order to take advantage of the unique opportunity presented by this anniversary, the event was divided into two parts.

The first part consisted of the symposium, keynoted on June 6 by Dr. Forrest C. Pogue, Director of the George C. Marshall Research Library, Lexington, Virginia, who spoke not only as a widely respected military historian, but also as a participant in the D-Day invasion. Dr. Pogue was followed in subsequent sessions by such other noted military historians as Dr. Roland G. Ruppenthal and Dr. Maurice Matloff, who discussed the logistical and strategic considerations in the invasion. Dr. Alfred Goldberg, of the Rand Corporation, and Colonel Alfred Hurley, of the U.S. Air Force Academy, analyzed the role of air power in the invasion. The Naval efforts of Germany were discussed by Vice Admiral Friedrick Ruge, Naval Advisor to General Irwin Rommel during the invasion, while the Honorable George M. Elsey, former Deputy Secretary of Defense, discussed the invasion problems of the U.S. Navy.

The conference was concluded with a summary paper given by the well-known military historian, Colonel Martin Blumenson, who discussed the immediate results of the Allied invasion effort. All of the papers presented during the two-day sessions will be published in book form later this year.

Between 150 and 200 persons attended the conference sessions and many availed themselves of the opportunity to also learn more about the holdings of the library in the area of military manuscripts related to the Second World War.

The second part of the conference was one which again points up the special character of presidential libraries and the many opportunities which are inherent in them for continuing education. During conferences with General Eisenhower about this program in 1967 and 1968, he expressed his concern for tell the story. Many of the displays, such as the 120-square-foot model of Mulberry Harbor (the artificial harbor designed and built by Great Britain to aid the invasion) were first-time events which drew a great deal of attention. In planning their exhibits, however, the staff worked to educate those viewers who had little or nothing to tie to in their own reserves of information.

The success of the scholarly programs as well as the interpretations of historical mater's in its museum exhibits has given the staff of the Eisenhower Library an unusual range of activity. With research in its archival holdings continuing to grow and an expanded program of museum interpretation under way, the library has already begun to outstrip even the enthusiastic predictions of some of its early supporters. In meeting the many opportunities in the future for serving

During a recent television interview I was asked what the limits were on the growth and development of a presidential library's resources and services. I replied, "In terms of creativity, our goal is infinity." My answer momentarily stopped the interviewer. After the show he confessed that like many persons he thought of presidential libraries in rather closely defined terms, with much of the work a job of filing papers from the presidential career.

The reaction of that news commentator is also an all too common one, even among professionals in the library field. It was based on hearsay evidence without a firsthand acquaintance with presidential libraries. The Dwight D. Eisenhower Library and its recent history demonstrate why-for those of us who direct presidential libraries—"infinity" is a very proper goal.

the interpretations and reinterpretations of history made by each generation. Everyone connected with the conference planning was reminded that almost two generations had passed since D-Day, 1944, and much new information was available on the subject. The crux of the matter for the staff became how to keep visitors constantly engaged, and subtly educated, in the history of the invasion as reflected in the library's holdings.

In resolving this problem the museum staff, under the direction of W. K. Jones, inaugurated on June 6, 1969, a six-month museum display which brought out at many levels information about D-Day and its place in the history of the Second World War. Manuscript material, museum objects in our collections, and loans from many museums in the United States and England helped to

scholarship and education the Dwight D. Eisenhower Library seems destined to prove out my somewhat casually offered idea that the goal truly is "infinity." As more and more persons come to use our resources, whether in a formal or informal sense, the stimulus to grow and change in our ability to interpret and relate the segment of history entrusted to us will be constantly renewed.

Received for review Aug 18, 1969. Accepted Oct 10, 1969.

Dr. John E. Wickman has been director of the Dwight D. Eisenhower Library since 1966 and holds the Ph.D. in History from Indiana University, Bloomington, Indiana. Before coming to the Library, he taught history and political science at the college level for eight years.

U.S. Controls on the Exportation of Unclassified Technical Data

A Fabled Account

William C. Petru

Hewlett-Packard Company, Palo Alto, Calif. 94304

■ The true, behind-the-scenes story of what *really* occurred on "The Day of the Great Big Paper Explosion," which buried the United States under three and a half feet of paper! In this now-it-can-be-told exposé of Big Government in Action, it is revealed how our irreplaceable national treasures of technical know-how were prevented from leaving our borders! And how a sneaky quasi-legal assault on the rules and regulations controlling technical data was thwarted! And how the very rules and regulations themselves function! An in-depth, never-to-be-forgotten analysis of a thrilling episode in bibliographic history!

AT 11:08 a.m. Pacific Standard Time, on the first day of Spring, March 20, 1969, a curious event occurred which will live on in history as "The Day of the Great Big Paper Explosion." The effects of the Explosion—the term is apt if not strictly accurate —lasted for months.

Surely, you remember the Day well: The United States succeeded in launching the world's largest rocket precisely at the moment that the vernal equinox was passing over Cape Kennedy, Florida. A dreadful vibration resulted from the meeting of two mighty forces, causing the instantaneous collapse of every known bibliographic classification and indexing scheme within the borders of the United States. Virtually every scrap of paper imparting information was forthwith torn willy-nilly from its sheltered niche on a library shelf, in a file drawer, in a recipe box, in a locked safe, and flung helter-skelter to the four winds. March being the month it is, it was no time before all those books, letters, documents, vendors' catalogs, pamphlets, newspaper clippings, engineering drawings, were spread—by actual sampled measurement—an average of $3\frac{1}{2}$ feet deep from coast to coast and border to border.

The depth of consternation amongst librarians and archivists (information scientists did not particularly care, their computers not having been affected) was a marvel to behold -breast-beating and hair-pulling being but the shallowest of the emotions displayed. The reaction of the federal government was predictable and somewhat to the point. The President immediately announced that X-number of dollars and every available resource would be poured out, et cetera, et cetera, and so forth. Furthermore, none of the public were to worry about the loss of this paper information because everything of real value -like tax information-was already on computers. The government's general plan called for the mobilization of every available snowplow to begin the attack on the drifted paper in wedge formations . . .

Porno-Information Is Exportable?

Suddenly, in the middle of the President's address, the Press Secretary came running in. The Secretaries of State, Commerce and Defense had discovered that their rules and regulations concerning the handling of classified and unclassified information were being seriously compromised. The regulations specified in the Industrial Security Manual for Safeguarding Classified Information had flown out the window along with the information they were designed to protect. Not only was one apt to find the engineering drawings for the building of an atomic submarine lying next to a delicious piece of pornography, but -far worse!-alien eyes were free to dwell upon this forbidden material (the atomic submarine, not the pornography).

Had this been the only way in which technical data were being mishandled, the Secretaries could have closed the borders to all travelers, permitting little information to leave the country. But with the Great Big Paper Explosion the problem was that the paper was on the move, wafted as it were on March winds. The wafting over the United States borders became so severe, as a matter of fact, that the Secretaries asked the President to mobilize the snowplows along the Canadian and Mexican borders, while minesweepers and other vessels were commanded to drag nets up and down the coast lines.

With the snowplows bringing a modicum of control over the inadvertent exportation of technical data, the Secretaries agreed that some sort of indoctrination program was needed for the general populace who were wading waist-deep in material for which they had no real appreciation. It was absolutely essential that some rules be followed in kicking it around.

Perhaps through frequent radio and television broadcasts of the rules and regulations affecting the exportation of technical data, the public could be aroused to the necessity of keeping these national treasures at home. The decision was made to concentrate first on unclassified information because it was found that the classified information, being obviously heavier in thought and content, had sunk to the bottoms of the piles of paper and could be worried about at a later time. In some areas where rioting college students



had stirred the paper up the classified material was compromised anyway, so what difference did it make?

The more the Secretaries discussed the problem, the more they realized that it was only the regulations governing the exportation of technical data which had any meaning left under the present circumstances. A distillation of the salient regulations was needed.

The Secretary of State insisted that his rules, the International Traffic in Arms, should be used since: 1) they cover arms, ammunition, and implements of war, in which everyone is interested; 2) they contain the famous United States Munitions List; and 3) they cover both unclassified and classified data pertaining to any of the articles on the Munitions List. And all of this in one neat package only 11 pages long.

The Secretary of Commerce, a true civilservant, immediately pooh-poohed the notion of brevity in favor of his *Comprehensive Export Schedule*, a fat looseleaf service containing Part 385, "Exports of Technical Data." Part 385 concerns itself: 1) only with unclassified data; 2) with all other information not included in the U.S. Munitions List; and 3) it had an intricately worked out licensing system for the exportation of technical data.

The Secretary of Defense stopped the discussion cold by saying that he didn't believe in controlling unclassified data—but if he did, all he would have to do was slap his Statement No. 2 from *DoD Directive* 5200.20 on it and everybody's export problem would be solved. The other Secretaries resented Defense for implying he had anything so simple, and there was a terrible row.

The President was asked to resolve the question of whose rules would save The Day of the Great Big Paper Explosion. He sagely called in each of the Secretaries one by one and had each answer a series of four questions: 1) the definition of technical data as

provided in his regulations, 2) technical data exemptions to the regulations, 3) licensing provisions for the exportation of technical data, and 4) ease with which the regulations can be read, understood, and applied to a $3\frac{1}{2}$ foot pile of paper threatening to leave the borders.

The Secretary of State, eager to make the best possible impression for his department rules, carefully intoned their full title: International Traffic in Arms Regulations, Subchapter M of Chapter 1 of Title 22, by Authority of Section 414 of the Mutual Security Act of 1954. The President, unimpressed, told him to hurry up and keep to the questions.

The International Traffic in Arms Regulations (ITAR) states plainly that the term "article" shall mean any of the arms, ammunition, and implements of war and technical data relating thereto enumerated in the United States Munitions List. As used in ITAR, "technical data" means: "(a) information concerning an article on the U.S. Munitions List which enables its use, operation, maintenance, repair, overhaul, production, or manufacture, or (b) research, development, and engineering technology concerning an article on the U.S. Munitions List, or (c) any technology which advances the state-of-the-art or establishes a new art in an area of significant military applicability, or (d) classified equipment or information relating to a U.S. Munitions List article."

The whole purpose of these regulations, the Secretary of State was fond of pointing out, was to keep our good old American know-how at home. What exemption to the export controls really boiled down to was whether that information was freely available in public libraries, or by purchase at a newsstand or bookstore, or had been approved for public release by government authority. If unclassified technical data does not fall within the exempted, a license issued by the Department of State is required. Applications must include five (5) copies of the technical data.

The President interrupted with a short expletive, saying that he could not have his snowplow drivers searching wildly for five copies of something in the event there was a breach in the battle at the borders. Could the rules be relaxed to read only one copy each? ITAR didn't sound too bad, bearing in mind that it was applicable to military articles only.

With this faint praise, the Secretary of State was dismissed and the Secretary of Commerce ushered in, hugging a number of looseleaf binders which were empty because they had fallen victim to the Great Big Paper Explosion. The President saw at once that he was to be impressed with the size of the *Comprehensive Export Schedule*, so before it went too far, the Secretary was admonished to keep it brief.

Provisions of Part 385, "Exports of Technical Data," of the *Comprehensive Export Schedule (CES)* do not apply to technical data which have been officially assigned a security classification. "Technical data" within the *CES* means "information of any kind that can be used, or adapted for use, in the design, production, manufacture, utilization, or reconstruction of articles or materials. The data may take a tangible form, such as a model, prototype, blueprint, or an operating manual; or they may take an intangible form such as technical service."

Further definitions within CES state that the "export of technical data means: 1) an actual shipment or transmission of technical data out of the United States; 2) any release of technical data in the United States with the knowledge or intent that the data will be shipped or transmitted from the United States to a foreign country; or 3) any release of technical data of U.S.–origin in a foreign country."

The release of technical data may be accomplished through: "1) visual inspection by foreign nationals of U.S.-origin equipment and facilities; 2) oral exchanges of information in the United States or abroad; and 3) the application to situations abroad of personal knowledge or technical experience acquired in the United States."

When the President reminded the Secretary for the second time to keep it brief, the Secretary countered that he couldn't; after all, under discussion were the regulations controlling all unclassified technical data, except for that puny military bit left to the Department of State.

The CES provides for two types of licenses: General License GTDA and General License GTDR. General License GTDA authorizes export of technical data to all destinations-data which under ITAR were exemptions from licensing: "data released orally or visually at open conferences, lectures, trade shows, or other media open to the public: and publications that may be purchased without restrictions at a nominal cost or obtained without cost or are readily available at libraries open to the public." Scientific or educational data and foreign patent applications fall within this license jurisdiction also. General License GTDR is to be used when exporting data which is not exportable under provisions of General License GTDA, which include data on nuclear devices, certain electronic and aircraft commodities, and petrochemical processes.

The Secretary of Commerce, eyes glassy, continued to recite the litany of General License GTDR: "Country Group S and Z Restrictions," "Country Group W and Y Restrictions," "Technical Data Restrictions Applicable to All Destinations," "Restrictions Applicable to All Destinations Except Canada"...

With the word "Canada," the President leapt to his feet. If Canada as a destination was exempt from export controls of certain technical data, the President could pull back half his snowplows! The rest of the *Comprehensive Export Schedule* was out of the question for consideration for the general populace, of course. Too difficult to understand and so . . . comprehensive.

Zealous Librarian in Milpitas

While the President was conducting his interviews to determine what rules to follow in an indoctrination program, an incident in Milpitas, California, occurred which would soon have a direct bearing on his judgment. An innocent visitor from Canada chanced to have blown in his face the process for making porous nickel, on the restricted data list even for Canadians in the *Comprehensive Export Schedule*. A zealous librarian, thoroughly familiar with the rules and knowing where her duty lay, made a citizen's arrest and dragged the poor tourist—still clutching the evidence—off to jail.

In the meantime, the President called in the Secretary of Defense to find out more about the so-called simple method his De-



partment had of controlling information. The Secretary burst in carrying nothing but a stamp pad and a rather smallish rubber stamp. These he threw down in front of the President, flatly stating that if this stamp appeared on each piece of paper lying around outside, there would be no need for the falderal of licensing or indoctrinating. The stamp was the famous Distribution Statement No. 2 from the *Department of Defense Directive 5200.20*, frequently called the NOFORN statement. If intended for use on unclassified material, it read:

"This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of [controlling DoD office]."

The statement as used for classified documents includes the short phrase,

"In addition to security requirements which must be met, this document is subject to special export controls . . ."

The "controlling DoD office" is the DoD activity or its higher in-line authority under whose immediate program a document is generated, whether the work was done inhouse or by contract. The Secretary was quick to point out that in this time of national emergency this definition could be altered a bit so that his administrators could control all technical data—DoD-sponsored or not.

The basis for Distribution Statement No. 2 (it is No. 2 in a list of five distribution statements covering various phases of technical data) is to control information

"that was furnished by a foreign government; commercial competition with foreign firms; the protection of technical know-how relating to critical products or manufacturing processes, tests and evaluation of military operational weapon systems and installations and other technology restricted by U.S. Mutual Security Acts."

The statement had already been placed onto all manner of unclassified technical information—speeches, brochures, reports, sales literature—so there was no reason why it could not be stamped onto more of the same. And, furthermore, Statement No. 2 has *no* automatic termination date.

The President sat thoughtfully . . .

Just then an aide came in to tell the President of a radio report from Milpitas. A federal judge had issued an injunction against the United States government, naming the President and the Secretaries of State, Commerce and Defense, ordering them to immediately stop enforcing all controls on the dissemination of information. A Canadian tourist, arrested with compromising technical data in his possession, had convinced the judge that any regulations attempting to

The following documents are pertinent in controlling the exportation of unclassified technical data:

- 1. Comprehensive Export Schedule; a compilation of official regulations and policies governing export licensing of commodities and technical data. Office of Export Control, International Commerce Bureau, U.S. Department of Commerce. Looseleaf. Available from the Superintendent of Documents.
- 2. Industrial Security Manual for Safeguarding Classified Information, DoD 5220.22-M (Jul 1, 1966). Looseleaf. Change 1 (May 1, 1968). Available from the Superintendent of Documents.
- 3. International Traffic in Arms, subchapter M of the regulations of the Secretary of State (Departmental Reg. 108.520, 30 F.R. 9034). As published in the Federal Register, v.31, no.233, pt.II, Friday, Dec 2, 1966. Available from the Superintendent of Documents.
- 4. Distribution Statements (Other than Security) on Technical Documents, DoD Directive 5200.20 (Mar 29, 1965).

regulate the free flow in information were patently unenforceable, what with all the information lying around freely available anyway.

With the President being spared the decision of having to choose amongst the regulations, he could return to running the country. In the meantime, the librarians returned to their usual tasks of arranging and rearranging paper piles, and in no time order was restored.

You know, of course, that the Canadian tourist finally lost his case in the Supreme Court and was deported to Grande Prairie, Alberta, still not knowing what porous nickel was. The injunction against the controls on information was lifted, and along with all the other rules and regulations, the *International Traffic in Arms Regulations*, the *Comprehensive Export Schedule*, and *DoD Directive* 5200.20 settled firmly back into place.

As a matter of fact, we are exactly where we were on March 20, 1969, "The Day of the Great Big Paper Explosion."

Change 2 (May 8, 1967). Available from local Defense Contract Administration Services Regions (DCASRs) or Department of Defense. This document references several other directives, all of which are relevant to controlling the exportation of unclassified technical data.

For further background information on the subject, see the *Journal of the National Classification Management Society* (particularly 1967) and the publications of the Aerospace Industries Association.

Received Apr 10, 1969. Accepted Sep 30, 1969. Mr. Petru is assistant libraries manager at Hewlett-Packard Company.

This paper was presented at a meeting of the Engineering Division on Jun 3, 1969 during SLA's 60th Annual Conference in Montreal. The intent of this paper is to present some of the U.S. regulations governing the exportation and importation of both security classified and unclassified technical data—regulations of which librarians are usually not knowledgeable, but should be.

Mechanized Serials Handling System

A Pilot Project

Marion C. Szigethy

Radio Free Europe, New York 10016

■ A mechanized serials handling project for the control of 500 serials, using in-house EDP equipment is described. Discussed are systems analysis, the design of the project, the conversion of the serial records, the methods used and the implementation of the new system. Samples of the coding sheet, legend, and a sample page of the basic output are included.

LIBRARIES today accept mechanization as a possible solution to many of their problems. The pressures of new requirements, and the necessity for new services are difficult if not impossible to satisfy by traditional methods. There are certain prerequisites to a successful automation effort. These are suitable staff, equipment, organization and a certain amount of know-how (1). Most small and medium sized special libraries have difficulties in introducing mechanized procedures mainly because of the high cost of owning hardware and the lack of one or more of the other prerequisites (2).

In the case of the library of Radio Free Europe most of the above prerequisites were present. The organization has EDP equipment in its IBM Center with a full time operator and two keypunch operators. Carrying out an initial project was a matter of bringing together the existing resources into one working system—the people, the processes and the equipment.

Objectives

Recognizing that mechanization can be a potent tool in applying the principles of scientific management, our aim in using equipment for some of the library procedures was to operate with greater efficiency, speed and accuracy, while at the same time reducing clerical routines to a minimum.

We knew that if we were to solve our problems by applying a total systems approach to everything we did, we would have to wait very long to get started. Therefore the limited evolutionary approach was chosen. At the same time, we tried to plan what we were doing so that it would fit into a larger pattern for later development.

As our first project we selected a relatively simple but significant project, our serial record, mainly because this operation can be completely separated from the rest of the library's operations and records. In the first stage we limited ourselves to list production and acquisition records. We did not attempt to include more complicated procedures, for example, check-in, routing slip production, etc. The serial record lends itself ideally to a pilot project:

- Titles are fairly constant;
- There is relatively infrequent need for changes;
- There is a restricted and fairly constant number of file items;
- There is a relatively small amount of information on each file item; and
- There is need for frequent manipulation

NOVEMBER 1969

1 Title 1-46 46 Direct Note. If air mail, indicate by Alphabetic 1 Title 1-46 46 Direct Alphabetic Note. If air mail, indicate by Alphabetic 1 Title 1-46 46 Direct Alphabetic Note. If air mail, indicate by Alphabetic 2 Serial No. 47-50 4 Numeric Numeric 3 Frequency 51 1 Abbreviated Abbreviations: 3 Frequency 51 1 Abbreviated Abbreviations: 4 Subject 52-54 3 Unused at present 4 Subject 52-54 12 Direct Note. If name is longer than I							
Alphabetic Alphabetic nation AIR M difer title. If nec for identification add place to for identification right after title. e.g. Charge of title. (can be of the e.g. charge of title. (can be of e.g. charge of title. (can be of e.g. charge of title. (can be of Alphabetic 2 Serial No. 47–50 4 Numeric 3 Frequency 51 1 Abbreviated Alphabetic Abbreviations: D Daily W Weekly F Fortnightly F Fortnightly B Bimonthly B Bimonthly B Bimonthly G Quarterly S Semiannual A Annual I Irregular 4 Subject 52–54 3 Unused at present 5 Person (Addressee) 55–66 12 Direct Alphabetic Note. If name is longer than 1 its, truncate. If possible, use of first name. 6 Department 67–70 4 Abbreviated Alphabetic Abbreviations: BD Bulgarian Desk CD Cacheolsovak D. HD Hungerian D. HD Hungerian D. HD Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Musich MUS Music PER Personal PES President's Off. PROD Production PUB Public Affairs 7 Source (Vendor) 71 1 Abbreviated Alphabetic Abbreviations: A American News C Cracovia G GPO	Field	Information	Columns			Abbreviations, Codes and Notes	
3 Frequency 51 1 Abbreviated Alphabetic Abbreviations: D Daily W Weekly F Fortnightly M Monthly B Bimonthly Q Quarterly S Semiannual A Annual 4 Subject 52–54 3 Unused at present 5 Person (Addressee) 55–66 12 Direct Alphabetic Note. If name is longer than 1 its, truncate. If possible, use of first name. 6 Department 67–70 4 Abbreviated Alphabetic Abbreviations: BD Bulgarian D. HD Hungarian D. PD Polish D. RD Rumanian D. LB Library NEWS Newsroom DIR Dir:'s Office ENG Engineering MUN Munich MUS Music 7 Source (Vendor) 71 1 Abbreviated Alphabetic Abbreviations: A American News C C Cracovia G GPO	1	Title	1-46	46		Note. If air mail, indicate by desig- nation AIR M after title. If necessary for identification add place of pub- lication right after title, e.g. Pravda/ Moscow, Pravda/Prague. Other notes, e.g. change of title, can be added.	
Alphabetic D Daily W Weekly F Fortnightly M Monthly B Bimonthly Q Quarterly S Semiannual A Annual I Irregular 4 Subject 52-54 3 5 Person 55-66 12 6 Department 67-70 4 Alphabetic Alphabetic Note. If name is longer than I its, truncate. If possible, use of first name. 6 Department 67-70 4 Alphabetic Alphabetic Abbreviations: BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. LIB Library 7 Source 71 1 7 Source 71 1 7 Source 71 1	2	Serial No.	47–50	4	Numeric		
5 Person (Addressee) 55-66 12 Direct Alphabetic Note. If name is longer than I its, truncate. If possible, use of first name. 6 Department 67-70 4 Abbreviated Alphabetic Abbreviations: BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. PD Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Munich MUS Music 7 Source (Vendor) 71 1 Abbreviated Alphabetic Abbreviations: BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. PI Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Munich MUS Music 7 Source (Vendor) 71 1 Abbreviated Alphabetic Abbreviations: A American News C Cracovia G GPO	3	Frequency	51	1		D Daily W Weekly F Fortnightly M Monthly B Bimonthly Q Quarterly S Semiannual A Annual	
(Addressee)Alphabeticits, truncate. If possible, use of first name.6Department67–704Abbreviated AlphabeticAbbreviations: BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. PD Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Munich MUS Music PER Personnel PRES President's Off. PROD Production PUB Public Affairs7Source (Vendor)711Abbreviated Albreviated AlphabeticAbbreviations: Abbreviated Alphabetic7Source (Vendor)711Abbreviated AlphabeticAbbreviations: American News C Cracovia G GPO	4	Subject	52-54	3		Unused at present	
Alphabetic BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. PD Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Munich MUS Music PER Personnel PRES President's Off. PROD Production PUB Public Affairs 7 Source 71 1 Abbreviated (Vendor) 71 1 Abbreviated Alphabetic Affairs C Cracovia G GPO	5		55–66	12		Note. If name is longer than 12 dig- its, truncate. If possible, use initial of first name.	
7 Source 71 I Abbreviated Abbreviations: (Vendor) Alphabetic Affairs G GPO	6	Department	67–70	4		BD Bulgarian Desk CD Czechoslovak D. HD Hungarian D. PD Polish D. RD Rumanian D. LIB Library NEWS Newsroom DIR Dir.'s Office ENG Engineering MUN Munich MUS Music	
(Vendor) Alphabetic A American News C Cracovia G GPO						PRES President's Off. PROD Production	
F Free (gift, exchange) S Special handling	7		71	1		A American News C Cracovia G GPO P Publisher/Distributor F Free (gift, exchange)	
8 Expiration 72–75 4 Direct Note. Use month and year Date Numeric 12–69	8		72–75	4		Note. Use month and year, e.g. 12–69	
9 Cost 76–80 5 Direct Numeric	9	Cost	76–80	5			

Table 1. Legend

of the information and updating of the various outputs.

Methods

The first step was systems analysis, and a study of the manual record itself (3). This made it possible for us to formulate our overall requirements. As a result we could

draw up the coding sheet (Fig. 1), the legend (Table 1) and a basic flowchart.*

In all our work the limitation of our storage medium, the IBM punched card, had to be taken into consideration. We had to use fixed fields and limit ourselves to 80

^{*} Copies of the flowchart are available from the author.

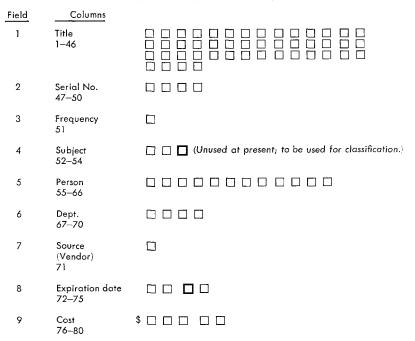


Fig. 1. Coding Sheet for Serials

characters, since we wanted to use only one card per file item to avoid the excessive machine time required to process "decklets" (or groups) of cards. To condense all of the needed information onto one card it was necessary to use both arbitrary coding and abbreviated coding. Here the objective was to make abbreviations as meaningful as possible and to use arbitrary coding for those elements used primarily by machines rather than by people.

The scope of the present record is: 1) current titles only; 2) serials defined to include government publications, some annuals, and various types of services in addition to newspapers and periodicals; and 3) inclusion of records for serials which are received in multiple copies.

As a general rule mechanized records should contain minimum information (4). Consequently a critical evaluation of the kind and amount of information to be included had to be performed. In our case the information in Fig. 1 was considered to be vitally important.

An individual arbitrary serial number was assigned to each title for easy machine alphabetization. Gaps were left unused in the numbering of titles so that new titles can be interpolated at a later time without having to renumber the series.

Preparation of the Input

The *first* step was to cleanse the old subscription and serial records-checking for accuracy, consistency, and standard language. This is an essential step in automation, since machines lack the flexibility of manual methods which human intelligence quickly adapts to handle new problems (2). One should not try to clean up an inefficient manual system by a direct jump to automated methods; the manual method must be cleaned up first (5). This is a "fringe benefit" of automation to the operation of the library. It is interesting to note that this pre-editing is not really chargeable to the mechanization project—but it may prove to be one of the most expensive steps.

The *second* step was to transcribe the "clear" record to the intermediate form, in our case the coding sheet, and then to proof-read the result.

The *third* step was keypunching followed by further proofreading.

The layout and format of the printout was discussed with the operator of our IBM Center. We obtain the following features by judicious compromise between the ideal and what was technically easy to do: running heads, numbered pages and total cost. The title of the periodical is emphasized somewhat by use of hanging indention for a second line with additional information. We use four-ply $8\frac{1}{2} \times 11$ inch sheets. In this way we get four copies for direct distribution. We plan to printout on hectograph or offset masters for duplication, so that additional copies can be distributed at a later stage.

The output is printed by the IBM 407 Accounting Machine with a control panel specially wired for our project (2). Our outputs at present are:

1. *Master file*. This file also serves as the basic input record and the file is kept in the library.

2. Renewal lists. These are prepared by sorting by departments and by vendors. The lists are prepared twice a year in four copies: a) in April for the July-June subscriptions, and b) in September for the January-December subscriptions. About 90% of our subscriptions expire either in December or in June; the rest must be handled as "exceptions."

3. Alphabetical company-wide list of subscriptions handled by the library; and

4. Departmental lists of titles and dollartotals of the subscriptions for each department to provide for administrative control and budget planning. These are also produced twice a year in four copies.

Additional lists can be produced on any of the fixed fields in the master file on request, for example, by expiration date, vendor, etc. All changes—additions, deletions, serial numbering, and corrections—are initiated and implemented by the librarian.

Equipment

The company's IBM Center has only simple equipment: a 407 electronic accounting machine, a 514 reproduction punch, an 083 sorter, and two 026 printing keypunches. These machines make possible the recording and subsequent duplicating, sorting, merging, updating and printout of information from the input record card. Supplementary equipment required for this project was a panel board and its wiring that had to be purchased separately. The $8\frac{1}{2} \times 11$ inch fourpart sheets had to be ordered separately, since they were not already stocked by the Center.

Cost

As a rule, a new system is expected to be better and more economical than the one it replaces. However, it is extremely difficult to compare an old manual system with a new mechanized one, for two main reasons. The cost of the old system (which frequently does not do the job adequately) is usually unknown, and machine systems do not simply replace existing manual systems. Machine systems generally do more and different things-we hope more efficiently-and provide more dependable records (1). Such was the situation in our case. The cost of implementing the new system (because it was an experimental pilot project) was relatively high. On the other hand, it has to be taken into consideration that most of this work was a one-time cost and that the maintenance and operation costs of the new system for the basic operations would not be higher than the old. At the same time the pilot project served as a learning experience for all those involved in the work.

Some approximate costs for some phases of the work and equipment in man-hours and dollars are:

Cleansing the old	
records	2 man-weeks
Transcription of	
the old records	
onto coding sheets	
and proofreading	2 man-weeks
Initial keypunching	
and proofreading	
(includes setting	
up the drum of	
the keypunch)	10 man-days
Wiring of the	
panel board	2 man-weeks
Paper supply	
for one year	\$15
Panel board	\$30
Machine time per year	10–15 hours

SPECIAL LIBRARIES

Summary

The pilot project was started in the Summer of 1965 and became operational in April 1966. The new system is basically a mechanized version of the old manual system. It is compatible with possible conversion to computer operations in the future. It is a wholly in-house operation, because the planning, design, and implementation were done by our own staff. It is just the first step for a more comprehensive automation project in the future.

One of the benefits derived from machine methods is the production—as by-product—of previously unknown statistical data concerning the library (2); for example, the number of journals, total amounts paid to vendors, total amount paid for all journals, and the amount spent for journals by departments.

With the manual system, subscription orders and renewals required as much as four weeks a year because of the re-typing of the same information as often as three times. With the new system the information is recorded once and is handled over and over again mechanically. Added benefits are the accurate and up-to-date listing of subscriptions, and the overall accuracy of the serial record. Considerable clerical time has been saved, but because all mechanized systems require constant changes, expansion, and improvement, systems maintenance is a permanent activity.

We did not discard the manual method immediately; both systems were operated simultaneously for about six months. After that time we felt sufficiently secure to discontinue the old system. As to the new one: it serves our purpose well; and it works. Further, and perhaps more important, it enables us to move more confidently toward further mechanization, with in-house knowledge of some of the problems involved, and less unintelligent dependence on outside assistance. The important point is to start and to gain experience, and not, we feel, to wait for some millennial "total systems" approach founded in ignorance and likely (it *has* happened) not to work.

Acknowled gements

Without valuable advice from Dr. Theodore C. Hines (Columbia University) we would not have been able to start our mechanization project. In addition, thanks are due to Peter Scopelliti, the company's IBM Center operator, the keypunch operators and members of the library staff who wholeheartedly and enthusiastically shared the burden of the pilot project.

Literature Cited

- 1. DeGennaro, Richard / The Development and Administration of Automated Systems in Academic Libraries. *Journal of Library Automation* 1:75–91 (Mar 1968)
- Pizer, Irwin H. / Mechanization of Library Procedures in the Medium-sized Medical Library. I. The Serial Record. Bulletin of the Medical Library Association 51:313-338 (Jul 1963)
- 3. Wilkinson, W. A. / A System for Machine-Assisted Serial Control. Special Libraries 58:149–153 (Mar 1967)
- 4. Jackson, Ivan F. / An Approach to Library Automation Problems. *College and Research Libraries* 28:133–137 (Mar 1967)
- 5. Melcher, Daniel / Automation: Rosy Picture and Cold Facts. *Library Journal*, 93:1105–1109 (Mar 1968)

Received for review Jan 30, 1969. Accepted for publication May 25, 1969.

Miss Szigethy is chief, Library & Reference Services, Radio Free Europe, which is a privately operated radio network broadcasting to Bulgaria, Czechoslovakia, Hungary, Poland and Rumania.

Miss Fibblesworth, Doctors, Bedpans and Such

Ralph W. Lewis

ESSA Research Laboratories, Boulder, Colorado 80302

-Why do I yield to that suggestion

Whose horrid image doth unfix my hair . . . ? —Macbeth 1:3

THE "image" problem affects me, personally, in a way that is probably more common today than a few years ago, but is nevertheless irritating. You see, I am a sixfoot-two, 230 pound weakling. Everytime I meet someone for the first time they inevitably ask me, "What do you do for a living?" And then I have to tell them, ". . . Uh, I'm a librarian and I work for ESSA. . . ." After I have explained what ESSA* is, the next task is to overcome the astonishment that my chosen profession engenders. I have been mistaken for a wrestling coach, for a prizefighter, for a salesman, for anything but a librarian.

This is one reason why the articles that I read about the "image" disturb me. The other reason is more important and more disturbing, because I derive great satisfaction from being a librarian and consider the profession to be as important, as worthy and as deserving of respect as any other. I am astonished more at librarians' opinions of librarians than of other people's opinions of me. In fact, it is even a little embarrassing at times. After the initial shock of seeing a librarian like me, people expect me to know more about almost anything than I do know. It is often necessary to fake vast knowledge of things in order not to destroy their confidence. If only librarians thought as much of me!

That is, this happens with people other than doctors, lawyers and professors, who are the apparent heroes of worship for a substantial number of our peers. What we are not appears to be more important than what we are.

It is a little ridiculous, do you not think, that a hulk like me should be subject to an image association with our archtype, "Miss Fibblesworth, that Anglo-Saxon persimmon?" (2) But I am not sure whether the embarrassment should be mine or hers. How would you react to a comparison with me? Besides, many of the Miss Fibblesworths with whom I have been associated strike me as being singularly intelligent and capable. Of course, they are not as fetching as Miss Tiparillo (4, 7) but they are likely to have more "upstairs"—certainly, a different kind of "capability."

That I should claim to be a member of a group, typified in the minds of many by Miss Fibblesworth, does not drive me to despair. My irritation stems from the reaction of my fellow librarians (including many who resemble the fair Miss F. themselves) to being associated with her. Our troubles stem, not from her image, but from our image of our-

^{*} ESSA stands for Environmental Science Services Administration, an agency of the U.S. Department of Commerce.

selves. Miss Fibblesworth is, after all, a better image, by far, than Professor Snarf of many college newspapers, than Mr. Shyster, the medieval lawyer of the funnies or the "quack" image of the doctor whose only interest is in his patient's pocketbook. Even the minister comes out second best in a comparison. So, why all the fuss about the "image"? She's nice. She's helpful. She's not nearly as sour as we pretend.

Let's be open and aboveboard. We are jealous of the other professions. We say, "If only I could be like them." But by acting like them we do not become like them. This is more especially so if, while we act the desired part, we berate our own inferiority.

Our status, whatever it is, comes from the nature of our job and its importance to those whom we serve (3). Unless what we do can actually be described as such, all our wishing and proclaiming will not make us a "profession." And what Miss Fibblesworth looks like is hardly relevant at all. Not looking like her is only a minor criterion for professional status. To make the grade we may have more serious obstacles to overcome. Some do not think we are a profession, nor do they think we will ever be (3). Does it matter much? Should we mold our activities by the need for them or by some desired image we have set as our goal? Doctors, after all, used to be barbers, as well, in the not too distant past. Their status is derived from what they do (there are some funny looking doctors, too). Our status is, and will be, molded the same way.

Are we a profession? I think so. That Professor Snarf and Mr. Shyster do not is only of passing interest to me. (I don't think *doctors* worry much about *our* status.) The image I project comes from my self-confidence, or lack of it, and my bulk—I do have an advantage there. The esteem I am accorded comes from my ability to do my job and its importance to those who make use of what I do. And, I submit, my esteem, my salary, my value and that of my profession have all risen dramatically in the dozen years I have called myself a librarian. (Alas, my bulk must also be included here among those dramatic rises.)

That is not to say that our profession's self-flagellation is undeserved or for no cause. We have not nearly met the challenge of the times. It's true that our professionals do the work of clerks, but their responsibilities are professional, nonetheless. Our methods have not kept pace with possible improvement. We are being seriously challenged by others who are convinced that they can do our jobs better than we can. Our education is woefully behind. The other difficulties that we blatantly bellow to the world are all too very true. But don't blame Miss Fibblesworth for it all. She has had precious little to say about how our profession has developed. We, who do not exactly fit the "image," bear more responsibility than she.

And let's not worry about the doctor and his bedpan (1). The doctor has his problems and challenges, just as we. He'll rise still higher or fall back depending on how he meets them, the same as we. We need to concentrate on our challenge, not our image. If we meet it, our image will improve.

Of course, the way others see us is important---to our ego, certainly---but more so



Received Apr 14, 1969. Mr. Lewis was library director of the Boulder Laboratories Library, which serves the ESSA Research Laboratories in Boulder and across the country as well as the NBS Boulder Laboratories. He is now chief of the library branch, NASA Ames Research Center, Moffett Field, Calif. 94035.

NOVEMBER 1969

to the service that we give. We are entrusted with our work and respected for doing it to a large degree by the confidence that others have in us. This has always been true. This confidence, or lack of it, results more from how well we do the job than by how our collective silhouettes compare with those of others in the better recognized professions. We are not doctors, we are not lawyers, we are not exactly teachers (some of us do not teach at all), and many of us are not professors. Why should our profession look like theirs? If all "professions" must look the same, then we will never make the grade. Is it so terribly important? Is it not sufficient that we have a vital function to perform and that its importance in our modern world increases every hour? Is it not sufficient that the demand for our service is rising sharply and bringing to us "professional" status, or something very like it? This is not happening, however, because we have been active in complaining about the "image." The change has come about mostly by the increase in the amount of information and the increase in the need for it. The need for us has increased proportionately, but not because of our efforts. The "image" remains the same despite the change in circumstance, because we have not seized the challenge as we should. We are being pushed, rather than leading in the change.

If we were to change our standards according to image and not allow any to remain within the profession whose visages fit within the silhouette of Miss Fibblesworth, and if we were to set the range of accepted shapes between mine and that of Miss Tiparillo, the challenge would still be there. Shapes have no necessary relationship to the challenge. The "image" is important, but not as important as the number, length and intensity of the comments found in almost every issue of our professional journals might lead us to believe.

It is a little ridiculous, do you not think, that a hulk like me should be subject to an image association with Miss Fibblesworth? But, considering the low esteem in which other librarians hold us both (and themselves) I am not sure whether the embarrassment should be mine or hers.

Bibliography

- 1. Sass, Samuel / Stamping Machines and Bedpans. *Library Journal* 94: (no. 2) 127 (Jan 15, 1969)
- Weatherford, John / Cause or Effect? *Library Journal* 91: (no. 17) 4588 (Oct 1, 1966)
- 3. Goode, William J. / The Librarian: From Occupation to Profession. *ALA Bulletin* 61: (no. 5) 544–55 (May 1967)
- 4. Moon, Eric / Tiparillos and Hacksaws. Library Journal 92: (no. 2) 1879 (May 15, 1967)
- 5. Richardson, Bernard E. / Last One in Bed's a Librarian. *Library Journal* 91: (no. 18) 4904-07 (Oct 15, 1966)
- 6. Weatherford, John / The Image's History. *Library Journal* 91: 3664-65 (Aug 1966)
- Shera, Jesse / Playgirl of the Western World. Wilson Library Bulletin 42: (no. 5) 529 (Jan 1968)

1970 SLA Salary Survey

Your questionnaire will reach you in January 1970. Less than ten minutes will be needed for your answers. The results will be more significant if all Association members complete the questionnaire.

sla nervs

New Florida Chapter SLA's 37th Is Installed

Almost 100 persons participated in the installation of the Florida Chapter on Sep 27. Luncheon was at the Statler Hilton Inn, Orlando, during the fall meeting of the Association's Board of Directors. SLA President Robert W. Gibson installed the new Chapter's officers; and the president of the Chapter, Bernard L. Foy, presided.

Dr. Harry A. Poole, Director of Information Systems, Florida Technological University, was the speaker at the Chapter's afternoon meeting held on the FTU campus.

Officers of the new Chapter are: president, Bernard L. Foy, assistant director of libraries for readers service, Florida Technological University, Orlando; president-elect, Mrs. Marguerite Wurster, assistant librarian, Extension Library, University of South Florida, St. Petersburg; secretary, Mrs. Eileen M. Hall, librarian, Florida Institute of Technology, Melbourne; treasurer, Mrs. Mary D. Carmichael, chief librarian, Naval Training Device Center, Technical Library, Orlando. Directors of the Chapter are: Elizabeth Eaton, assistant librarian, Health Center Library, University of Florida, Gainesville; Alice V. Neil, librarian, School of Finance and Business Administration, Rollins College, Winter Park; and Dr. Martha Jane K. Zachert, associate professor, School of Library Science, Florida State University, Talla-



hassee.

Serious advice on "How to Run a New Chapter" from SLA President Gibson to Florida Chapter President Foy as Bob Isaacs, librarian of the Orlando Sentinel-Star listens.

Actions by the Board of Directors Sep 25–27, 1969

AFIPS—The Board endorsed the recommendation of SLA's Representative to AFIPS that the AFIPS Board be requested to establish a Library Automation Committee. SLA is now represented on the following AFIPS Committees: Information Dissemination, Public Information, Social Implications, and Education. Establishment of an AFIPS Library Automation Committee will provide a better mechanism for more effective communication between the library community and the other sponsoring societies of AFIPS.

Committee on Committees-In its continuing effort to construct a coordinated framework in which Standing Committees can concentrate on large programs, the ConC presented a series of recommendations for the redefinition of some Committees, the revision of the names of some, and the dissolution of others. In its studies ConC has considered Committees to be in three categories: 1) Association-oriented (that is, operational); 2) Association and its Members; and 3) Association and Other Organizations. The major changes proposed were in the second category which encompass relations between the Association and its members. The changes approved by the Board will be reflected in Committee appointments for 1970/71.

Academy of Management Book Awards Committee—Notification has been received from the Academy that its nominating procedures have been changed. Nominations now are encouraged only from publishers and members of the Academy. Therefore the SLA Board authorized discontinuance of this SLA Committee.

Scholarship Event in Montreal—The scholarship event at the Blue Bonnets Raceway earned \$1,512 for the SLA Scholarship Fund. The 1969 event is the last to be sponsored by the Metals/Materials Division which initiated this annual fund raising activity at Conferences. In the future the scholarship event will be the responsibility of the Conference Committee.

1970 Detroit Conference—Registration fees for the entire Conference were set at: \$20 for advance registration, \$25 at the Conference, and \$30 for non-members. Daily fees will be: \$10 for members, and \$12 for nonmembers. These fees are in line with those of other professional organizations.

1971 San Francisco Conference—The host Chapter's recommendation for the Conference theme was approved: *Design for Service* —Information Management.

Continuing Education—The Education Committee submitted an evaluation of the 1969 Seminars on Continuing Education for Librarianship. The report is presented in this issue of *Special Libraries*. The Board ap-

The Board has called a Special Meeting of the members on Jan 30, 1970. The purpose of the meeting is to approve a new statement of objectives for the Association. The Special Meeting is called by the Board of Directors by authority of the Bylaws (Article VI, Section 2). The meeting will be in Atlanta at the Regency Hyatt House during the Winter Meeting of the Board and Advisory Council. A notice of the Special Meeting and additional information will be mailed to all members in conformity with the Bylaws (Article VI, Section 3). See also *Special Libraries* 60:386 (Jul/Aug 1969).

proved the Committee's recommendations that the seminars continue to be conducted and that the Committee continue to seek feedback about its educational activities.

Research Committee—The Committee has analyzed the potential role and scope of Association involvement in research. The analysis differentiates between *levels of responsibility* and *levels of participation*. The levels of each ladder are considered in a decreasing order of direct responsibility by SLA. The Board approved the Committee's recommendation that 3% of the Association's dues income be budgeted for research projects.

Placement—The minimum salary for "Positions Open" in the classified ads in *Special Libraries* was raised by the Board from \$7,000 to \$8,000. The Placement Policy Committee's recommendation was based on the national trend toward higher salaries for librarians.

As a result of discussions in Montreal by the Committee and in the Advisory Council, the Committee recommended that the appropriate level of activity at HQ should be an "Employment Clearinghouse" rather than a "Placement Service." Discussions with representatives of the U.S. Employment Service and the Canadian Department of Manpower and Immigration indicated that a clearinghouse activity can be handled as a clerical activity. The Board asked the Executive Director to indicate in Jan 1970 as to how this recommendation can be implemented.

SLA/ASIS Merger Discussions—SLA President Robert W. Gibson had been advised of the Jul 24 action of the ASIS Council. ASIS President Joseph Becker reported to Mr. Gibson that the ASIS Council voted to proceed with the second phase of discussions as follows:

- 1) to constitute a new Joint Committee consisting of the past, present, and future Presidents of ASIS; and to ask SLA to do the same in number and kind;
- to request the Joint Committee to develop implementation plans for alternative patterns of affiliation which can be ratified by both societies; the first

dealing with *merger*, and the second with *federation*; and

 to report back to the ASIS Council and the SLA Board within a three to six month period.

Mr. Becker also indicated that the ASIS Council "decision to proceed this positively was based on the understanding we would be working toward a *Society for Information Science* to embrace the revitalized aims of both ASIS and SLA."

SLA's Board of Directors voted to accept the three points presented by the ASIS Council. Further discussions will be continued by the new joint committee:

	SLA	ASIS
President	Robert W. Gibson, Jr.	Joseph Becker

President-Elect Florine Oltman Charles P. Bourne

Past President Herbert S. White Robert S. Taylor

Petition Received for Amended Membership Requirements—A petition to amend the Bylaws was received by the Board; the petition was signed by the number of voting members of the Association required by the Bylaws (Article XV, Section 2). The Board referred the petition to the Advisory Council for its discussion in Jan 1970. Copies of the petition have been mailed to Council members for discussion with their constituent units before January.

Chapter & Division Allotments—The Board approved allotments at the same rate as in the past year. The allotment to Chapters will be \$3.00 per member per year, and the allotment to Divisions will be \$2.00 per member per year. The 15 months, Oct 1969—Dec 1970, are the transition period to change the Association's fiscal year to coincide with the calendar year. Therefore allotments for this 15 month period will be \$3.75 per member for Chapters and \$2.50 per member for Divisions.

General Fund Budget—The Board approved the budget (page 612) for the 15 month transition period from Oct 1, 1969 to Dec 31, 1970. Beginning in Jan 1971 the fiscal year will coincide with the calendar year.

General Fund Budget (Summary) Oct 1, 1969–Dec 31, 1970

Expenses			Income		
Salaries & Wages	\$	148,400	Dues & Fees	\$	227,400
Employee Benefits		18,200	Periodicals (Net Income)		
Office Services*		42,000	Special Libraries		(-13,250)
Occupancy Costs†		37,600	Scientific Meetings		5,600
Audit, Legal, etc.		7,100	Technical Book Review Inde	ex	8,125
Travel‡		8,800	Conference (Net Income)		30,000
Chapter & Division			Non-Serial Publications		
Allotments		51,250	(Transfer from NSP Fund)		4,400
Member Services**		10,200	Interest & Dividends		9,400
Public Relations ^{††}		14,600	Miscellaneous		1,250
Salary Survey (1970)		12,000	Income for General Fund	\$	272,925
Systems Implementation		3,700	mediae for General Fund	Ψ	272,725
	\$	353,850			
Less Reduction of Costs for Overhead of Funds	¥				
and Programs	_	(-37,200)			
Expenses of General Fund	\$	316,650	Expenses of General Fund	- ((-316,650)
			Anticipated Excess Expenses over Income for 15 months		(-44,725)

* Includes telephone, postage, stationery, duplicating & equipment maintenance.

+ Includes rent, electricity, janitor & insurance.

Includes travel of President, President-Elect & staff, plus expenses for meetings of Board and Council. ** Includes Committees, Sustaining Members & ballots.

++ Includes Promotional Materials, Recruitment, Consultation Service & Scholarship Program.

Additional Committee Reports 1968/69

Statistics Committee*

In Jun 1968 the Library Administration Division of the American Library Association was funded by the U.S. Office of Education to develop a national plan for library statistics.

In Aug 1968 the chairman of the SLA Statistics Committee attended a meeting at the U.S. Office of Education which was concerned with the ALA project implementation and a need for the coordination of this project with another Office of Education contract at the University of Pennsylvania, Warden School of Economics, for a systems analysis to develop a library in information science statistical data system. As an outgrowth of this meeting and further discussion with David C. Palmer (State Library of New Jersey), chairman of the LAD Statistics Coordinating Committee, the SLA Committee chairman was requested to serve as committee consultant and to prepare a position paper to represent the special libraries interest in the national plan.

The SLA President was formally requested in Dec 1968 to make this appointment and approval of the appointment was made after a brief discussion at the SLA Midwinter meeting in Jan 1969.

A draft position paper was prepared and mailed to the Committee members for comment on Mar 18. This draft has also been submitted to the ALA Statistics Coordinating Committee. This draft and other position and overview papers will be made a part of the preliminary presentation of the national plan at the ALA conference in Atlantic City in Jun 1969.

SLA Committee members in general approved the draft and particularly the draft's emphasis on the importance of identifying user needs before the start of any extensive data-gathering program.

A U.S. Office of Education supplementary grant is being sought by the American Library Association to support final editorial work on the plan during the summer and fall 1969.

LOGAN O. COWGILL

^{*} This report should be added to those in the Sep issue of Special Libraries.

CHAPTERS & DIVISIONS

Boston—In September the Chapter visited the new Faxon Building in Westwood, Mass. The use of the IBM 360/40 was described in Faxon's automated serials records for more than 30,000 periodicals.

The Boston Chapter has joined NECHIPS, the New England Clearinghouse of Information Processing Societies.

Greater St. Louis—On Dec 2 the Chapter will visit the St. Louis City Art Museum. Other meetings for 1969/70 are scheduled for Feb 3 and Apr 9, 1970.

Illinois—The Chapter's annual "Bosses' Night" in September inaugurated the programs for 1969/70. Jory Graham, author of the current best seller *Chicago: An Extraordinary Gnide*, described the writing of a guidebook.

Indiana—Papers of a conference held at Purdue University (Oct 4–5, 1968) are now available. The conference was jointly sponsored by the Chapter and by the Purdue University Libraries. The 71 page publication is available for \$3.50. Payment must accompany order; make checks payable to Indiana Chapter, SLA. Send orders and checks to: Mrs. Theodora Andrews, Pharmacy Library, Purdue University, Lafayette, Indiana 47907.

Minnesota—Definitions of a special librarian were considered by a panel at the Oct 15 meeting. A joint meeting of the Minnesota Chapters of SLA and ASIS on Nov 19 will hear Robert Hayes (UCLA) speak on the topic, "What Is ASIS?" The Samanisky puppets and a Christmas buffet will give a holiday flavor to the Chapter's Dec 19 meeting.

New York—On Oct 21 the Chapter participated in the observance of the twenty-fifth anniversary year of United Nations. The host of the meeting at the Dag Hammarskjold Library was the library's deputy director, Dr. Joseph Groesbeck.

New York's Documentation Group—A two day seminar will be sponsored by the Group in early December. The seminar will consider current applications of mechanization in documentation. Write: Richard Luxner, IBM Research Library, T. J. Watson Research Center, P.O. Box 218, Yorktown Heights, N. Y. 10598.

New York's Social Science Group—On Dec 10 the Group will visit the new Graduate Center and Library of the New School for Social Research.

New York Chapter's Technical Science Group-The 5th Annual Symposium cosponsored by the Group, the ASIS Metropolitan New York Chapter and the Association for Computing Machinery was held on Saturday, Sep 20. Concurrent seminars in the morning considered Management Information Systems, a Generalized Information System, the Effect of the Computer on User Environment, and Library Applications of Third Generation Computers. The afternoon seminars were concerned with Elements of Programming Languages; PL/1; File Organization; and Large Scale Data Banks in the Humanities, Social Sciences and Education.

Oklahoma—The summer meeting in Ponca City on Jul 25 heard first-hand reports of Montreal presented by members who attended the SLA Conference.

Philadelphia—An all day visit to Millersville State College on Oct 25 also included Amish Cooking, a pretzel bakery and shoo-fly pie. The meeting on Nov 13 is a joint meeting with the Delaware Valley Chapter of ASIS; a panel will consider the proposed SLA/ASIS merger. There will be a social meeting on Jan 6, 1970.

Virginia—The Chapter met during the Virginia Library Association Conference with VLA's Special Libraries Section. The Oct 25 workshop was titled "Orientation of User and Management to Microforms." The November meeting will be the Chapter's first "Bosses' Night." A one-day "Institute on Communications" is planned for Mar 1970.

Chapter Visits

President Gibson and President-Elect Oltman have completed their Chapter visits for 1969/70. Mr. Gibson visited:

North CarolinaSep 11 in RaleighSouth AtlanticOct 8 in AtlantaAlabamaOct 10 inBirminghamBirminghamGreater St. LouisOct 15 in St. LouisSouthernOct 17 in Knoxville

Miss Oltman visited:

Cincinnati, Cleveland and Dayton at a Regional Meeting of the Ohio Chapters Indiana Michigan Wisconsin Illinois

Oct 17 in Cleveland Oct 19 in Lafayette Oct 23 in Detroit Oct 24 in Milwaukee Oct 28 in Chicago

New TBRI Editor



The masthead of the Sep 1969 issue of SLA's *Technical Book Review Index* has already announced its new editor, Albert F. Kamper. Mr. Kamper succeeds Anthony Martin as *TBRI*'s editor in the publication's thirty-sixth year.

Al Kamper is a graduate of Duquesne University (Pittsburgh) with a major in mathematics and minors in physics and philosophy. In addition to his MLS from the University of Pittsburgh, he has earned additional credits in his further studies of information retrieval at Pitt.

TBRI's new editor is head of the book order office at the Carnegie Library of Pittsburgh. He has been associated with the Carnegie Library since 1959; as a page and then clerical assistant in the library's Allegheny Regional Branch, and as a library trainee in the Central Library's Science and Technology Department. Mr. Kamper was librarian of Carnegie's Science and Technology Department from 1965 to 1967 when he was appointed to his present position. Mr. Kamper is a resident of Pittsburgh; he is married to the former Julie M. Mangold.

Anthony Martin has resigned as editor of *TBRI* after thirteen years of service, because of his appointment as director of the Carnegie Library of Pittsburgh.

Technical Book Review Index is a selection-evaluation tool for new technical books published in the United States and abroad. Pertinent sections are quoted from selected reviews appearing in more than 2,500 scientific, technical, and trade journals. It brings together information otherwise scattered through specialized trade and technical periodicals. *TBRI* is unique in its coverage of reviews intended for specialists. Abstracts of reviews of more than 1,300 new books are compiled each year from the trade and technical publications received in the Science and Technology Department of the Carnegie Library of Pittsburgh.

SLA has published *TBRI* since 1935; it is published monthly except July and August. The subscription price is \$15 per year in the U.S. and Canada; add \$1 postage elsewhere. Subscription orders must be addressed to SLA, 235 Park Avenue South, N. Y. 10003.

Nominating Committee Report: Candidates for 1970/71

A slate of candidates for office has been presented to the Board of Directors. All candidates have accepted nomination. (Note that there is an automatic succession from the office of President-Elect to President and from Chairman-Elect to Chairman of the Advisory Council.)

President

Florine A. Oltman Air University Library Bibliographic Branch Montgomery, Alabama 36112

President-Elect

William K. Beatty Northwestern University Archibald Church Medical Library 303 E. Chicago Ave. Chicago, Illinois 60611

Efren W. Gonzalez Bristol-Myers Products Scientific Division 1350 Liberty Avenue Hillside, New Jersey 07207

Chairman, Advisory Council

Keith G. Blair General Dynamics Convair Division Library P.O. Box 12009 San Diego, California 92112

Chairman-Elect, Advisory Council

Mrs. Jeanne B. North Information General Corp. 999 Commercial St. Palo Alto, California 94303

Dr. Martha Jane K. Zachert The Florida State University School of Library Science Tallahassee, Florida 32306

Treasurer (1970/73)

Bettie Jane Dougherty Port of New York Authority 111–8th Ave. New York, N.Y. 10011

Janet M. Rigney Council on Foreign Relations 58 East 68th St. New York, N.Y. 10021

Director (1970/73) Helen E. Loftus Eli Lilly & Company Business Library P.O. Box 618 Indianapolis, Ind. 46206

Miriam H. Tees The Royal Bank of Canada P.O. Box 6001 Montreal 3, P.Q., Canada

Director (1970/73) John P. Binnington Brookhaven National Laboratory Upton, N.Y. 11973

Theodore D. Phillips Queens University Kingston, Ontario, Canada

Present members of the Board who will continue to serve in 1970/71 are: Robert W. Gibson as Past President; Rosemary R. Demarest and Burton E. Lamkin (Directors 1968/71); Edythe Moore and Loyd R. Rathbun (Directors 1969/72).

Further nominations, accompanied by written acceptance of the nominee, may be entered by petition of 25 voting members and shall be filed with the administrator of Association Headquarters at least four months before the Annual Meeting. The last day to receive written nominations is Feb 10, 1970.

> Moira Jones Cartwright, W. Roy Holleman, Gordon E. Randall, Winifred Sewell; Ruth Nielander, Chairman

Continuing Education for Librarianship

Evaluation of SLA's 1969 Seminars

Martha Jane K. Zachert

Mary Lou Stursa

FOR the first time in SLA history structured opportunities for continuing education were offered to the membership at the 1969 Conference in Montreal. The Education Committee planned and presented four concurrent seminars. The instructors of these seminars were working special librarians who planned the details of their courses on the basis of the Committee's guidelines.

It was the plan of the Committee to limit attendance to 35 persons per seminar; three seminars, however, were oversubscribed. Two of these were therefore divided into two sections each, and two additional instructors were obtained who followed the prepared outlines with the extra groups. The instructor for the third oversubscribed seminar preferred a different methodology, that of retaining all participants in a single group, but utilizing an assistant for discussion leadership. The paid enrollment, totaling 227 persons, was distributed among the seminars as follows:

Seminar	1.	Personnel Administration	31
Seminar	2.	Planning the Library	
		Facility	55
Seminar	3a.	Problem Publications	38
Seminar	3Ь.	Problem Publications	36
Seminar	4a.	Basic Principles of	
		Management	33
Seminar	4b.	Basic Principles of	
		Management	34

The Education Committee wished as complete an evaluation as possible of its initial attempt to provide continuing educational experiences for SLA members. The major questions to which answers were sought were: How relevant for working librarians were the choices of topics for study? How well were the courses planned? How well were the courses presented? Secondarily, the Committee was also concerned with the question: Has the management of the continuing education seminars, including their publicity, cost, and physical arrangements, been satisfactory? The purpose of all parts of the evaluation is to enable the Committee and the SLA Board of Directors to make decisions about the continuance of such learning experiences. Therefore, specific suggestions as well as answers to these general questions were sought.

Two methods were used to obtain evaluation data. First, to obtain the reactions of the participants, a questionnaire was used. This questionnaire-rather longer than usually desirable, but with specific objectives for each part-was mailed to all participants following the Conference. Sixty-seven per cent of the questionnaires were returned in usable condition for analysis. Second, observers were assigned to each seminar for the specific purpose of providing feedback from an objective, nonparticipatory point af view. For the role of observer, faculty members of graduate library schools were selected. Their primary responsibility was to comment on the adequacy of the learning situations created by the Committee and the instructors and on the quality of the teaching. One observer was called home before the seminars began and a last minute substitution had to be made. Observer reports were received, however, from six observers. In addition, the Education Committee chairman and the Committee member responsible for the evaluation of the seminars visited each seminar while it was in session.

Relevance and Scope of Topics for Study

In responding to questions each participant and each observer reacted only to the course he experienced. Totals would therefore be meaningless. Suffice it to say that participants in all except one seminar found their course topics to be generally relevant. Participants in two seminars felt the scope of their courses to be entirely appropriate, but participants in the other four seminars felt that their courses, though acceptable, could have had a better defined scope for coverage in a one day meeting.

The evaluation of the seminars was planned by Dr. Zachert, who also edited the statistical analysis, added the interpretation and wrote the final report. Mrs. Stursa made the tabulation and provided the statistical analysis, including supervision of the computer tests of significance of the data.

Approximately one-fourth of the participants in one seminar judged both the relevance of the topic and the scope of the course as inappropriate. The observers, on the other hand, felt that all topics were too broad in scope and that the relevance of the topics studied vis a vis the prior knowledge of the participants could be improved. Though no statistically significant generalizations emerged from the data, the Education Committee can be guided in the future by many of the specific suggestions. It seems safe to say, for example, that most people prefer depth study of narrow topics rather than superficial coverage of broad topics.

Apropos of the relevance of the topics offered as continuing education seminars, it is important to know to whom they appeared relevant. Information was requested from each participant about the number of years he has been in his present position and the number of years he has been in the profession of librarianship. Interestingly, 79% of the participants responding have been in the profession more than six years. Forty per cent of the participants responding have been in their present positions more than six years, 39% have held their present positions 1-3 years, and 20% from three to six years. It would seem these seminars appealed to experienced librarians, especially to those of less than three years or more than six years tenure in their present positions.

Organization of Course Content

Satisfaction with the organization of the content matter within the courses was high, more than 50% of the respondents from each seminar expressing complete satisfaction. In four of the seminars 72-76% of the respondents expressed complete satisfaction. With one exception, the observers' opinions were in agreement with those of the participants.

Effectiveness of Presentations

It was the intention of the Committee that the presentation of the course material should be made in two stages: 1) a preparation kit sent in advance to each registrant for a seminar, and 2) the materials and activities of group study during the one day seminar. For various reasons the use of preparation kits did not work out as planned. Members of two groups received no preparation kits. Members of the other four groups received some preparation materials, but generally less than was anticipated by the Committee. About half of the respondents felt these materials were satisfactory for their stated purpose. The other half of the participants in these groups, and the observers, felt the material received fell short of its potential.

Responses to questions about the effectiveness of instructors, materials and group activities has resulted in valuable information for guidance of the Education Committee for future courses. The specific comments of both participants and observers are especially useful in this regard.

Management of the Seminars

Many of the questions relating to the management of the seminars went unansweredthough whether from the length of the questionnaire or for some other reason it is impossible to know. In general, it seems safe to say that the registration brochures were considered easy to read and adequately descriptive of the courses as presented. Most participants had little difficulty deciding for which seminar to register, though quite a few expressed hope that the same topics will be repeated as they have specific choices for another year. Twothirds of the respondents felt they got their twenty dollars worth in information and inspiration. Half of the respondents to the questionnaire answered a question about a \$50 two-day seminar; 80% of this half expressed interest. Only one individual expressed interest in a \$100 two-day seminar.

The response to questions about the physical facilities clearly show appreciation of attention to creature comfort, as well as the fact that, given a certain number of people engaged in certain defined activities, completely satisfactory arrangements can be made.

Future SLA Education Seminars

A majority of those who attended the 1969 seminars felt they were a valuable addition to the usual Conference activities; they would be willing to pay the cost for the privilege of attending similar seminars in the future. Apparently the idea of the seminars or the topics offered in 1969 appealed mostly to individuals who have been in the library profession for more than six years. These individuals were not reticent about making suggestions for the future. More than 20 specific topics for future seminars were suggested, along with many specific suggestions relating to materials, characteristics of instructors and management of the seminars. One interesting suggestion was that SLA issue attendance certificates suitable for the personnel file of each individual registrant in recognition of his participation in the seminar. Clearly, the seminars filled a need for these SLA members; continuing education is an activity they will support.

MEMBERS IN THE NEWS

Susan Barrick from librarian, Virginia Institute for Scientific Research . . . to librarian, Virginia Institute of Marine Science, Gloucester Point. Miss Barrick was the recipient of an SLA Scholarship for 1966/67.

Adepu Bikshapathi to assistant law librarian, Mercer University, Macon, Ga. Mr. Bikshapathi, an SLA Scholarship winner for 1968/69, received his MSLS from North Texas State University.

Edward I. Boniface, president-elect of SLA's Upstate New York Chapter, has joined the General Electric Research and Development Center as an analyst/programmer in GE's Finance Operation. Since 1966 he has directed the library automation project at Rensselaer Polytechnic Institute.

Mrs. Concetta Mazzarino from Hackensack Hospital library . . . to assistant librarian for technical processes, New Jersey College of Medicine and Dentistry, Newark, N. J.

Mrs. Carol Vogel Scrivens from the University of Pittsburgh Graduate School of Library and Information Science . . . to librarian of Booz, Allen & Hamilton, Inc., management consultants, in New York.

Winifred Sewell, chief of the Drug Literature Program, NLM, has been elected president-elect of the Drug Information Association for 1969/70; Miss Sewell was SLA's President in 1960/61. Walter A. Southern, head of Science Information Service, Abbott Laboratories . . . elected treasurer of DIA.

Mrs. Teresa Townsend from American Bankers Association, Washington, D. C. . . . to director of Information Services, Bank Public Relations and Marketing Association, Chicago.

Jeannette Yates received ALA's John Cotton Dana Publicity Award for the U.S. Naval Weapons Station library (Yorktown, Va.) for the publicizing of the diversified library activities—from technical personnel to the needs of families living on the base.

Mrs. Virginia Boucher, head of Interlibrary Loan Service, University of Colorado (Boulder) was director of the Institute for Interlibrary Loan Librarians, Oct 13–17. Speakers included: Maryann Duggan (Southern Methodist University), Phoebe Hayes (Bibliographical Center for Research, Denver), Russell Shank (Smithsonian Institution Libraries), and Mrs. Margaret D. Uridge (University of California, Berkeley). Resource discussion leaders included: Jack M. McCormick (ESSA, Boulder) and Jack Key (Lovelace Foundation for Medical Education and Research, Albuquerque).

618

Boniface



SLA Authors

Andrews, Theodora. What Services the Library Can Offer Its Faculty. American Journal of Pharmaceutical Education (Dec 1968)

Baatz, Rosemary. Optometric Extension Program Foundation Postgraduate Courses. Subject and Name Index, 1947–1957. Duncan, Okla., Optometric Extension Program Foundation, Inc., 1969. 42p.

Barensfeld, Thomas. Mysteries of the Rue "Morgue": Push-Button Library System Set Up for Cleveland Press. *Scripts-Howard News* 23: (no. 11) 3-6 (Aug 1969)

Burns, Jr., Robert W. Using the Literature on Wildlife Management. p.13-45 in *Wildlife Management Techniques.* 3d rev. ed. by Robert H. Giles, Jr. Washington, D. C., The Wildlife Society, 1969.

Burns, Jr., Robert W. and Mosby, Henry S. Developing and Maintaining a Small Personal Reprint Library. p.47–51 in *Wildlife Management Techniques*. 3rd rev. ed. by Robert H. Giles, Jr. Washington, D. C., The Wildlife Society, 1969.

Havlik, Robert J. The Library Services Branch of the U.S. Office of Education; Its Creation, Growth and Transformation. In *Library History Seminar No. 3. Proceedings. 1968.* Martha Jane K. Zachert, ed. Tallahassee, Fla., Florida State University School of Library Science [1969]

Havlik, Robert J. Nova University's Libraries— A New Approach to Education. *Florida Libraries* 20: (no. 1) 9–11 (Mar 1969)

Klempner, Irving M. A Unified Curriculum for Information Science. College & Research Libraries 30: (no. 4) 335-41 (Jul 1969)

Kortendick, James J. and Stone, Elizabeth W. Highlights of a Study on Federal Librarians and Post-MLS Education: A Preliminary Report. DC Libraries 40: (no. 4) 71-76 (Fall 1969)

SPECIAL LIBRARIES

<u>vistas</u>

Information Hang-Ups

Reactions to DDC and CFSTI Information Services

The free document distribution service by DDC (Defense Documentation Center) to defense contractors and government agencies was changed on Jul 1, 1968, so that hard copies (paper copies) were priced at \$3.00 each. Microfiche copies would be supplied at "no charge." New problems developed, some of a transient nature and some that are still considered to be bottlenecks in the flow of important information.

During the summer of 1969—one year after the policy change—representatives of about 25 libraries of organizations in the Greater Washington, D. C. area met, discussed and studied their common problems. They represented heavy users of the DDC and CFSTI services. A user survey questionnaire plus five committee studies investigated SDI categories, abstract bulletins and indexes, acquisitions procedures, etc.

The results and recommendations of these studies were presented to administrators of DDC, CFSTI and NASA at a meeting in Washington on Sep 23, 1969. The studies were presented to initiate communications, and as a positive step toward mutual cooperation. The discussions between the special librarians present and the agency administrators were vigorous.

Perhaps, no one should be surprised that the agency administrators still feel that librarians speak for themselves rather than for the technical community which they serve. After more than a quarter of a century of document distribution problems, it appears that the agency administrators feel that the technical community is a satisfied user of their products. A blind spot continues to gloss over the obvious—that the complaints of librarians represent a distillation of the complaints of the technical community served by the librarians.

Reports of the Sep 23 meeting indicate that responsible personnel in DDC and CFSTI still persist in their hardened position that TAB* and USGRDR* are "announcement bulletins" intended for technical users, and are not retrospective search mechanisms for librarians. It is hard to believe that a librarian would undertake a retrospective search without having anxiety-laden technical personnel waiting for the documents relating to their bid proposals. At the conclusion of the meeting, there were indications that there would be another study by CFSTI regarding the use of USGRDR to discover whether it is being used as a retrospective searching tool!

The present DDC document pricing procedure requires payment to CFSTI rather than directly to DDC. This cumbersome—for the customer—procedure was reportedly defended on the basis that operational costs and delays would be the same whether DDC or CFSTI handles the billing of user charges. This time delay is reputedly only 12–24 hours. Responsibility for the delays in filling DDC or CFSTI orders was pointed toward the usual absentee scapegoat—the U.S. Post Office Department.

Whether the constructive dialog between user and distributor—that had been hoped for—was achieved will be shown only by developments in the immediate future.

Reports of the summer-long activities leading to the Sep 23 meeting do not show any signs of involvement by SLA's Government Information Services Committee.

> PAULA M. STRAIN Bethesda, Md. 20014

^{*} Technical Announcement Bulletin and U.S. Government Research and Development Reports.

HAVE YOU SEEN?



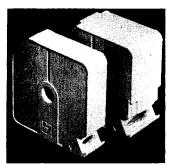
A small punched card $(3!/4'' \times 25/8'')$ is one of the new features of IBM System/3. Although the card is about one-third the size of the well-known 80-column cards, the new card can hold 20% more information. The compact System/3 requires only 150 sq. ft. of floor space. Rental of the punched card version starts at \$945 per month; rental of the direct access disk storage system begins at \$1,325 per month. Programming for the new system is done in an English-like language, RPG II. (IBM Data Processing Division, 112 E. Post Rd., White Plains, N.Y. 10601)



The Lee Music Chamber is essentially two "Infinite Baffled" speaker systems formed into a partially enclosed lounge chair. To a listener seated in the chair, the apparent acoustic level is substantial enough to effectively isolate him from the environment. From outside the chair, a casual listener hears stereo at "background music" power levels. The outer shell is a fiber glass hollow wall construction. Inner walls of the listening chamber are lined with 2" latex foam upholstered with heavy nylon fabric. Write: Kinney Advertising, 439 S. La Brea Ave., Inglewood, Calif. 90301.



A portable microfilm densitometer is palmsize and self-powered with a standard 9 volt battery. The Model PD-8 reads transmission densities in the range of 0.0–3.0 density units. Write: Atlantic Microfilm Corp., Spring Valley, N.Y. 10977.



Compatible interchangeable cartridges for 16mm and 35mm microfilm have been announced. A simple converter, which may be attached to most viewers without the use of tools, adapts roll film equipment to these cartridges. Write: Information Design, 3247 Middlefield Rd., Menlo Park, Calif. 94025.



Semi-active and inactive records can be stored in corrugated file boxes, that can be stored flat when empty. No taping or stapling is required to set up the "Miracle Boxes" available in three sizes: letter/legal, longfellow, and ledger. For information: The Paige Co., 432 Park Ave. South, N.Y. 10016.



The Bravo Collection of the Library Division of Myrtle Desk Company is available in either walnut or traditional maple. A unique attachment of the legs to the extreme outside edges of corners eliminates the need for stretchers or aprons. Write: Myrtle Desk Company, P.O. Box 1750, High Point, N.C. 27261.



Ruled forms, charts, etc. can be prepared quickly with the "Speed-Ruler." Parallel lines can be constructed without calculations or measurements; and mimeograph or hectograph stencils and offset masters can be prepared. Write: Professional Aids Co. (L52), 1 N. Wacker Dr. (Suite 400), Chicago 60602.



Permanent protection with "delayed" adhesive action is available for book covers and

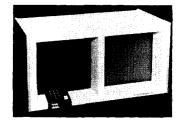
other flat surfaces. It is claimed that the transparent film can be adjusted until a permanent bond sets after 6 to 24 hours. It is stocked in widths from $9\frac{1}{4}$ " to $37\frac{3}{4}$ " and in three lengths (40, 200 and 400 inches) by the Evans Specialty Co., Inc., P.O. Box 4220, Richmond, Va. 23224.



A Computer Output Microfiche reader has been developed for computer-generated microfiche. The micro-images are projected at $42\times$, showing an entire 132 character line on the $11\frac{1}{2}'' \times 15''$ viewing screen. Although the NCR 456-942 COM Reader was designed for $4'' \times 6''$ microfiche, it can be adapted to $6'' \times 8''$ fiche. For information: NCR Industrial Products Division, 3100 Valleywood Dr., Dayton, Ohio 45429.



"Compac" ceiling system supplies light, heat, conditioned air and acoustical control. Glare-free, high level illumination with low brightness is achieved by use of 3/16" thick prismatic lenses molded from Plexiglas. The ceiling system is composed of 5-foot square modules that include the 3-foot square regressed lighting elements. "Compac" is marketed by the Day-Brite Lighting Division of Emerson Electric Company, St. Louis, Mo. An ultramicroform reader is combined with a computer display terminal in a single console with automatic keyboard retrieval controls. The computer display (CRT) at the left of the console is optional. For additional information: Microform Data Systems, Palo Alto Office Center (Suite 1507), Palo Alto, Calif. 94301.



LETTERS

COM Computer-Output-Microfilm

I find that there has been a typographical error in the final printing on page 436 (Special Libraries, Sep 1969) of my article on "New Developments in Photoreproduction." The word "Onto" in the phrase "Computer-Output-Microfilm" has been substituted for the word "Output." My reference to the phrase "Computer-Output-Microfilm" is the NMA Glossary of Terms for Microphotography and Reproductions Made from Microphotography and Reproductions Made from Microimages. Compiled by Donald M. Avedon. 5th ed. Annapolis, Md. 21404, National Microfilm Association (P.O. Box 386). In press.

The definitions shown on p.436 of my article have been circulated widely within the National Microfilm Association with the purpose of acceptance as standard definitions. Members of the NMA Standards Committee are concerned with the choice of terms quickly adopted without general agreement and resulting in confusion among users. We have seen the following terminology

REVIEWS

An Introduction to Computers in Information Science. Artandi, Susan. Metuchen, N.J., The Scarecrow Press, Inc., 1968. 145p. \$4.00 (LC 68– 12643)

Dr. Artandi, associate professor of library service, Rutgers University, has produced a basic review of information science and the computer role in librarianship which should be read by all who feel that they have not yet grasped understanding in these areas. The presentation is in four parts: a definition and overview of information science and technology; theories of document organization; explanations of computer hardware and software; and representative machine applications.

The presentation is easily read because of its clear presentation. No reader should fail to understand because of the lack of some specific disused loosely in print, "Computer-Originated-Microfilm" and "Computer-Onto-Microfilm". These phrases have not been accepted as standard.

After circulation and discussion within the industry some modification of this terminology has been made and will appear in the glossary and also in the published NMA Informational Monograph No. 4. I am citing the revised version for the information of SLA members.

What does COM mean?

- 1. Computer *Output* Microfilm: microfilm containing data, produced by a recorder from computer generated electrical signals.
- Computer Output Microfilmer: a recorder which converts data from a computer into human readable language and records it on microfilm.
- 3. Computer *Output* Microfilming: a method of converting data from a computer into human readable language onto microfilm.

Loretta J. Kiersky SLA Representative to NMA

cipline, like mathematics, as so often happens in other similar "basic" texts. The illustrations, consisting of flow charts, examples of index outputs, schema of hardware parts, etc., are most helpful, except for two reduced KWIC pages which are difficult to read.

In the opinion of this reviewer, Chapter 3, "Computer Hardware and Software," is one of the finest basic discussions of the binary number system, input/output media, printers, storage devices, time-sharing and programming language available for the true layman.

If there is any person reading this review who feels that he still lacks a fundamental understanding of the computer and its role as another tool of librarianship, a careful reading of this book should correct that lack.

> George Agar New York, N. Y.

Recommended Practice for the Protection of Library Collections from Fire. Boston, National Fire Protection Association, 1969. 32p. Available from NFPA, 60 Batterymarch St., Boston, Mass. 02110 as NFPA No. 910. \$0.75.

An empirical lesson learned after the cataclysmic fires that followed the San Francisco earthquake in 1906 has been overlooked many, many times. Fire prevention experts continue to have their own hang-up in their dependence on water to put out fires. Fire can be selfextinguishing under certain circumstances of construction that are of particular importance to special libraries.

Several days after the S.F. earthquake, the secretary of the Pacific Gas & Electric Company pressed the palm of his hand to the outer surface of the still locked door of his company's main vault. The outer surface of the door was still quite hot as a result of the fire that had destroyed the company's main office building. Other officers of the company waited impatiently for the vault to be opened so that the company could get on with its business. The secretary was resolutely obstinate. The vault, containing the company's primary records, was not to be opened until two weeks after the door and walls of the vault were no longer warm to the touch.

Officers of other companies—whose vaults had also survived the disaster intact—were equally anxious to resume their operations. Without hesitation they opened their vault doors. They saw their records and ledgers in orderly arrays in their vaults, but only momentarily. Fresh air with its combustion-supporting oxygen rushed ino the opened vaults. The papers—still hot—glowed, burst into flames, and collapsed into piles of ashes. Vault after vault became a columbarium of corporate ashes as fresh oxygen flooded through the open doors into contact with the hot paper.

Water sprinklers would *not* have saved the day. The city's water supply had been destroyed by the earthquake. The contents of the vaults had survived the conflagration of the city because they were relatively air-tight. The first partial combustion of their contents had produced carbon dioxide which had smothered the burning process. Unless new oxygen supplies were admitted, no further burning could occur regardless of the temperature.

The obstinacy of PG&E's hero was soundly based on the simple chemistry of burning. Paper, wood or any organic material can burn only if there is an adequate supply of air with its oxygen to support combustion. And burning cannot occur below a critical temperature. Understandably, insurance companies have become skittish about their losses from fires in libraries. There is validity in some of the recommendations; for example, the structural defects of multistory steel stacks where structural collapse of the loaded metal stacks can and does occur during high temperature fires.

But, librarians must be even more skittish of the totality of recommendations that are promulgated without appropriate participation of the library community. Why was there no real representation on the NFPA Committee from the real losers, losers by both fire damage and water damage?

The significance of the report of the NFPA Committee must be viewed in terms of the affiliations of its 14 members. There was only one librarian (university) who, according to the NFPA record, did not cast a vote. The other committee members included a deputy fire chief, representatives of a state division of fire safety, two insurance organizations, four organizations interested in the sale of protection equipment, three museums (but not museum libraries), a historical association, and a chemical company (apparently, a manufacturer of adhesives and paper coatings).

Regardless of how the report is read, there is only one fundamental recommendation: the installation of water sprinklers. Lip service is given to systems that smother fires with carbon dioxide—this presumably because one committee member represents a trade association whose members sell carbon dioxide.

Although examples of destructive fires are almost always those in university or public libraries, special libraries may already be the unconscious pawns when their parent organizations negotiate renewals of their fire insurance coverage. Many special libraries with their relatively small stack areas, with their security vaults, or areas of controlled access are ideal for non-sprinklered detection systems.

A peculiar hang-up among the old-time fire experts, who are still in control, requires that open flames or high temperatures set off an alarm and that water sprinklers gush forth. Why must we wait for open flames? There are proven smoke detection systems and temperature-rise detection systems that do not require massive temperatures. Modern technology has moved past the bucket brigade. Why are there no recommendations for the installation of systems that will detect smoldering conditions before active burning occurs?

The total destruction of books and archival records by saturating them with water is no less permanent than destruction by fire. Sophomoric statements about the ease of drying drenched books casts serious doubt on the total technical competence of the committee. The abyss that separates the committee from the realities of library preservation is emphasized by the report's Appendix, "Salvage of Wet Books." A credit line indicates that the Appendix is "adapted" from articles in the Wilson Library Bulletin and in the Saturday Review.

The ultimate in fairy tales appears in listing the use of a centrifuge to remove water from a wet book: "One *(sic)* instance is reported of a large book being dried thoroughly after 20 hours of spinning at 190°F." Does your friendly insurance company have 10,000 such high temperature centrifuges to fly to your library after a drenching—or 1,000 or 100, or *even* one centrifuge?

Equally fascinating is the sprinkling of "sawdust between the pages of a book to aid air

PUBS

BIBLIOGRAPHY

The Function of Bibliography. Roy Stokes. London, Andre Deutsch, 1969. 174p. \$5.95. (Available from British Book Centre, Elmsford, N.Y.)

BIBLIOGRAPHIES

Serial Bibliographies in the Humanities and Social Sciences. Richard A. Gray and Dorothy Villmow, comps. Ann Arbor, Mich., Pierian Press, 1969. xxiv,345p. \$14.95.

American Dissertations on the Drama and the Theatre: A Bibliography. Frederic M. Litto. Kent, Ohio, Kent State Univ. Press, 1969. ix, 519p. \$12.50.

Filmed Books and Plays: A List of Books and Plays from which Films have been made, 1928-1967. A. G. S. Enser. N.Y., London House & Maxwell, 1968. 448p. \$11.50.

Historical Sets, Collected Editions, and Monuments of Music: A Guide to their Contents, 2d ed. Anna Harriet Heyer, comp. Chicago, Am. Libr.Assoc., 1969. xiv,573p. \$25.

The Library Journal Book Review 1968. N.Y., R. R. Bowker Co., 1969. 806p. \$12.75, U.S. & Canada; \$14, elsewhere.

Reading Round the World: A Set of Internal Reading Lists Compiled by Members of the International Federation of Library Associations. circulation." Alcohol is also reported to be effective in removing residual moisture. But, "the alcohol should be patted on only, because rubbing may smear printing inks." (Perhaps, a dry martini over sawdust is the prescription of choice for any librarian who has "friends" such as these.)

The NFPA Appendix which gives a factual aura to experiments is a misleading document. It can be a dangerous document for the librarian or administrator without some smattering of technical matters. It could even be unethical in the hands of a salesman of protection equipment or in the hands of insurance representatives who do not understand the problems of preservation of library materials.

One can wonder why has there been no representation from the Council of National Library Associations, for example, or from the Library Technology Program. FEMCK

Frank Gardner and M. Joy Lewis, eds. Hamden, Conn., Archon Bks., 1969. 260p. \$4.50.

The Lee Max Friedman Collection of American Jewish Colonial Correspondence Letters of the Franks Family (1733-1748). Leo Hershkowitz and Isidore S. Meyer, eds. Waltham, Mass., Am. Jewish Hist.Soc., 1968. xxxv,171p. \$10. Studies in Am. Jewish Hist., no. 5.

CATALOGING & CLASSIFICATION

The Catalog and Cataloging. Arthur Ray Rowland, ed. Hamden, Conn., Shoe String Press, 1969. xvi,344p. \$9. Contributions to Libr. Lit. no. 8.

Cataloging U.S.A. Paul S. Dunkin. Chicago, Am. Libr.Assoc., 1969. xxii,159p. \$5.

Classification for International Law and Relations, 3d ed. Kurt Schwerin. Dobbs Ferry, N.Y., Oceana Publications, 1969. 130p. \$6.

Klassifikationssysteme und Thesauri: Eine Anleitung zur Herstellung von Klassifikationssystemen und Thesauri im Bereich der Dokumentation. Dagobert Soergel. Frankfurt am Main, Germany, Deutschen Gesellschaft fur Dokumentation, 1969. 224p. DM 28.50.

A Programmed Course in Cataloguing and Classification. London, Andre Deutsch, 1969. 132p. \$4.95. (Available from British Bk. Cen., Elmsford, N.Y.)

COMPUTER APPLICATIONS

British Commercial Computer Digest, 10th ed. Published for and on behalf of Computer Consultants Limited. London & Elmsford, N.Y., Pergamon Press, 1969. approx. 302p. \$24.

Conceptual Design of an Automated National Library System. Norman R. Meise. Metuchen, N.J., Scarecrow Press, 1969. viii,234p. \$5.

MARC Manuals Used by the Library of Congress. Prepared by the Information Systems Office, Library of Congress. Chicago, Am.Libr.Assoc., Info.Sci. & Automation Div., 1969. 347p. pap. plastic spiral bind. \$7.50.

The MARC Pilot Project: Final Report on a Project Sponsored by the Council on Library Resources, Inc. Henriette D. Avram, ed. Washington, D.C. Library of Congress, 1968. 183p. \$3.50. (For sale by Supt. Docs.)

Who Is Related to Whom in the Computer Industry, 3d ed. Published for and on behalf of Computer Consultants Limited. Oxford, England & Elmsford, N.Y., Pergamon Press, 1969. 324p. \$24.

DIRECTORIES

American Men of Science, 11th ed. The Physical & Biological Sciences, Suppl. 5. Jacques Cattell Press, ed. N.Y., R. R. Bowker Co., 1969. x,785p. \$25, in U.S. & Canada; \$27.50, elsewhere.

Directories of Government Agencies. Sally Wynkoop and David W. Parish, comps. Rochester, N.Y., Libraries Unlimited, 1969. 242p. \$8.25. (P.O. Box 9842, Rochester, N.Y.)

1969 Directory of National Trade and Professional Associations of the United States. Washington, D.C., Columbia Bks., 1969. x,169p. pap. \$7.95.

INDEXING

Indexes and Indexing: Guide to the Indexing of Books, and Collections of Books, Periodicals, Music, Recordings, Films, and Other Material, 3d rev. ed. Robert L. Collison. Tuckahoe, N.Y., John De Graff, 1969. 223p. \$6.95.

LIBRARIES & LIBRARIANS

Building Library Collections, 3d ed. Mary Duncan Carter and Wallace John Bonk. Metuchen, N.J., Scarecrow Press, 1969. xii,319p. \$7.50.

The Career of the Academic Librarian: A Study of the Social Origins, Educational Attainments, Vocational Experience, and Personality Characteristics of a Group of American Academic Librarians. Perry D. Morrison. Chicago, Am.Libr.Assoc., 1969. viii,165p. pap. \$4.50. ACRL Monog. no. 29.

Carnegie Libraries: Their History and Impact on American Public Library Development, George S.

November 1969

Bobinski. Chicago, Am.Libr.Assoc., 1969. xiv, 257p. \$8.

The Government and Control of Libraries. K. A. Stockham. London, Andre Deutsch, 1969. 110p. \$4.50. (Available from British Bk. Centre, Elmsford, N.Y.)

Interlibrary Loan in New York State: A Report Prepared for the Division of Library Development of the New York State Library. Nelson Associates. N.Y. (Nelson Associates, 845 Third Ave., N.Y. 10022), 1969. xxvi,294p. pap. plastic spiral bind. \$10.

Junior College Libraries: Development, Needs, and Perspectives Papers Presented at a Conference Sponsored by the American Library Association, The American Association of Junior Colleges, and the University of California, Los Angeles, June 21-2:4, 1967. Everett LeRoy Moore, ed. Chicago, Am.Libr.Assoc., 1969. xi,104p. pap. \$3. ACRL Monog. no. 30.

Library and Information Services for Management: Papers Presented at a Short Course Held at the School of Librarianship and Information Work at Liverpool College of Commerce in December 1967. K. G. B. Bakewell, ed. Hamden, Conn., Archon Bks., 1969. 130p. \$4.

An Overview of the Library Services and Construction Act—Title 1. Jules Mersel, et al. N.Y., R. R. Bowker Co., 1969. 373p. \$6.95, U.S. & Canada; \$7.65, elsewhere.

On Research Libraries: Statement and Recommendations of the Committee on Research Libraries of the American Council of Learned Societies, Submitted to National Advisory Commission on Libraries, Nov. 1967. Cambridge, Mass., MIT Press, 1969. xix,104p. \$5.95.

Special Libraries and Information Services in India and in the U.S.A. J. Saha. Metuchen, N.J., Scarecrow Press, 1969. iii,216p. \$5.



CARDMASTER, 1920 Sunnyside, Dept. 411, Chicago 40



GRANDE ENCICLOPEDIA PORTUGUESA E BRASILEIRA

40 vols. plus part 2 Brasil vol. 1.

Lisboa 1935-

Cl. \$668.25



offices in LONDON/PARIS/STUTTGART BOGOTÁ/RIO DE JANEIRO

31 East 10 Street/New York, N. Y. 10003

PHILOSOPHY HISTORY AUTOBIOGRAPHIES RELIGION THEOLOGY **EDUCATION** FOREIGN LANGUAGE BOOKS MYTHOLOGY BIBLES

Searching for rare and out-ofprint reference materials? Consider Micro Photo's DUOPAGE book reproduction process. Xerographic copies of original material reproduced on a two-sided printed sheet, resulting in an exact facsimile of the original material. Available bound in quality buckram or soft cover ... shelf ready and durable.

searches for out-of-print books START HERE...



Write for your complimentary copy of DUOPAGE Out-Of-Print Books... with over 6,000 titles to choose from, it's a very good place to start.

WOOSTER, OHIO 44691



Ask about Heckman's 28-day Library Binding Service



... and get this interesting booklet free for the asking!

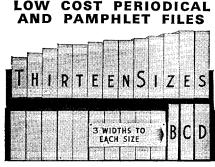
I am interested in: Heckman's 28-day free pick-up and delivery service offered to over 30 states. Heckman's simplified ordering program for Standardized Magazine Bindings. Heckman's Catalog of Paperback Books. Please send my free copy of "The Art of Library Binding." Library

State Zip THE HECKMAN BINDERY, INCORPORATED NORTH MANCHESTER, INDIANA 46502 TELEPHONE (AREA CODE 219) 982-2107 for SPECIAL LIBRARIES • Faxon Librarians' Guide Available on Request • Fast, efficient, centralized service for over 80 years. Library business is our only business! • F. W. FAXON CO., INC. 15 Southwest Park Westwood, Mass. 02090 Continuous Service To Libraries Since 1886

Expert Service on

MAGAZINE SUBSCRIPTIONS





Sturdy—Attractive—Unique ALL SIZES SAME PRICE

FREE SAMPLE MAGAFILE sent upon request. You will receive it by return mail along with handy size-chart and additional details. No obligation or salesman follow-up.

Magafiles sell themselves



SPECIAL LIBRARIES

City

Research and Microfilm Publications

One of the most ambitious data-gathering efforts of recent years has been the program of the U.S. Joint Publications Research Service (USJPRS) to provide government agencies with significant and otherwise unavailable material from foreign sources.

These sources include scholarly works, research papers and documents, articles from leading newspapers, magazines and journals, economic and industrial reports, conference proceedings, and commercial statistics.

The material, selected by both government and private research specialists, covers the full spectrum of the social and physical sciences, political affairs, economics, medicine, international relations, and all aspects of engineering and technology.

All of this material is available to non-governmental educational, research and industrial organizations. Its current volume amounts to approximately 1,000 pages of translations per working day—more than one quarter million pages a year.

Through RESEARCH AND MICROFILM PUBLICATIONS, CCM Information Corporation offers the only comprehensive indexing, microfilm and microfiche services to the entire output of USJPRS material. Issued monthly to subscribers, the RMP Bibliography-Indexes to Current USJPRS Translations is organized into four geographic areas: China-Asia, Eastern Europe, the Soviet Union, and International Developments, which covers Africa, Latin America and the Near East. Each area bibliography contains a detailed listing of the most recent JPRS translations relevant to that area. Corresponding microform of the translated documents is available for each area on a monthly basis. To provide complete access to JPRS translations, back issues of the Bibliography-Index and companion microform files are available for all four geographic areas

RESEARCH AND MICROFILM PUBLICATIONS also publishes more than 750 full-length scholarly books translated by JPRS. Titles cover all the subjects included in the monthly translation service and are now available in Xerox copyflo format—either in paperback or hard cover. A catalogue listing all the book titles and organized by subject and by country can be obtained free from CCM information Corporation. Write for your copy today.

CCM INFORMATION CORPORATION A subsidiary of Crowell Collier and Macmillan 909 Third Avenue, New York, N. Y. 10022

RESEARCH & MICROFILM PU CCM Information Corporation A subsidiary of Crowell Collier and Macmilla 909 Third Avenue, New York, New	Dept. M40
Please send me the RMP catal	og and more information.
NAME	
ŢĮŢĹĔ	
LIBRARY	
ADDRESS	
CITY STA	TE ZIP

Save hours of research time with this unique new reference volume...

The New York Times **Obituaries Index**

an alphabetical cumulation of over 350,000 death listings from The New York Times Index since 1858

This volume begins where other leading biographical references leave off. It locates information about people who were of some prominence, but not necessarily leading historical figures. And these are the ones that give you the most trouble.

Where else in your library could you look up such figures as Mrs. Sigmund Freud (d. 1951)? Or Archbishop Chrysostomos, former Primate of the Greek Church (d. 1938)? Or the colorful Queen Salote of Tonga (d. 1965)?

Each listing in the Obituaries Index consists of the name and the reference (by year, month, day, page and column) to the item that appeared in The New York Times.



Offers an easy starting point for researchers

Provides a supplemental reference source to biographical material

Guides researchers quickly to obituaries of persons whose death dates they do not know

Aids genealogical studies

Available November, 1969. Approx. 800 pages.

Price: \$55.

To order on 30-day approval, write to:

The New York Times/Library Services and Information Division, Dept. SK-0, 229 West 43d Street, New York, N.Y. 10037.

Special Service for Special Librarians

- Worldwide acquisitions and procurement.
- Current Subscriptions.
- Advance Book Information.
- Research sets of periodicals.
- Microforms,
- Service.

Maxwell Scientific International, Inc. Fairview Park, Elmsford, N.Y. 10523 914 592-9141 CABLE: UNIBOOK NEWYORK

AN EQUAL OPPORTUNITY EMPLOYER

Complete composition, press and pamphlet binding facilities, coupled with the knowledge and skill gained through fifty years of experience, can be put to your use—profitably

THE VERMONT PRINTING COMPANY

Brattleboro, Vermont

PRINTERS OF THE OFFICIAL JOURNAL OF SPECIAL LIBRARIES ASSOCIATION

In a world of specialists, does anyone remember the poor generalist?



Specialized indexing services have undoubted value. We know because we publish some of the most elegant ones available anywhere.

But there is also a place and a continued need for a broad-gauged, generalized, multi-disciplinary index that is timely and easy to use. And we publish one of those too—the most comprehensive, up-todate guide in the world to the available literature in the sciences, medicine and technology.

The PANDEX CURRENT INDEX TO SCIENTIFIC AND TECHNICAL LITERATURE, published by CCM Information Corporation, covers 2,400 scientific, medical and technical journals 35,000 U.S. Government Research and Technical Reports, and 6,000 new books annually. It includes appropriate material from the Russian, German, French and Italian literatures. Now, too, it incorporates the complete *Engineering Index* in electronics, giving it even wider scope in an important field. The PANDEX Index is published in printed, bound form every two weeks. All entries are indexed under 6 to 20 different subject headings, making it highly unlikely that the user will miss an important new publication regardless of the key subject word he uses. There is also an author index that provides a complete listing of the principal authors of all the works cited.

Quarterly and annual accumulations to the PANDEX Index are available in microfiche or microfilm. The full contents of the Index are also available on computer tape on a weekly basis, along with complete support programs for printout, retrospective search and SDI (Selective Dissemination on Information). Tape is generated on an IBM 360 and is available in either seven or nine track format; coding is EBCDIC or BCDIC.

For information on weekly magnetic tape service and price schedules on microform write to CCM Information Corporation, or fill in coupon below.

CCM INFORMATIC A Subsidiary of Cro 909 Third Avenue, N	well Collier and	d Macmillan
Send sample cop Send more inforn	nation	nually.
NAME		
TITLE		
LIBRARY		
ADDRESS		
CITY	STATE	ZIP

CCM INFORMATION CORPORATION

A Subsidiary of Crowell Collier and Macmillan, 909 Third Avenue, New York 10022

bound by a principle

Certified Library Binding is based on certain minimum specifications established by members of the Library Binding Institute. In addition to the rigid requirements of these standards, each member is subject to continuous quality control inspections to guarantee satisfaction in your rebound or prebound books.

Every book rebound or prebound by a Certified Library Binder, therefore, has been bound by a principle of craftsmanship which assures more readers per book and less cost per reader.



There are fewer than 60 Certified Library Binders in the United States displaying this seal. It is the stamp of approval given only to Certified Library Binders and is your assurance that your books have been bound according to the standards and principles of the Library Binding Institute. Without this seal, you have no assurance that your books have been truly LIBRARY BOUND. Send today for a list of Certified Library Binders and other informative literature.

Library Binding Institute

160 State Street • Boston, Mass. 02109

PLACEMENT

All Classified Line Ads are \$1.50 per line; \$4.50 minimum. Current members of SLA may place a "Positions Wanted" ad at a special rate of \$1.00 per line; \$3.00 minimum. Copy for display ads must be received by the tenth of the month preceding the month of publication; copy for line ads must be received by the fifteenth.

POSITIONS WANTED

Librarian—Columbia MLS, experienced bibliographer, fluent in seven languages, seeks position Manhattan. Box C-117.

Special Library-Man, 33-1 yr. experience college libs., 3¹/₂ yrs. univ. libs., 1³/₄ yrs. industrial lib. Proficient in Arabic & French. MS & Advanced Certificate in Lib. Sci. Prefers Toronto, Montreal, U.S. (East or West). Box C-118.

Librarian-researcher—Male, MLS, MA, 5 years exp. in every library function. Strong background in information retrieval. Seeks position as librarian or researcher in business or cultural institution. Prefers NYC. Write: Box C-119.

POSITIONS OPEN

Medical Center Library Cataloger-Requires professional degree, experience and/or science subject background. Beginning salary of \$7,500 and up commensurate with experience. Send résumé to Medical Center Library, West Virginia University, Morgantown, West Virginia 26506.

U.S. Geological Survey Library—Invites applications for the position of Chief, Reference and Circulation Section (GS-13: p.a. \$15,812-\$20,555). Candidates should possess broad academic knowledge of earth sciences and extensive geoscience reference experience, demonstrated supervisory and administrative experience. Degree in geoscience plus graduate degree in library science or their equivalents and at least three years of related experience with one year comparable to GS-12 level in Federal service. Incumbent is to develop program providing for full utilization of Survey's collections and formulating policies relative to program development. Supervises staff of 10. Provides technical and policy leadership in reference and circulation to field libraries. Applicants should submit a detailed SF 171 application form. This is a career position in the competitive Federal service. Please submit applications to or request further information from: William A. Ellison, Branch of Personnel, U.S. Geological Survey, Room 1204, GSA Bidg., 18th & F Sts., N.W., Washington, D. C. 20242. Phone: 202-343-9453. The Geological Survey is an equal opportunity employer.

SPECIAL LIBRARIES

Chief Catalog Librarian

Opportunity to head the cataloging section of the National Security Agency Library. Section has 5 to 7 full-time employees; high proportion of original cataloging in technical subjects and foreign languages; LC classification used. Central collection and several branch libraries controlled from union catalog.

Chief cataloger would be key participant in developing an automated library system. MLS and three or more years of supervisory cataloging experience required. Salary, \$11,223-\$13,389. Please send your resume to: Mrs. Lillian P. Gibbs.



An equal opportunity employer

POSITIONS OPEN

Life Science Librarian—Supervision of Life Science Library and four departmental libraries. Requires graduate degree in Library Science, appropriate experience. Full faculty status, generous fringe benefits. Salary open. Send application and résumé to John H. Moriarty, Director of Libraries, Purdue University, Lafayette, Indiana 47907.

Librarian—Psychology and related areas. Educational research organization midtown Manhattan. Specialized collection 7,000 volumes. Salary open. Box C-120.

Transportation Center Library, Northwestern University, has an opening for a cataloger on a professional staff of five. Duties include original cataloging of books, documents and research reports (library-developed subject heading list). The cataloger works under the librarian in charge of technical processes. This is a research library specializing in transportation economics and traffic safety serving the University and the transportation industry. Applicants should have the MLS. Initial salary \$8,500 or substantially more for experience in cataloging transportation or related literature, e.g. business, planning or public administration. Send résumé to Benjamin Jacobson, Librarian, Transportation Center Library, Northwestern University, 1810 Hinman Avenue, Evanston, Illinois 60204.

TECHNICAL LIBRARIAN

We have an excellent opportunity for a Librarian with an M.S. Degree in Library Science, serving approximately 250 Research and Development professional and nonprofessional people in the Niagara Falls, New York area.

Some background in Physical Sciences is desirable, but not essential.

The Research and Development Department, Mining and Metals Division, is located in Niagara Falls, New York, within an area of outstanding cultural, educational, and recreational facilities.

> Send your résumé in confidence to Mr. W. J. Waggoner, P.O. Box 579 Niagara Falls, New York 14302



UNION CARBIDE CORPORATION Mining and Metals

An equal opportunity employer

POSITIONS OPEN

The Oregon State Library—Needs an experienced *Documents Catalog Supervisor*, Librarian 4. Salary: \$8,952-\$11,136. Administrative position and responsibility for coordinating personnel with workload and supervising complete documents cataloging operation under general direction of Head of Documents/Serials Section. Person must have knowledge of library administration, professional library principles, and be able to organize and direct staff. Position requires graduate library school degree and three years of professional experience. Ready access to educational facilities and recreational variety. APPLY: Oregon State Library, State Library Building, Salem, Oregon 97310, Telephone 364-2171 Ext. 308.

Queen's University at Kingston, Ontario-Requires Law Cataloger. Background or degree in Law; experience in law libraries, and Los Angeles County Law Classification very desirable. Position open as Senior Librarian (\$8,000, negotiable). Law Library now has five professional staff, 58,000 volumes, handsome quarters, part of library system of 650,000 volumes, 215 staff, 20 branches. For more information write: Donald A. Redmond, Chief Librarian, Queen's University, Kingston, Ontario, Canada.

Geology Librarian—Princeton University Library. Responsible for administration of branch library covering geosciences and oceanography. Staff of 3. 80,000 volumes plus 60,000 maps. Undergraduate degree in geosciences or marine sciences; MS from accredited library school. Salary: \$8,700. Excellent fringe benefits. Apply to Jay K. Lucker, Associate University Librarian, Princeton University Library, Princeton, N. J. 08540.

University of Illinois at the Medical Center, Library of Medical Sciences, Chicago. Circulation-Reference Assistant, fifth-year library school degree, experience desirable, minimum salary \$8,000, month vacation, retirement system, academic rank, available immediately. Write: Wilma Troxel, Director, University of Illinois, Library of Medical Sciences, 1853 West Polk Street, P. O. Box 7509, Chicago, Illinois 60680. Telephone: 312-663-7332.

Atlantic Richfield Company—Seeks a Librarian to direct Information Services at its Harvey Technical Center, which is the focal point for research and development activities in the Company's Products Division. The Center is located in suburban Chicago. Applicants should possess a Master's degree in Library Science and have a minimum of 3 years related library experience, including administrative experience. An undergraduate degree in Chemistry or Chemical Engineering is preferred and proficiency in information retrieval techniques is highly desirable. Qualified applicants are invited to submit a résumé, including salary history and requirements, in confidence to: Mr. Robert King, Employee Relations Division, Atlantic Richfield Company, Harvey Technical Center, 400 E. Sibley Blvd., Harvey, Ill. 60426. An equal opportunity employer.

THE MARKET PLACE

Free! Two Volume Set of Books in Print (\$21.85 value) to new customers. Write our Mrs. Anne Lacey in the Library Order Dept. for particulars plus our own special free 70 page catalogue of Scientific & Technical Books of All Publishers. Very generous discounts on all technical/scientific publishers. L. H. Gleichenhaus Technical & Scientific Book Company, The Empire State Building, New York, N. Y. 10001.

Back Issue Periodicals—Scientific, Technical, Medical and Liberal Arts. Please submit want lists and lists of materials for sale or exchange. Prompt replies assured. G. H. Arrow Co., 4th & Brown Sts., Philadelphia, Pa. 19123.

Back Issue Periodicals—Scientific, Technical, Bought and Sold. Duplicates purchased or exchanged at Top Market Value. Prompt replies to both Want & Sell Lists. Zeitlin Periodicals Co., Inc., 817 S. LaBrea, Los Angeles, Calif. 90036

National Geographic Magazines 1888-1969, any issue; "Antiques" Magazines 1922-1969. Periodical Service, Box 465-SL, Wilmington, Del. 19899.

Technical Translations—French & German, 7– 10 day service. Highly technical articles, patents, reviews, etc. translated expertly. Direct requests to: Mrs. Barbara Farah, Quick-Trans of Buffalo, 11197 Clinton Street, Elma, N. Y. 14059. Tel. 716-684-7168.

Foreign Books and Periodicals—Specialty: Building Collections. Albert J. Phiebig Inc., Box 352, White Plains, N. Y. 10602.

INDEX TO ADVERTISERS

Bell & Howell, Micro Photo Div 11A				
R. R. Bowker Company Cover IV				
CCM Information				
Corp Cover II, 6A, 13A, 15A				
Cardmaster Company 9A				
Connex Systems Inc 5A				
Ebsco Subscription Services 10A				
Engineering Index, Inc 8A				
The Faraday Press, Inc 1A				
F. W. Faxon Co., Inc 12A				
G. K. Hall & Co Cover III				
The Heckman Bindery, Inc 12A				
Institute for Scientific Information 2A				
Library Binding Institute 16A				
The Magafile Co 12A				
Maxwell Scientific International, Inc. 14A				
The New York Times 572, 14A				
Stechert-Hafner, Inc 10A				
The Vermont Printing Company 14A				

NEW REFERENCE WORKS

Sources for the HISTORY OF IRISH CIVILISATION Articles in Irish Periodicals National Library of Ireland, Dublin

This catalog contains all the articles published in Irish historical, literary and scientific periodicals from about 1800 up to the end of the year 1969. Reviews of books, unless very short, have also been included. The periodicals, selected for indexing on the basis of their value for research, number about 120 and include monthly, quarterly and annual publications and the proceedings and transactions of learned societies. Some of these periodicals have been published continuously for over a hundred years.

Estimated 290,000 entries, 9 volumes

Prepublication price: \$695.00; after July 31, 1970: \$865.00

Catalog of Books and Manuscripts at the KEATS-SHELLEY Memorial House in Rome

This catalog of 7,500 volumes, includes original editions and significant translations of the four poets, John Keats, Percy Bysshe Shelley, Lord Byron, and Leigh Hunt, and works of biography and criticism relating to them.

The catalog also describes the manuscript and memorabilia collection of over 300 letters and personal papers of Keats, Shelley, Byron and their associates.

Estimated 6200 cards, 1 volume

Prepublication price: \$35.00; after July 31, 1970: \$45.00

Dictionary Catalog of the TEACHERS COLLEGE Library Columbia University

The Teachers College Library provides a collection of over 350,000 books, current and backfile periodicals, and a variety of audiovisual materials in the numerous special fields of education and supporting disciplines. The collections include basic reference resources dealing with approximately 200 distinct educational systems in the world; the publications dealing with American elementary and secondary education are exceptionally comprehensive. Also notable is the most extensive collection in the U.S. of educational periodicals published in the U.S.S.R.

Estimated 630,000 cards, 36 volumes

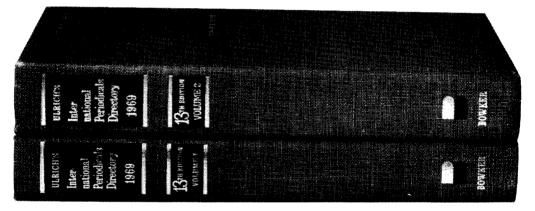
Prepublication price: \$2140.00; after January 31, 1970: \$2675.00

10% additional charge on orders outside the U.S. Descriptive material on these titles and a complete catalog of publications are available on request.

G. K. HALL & CO. 70 Lincoln Street, Boston, Mass. 02111

ULRICH'S HAS INTEGRATED!

New 13th edition, December



ULRICH'S INTERNATIONAL PERIODICALS

DIRECTORY—long a standard among librarians, educators, researchers, publishers, advertisers—now emerges in an all-new, more convenient format.

From now on both volumes of ULRICH'S will be published simultaneously every other year with a comprehensive supplement in between. No more separate volumes devoted to separate disciplines. No more waiting for a second volume to come out. ULRICH'S is now an integrated two-volume set arranged alphabetically according to 223 subjects.

More comprehensive coverage than ever before.

Full information on 40,000 periodicals from all over the world— $\frac{1}{3}$ more than the last edition. Thousands of magazines applicable to more than one subject are crossreferenced—some as many as four times.

Find full name; subtitle; former name; whether a sponsoring organization; languages of text; year first published; frequency of issue; annual subscription price in country of origin; name of editor; name and full address of publisher; whether it carries abstracts, reviews, bibliographies, advertising; format; whether indexed or abstracted.

Outstanding features of the new ULRICH'S.

A brand-new alphabetically-arranged, worldwide listing of new periodicals that have appeared since 1967

A comprehensive, alphabetical index to all 40,000 periodicals, periodicals by their former names if they have changed since the last edition, ceased publications, all 223 subject headings, plus hundreds of cross-references

ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, 13th edition. Edited by Merle Rohinsky. Standard Book Number: 8352-0270-4. LC: 32-16230. Clothbound. Postpaid price: \$34.50 net per two-volume set in the U.S. and Canada; \$37.95 elsewhere. In New York please add applicable sales tax. Ready December.

R. R. Bowker Company 1180 Avenue of the Americas, New York 10036