San Jose State University
SJSU ScholarWorks

Special Libraries, 1969

Special Libraries, 1960s

9-1-1969

Special Libraries, September 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, September 1969" (1969). *Special Libraries, 1969.* 7. https://scholarworks.sjsu.edu/sla_sl_1969/7

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



September 1969, vol. 60, no. 7

Crisis in the University Program Planning & Budgeting Photoreproduction Advertising & Marketing Libraries Information Center Administration

SPLBA 60 (7) 419-500 (1969)

There are two ways to keep abreast of the 20,000 new English Language books that come out each year.

The old way: Read tens of thousands of listings and ads.

The new way: Use the unique Books-Coming-Into-Print Service from Bro-Dart's Stacey's Division.

Books-Coming-Into-Print is a computeroperated advance notification and acquisition program which allows your library to profile its needs in specific disciplines. It gives you notification, continuations, and automatic shipment of books on approval.

This is much more than an approval program.

Our Stacey's Division, the nation's leading academic bookseller, will classify and organize over 20,000 titles a year of interest to your library.

Then there's the matter of our computer and the Thesaurus we provide you with. By using our Thesaurus and your specifications you pin point the exact type of books you'll be interested in, regardless of how broad or narrow your areas of special interest or the academic level desired. By carefully profiling your needs, you'll be receiving books or information about only those publications that would be of special interest to your library. That's the advantage of dealing with a computer.

The Books-Coming-Into-Print Program will provide you with an advance notice card prior to publication for each title which fits your profile. If you, for any reason, don't want the book, all you have to do is return the computerized card. And we won't send you the book. If, on publication, the book is not appropriate to your profile, you will receive a rejection notice with explanation. Of course, all shipments are "on approval."

Remember, you'll be dealing with one source for books from all publishers. The Books-Coming-Into-Print Program applies to all English language books, continuations, and monographs by commercial and non-commercial publishers. In the humanities. Or the sciences.

Then, since you'll be dealing with Bro-Dart, you'll have the option of getting your books with a full variety of supplemental cataloging and processing services.

Since you'll be given advance notice about each new book, the system is compatible with your present way of ordering monographs and continuations.

And what you'll have is an "on order" file which your library can use for ordering, reference, or cancellations.

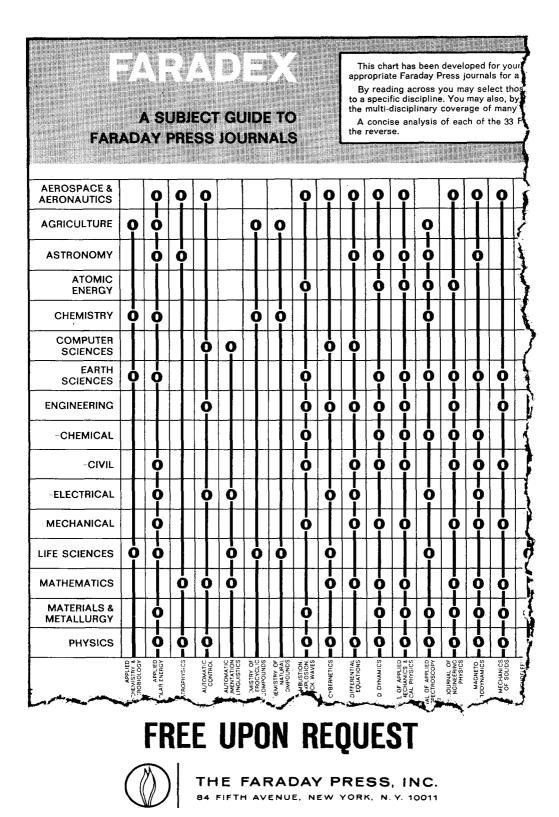
Naturally, your library will receive competitive discounts. Rapid service. And accurate selections.

Much easier than reading all those ads and listings.

For additional information on this exciting new service, write: Dept. SL-9

P.O. Box 923, Williamsport, Pa. 17701 2575 Hanover, Palo Alto, Calif. 94304





What's the difference between the 1967 and 1968 [™]International Directory of Research and Development Scientists?

One year of scientific publishing and about 100,000 new names or addresses.

Research and development scientists are probably among the most mobile groups in our population. Frequent changes in their locale, particularly in the earlier phases of their careers, make it quite difficult to determine their most current address. A scientist may publish an article *here*... and while one is reading it... he has moved off to *there*.

Since 1957, ISI has published weekly Author Address Directories in CURRENT CONTENTS[®], the widely acclaimed current awareness service. Two editions of CURRENT CONTENTS, Life Sciences and Physical Sciences —104 issues published in 1967—served as the base for the first IDR&DS in 1967. The 104 weekly issues published in 1968 were used for the 1968 IDR&DS.™

Unlike most directories which are restricted to a specialized area, IDR&DS covers the entire sweep of science, from experimental and theoretical to clinical and applied. This is possible because CURRENT CONTENTS covers a wide selection of all the world's major journals in a large variety of fields.

The 1968 IDR&DS is not an up-dating device for the earlier 1967 edition. The 1967 IDR&DS represents only scientists who published in the calendar year of 1967. And the 1968 IDR&DS includes all available data only for scientists who published during the calendar year of 1968. Thus, it is conceivable, and likely, that many of the scientists' names and affiliations listed in one edition of the IDR&DS may not appear in the other edition. But should a given scientist publish in 1967 and again in 1968, his most recent affiliation and address will be found in the 1968 IDR&DS.

Each annual IDR&DS is an independent record of that year's publishing authors who are listed as first authors in CURRENT CONTENTS:

1967 Names and complete mailing addresses for 126,055 scientists from 21,487 organizations working in the United States and over 100 foreign countries are represented in over 200,000 articles published in 1,464 journals.

1968 Names and complete mailing addresses for 152,648 scientists from 22,718 organizations working in the United States and over 100 foreign countries are represented in over 225,000 articles published in 1,515 journals.

In the event that a particular name cannot be found in either available IDR&DS edition, it is suggested that one first consult the SOURCE INDEX of the SCIENCE CITATION INDEX[®], a companion publication of ISI. Indeed, placement of IDR&DS alongside the CORPO-RATE and SOURCE INDEXES of the SCI[®] will prove invaluable to the user. Since the SCI SOURCE INDEX contains all authors of a particular article, this will lead simply and rapidly to the first author addresses in the IDR&DS. The SCI SOURCE INDEX will also solve the problem of locating the senior author of a team who always publishes his name last.

Since a number of subscribers to our ISI services are now requesting the 1967 IDR&DS (as well as the 1968 IDR&DS) we are making arrangements to print additional copies of it. If you wish to reserve your copy of the second printing of the 1967 IDR&DS and the new 1968 IDR&DS, phone or write us at Dept. 26-146.

Or, if you've already ordered each annual edition of the IDR&DS, you may wish to enter "a standing order" for subsequent years, which isn't a bad idea at all, since we're already compiling the 1969 IDR&DS that will represent the names and mailing addresses of the scientists and scholars publishing in our five editions of CURRENT CONTENTS during the calendar year of 1969.



Institute for Scientific Information

325 Chestnut Street, Philadelphia, Pennsylvania 19106, USA Telephone: 215/923-3300 Cable SCINFO

special libraries

SEPTEMBER 1969 VOLUME 60, NUMBER 7

SPLBA

Crisis in the U	419	Robert F. Shaw		
Program Planning and Budgetin	423	Willard Fazar		
New Developments in Photorep	roduction	434	Loretta J. Kiersky	
A Look at Advertising and Marketing	437	Elin Christianson Peggy Wolfe		
User Needs and Their Information Center Admi	446	Robert W. Coover		
Moving a Fragmented O	Moving a Fragmented Collection			
New HUD Library459National Engineering Information Conference460New Dimensions in Acquisitions461			SATCOM Forum	461
			Have You Heard	463
			Reviews	467
			Letters	468
		SLA News		
		_		

Members in the News	469	Reports of Committees and		
		Special Representatives 1968/69	473	
Placement	28 A	Index to Advertisers	30a	

NOTE: The 1969 Conference reports are in the July/August issue. The directory of Chapter officers, Division officers, and Committee chairmen that has appeared in the September issue in past years is now included in the SLA Directory 1969/70. This new directory which lists all members as of Jun 30, 1969 is being mailed without charge to all SLA members.

Editor: F. E. MCKENNA

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



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 comunications should include both old and new addresses (with ZIP Codes) and should be accompanied by a mailing label from a recent issue. *Members* should send their communications to the SLA Membership Department, 235 Park Avenue South, New York, N. Y. 10003. *Nonmember Subscribers* should send their communications to the SLA 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.

Today's Journal Articles Are Tomorrow's References. WILEY-INTERSCIENCE Journals Give You Up-to-the-Minute Research Findings and Data —

BIOPOLYMERS, Issued Monthly Subscription Price\$ 70.00 Foreign Postage\$ 3.00 BIOTECHNOLOGY & BIOENGINEERING. Issued Bimonthly, Plus Symposia Subscription Price\$ 60.00 Foreign Postage\$ 4.00 COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS, Issued Bimonthly Subscription Price\$ 20.00 Foreign Postage\$ 2.00 DEVELOPMENTAL PSYCHOBIOLOGY, **Issued Quarterly** Subscription Price\$ 15.00 Foreign Postage\$ 1.00 INTERNATIONAL JOURNAL OF CHEMICAL KINETICS, Issued Bimonthly Subscription Price\$ 20.00 Foreign Postage\$ 2.00 INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY. Issued Bimonthly, Plus Symposia Subscription Price\$ 70.00 Foreign Postage\$ 3.00 JOURNAL OF BIOMEDICAL MATERIALS RESEARCH. Issued Quarterly Subscription Price\$ 25.00 Foreign Postage\$ 1.00 *JOURNAL OF APPLIED POLYMER SCIENCE, Issued Monthly, Plus Symposia Subscription Price\$135.00 Foreign Postage\$ 6.00 JOURNAL OF NEUROBIOLOGY. Issued Quarterly Subscription Price\$ 20.00 Foreign Postage\$ 1.00 *JOURNAL OF POLYMER SCIENCE Part A1 (General Papers, Chemistry), **Issued Monthly** Part A2 (General Papers, Physics), Issued Monthly Part B (General Letters), Issued Monthly

*Information on microfilms available on request.

September 1969

Part C (Polymer Symposia), Issued Irregularly Subscription Price\$325.00 Foreign Postage\$ 15.00
JOURNAL OF RESEARCH IN SCIENCE TEACHING, Issued Quarterly Subscription Price
RESEARCH MANAGEMENT, Issued Bimonthly Subscription Price\$ 10.00 Foreign Postage\$ 1.00
TRANSACTIONS OF THE SOCIETY OF RHEOLOGY, Issued Quarterly Subscription Price\$ 15.00 Foreign Postage\$ 1.00
SCIENCE EDUCATION, Five Issues per YearSubscription PriceForeign PostageSubscription </td
Available from

Available from John Wiley & Sons Ltd., England—

NUMERICAL METHODS IN

ENGINEERING, Issued Quarterly Edited by OLGIERD C. ZIENKIEWICZ, University of Wales; and RICHARD H. GALLAGHER, Cornell University. This new journal deals with the use of the

computer and computer techniques in engineering and related fields. It includes coverage of such subjects as structural analysis, heat transfer, fluid mechanics, network theory; electronics and optimal system design.



WILEY-INTERSCIENCE a division of JOHN WILEY & SONS, Inc. 605 Third Avenue, New York, N.Y.10016 Good References Form The Backbone Of Any Good Library. WILEY-INTERSCIENCE Has The Encyclopedias You Need In The 1970's—

Kirk-Othmer ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY

Second Edition Executive Editor: ANTHONY STANDEN Editorial Board: HERMAN F. MARK (Chairman), Polytechnic Institute of Brooklyn; JOHN J. McKETTA, JR., University of Texas; and DONALD F. OTHMER, Polytechnic Institute of Brooklyn "A necessity for any technical library." —Choice "...a compendium of information on chemical technology that is as near to perfection

ical technology that is as near to perfection as possible . . ."--Nature Volume 18: Shale Oil to Strontium 1969 Approx. 896 pages

Single Copy: \$50.00 Subscription: \$40.00

Volume 19 Available Fall 1969

Mark-Gaylord-Bikales ENCYCLOPEDIA OF POLYMER SCIENCE AND TECHNOLOGY

Plastics, Resins, Rubbers, Fibers Executive Editor: NORBERT M. BIKALES, Consultant, Editorial Board: HERMAN F. MARK (Chairman), Polytechnic Institute of Brooklyn; NORMAN G. GAYLORD, Gaylord Associates, Inc.

"... destined to be *the* definitive reference tool in the polymer field.... An indispensable reference work for special, college and university, and large public libraries."

-Library Journal

Volume 10: Phenolic Resins to Polycarbonates Single Copy: \$50.00 Subscription: \$40.00 Available Fall 1969 Volume 11 Available Fall 1969

Snell-Ettre ENCYCLOPEDIA OF INDUSTRIAL CHEMICAL ANALYSIS

Editor-in-Chief: FOSTER DEE SNELL, Foster D. Snell, Inc.

Executive Editor (Volume 8):

LESLIE ETTRE

Note: Volumes 1-7 of the Encyclopedia were edited by Foster Dee Snell and Clifford L. Hilton. Future volumes will be edited by Foster Dee Snell and Leslie Ettre.

"... a major contribution to the field of reference materials in science"

-Laboratory Management "... This encyclopedia promises to be a standard reference for many years to come." -Record of Chemical Progress

Volume 8:

Bromine to Cements, Mortars and Concrete Single Copy: \$45.00 Subscription: \$35.00 Available Fall 1969

Vinken-Bruyn HANDBOOK OF CLINICAL NEUROLOGY

Edited by P. J. VINKEN, Staff Neurosurgeon, University Clinics, Amsterdam, Consulting Neurosurgeon, Boerhaave, Clinic, Amsterdam.

Executive Chief Editor, Excerpta Medica Foundation; and G. W. BRUYN, Consulting Neurologist, Netherlands Central Military Hospital, Utrecht.

Available Now-

Volume 1:

DISTURBANCES OF NERVOUS FUNCTION (Edited in collaboration with

Raymond Garcin)

1969 701 pages

Single Copy: \$67.00 Subscription: \$57.00

Volume 3:

DISORDERS OF HIGHER NERVOUS ACTIV-ITY (Edited in collaboration with Macdonald Critchley and J. A. M. Frederiks)

1969 443 pages Single Copy: \$35.00 Subscription: \$29.75 Volume 5:

HEADACHES AND CRANIAL NEURALGIAS 1969 414 pages Single Copy: \$36.00 Subscription: \$30.50

Volume 6:

DISEASES OF THE BASAL GANGLIA 1969 889 pages Single Copy: \$77.00 Subscription: \$65.50

Available Fall 1969-

Volume 2:

LOCALIZATION IN CLINICAL NEUROLOGY (Edited in collaboration with A. Biemond) In Press Single Copy: \$63.00 Subscription: \$53.75

Volume 4:

DISORDERS OF SPEECH, PERCEPTION, AND SYMBOLIC BEHAVIOR (Edited in collaboration with Macdonald Critchley and J. A. M. Frederiks)

In press Single Copy: \$44.00 Subscription: \$37,50



WILEY-INTERSCIENCE a division of JOHN WILEY & SONS, Inc. 605 Third Avenue, New York, N.Y. 10016 In Canada: John Wiley & Sons Canada Ltd. 22 Worcester Road, Rexdale, Ontario

Now, From CCM Information Corporation:

The first full, monthly, index to 100,000 of the most important conference papers to be delivered around the world during a 12 month period.

o 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 auth name and the subject heac under which his paper appears

A Conference Data Section (taining the name of the confere its date, location and sponsor, ordering information of prepr reprints, translations, abstract umes, etc. Cumulations will be duced semiannually in printed for The entire project is under the fessional direction of the W Meetings Information Center, wh editors produce WORLD MEET and CALL FOR PAPERS. To help sure the inclusion of every im tant scientific and technical pa a distinguished International visory Board has been appointe assist in selecting all signifi conferences and meetings to covered-some 2,000 a year.

In time—often a year or morevast majority of these papers find their way into the journal lit ture in their fields.

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

	XX
	ntroductory offer—save 10% on monthly issues for first 12 issues
A SL	bsidiary of Crowell Collier and Macmillan Ihird Avenue, New York, New York 10022
	ter my subscription for the following:
	Current Index to Conference Papers in Chemistry (monthly) at the pre-publication price of \$67.50 (regularly \$75 a year).
	Semi-annual cumulations (2 issues) \$25 a year.
	Current Index to Conference Papers in Engineering (monthly) at the pre-publication price of \$85 (regularly \$95 a year).
	Semi-annual cumulations (2 issues) \$35 a year.
	Current Index to Conference Papers in Life Sciences (monthly) at the pre-publication price of \$81 (regularly \$90 a year).
	Semi-annual cumulations (2 issues) \$35 a year.
	Special combination price for all three publications (without cumulations) \$235
	Title
ame stitution	

ORDER FORM

A new plan to build your newspaper holdings at far below normal microfilm subscription prices!

Start your balanced collection of newspapers on microfilm, or build, inexpensively, on existing collections with the Micro Photo Library Edition Plan . . . an excellent opportunity to receive continuing subscriptions of leading American newspapers on microfilm, specially tailored to meet the needs of libraries, educators and researchers.

We make a long story short by refilming the newspaper to: • delete remake pages • eliminate large advertising sections • save space in tabloid section filming • save cost

And, as a result . . . provide you with a valuable reference and historically complete film copy of these newspapers at far below the individual subscription price charged for a copy of the microfilm as prepared for the publishers' record.

These newspapers are read daily by 8,110,370 people throughout the nation. They should be in your reference files. ACT NOW . . . while the substantial Library Edition savings are in effect.

For as little as \$760. you add these six newspapers to your microfilm reference collection with new Library Editions plan

Brochure explaining the Library Editions Plan available on request.



LIBRARY & EDUCATIONAL RESEARCH DEPARTMENT OLD MANSFIELD ROAD • WOOSTER, OHIO 44691

PACKAGE NO. 2 — SIX COMPLETE LIBRARY EDITION NEWSPAPERS

Desides Deskage

	Subscription Price Price (all six)
The Wall Street Journal	\$ 75.00
The Charlotte Observer	175.00
The Detroit News	363.00
Rocky Mountain News	
of Denver	170.00
The Washington Post	275.00
The Des Moines Register	105.00
	\$1163.00 \$760.00
	SAVINGS\$403.00

Newspapers from the Library Edition Package No. 1 are still available at Library Club savings ... send for brochure describing: • The Miami Herald • •The Cleveland Press • Daily News (New York) • San Francisco Examiner •• Arkansas Gazette (Little Rock)

THE WALL STREET JOURNAL

der Witt

The Washington Post

The Charlotte Observer

The Bes Moines Register

The Detroit News

BOOKS IN PRINT 1969 Val 1	BOOKS IN PRINT 1969 wc.a	SUBJECT CUIDE TO BOOKS IN PRINT 1969 Va.1 AJ	SUBJECT GUIDE TO BOOKS IN PRINT 1969 VE."	the publishers' trade list annual 1969	the publishers' trade list annual 1969	the publishers ¹ trade list annual 1969	the publishers' trade list annual 1969
				A-Di	Do-Kene	Kenn-R	s-z
				# O W L E S			

PRF-PUB AND STANDING ORDERS FILLED FIRST. RESERVE THE 1969 EDITIONS TODAY FOR FALL DELIVERY.

BOOKS IN PRINT 1969. Complete ordering information on 275.000 inprint books from 1900 U.S. publishers. Includes 50.000 new titles. Separate author and title indexes. The title index includes a directory of all known U.S. publishers. Standard Book Number: 8352-0267-4. Postpaid price for the two-volume set: \$21.85 net in the U.S. and Canada: \$24 elsewhere, November,

SUBJECT GUIDE 1969. Indexes 210,000 in-print LIST ANNUAL 1969. Four titles according to 37,-000 Library of Congress to-handle size—the same subject headings-with size as BOOKS IN PRINT 43.000 cross references. Helps you track down lists of more than 1900 books on nearly every conceivable subject popular or obscure. Standard Book Number: 8352-0268-2. Postpaid price for the two-volume found in a publisher's set: \$19.25 net in the U.S. and Canada: \$21.10 elsewhere. November.

PUBLISHERS' TRADE volumes in a new. easier--contain the trade order U.S. publishers, Detailed descriptions of books, series, discounts, and other important information which can only be catalog. Standard Book Number: 8352-0266-6. Postpaid price: \$14 net in the U.S. and Canada: \$15.40 elsewhere. September.

In New York please add applicable sales tax.

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

We'll sell you a year's subscription to any of 4,206 periodicals. Just tell us which year.

Periodicals published during the last 300 years are as easy to subscribe to as this year's magazines.

Simply order them from University Microfilms.

If you want, say, Newsweek for 1952, we can sell it to you on 35mm microfilm.

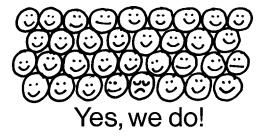
If you want microfilm of Scientific American for 1967, the Congressional Globe for 1867, or the Anti-Jacobin Review for 1798, we can supply those also.

Our collection of periodicals on microfilm goes back as far as the periodicals themselves. And some of the periodicals go back as far as 1669.

To find out which periodicals we have, and what we charge for them, write for our free 200-page catalog.

University Microfilms 300 North Zeeb Road, Ann Arbor, Mich. 48103, (313) 761-4700 University Microfilms Limited, High Wycomb, England.

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 INFORMATION CORPORATION A Subsidiary of Crowell Collier and Macmillan 909 Third Avenue, New York 10022 Dept. M41
	 Send sample copy Send more information Send me the print form at \$360 annually.
	NAME
	TITLE
	LIBRARY
	ADDRESS
	CITY STATE ZIP

CCM INFORMATION CORPORATION

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



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-9, 229 West 43d Street, New York, N.Y. 10036.



special libraries

Crisis in the University

Robert F. Shaw, C.C.

McGill University, Montréal, P. Q.

THE words, "Crisis in the University," bring visions to the public of restless youth, of destructive student politicians, of a captive press, and of the effort by revolutionaries to gain enough strength to smash society by smashing the university. The words bring visions of those who would accuse, belittle, besmirch, demand and destroy, who would create debate about too much freedom and not enough freedom, and academic integrity and academic inflexibility, and the tough corporation-controlled administration or the gutless do-nothing administration.

We fear that in their mad ambition the revolutionaries will somehow gain such strength that they will burn the books, destroy the library and shoot the librarian. And there are a dangerous few who strive for just that. But they are a very few and they live, here in Canada, among a thoughtful and sensible many-who in due time will shake off the madmen and build for the future on the solid structure we have built so far. Let us not, therefore, be distracted too much by the revolutionaries. Let us, of course, be vigilant and patient and firm but let us not be mesmerized by shock tactics and scare headlines into devoting all of our time to reacting to imagined threats.

Let us keep our perspective. The subject of this talk, "Crisis in the University," does not refer to revolution. Instead, my subject is a threat in the heart of the institution. It is a threat to the library from within—a threat of slow strangulation, not sudden death. We are

September 1969

in the midst of crisis—an actual explosion; an explosion of knowledge, of communication, of demand for learning; a flood of literature, an avalanche of books. There aren't enough trained librarians to go round. Next year North America will need 88,000 graduate librarians, but we won't have them. The number of readers has gone out of sight. There is a traffic jam at the Circulation Desk.

Gleeful Complainers

The radicals and complainers are in high glee. "The library is inefficient," they say. We try to hire more staff with our limited funds. "The books we need," they say, "are published, but the library doesn't have them —or they are buried in the backlog—or out —or lost—or waiting to be re-stacked!" The university scratches desperately, coughs up some extra funds, buys some books—and the library's backlog of uncataloged volumes gets bigger and bigger.

"We have no place to put them," says the Librarian. We beg, borrow, then build more stacks. It takes three and one-half acres of floor space to store and manage one million volumes.

"But we don't have enough reading room," complains the Student.

"Ah-ha," says the Revolutionary, "I demand that McGill give up its colonial isolation and throw open its doors to the public." "Watch out," says the Expert. "In the next ten years the whole thing will double again."

More subjects, more books, more periodicals, more readers, more copies, more backlog, more personnel, more cost, more ulcers. Yes, we face a crisis, and a frightening debate between a wild-eyed technology enthusiast and some ordinary human beings like you and me. We agree on only one thing: We must either go to work now or throw up our hands.

Dialog with an Enthusiast

Let's listen in for a while to a dialog. The salesman with the gleam in his eye says that a recent survey by the library community itself indicated that in most libraries, the only advances in methodology since the turn of the century were the additions of the typewriter and the copying machine. "Where are the solutions?" we ask the computer madman. And he replies: "In modern technology including the computer."

"The microfilm," he says, "will get rid of the problem of the storage and preservation of the bulky easy-to-damage literature. The card index can be 'microfiched.' A microfilm scanner, or a computer, will give quick access to the reader of this compact catalog."

There are many who fear the computer but Mr. Enthusiast believes it will be our salvation in the library of the future. It will save us time and personnel and space and cost. It's one servant of mankind that does not demand an annual salary increment. He forgets to mention that it demands a new and better model costing twice as much. "Those who fail to move for fear of the implications of 'data processing,' " he insists, "will be pushed from crisis to crisis and helter skelter into computerized operations. It will all begin at the circulation desk. There, the librarian meets the public which is getting more and more enraged by delay and frustration. The radicals will soon pick it up with some 'demands,' followed by some 'direct action.' The next crises will arise in cataloging, then in acquisition and accounting and space."

"So," we ask, "what happens if we proceed by plan instead of by crisis? Then we will start by swallowing a bitter financial pill washed down with criticism—for at the outset our costs will be higher than those who stick to manual methods—and, of course, there will be bugs. Just imagine the confusion when half the library is machine readable and the other half is not—and of course, just at that moment someone comes up with a 'better system.'"

"But not for long," says the Enthusiast. "A couple of years of suffering will bring rewards in both cost and efficiency. The building of a computerized data bank will produce wonderful results. Step One—acquisitions. The librarian who is basically an educator does not get much joy from the business and clerical demands of acquisitions. Now the whole process can be converted into machine-readable form. The computer is fed the complete bibliographical record of the book and the appropriate budget, purchasing and accounting procedures, controls and instructions. . . ."

"Once you have it operating," he continues, "and have ironed out the bugs, you will be a lot happier and you can save up to 40% of your acquisition costs. Regular printouts from the computer will give you complete information.

"The library which has converted to machine acquisitions has automatically set up a basic data bank which forms the basis of automated cataloging and circulation systems.

"The bibliographical data which was fed into the computer's memory for acquisition can now be used for catalog cards, book catalogs, circulation cards and charge-out lists, bibliographies and book labels. Your card catalogs and lists will be printed out at up to 66,000 lines per hour.

"The librarian can rely on Library of Congress printed cards or proof sheets furnished on a subscription basis."

"But," say we in a small voice, "only 40% of a library's material is available in this form and the balance is hard manual drudgery."

"Nonsense!" shouts Mr. Enthusiast. "The computer will swallow all the information fed to it and then alter, query, manipulate and massage it to order. It will print book catalogs for distribution all over the campus and beyond. Students may therefore query the holdings before going to the library. The computer will duplicate its own records for storage beyond the reach of revolutionary vandals."

"But the computer won't render itself invisible," we mutter. puter will graduate him and he will stagger out into the sunlight, bearded and longhaired and pale, to receive his degree from a machine at the corner of McTavish and Sherbrooke.

The computer will swallow all information fed to it and then alter, query, manipulate and massage it to order. It will print book catalogs for distribution all over the campus and beyond. Students may therefore query the holdings before going to the library.

Mr. Enthusiast ignores us and carries on bravely: "There are substantial savings. For example, the use of the computer for circulation control is one of the best cures for librarian ulcers. Manual operations are becoming more and more difficult and slow. From the circulation desk the librarian can query the computer as to availability, or as to the current borrower of an urgently needed book. The computer replies instantly.

"When the book is issued, the borrower's ID card, especially prepared for the purpose, is dropped in one slot and the book's card in another."

We are getting a little fed up. This guy doesn't know that the use of ID cards is a sure sign that we live in a police state! But nothing seems able to stem the sales flood.

"The computer records all the details of the loan, prints out the charge slip and updates the inventory. In due course, if necessary, it will issue overdue notices and reject requests for loans by those who are in default on a previous loan."

"I wonder if you can train the computer to go up to the sixth floor to get the book?" we enquire, but again there is no reply. Just more words.

"If we are to believe you, Mr. Enthusiast, then let us dream a little. Some day the student will sit at a console at home and call for the book of his choice to be shown on the screen page by page. In fact he will call forth from the computer any part of the university course he may be following. He will proceed at his own pace because the computer will not teach any step until the previous step is mastered. Then one day, the com"Somewhere there must already be such a machine. We've seen its graduate. What happens to him? Well, of course, he goes home, pushes a button marked 'job' and the computer puts him to work, provided he properly answers its first question about his political views. After a tiring day at the terminal, he pushes the button marked 'Late Show.' Is it true, Mr. Computer-Man, that we are already approaching these results?"

But we have listened enough. The time has come to fight back. We can solve our problems with better planning and management, better systems and designs and layouts and training, better use of our existing facilities. We can ease the burden by accepting some duplication but gaining better-informed service and help in decentralized user-oriented special libraries scattered about the campus or the country. That's what special libraries are about, isn't it? Of course, we could centralize them by an information network.

Plan with the Librarian

"Things would be better," we argue, "if the universities and researchers would only recognize that there is a literature explosion and would do their planning in close consultation with the librarian.

"Don't you know, Mr. Technologist, that the beautiful computerized system grinds to a halt when you start the search for a new title? Really the telephone is a better tool for the purchasing detective.

"Don't you know that people don't like to

This paper has been adapted from the Keynote Address at SLA's 60th Annual Conference in Montréal on Jun 2, 1969. Robert F. Shaw, C.C., is vice principal (administration) of McGill University and chairman of the McGill University Libraries Commission. As a civil engineer Mr. Shaw had been associated with the Foundation Company of Canada Limited for thirty-five years before moving into the academic world. His industrial assignments ranged from engineer and estimator to president of the company.



People don't like to be automated. Semantics cause problems that are hard to solve. When you ask for literature on "silver," do you want a Tiffany Catalog?

be automated? That semantics cause problems that are hard to solve? When you ask for literature on silver, do you want a Tiffany Catalog?

"Don't you know that cross-referencing needs more time and skill as knowledge explodes? That selection of titles becomes more difficult as volume increases? That a lot of junk is being printed? That these new problems slow us down so that even the computer won't get to order the book until the school session is over?

"How in the world can you study Shakespeare through a computer? What do you mean, 'earphones'?

"You certainly are ambitious if you think you can make the author, the publisher, the printer and the reviewer all fall efficiently into step with your computer. "Do you really believe that the librarian will become simply a technician who explains the operation of the computer? Oh, you mean somebody has to put the stuff *into* the computer? That's funny!

"Maybe you can browse faster with a computer, but it won't be much fun.

"'How can we find the money to experiment and risk failure?

"Let someone else develop it—but you should tell us exactly when it is solved so we can be there at the same time."

Well, Mr. and Mrs. Librarian, there's the debate. It has left us, the ordinary humans, tired and worried. The Computer-Man looks as cocky as ever. What's left? Have we learned anything? Well, let's review:

There is an explosion in knowledge.

There is an explosion in literature.

There is an explosion in demand.

There is an explosion in variety.

The requests for information are becoming more complex.

The cost of everything in the library is going out of sight.

There aren't enough trained people.

There is a crisis in the library.

It will be twice as bad ten years from now.

What can we do? Now? Quick!

"Say, Mr. Computer-Man, let's talk some more!"

SPECIAL LIBRARIES

Program Planning and Budgeting Theory

Improved Library Effectiveness by Use of the Planning-Programming-Budgeting System

Willard Fazar*

Executive Office of the President, Bureau of the Budget, Washington, D. C. 20503

■ Libraries have a great need to participate more effectively in decisions that influence their capacity to serve their users. This paper presents a means toward that end. The relatively new Planning–Programming–Budgeting System is described in the context of its proven utility in the Department of Defense and of its growing utility in the civil sector of organizations. It describes the system's

A SYSTEM for more realistic and beneficial program planning and budgeting by libraries is discussed. It is a means for libraries to enter the institutional decisionmaking process in the establishments where they are frequently buried as a good thing, with little or no role in decisions made by those establishments for executive program actions and resource allocations. Most usually the library enjoys acceptance and suffers from treatment as one of many administrative services or overhead functions of the establishment.

Although this paper was prepared for an Institute concerned with the federal sector of libraries, I think my conclusion applies to background; its implementation in the federal government; its spread into non-federal sectors; and the system's methods, including systems analysis, applied economics, and quantitative reasoning. The paper includes illustrative examples of results needed for decision-making by managers, and basic guiding principles for PPBs application.

the traditional library practices of all sectors, including the academic libraries, the state and local public libraries, and the libraries of business and commerce.

Is there any form of self-help that libraries might undertake to participate more effectively in decisions affecting their existing and potential contributions to their establishments? Yes, in many cases. Their application of the Planning–Programming–Budgeting System (PPBS) offers tremendous opportunity for this type of advancement.

What Is PPBS?

PPBS is many things for modernizing management and decision-making at all levels. It is a mechanism for making hard choices; a means for deciding among competing claims for always limited resources; a system for es-

^{*} The views expressed in this paper are those of the author and do not necessarily reflect the views of the Bureau of the Budget.

tablishing priorities, setting policies, and for describing numerically, difficult problems and the impact of alternate decisions for their solution.

PPBs is an integrated system to improve the information base for policy, program and resource-allocation decisions. It is a unifying and comparing process for higher level review and analysis of program alternatives. It provides, through narrative and numerical expression, an explicit determination of the relative efficiency and economy of allocating limited resources to alternate plans for achieving concrete objectives. It is a means for revealing the long-range consequences (in terms of estimated costs and benefits) of annual or short-range decisions and actions on plans, programs, and resource allocations. It provides the basis for effective evaluation and integrated control of ongoing programs.

The Background

PPBS was originated by the Department of Defense to cover all of the activities and resource applications of all the armed services. By 1964, this system had proven its capacity to provide the Secretary of Defense with the explicit information required to formulate his judgment before making big and crucial decisions for the allocation of resources approximating half of the federal budget. His decisions could then be substantiated by the PPB systems information documented before his decision-making.

In August 1965, the President directed his Cabinet and agency heads to adopt PPBs in the civil sector of the federal government, based on guidance from the U.S. Bureau of the Budget.

Soon thereafter the Bureau of the Budget issued a bulletin containing instructions for implementation of the system. This bulletin along with subsequent modifications continues to require the following materials from major federal agencies in the executive branch:

1. A *Program Structure* that classifies all of an agency's activities, hierarchically, into program categories, subcategories and elements.

2. Program Memoranda (PM). The PM is a document, oriented toward major

program issues, that presents for all or part of a program category a comparison of the cost and effectiveness of alternatives for resolving those issues, the agency head's recommendation on programs to be carried out, and the reasons for those decisions.

3. Special Analytical Studies (SAS). The SAS provide the analytical ground work supporting the budget request decisions reflected in the PM's for both the budget year and for subsequent years.

4. Program and Financial Plans (PFP). A multi-year summary tabulation of agency programs in terms of their outputs, costs, and funding requirements for the budget year and at least four subsequent years.

Since 1965 interest in and adoption of PPBs has spread well beyond the Federal Government:

-U.S. States, counties, cities, and localities are studying and developing its application for programs under their jurisdictions, for example, New York, California, Michigan, many counties, Detroit, Denver, New Haven, and Pittsburgh.

-Nations around the world are developing its application for more effective government management and to accelerate national development under the limited resources available, for example, Canada, Chile, Sweden, Israel, Belgium, and many others.

-In the fall of 1965, the UN General Assembly endorsed the adoption of Program Budgeting by individual UN agencies, based on assistance provided the Expert Committee of 14 by the U.S. Bureau of the Budget.

-Some universities are undertaking its application for improved institution-wide management and decision-making.

-Even some industrial firms are exploring its utility, especially in the field of utilities.

The Methods

Once the program structure is established and concrete objectives are identified, the merit of decisions for action and for the allocation of resources hinges on the extent and validity of an organization's analytical effort. This effort involves the systems analysis, operations research, and application of pertinent economic, statistical, and mathematical techniques appropriate for diagnosing interrelationships of variables and for quantifying estimates of costs, effectiveness, performance, uncertainty, etc. Continuous analytical effort must be applied throughout the PPBs activity to support decision-making and changes that may become necessary at any point in time. The budget that results is the financial expression of the program plans.

Systems analysis is the key to PPBS pay-offs, including the derivation of the successive approximations of the cost-effectiveness of program plans to achieve specified results. Systems analysis is an orderly method for evaluating all of the major factors bearing on the achievement of specific ends by alternate means. Systems analysis is the mechanism for treating the total problem under consideration instead of only parts and pieces of the problem-a practice too often employed with the excuse that parts of a problem are easier to understand and handle. But time and again operations research has proven that suboptimization of all the parts will not produce, in combination, the optimum system or solution to a complex problem. Systems analysis has five principal elements which, in effect, constitute the ingredients of PPBS analysis:

1. Objectives. The objectives of program plans must be identified concretely. To say that the objective is to "improve" something or to perform "better" may sound nice, but it is soft and intangible instead of concrete. Every program plan should have an objective or objectives, including benchmarks to achieve them, that are worded or identified so that whenever the question is asked, "Has it been done?", the answer must be YES or No. The answer must not be "We're doing it" or "We're always doing it." In addition, such objectives should be time-phased, with the understanding that they and their "schedules" for achievement are always subject to change as circumstances unpredictable at the time of their approval may occur.

2. Alternatives. The choices for decision are represented by the specification and comparative analysis of alternatives. The need to identify and analyze alternatives stems from recognition that the decision-maker is entitled to a better basis for his formulation of judgment—something more than the usual approach that presents him with a single program plan requiring "X" amount of resources along with the implication "It's the best. Take it or leave it." Systems analysis should be applied to several *feasible* alternatives, including alternative courses of action to achieve a given objective, but not excluding courses of action to achieve alternate objectives.

3. Costs/Resources. Explicit estimates of the resources required to carry out the several alternate program plans are essential for the diagnosis. The estimates must be made not only for the budget year but for all of the subsequent years through the time of completion of the objectives. The estimates should cover both dollar costs and the physical resources to be procured for those dollars, e.g., manpower, facilities, materials, etc.

4. *Models.* A model is often helpful to illustrate and simulate a complex problem and the means for solution, without going through the actual experience and investment of resources. A wide variety of models can be useful for this purpose. They range from a simple drawing, such as a road map or flow chart, to complicated mathematical models. The numerical depiction of the mathematical model, e.g., a linear programming model, can be especially helpful as one form of quantification in PPB systems analysis.

5. Criteria. "Criteria" can be defined, simply, as "tests of preference." Sound criteria must be developed and stated explicitly as the bases for assessing the effectiveness, benefits, or utility of achieving the objectives of program plans. Since a principal purpose of PPBS is to estimate the cost-effectiveness or cost-benefits of alternate program decisions, the development of an effectiveness or benefit scale should be based on the numerical expression of criteria satisfaction (often called "performance" at different cost levels. This is illustrated, without entry numbers, in Figures 4 and 5. Unlike business and industry where a single criterion (profit) can usually be used to measure effectiveness, the effectiveness of most governmental, academic, and library activities and programs depends on more complex and less tangible criteria.

The methods used for PPBs analysis may be described through a variety of closely in-

tertwined and overlapping terms, including systems analysis, applied economics, operations research, management science, econometrics, quantitative reasoning, statistical methods, input-output analysis, and more. All of these terms involve the use of scientific method, numerical expression, logic, rigor, and explicitness. A large number of analytical procedures and specific techniques are available to conduct the systems analysis. Together, they comprise a huge workshop of tools or techniques. They present the skilled analyst with the problem of knowing what is in the workshop inventory, and of choosing the right tool(s) for the job to be done. Care must be taken to avoid the application of a very fine tool or technique to the wrong job or problem.

Let us take a quick-brush tour through the workshop to look at some of the tools or techniques available and at some types of products useful for the decision-maker who may never go through the workshop and who is not skilled in applying the tools.

Many of the tools or techniques for PPBS analysis can be grouped under applied economics and quantitative reasoning.

Applied Economics

Economics is sometimes described as the science of how we choose to make the best use of scarce or limited resources, physical and dollar resources, to produce the goods and services required for mankind. Since the overall mission of the federal government is to serve the American people by employing its limited resources to provide the goods and services they require for effective government, some of the economic principles, concepts, and laws are particularly relevant to the development and operation of PPBS.

The notations and illustrations that follow are grossly simplified in order to provide just a little exposure to the subject for those who are not well acquainted with applied economics techniques. Their utility for library program decisions rests merely in the transference of the terms used into those that reflect the library environment, activities, and services.

Applied economics for optimizing choices can proceed in two ways: through *economy*,

to achieve a given result or output for least resources; or through *efficiency*, to get the greatest benefit or output for a fixed amount of resources.

1. The law of diminishing returns concludes that, generally, increases in some inputs or resources relative to other fixed inputs or resources will increase the total output less than proportionately to the increase in inputs, so that additional output derived from a given addition of input diminishes. This law is basic to answer a vital PPBS question: "Will the increment of funds requested for this program, provide an increment of output commensurate with the cost?"

2. Marginal reasoning, which requires incremental analysis, is a PPBs requisite to determine and compare the worth of additional increments of inputs for the achievement of a fixed output and of alternative outputs or program objectives. Sound incremental analysis involves comparisons of increments of cost with increments of benefit to estimate and display the significance and interrelationship of increments of cost and of output such as, utility, products, returns, or benefits. Where the net increment of a move is positive, it is likely that a further move in that direction will yield a further net benefit. When an optimum has been reached, no incremental move, either up or down, will yield any improvement. This position is sought through marginal reasoning.

Utility is the capacity of a good, a product, a service, or an output to satisfy a human want. The economic law of diminishing *marginal utility* is applicable here since additional units of a given good most usually give less satisfaction or utility than units previously available. By comparing utility in our minds, we can construct a hypothetical scale with numerical values to demonstrate the relative utility of different quantities of a good. Since the validity of numbers representing the satisfaction derived may be highly questionable, effort should be exerted to develop numbers that approximate relative utility in the decision-maker's mind.

3. The marginal product is the extra output derived by adding an additional unit of a given productive factor with no change in the input of other productive factors. Here again, the extra units of the one factor may increase total output with diminishing marginal returns or output to the point where an additional unit of the given factor will not yield sufficient output to pay for the input cost, and if units of the factor continue to be added, the marginal unit added will yield no additional returns or product for the resources invested. Marginal product measurements can be quantified more reliably and objectively than those for marginal utility.

4. Marginal costs may furnish useful information not previously available for the decision-maker. Practices employed to provide decision-makers with cost information for different levels of output or number of products are ordinarily confined to figures representing total costs and average costs. But the important distinction between average costs and marginal costs is not always revealed. It is unfortunate that many managers take such pride in reducing the average cost per unit of output that, if they do not know the marginal costs of incremental units of output leading to lower average costs, they may incur marginal costs that cancel the benefits of further reductions in average costs, e.g., diminishing returns. Table 1 represents an end-product for the decisionmaker that exemplifies this situation.

5. Production analysis provides knowledge about the relationship between physical inputs and physical outputs, or the transformation of inputs into outputs, e.g., costs into products. The economic theory of production and marginal products is most relevant to this type of analysis. Because the efficient allocation of limited resources is a prime objective of PPBS, the economic choice of the decision-makers should be formulated with more explicit knowledge about the available alternatives, about what different combinations of things he can buy for those resources, and about the utility or worth of the outputs that might be derived or produced through various allocations of the inputs or resources. Through systematic quantitative analysis and diagramming, the application of production analysis can furnish the decision-maker with information to compare the relative efficiency of different possible decisions. Some simplified illustrations of production analysis follow.

Units Produced	Fixed Cost	Total Cost	Total Variable Cost	Avg. Variable Cost	Avg. Fixed Cost	Avg. Cost	Marginal Cost
1	30¢	40.4	104	10.04	00.0.t	10.04	10¢
I	50ψ	40 <i>¢</i>	10¢	10.0¢	30.0¢	40.0¢	9
2	30	49	19	9.5	15.0	24.5	
3	30	57	27	9.0	10.0	19.0	8
4	30	66	36	9.0	7.5	16.5	9
				7.0	7.5	10.5	10*
5	30	76	46*	9.2	6.0	15.2	
6	30	87	57	9.5	5.0	14.5	11
7	30	99	69	9.8	4.3	14.2	12
							13
8	30	112	82	10.3	3.7	14.0	14
9	30	126	96	10.7	3.4	14.0	
10	30	141	111	11.1	3.0	14.1	15
10	00			11.1	5.0	14.1	16
11	30	157	127	11.5	2.9	14.3	
12	30	174	144	12.0	2.5	14.5	17

Table 1. Decision Table for Costs with Diminishing Returns.

* The point where diminishing returns set in as variable costs for additional units move upward.

The production-possibility curve is useful to depict all possible maximum combinations of products that can be bought for a given input of dollars. The product combinations can range from apples vs. oranges, hospitals vs. schools, health vs. education, target destruction potential vs. defense kill potential, through "guns vs. butter." You can substitute any of these combinations for Product X and Product Y in Figure 1.

The solid curve shows the estimated quantities of two products that could be bought for a given number of dollars. The dashed curve shows the quantities that could be produced for a given larger number of dollars. To estimate the combination of three or more products that a given number of dollars would buy, this approach is also feasible but admittedly more difficult. With this information no matter if only crudely approximated, the decision-makers can tell that all of the points on the curve represent an efficient use of the given resources; that he has many choices; and that a choice of any point, such as Point P, under the curve is feasible but would represent an inefficient use of the given level of resources. But which of the infinite number of efficient points on the curve should be chosen?

6. Indifference curves provide a means for closing in on that efficient point that maximizes the utility of a particular combi-

Figure 1. Production-Possibility Curve.

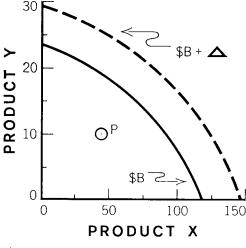
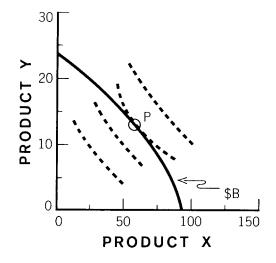
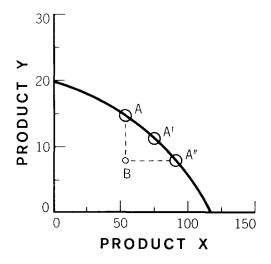


Figure 2. An Indifference Map.



nation of the two products. Indifference curves reflect preference for different combinations of useful products that could be bought for different amounts of resources. The curve depicts equal satisfaction for different combinations, such as more of Y and less of X, equal amounts of Y and X, and more of X and less of Y. Personal preference or judgment is a factor that is recognized as a vital part of PPBS, for which quantification and the application of complex techniques are no substitute. The indifference curve, representing personal taste and preference, can be most helpful as a basis for the decisionmaker to make his choice. Several indifference curves to show combinations preferred for different levels of resources form an indifference map (Figure 2).

In this indifference map, each curve convex to the point of origin (the dashed lines) represents the preference for combinations of "products" buyable for different levels of resources. The higher curves signify combinations preferred over those of the lower curves, e.g., more of both products instead of less of both products. By entering the production-possibility curve to show the possible combinations obtainable for a given level of dollars, the concave **\$B** curve (the solid line), we note that the optimal point of choice, Point P, is the point of tangency between the **\$B** curve and the indifference curve as shown. Fig. 3. Inefficient Point & More Efficient Points



Admittedly, this illustrative example greatly over-simplifies the problem of locating the optimal point by systematic quantitative analysis. However, even though effort to find the exact location of this point may appear to be futile, any narrowing of the range of possible locations, as a result of such an effort, can raise the quality of the decisionmaker's judgment. As illustrated in Figure 3, and as stated by Hitch and McKean (4):

"... the best practical aim of systematic quantitative analysis is to demonstrate that some course of action A is better than some alternative course of action B, when B is what is proposed, or planned, or will otherwise occur. If B is an inefficient point, systematic quantitative analysis can find several efficient points A, A', A'', ... which can be shown to be superior to B ..."

The application of these tools of applied economics is described in more detail in the study by Hitch and McKean.

QUANTITATIVE REASONING

The translation of ideas and facts about a problem into symbols, diagrams and graphs, and numbers that represent them, involves the use of quantitative reasoning. By this means, it is possible to reduce such ideas and facts into manageable proportions, to measure or estimate their magnitude, to learn more about their interrelationships, and to answer significant questions bearing on how the problem might be resolved. Quantitative reasoning is naturally involved in the applied economics just described. But some additional quantitative approaches useful for application to PPBs problems, merit brief reference here:

1. Operations research (OR) is a principal means for quantifying complex problems and their possible solutions. OR applies a team of persons having relevant skill for the rigorous analysis and treatment of interdisciplinary problems. Many techniques are applied and innovated by OR teams to search for "optimum" solutions to problems. These include linear programming, queuing theory, gaming, mathematical modelling, and PERT. The application of an OR technique to a given problem may often be performed by just one person, but the formulation of a large complex problem, the identification and diagnosis of factors bearing on the problem, and the choice of techniques for rigorous analysis usually requires application of the combined talents of several people.

2. Statistical methods. Statistics is a discipline that deals with tools for characterizing aggregates of figures. Statistical methods provide means for managing, understanding, analyzing, and manipulating masses of numbers by estimating or summarizing their central tendency, their dispersion, range and variance, their trends and significance and their probabilistic implications. The application of statistical methods to PPBs problems provides a more comfortable and rational basis for decision-making and for overcoming decisions that may be based on erroneous, intuitive, or impulsive evaluation and judgment.

To evaluate the risk and uncertainty inherent in all planning, programming, and budgeting, estimates can be obtained through the application of statistical methods, especially those available to measure and estimate the *probability* of outcome. A variety of statistical methods or tools are available to estimate or predict the likelihood of achieving an uncertain PPBs benchmark.

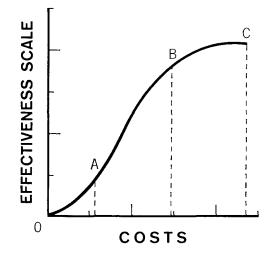
Statistical *sampling* is a means for estimating the scope, content, and characteristics of a large universe of numerical information on

a given subject, e.g., population, retail prices for bread, labor earnings, etc. It is a means for saving time and money to obtain data representing information that would be too massive to cope with in totality. Sampling methods include techniques for achieving randomness, for stratifying the universe, and for estimating the sampling error.

Some statistical methods and techniques are particularly useful for *evaluation and control* of program performance. Regression analysis, for example, is useful for controlling future performance on the basis of quantification and diagrammatic illustration of past performance. Regression analysis provides a capacity to predict future performance and determine what deviations from the satisfactory level are permissible and what deviations indicate a loss of control and need for remedial action.

PERT (Program Evaluation and Review Technique) is, in effect, a statistical technique for management planning, programming, and control of the time, resources, and technology for achieving program objectives. PERT is a probabilistic technique that may be applied to estimate continuously the probability of program completion by any point in time.

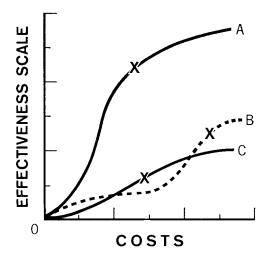
3. Mathematical techniques include a wide range of tools for quantifying different aspects of PPBS analysis. Since mathematics is often called the science of quantity or quantities, the PPBs analyst must take advantage of this science as a help for resolving many PPBS problems. As a means for symbolizing, relating, and manipulating the variables bearing on program performance and evaluation, the laws and techniques of mathematics constitute a valuable resource for analysis. The building of a mathematical model of the problem is often useful to exemplify the problem and the impact of alternative solutions or decisions before any action is taken. Mathematical techniques are in some way involved in all of the "applied economics" and "quantitative reasoning" methods described above as well as in the "cost-effectiveness analysis" described be-



low. Useful cost-effectiveness analysis requires that alternatives be compared in terms of their differences in effectiveness for the same costs (the comparison of outputs for an identical dollar input) or in terms of their differences in costs for the same effectiveness (the comparison of inputs for an identical output)—or both types of comparisons.

The diagramming of the results of costeffectiveness analysis can be most helpful for decision-makers to visualize easily the potential impact of choices for decision. Moreover, a few summary numbers that approximate and compare the "cost-benefit ratios" that can be expected from alternative courses of action can go far to simplify the worth of those alternatives in the decision-maker's mind.

Simplified diagrams (Figures 4 and 5) illustrate the kinds of end products useful to the decision-maker, that can be obtained from cost-effectiveness analysis. Figure 4 shows the effectiveness or output that may be bought through one program plan for different costs or inputs. It demonstrates at Point A that very little effectiveness can be obtained for very little cost; that very great effectiveness at Point C can be obtained for very high costs; and very good effectiveness at Point B can be obtained for much lower costs than the slightly higher effectiveness at Point C.



In most cases for which a cost-effectiveness curve can be drawn, the choice for decision should center in the knee of the curve.

A comparison of cost-effectiveness for alternative program plans is shown in Figure 5. In this case, Curve A is the dominant alternative for choice. It is relatively easy to illustrate the results that are desired from cost-effectiveness analysis, but the production of reliable results includes some difficult tasks related to the development of appropriate and reasonable cost estimates as well as to the determination and scaling of effectiveness.

4. Quality Analysis. The quality of goods and services that constitute program outputs is an attribute that may be of primary significance for determining the costs or resource inputs for many programs. Quality analysis, therefore, must be recognized as an inherent factor in PPBs analysis. The PPBs emphasis on numbers and quantification does include the quantification of quality to the extent feasible.

Since quality is a characteristic that may be either material and tangible or immaterial and intangible, any conclusion that quality cannot be described or measured by numbers would be incorrect in many instances. For cases in which quality is a physical attribute, e.g., the decibels of sound put out by a warning system, the tonal quality of a radio, the length of performance for a space vehicle battery, the reliability of a bulldozer, etc., it can be estimated or measured through quantification.

Whenever quality forms a significant influence on effectiveness of output and a difference in resources may result in a significant change in quality, the effectiveness scale used for cost-effectiveness analysis should include the quality factor.

Less tangible quality attributes, such as the quality of social benefit, literature in publications, beautification, cultural advancement, paintings, etc. are more difficult to express numerically. But instead of concluding—even for those cases where quality depends on individual personal tastes—that "quality cannot be quantified," the door should be left open by raising the question, "How might we quantify the quality of output in this case?" (If it is a case for which an identifiable change in quality would create a significant change in effectiveness of output).

Many organizations in government and industry have techniques for estimating and measuring quality of output. Such mathematical and statistical techniques have resulted from many years of research, which continues today, to advance the state of the art of the quantification of quality. The American Society for Quality Control is a major source of considerable literature.

Some Guiding Principles

To gain many of the rewards promised by PPBS, there are many principles that should be followed to guide its effective development and operation. Most of these principles are derived from the practices employed and the experience gained by the Department of Defense since PPBS inception. Here, I will emphasize, simply and even bluntly, just a few of them—those that I believe form the foundation for success.

1. Don't fight it, try it! The negative approach is used by those who spend time and energy finding reasons why it cannot or should not be done. This is "fighting the problem" instead of "solving the problem."

2. The program structure should be developed without regard to organizational structure. Many programs cut across the organizational structure, making it foolhardy to assume that major organizational segments are synonymous with major program categories.

3. "Better be roughly right than exactly wrong" are the words of Mr. Systems Analysis (8, 9). Precise answers can be derived from fine and fancy quantification techniques, but "there is great danger in this business to get mesmerized by the techniques" and end up with the perfect answer to the wrong problem.

4. The development and continuous operation of PPBs requires the approach of "successive approximations, beginning with a first rough cut and followed by a series of refinements that will never be perfect, precise, or optimal." (8, 9) This principle merits close to first place in our thinking because it fosters getting started, no matter how rough and inaccurate the original estimates may be. Once drafted, they do provide the basis for successive refinements and improvements.

5. The question to be answered by PPBs is "What is right?" not "Who is right?" The decision-maker should have the answer to the former question even if his decision favors the answer to the latter question. That is his responsibility.

6. Systems analysis must be conducted with *continuity*. The findings from one-time analysis should not be set in concrete, thereby failing to keep abreast of changes and refinements that should modify the one-time analysis.

7. Cover the *total problem* by avoiding the omission of significant components of factors or ad hoc consideration of only parts of the problem. Similarly, exclude factors that are irrelevant.

8. Identify explicitly the *assumptions* made and the *uncertainties* in store.

9. If initial results disagree greatly with the decision-maker's intuition, *back to the drawing board*!

10. KEEP IT SIMPLE! ". . . the techniques we use are, generally speaking, the simplest." (8, 9)

Parting Notes

After taking you through this complex maze of the PPBs concept, I seek the words that may impart to you the final motivation and incentive to extend its application into library environments, and to make it an inherent part of library science. The words were written by Dr. Robert F. Munn, Acting Provost and Dean of the Graduate School, West Virginia University (12). Although his words are confined to the situation of academic librarians, I do believe they are equally applicable for librarians in all sectors except those engaged in profit-making services.

"While many academic librarians worry endlessly about the Administration, they usually know very little about it. Librarians are not normally part of either the administrative inner circle itself or the select group of faculty oligarchs and entrepreneurs whose views carry great weight. They are thus excluded from the real decision-making process of the institution. Indeed, librarians are often horrified and/or enraged to discover that decisions of crucial importance to the library have been made without their advice or even prior knowledge.

"The most accurate answer to the question, 'what do academic administrators think about the library,' is that they don't think very much about it at all.

"One important consideration is the fact that many academic administrators view the library as a bottomless pit. They have observed that increased appropriations one year invariably result in still larger requests the next. More important, there do not appear to be even any theoretical limits to the library's needs. Certainly the library profession has been unable to define them.

"Since nobody yet appears to have the slightest idea how to make a cost-benefit analysis of the contribution of the library, few administrators feel justified in straying far from the traditional percentage.

"The current pressure to introduce modern management practices into the universities will not leave libraries unaffected. Such techniques as program budgeting require a much more rigorous analysis of the balance of return against investment than has ever been applied to libraries. Just why should the library receive 3 or 6 or 1 or 10 percent of the institution's total budget? How should the claims of the library, the computer center, and educational television for budget support be evaluated? These and similar questions are certain to be asked. It might be prudent for academic librarians to have some answers."

Over the past decade, we have created a plethora of information systems and centers in the United States almost entirely unconnected with libraries, even though libraries have been information centers since long before the invention of computers and communication networks. In many minds, the library's image remains one of a document storage and retrieval warehouse. I leave you now with these hopes:

- That this presentation may help you to lift your sights for the greater effectiveness of the library community.
- That you may wish to explore what role the library should play in the plethora of information centers.
- That you can visualize the potential utility of PPBs to elevate libraries beyond the storehouse function to incorporate more of the functions of the newer information centers, systems, and clearinghouses.
- That you will act to explore PPBs further (see the Reading References) and take steps toward PPBs training, development, and application as appropriate in your respective environments.

Received for review Dec 30, 1968. Accepted for publication May 28, 1969. Mr. Fazar is a management scientist in the Office of Executive Management, U.S. Bureau of the Budget. The paper was presented to the Institute on Federal Library Resources, Services and Programs on Jun 19, 1968 at The Catholic University of America, Washington, D.C.; to the Institute for PPBs for



Libraries on Sep 23, 1968 at Wayne State University, Detroit; and to the 88th Annual Conference of the American Library Association on Jun 23, 1969 in Atlantic City, N.J.

Reading References

- Johnson, Lyndon B. / Introduction of New Government-Wide Planning and Budgeting System, Statement by the President to Members of the Cabinet and Heads of Agencies, Aug 25, 1965. Weekly Compilation of Presidential Documents 1: (no. 5) 141-143, Govt. Printing Office (Aug 30, 1965)
- Schultze, Charles L. / Statement by the Director of the Bureau of the Budget before the Congressional Subcommittee on Fiscal Policy of the Joint Economic Committee. (Jul 22, 1965)
- 3. U. S. Bureau of the Budget. *Bulletin* 68-9. (Apr 12, 1968)
- Hitch, Charles J. and McKean, Roland N. / The Economics of Defense in the Nuclear Age. The Rand Corporation, 1960.
- 5. Analysis for Military Decisions. Rept. no. R-387-PR, The Rand Corporation (Nov 1964)
- 6. Samuelson, Paul A. / Economics, an Introductory Analysis. N.Y., McGraw-Hill, 1964.
- 7. Goetz, E. Billy / Quantitative Methods. N.Y., McGraw-Hill, 1965.
- 8. Conference on Science and Urban Affairs, U.S. Housing and Home Finance Agency. Discussion of Systems Analysis by Alain Enthoven. (Jul 13, 1965)
- Enthoven, Alain / Systems Analysis and the Navy. Naval Review 1965. United States Naval Institute.
- Hirsch, W. Z. / Integrating View of Federal Program Budgeting. Rept. No. RM-4799-RC, The Rand Corporation (Dec 1965)
- Gorham, William / Sharpening the Knife That Cuts the Public Pie. Public Administration Review 28: (no. 3) (May/Jun 1968).
- Munn, Robert F. / The Bottomless Pit, or the Academic Librarian as Viewed from the Administration Building. *College and Research Libraries* 29: (no. 1) 51-54 (Jan 1968).

September 1969

New Developments in Photoreproduction

Loretta J. Kiersky

Air Reduction Company, Inc., Murray Hill, N. J. 07971

AN EXCITING view of information handling, one that combined the technology of microfilm with that of the computer, was presented at the 18th annual convention of the National Microfilm Association, held May 6–8 in Boston. The convention theme was "Instant Information."

The theme was well carried out in the large display of new products, equipment and services. A number of exhibitors demonstrated equipment designed to convert data from magnetic tape to microfilm. New types of film were shown, including color microfilm, and also a process for adding color to black and white film by means of a projection or enlarging device. Ultrafiche-the microfilm in search of a publisher-permits storing as many as 3,200 images on a single 4×6 inch fiche. One application viewed was a parts catalog. All automotive parts are listed on four ultrafiches and duplicate copies of the ultrafiche are distributed to dealers throughout the country. A new interest in transmission of images from microfilm over communications lines is apparent. Equipment for this purpose-designed by several companies, such as Magnavox and Xerox-was shown. Several new microfilm readers and other improved equipment were on view.

The four general sessions offered theme papers on various aspects of microfilm systems and related computer output. A range of topics, indicating new trends in the industry, was discussed in the 14 workshop sessions. Some of these of interest to information centers covered the role of microfilm in the library, the relative methods of different microforms, the computer-microfilm interface, the future of microfilm information systems, automatic retrieval and transmission of microfilm and total systems design for microfilm.

There were some notable "firsts" demonstrated by several of the major manufacturers. Eastman Kodak Company displayed a new concept that makes it possible for you to convert your present reels of microfilm to a "magazine" format. Kodak uses the term "magazine" for its container of microfilm while 3M Company, Bell & Howell and others use the term "cartridge." Kodak introduced a plastic snap-on ring which it calls the Recordak Thread-Easy* magazine.

Your conventional spoked reel of microfilm can be slipped into the plastic ring and then pressed into place to create a contained roll of microfilm. This converted magazine may then be placed in the new Recordak Motormatic Reader, Model MPG, designed to receive it. It will automatically thread itself through an "open-close" glass flat onto a universal take-up reel, and will automatically rewind the film. The rings may be obtained in the 16mm size at \$0.33 each or the 35mm size at \$0.66 each.

Like the magazine and cartridge systems already in use, this converted magazine offers several advantages over roll microfilm. It is automatically threaded and rewound, it cannot be handled by the user, and it requires less space for storage. The snap-on ring provides a surface for identification and storage.

The Recordak Motormatic* reader (Model MPG) has a 15×15 inch viewing screen

^{*} Kodak trade name.



Recordak Thread-Easy Magazine

and offers 360° image rotation. An extra Unit Adapter is available at \$165 for viewing microfiche or jackets of any size up to tab card size. The reader costs \$1,175 with a charge of \$120 for each of the $19 \times$ and $23 \times$ lenses.



Kodak also displayed a jacket of tab card size that may have both 35mm and 16mm microfilmed images stored in its channels. The jacket may be used in a great many applications requiring stored images of text and graphics in either 35mm or 16mm or the combination of both. The application shown was a combination of engineering drawings and supporting documents. The jacket system is called KUED (Kodak Unitized Engineering Data). In this application four 45×63 inch drawings microfilmed at 36:1 reduction and 26 related data sheets, $11 \times$ 81/2 each, microfilmed at 20:1 reduction were stored in the same micro-thin jacket. Diazo duplicates of the jacket for distribution can

be made at a cost of \$0.05 each. KUED offers a possibility for storing clippings, maps, architectural drawings and other material at low cost.

The 3M Company introduced Executive I. a low-cost reader-printer for viewing and printing enlargements of microfilmed images viewed on microfiche or aperture card. The cost of the machine is \$280 which makes it an attractive multi-image fiche reader/printer. A new type of dry silver paper is used for enlargements. It is developed by heat and can be processed in a few seconds. The high contrast prints are $8\frac{1}{2} \times 11$ inches in size. The machine has a 12×12 inch shatterproof viewing screen, with a color choice of blue or green, and an adjustable exposure control. Two lenses are available, 20× and $24 \times$ for use with standard microfiche sizes and aperture cards. A keyed index makes it possible to quickly locate a single image.

The 3M Company also exhibited their new 3400 cartridge microfilm camera. It will film 3,000 letter size documents and store them in one cartridge in a few minutes. A unique feature of the camera allows the operator to stop filming at any time before filming is completed. The exposed film can be rewound into the cartridge and removed from the camera. A second cartridge can be inserted for filming other documents. At a later date the first cartridge can be re-inserted and filming of the first batch of documents resumed. This is a valuable feature when sequential filming of documents or logged information is required to be in chronological order. This means documents do not have to be held aside until a collection is completed. but filming may begin at once. (The price of the 3400 is \$2,295.)

September 1969

Bell & Howell introduced an improvement in their combination machine, the jacket reader-filler, with the new Model 1600. It will load 16mm film frames or strips at the increased speed of 700 film strips per hour. The machine has a new rear projection screen with brighter illumination for verifying images before insertion in the jacket's channels. This machine permits rapid updating of a jacket-file by adding either single or multiple images. It registers the jacket in a precise relation to the film track so that there is automatic alignment of the film chambers. It will accommodate 100 foot rolls of film and automatically cycle through the steps of film cutting, jacket indexing and notching.

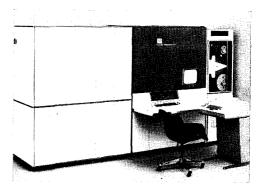
A term we will find frequently in the literature of management, business and photoreproduction is COM. NMA defines COM as:*

 Computer-Onto-Microfilm: Microfilm produced by a recorder from computer generated magnetic tape containing data.
 Computer-Onto-Microfilmer: A recorder which converts data from magnetic tape into human readable language and records it onto microfilm.

3) Computer-Onto-Microfilming: A method of converting data from magnetic tape into human readable language and records it onto microfilm.

One specific type of Computer Output Microfilmer, the Electron Beam Recorder, has been demonstrated in recent months by the 3M Company. Kodak has also shown its KOM 90 Microfilmer which is capable of processing up to 90,000 characters per second onto as many as 300 pages of man-readable information per minute.

A high precision microfilm recorder, Model FR-80 was introduced in Boston by Information International, Cambridge, Mass. 02134 and Los Angeles, Calif. 90064. It is a computer controlled visual image processing system. The output microfilm is compatible with 16mm cartridge, 16mm strip, 35mm aperture card and microfiche systems. Input



to it is a 9- or 7-track magnetic tape system. It accepts all common formats. It allows interface with any data format without hardware change. The monitor display is 8×10 inch CRT (cathode ray tube) display of image recording. The FR-80 allows program selection of 8 line widths and 8 densities. In typesetting applications it can generate catalogs, dictionaries and directories. It can produce engineering designs and drawings, add information to business forms and it can also create animated films. The basic cost is \$225,-000. Seventeen orders for it were placed during the first day of the convention.

There now appears to be a wide interest in facsimile transmission. Many members of the industry have referred to it as the "sleeping giant of the electronic communication industry." In this process an original document placed on a transmitter is converted into signals which are transmitted over a communication channel to a receiver at the other end. Here they are reconverted to document readable form. The medium may be radio, microwave frequencies or telephone lines depending upon the particular commercial service.

It is possible now to use voice telephone lines such as WATS (Wide Area Telephone Service) for transmission of information. The Dataphone system offered by AT&T Company and the Dataset service offered by Western Union can be used for facsimile transmission. Some interesting applications, such as systems for obtaining law citations or medical information are already in operation using the equipment of both of these companies. The possibility of a tie-in of TWX and TELEX offers an opportunity to speculate on developing new space-age information networks.

^{*} Avedon, D. M. NMA Glossary of Terms for Microphotography and Reproductions made from Microimages, 5th ed. Annapolis, Md. 21404. National Microfilm Association (PO Box 386). In press.

A Look at Advertising and Marketing Libraries

Elin Christianson

Peggy Wolfe

■ Members of SLA's Advertising & Marketing Division are employed in libraries in business and manufacturing organizations, publishing houses, broadcast media, trade associations, and public and university libraries as well as in advertising agencies. The Division has surveyed these libraries in terms of their place in their parent organization, size and composition of staff, size and nature of collections, and services offered. The results of the survey show the similarities and differences in A&M Division libraries and in comparison with professional standards.

WhAT are advertising and marketing libraries like? How are they similar? How do they differ? How do they stand in relation to the measures described in the *Objectives and Standards for Special Libraries* (1) and the *Profiles of Special Libraries* (2) developed by the SLA Professional Standards Committee?

To answer these questions, the Advertising & Marketing Division conducted a mail survey of its membership in early 1968. A questionnaire was sent to the 328 members of the Division in the United States and Canada with the request that only one questionnaire be returned from each library. Responses were received from 106 libraries (53.7%)of the 201 libraries listed in the 1967/68 Division directory.

Within these categories of Table 1, advertising agencies and media include advertising agency libraries, broadcast company libraries, and magazine and newspaper publishers' libraries. Companies include the libraries of manufacturing corporations and of non-manufacturing corporations such as investment brokers, banks, market research firms, consultants, transportation firms, and public utilities. Associations and non-profit institutions include advertising and other trade associations, non-profit institutions and government agencies. The final category is composed of public and university libraries.

Thus, both A&M Division membership and the survey results reflect not only the character of libraries directly involved in advertising and marketing but also the character of company and other libraries which include among their other concerns an inter-

Type of Organization	Number in Division	Number in Response
Advertising agencies and media	84	41
Companies		
Manufacturing	41	29
Non-manufacturing	38	16
Associations and non-profit organizations	27	13
University and public	11	7
Total	201	106

Table 1. A&M Division Survey Sample and Response

	Advg. Agencies	Com	panies			
Department	& Media	Mfg.	Non-Mfg.	Assns.	Total	
Research (Market or Media)	59%	21%	37%	23%	40%	
Separate Dept.	22	7	25	31	19	
General Admin.	17	31	25	38	25	
Public Relations	2	21	13	0	9	
Marketing	0	17	0	8	6	
Information Systems	0	3	0	0	1	
	100%	100%	100%	100%	100%	

Table 2. Place of Libraries in Organization

Base: 99 libraries (excluding 7 university and public libraries).

est in advertising and marketing.

In some sections of the following analysis, figures for university and public libraries are not included. Reasons for their exclusion are discussed in the appropriate places in the text.

Organization

Two questions in the survey of Advertising & Marketing Division libraries covered the place of the library in the organizational structure and the superior executive to whom the librarian reports. Table 2 shows the percentage of libraries in each type of organization by the department in which they are located. A general administrative department is one such as support services, secretarial department, executive office, or operations.

However, this picture changes considerably when the libraries are divided by the type of company in which they exist. Advertising agency and media libraries are most often (59%) located in the research department; 22% are considered separate departments, and 17% are within general administrative departments.

Among the manufacturing company libraries, general administration is the most common location of the library (31%) while 21% are part of research and 21% are part of public relations. Non-manufacturing company libraries most frequently are part of research (37%), while 25% are separate departments, and 25% are part of general administration.

Libraries which serve associations and nonprofit institutions are most often general administrative departments (38%); 31% exist as separate departments and 23% are part of research.

University and public libraries are not included in Tables 2 and 3 since their organizational structures are on a different basis.

The superior executive to whom the librarian reports is, of course, a reflection of the organizational location of the library.

	Advg. Agencies	Com	panies			
Superior	& Media	Mfg.	Non-Mfg.	Assns.	Total	
Research Director	64%	21%	37%	15%	40%	
Other Administrator	32	30	44	77	40	
Marketing Director	2	14	0	8	6	
Public Relations Dir.	2	21	13	0	9	
Information Systems Dir.	0	14	0	0	4	
No answer	0	0	6	0	1	
	100%	100%	100%	100%	100%	

Table 3. Executive to Whom Librarian Reports

Base: 99 libraries (excluding 7 university and public libraries).

However, some differences will be found since the libraries which exist as separate departments must still be responsible to some authority in the company.

Overall, the librarian most frequently reports either to the research director or to an administrator such as the general administrative vice president, assistant to the president, executive director, president, head of personnel, head of management services. Eighty per cent of the Division libraries report to one of these executives.

Although these organization tables indicate some similarity in that libraries are most commonly allied with the research or general administrative functions of their companies, there are some significant differences.

Agency and media libraries are most frequently allied with research, either as part of the department or by reporting to the research director. Although these libraries usually serve the entire organization, their position would indicate that they are considered part of the research function.

Libraries which serve companies show more variation in their place in the structure of the company. Although research is a common location for the library, general administration, public relations and marketing also appear to be popular places for the library function. The location of the library in a separate "Information Systems" department also shows up in this category. This greater variation in the location of the libraries in companies may be a reflection of the large



size of the company and its organization structure as well as the interests of the library which may include technical areas as well as advertising and marketing.

Staff

Another group of questions in the survey covered the size and status of the library staff and memberships in professional associations. Staff composition by professional status is shown in Table 4. Both the average size and range of staff are included.

Except for university and public libraries where the average is 9.9 staff members, the various categories of libraries report an average size of 3—4 staff members. Most frequently the staff is composed of both clerical and professional personnel. However, some library staffs do include sub-professional personnel. The use of sub-professionals is more frequent in the large staffs of university and public libraries (which average 2.9 sub-professionals) than in the other libraries which average less than one sub-professional.

Staff	Advg. Agencies	Com	ipanies		University
Composition	& Media	Mfg.	Non-Mfg.	Assns.	& Public
Professional Average	1.4	2.0	0.9	1.2	4.0
Range Sub-Professional	0–8	0-12	0–3	04	1–9
Average Range	0.7 0–3	0.4 0–4	0.6 0–1	1.0 0–2	2.9 0–12
Clerical Average	1.2	1.5	1.4	1.0	2.0
Range Total	0-6	08	0-4	0–3	0–8
Average Range	3.3 1–14	3.9 1–20	2.8 1-7	3.2 1–9	9.9 2–21
Base: 106 libraries					

Table 4. Size of Staff

September 1969

Table 5. Professional Memberships

	Advg. Agencies	Companies			Univ.	
Association	& Media	Mfg.	Non-Mfg.	Assns.	& Public	Total
Special Libraries Association National, state, or	100%	100%	100%	100%	100%	100%
local library assn. American Society for	17	31	25	38	100	30
Information Science	2	28	6	23	14	13

Base: 106 libraries

The ranges for size of professional and clerical staff are of particular interest. Although, within each category of library, the total staff range indicates there is at least one person on the staff; the ranges indicate that in some libraries there is either no professional or no clerical person. The only exception is in the university and public library professional staff where the range begins at 1.

Respondents were asked about professional memberships held by them and their professional staff. Memberships in library or related associations are in Table 5. Not included are some 22 other memberships such as American Marketing Association, Advertising Women of New York, etc., which are primarily subject-oriented associations.

All librarians reported membership in SLA (a result to be expected since the survey was based on SLA members). Membership in other national, state, or local library associations ranged from a high of 100% among university and public librarians to a low of 17% among advertising agency and media librarians. Membership in ASIS was most frequent among manufacturing company (28%) and association (23%) librarians and least common with agency and media librarians (2%).



Collections

Respondents were asked to give the size of their holdings of various materials, ranging from books, serials, and annual reports which were held by all libraries to the more specialized materials such as research material, company data, and other special collections which were held by fewer libraries. The results are shown in Table 6* which reports size of collection by type of library and in Table 7 which reports the percentage of libraries holding various special materials.

Almost all responding libraries reported that their collections included books, periodicals, newspapers and annual reports. However, the median number of titles held of each type of material varied among the various categories of libraries as did the size of the collections of the libraries in each category.

The university and public libraries, as might be expected, showed the largest typical collections with 11,200 books and 255 periodicals. Company libraries also averaged large book and periodical collections with a median of 4,000 books and 250 periodicals in manufacturing company libraries and 1,500 books and 100 periodicals in nonmanufacturing company libraries. Association and non-profit institution libraries reported

^{*} The value given in Table 6 is the *median* rather than the mean or average. The median is the central value of a series of observations, half the observations lie above this point, half below it. In the selection of a measure for size of collection, the median was chosen because it is a good indication of "typical" size when the range of values is very wide and the presence of a few very large or very small collections will skew the average so that it does not effectively indicate the typical size of collection.

Table 6. Size of Collection

. .

	Advg. Agencies	Comp	any		University	
Collection	& Media	Mfg.	Non-Mfg.	Assns.	& Public	
Books						
Median	800	4,000	1,500	1,500	11,200	
Range	50-9,000	100-28,000	50-40,000	100-5,000	3,000-61,000	
Periodicals						
Median	165	250	100	120	255	
Range	20-3,260	50-1,200	4800	35–350	160-1,420	
Newspapers						
Median	4	5	5	4	7	
Range	1–52	2-30	2–45	2-15	1–10	
Annual Reports						
Median	100	200	70	100	650	
Range	101,000	6–2,500	5–5,000	10–3,000	40-53,000	

Base: 106 libraries

a median of 1,500 books and 120 periodicals.

Advertising agency and media library book collections were smaller (800 titles was typical) but their periodical holdings (a median of 165 titles) were proportionately larger compared to the number of books held.

The average number of newspapers in the various types of libraries was relatively small (4 or 5 titles in the company libraries, and 7 in the university and public libraries). All types of libraries reported fairly extensive annual report collections.

The libraries were also asked to report on their holdings of various other materials of particular interest to advertising and marketing libraries. Because most of these materials are generated within the company or are services purchased by the company, university and public libraries are not included. Table 7 reports the percentage of libraries which hold these special materials.

Whether or not a library maintains some of these special collections depends on whether or not the parent organization generates or

	Advg. Agencies	Companies				
Type of Material	& Media	Mfg.	Non-Mfg.	Assns.	Total	
Research Materials						
Internal research	51%	41%	63%	38%	48%	
Product audits	76	38	44	62	57	
Ad reader studies	51	31	13	62	40	
Interview tapes	17	7	6	0	10	
Company Data						
Internal archives	54	21	50	62	44	
Co./Dept. files	42	24	31	46	35	
Advertising Collections						
Print ads (Competitive)	37	7	0	23	20	
Print ads (proof)	27	3	6	0	13	
Broadcast commercials	17	7	0	15	11	
Other						
Picture files	49	17	19	23	31	
Slides and films	24	14	19	38	22	
Base: 99 libraries						

Table 7. Special Collections

uses the material. About half the libraries have collections of internal research reports. Over half also maintain collections of product audit reports (magazine and newspaper product studies which are generally available and/or the more expensive audits sold by Nielsen and MRCA). Over half the advertising agency, media, and association libraries collect advertising readership studies while fewer company libraries do so. Interview tapes are held by few libraries; this is logical because such tapes are usually created by advertising agency or company market research departments in the course of their work.

About half of the libraries have internal archives for their companies and more than one-third handle department or company correspondence files. Among manufacturing libraries, fewer than one-quarter report such collections in their care.

Although libraries in several of the categories have collections of advertisements and commercials, the agency and media libraries are most involved in these collections. Competitive print advertisements were collected by 37% of the advertising agency and media libraries. Proofs (proof copies of client or company ads) were held by 27%; 17% of the libraries had copies of broadcast commercials. One reason for the preponderance of print over broadcast collections is that broadcast commercial copies are not as freely available as print ads. Few copies exist and are often expensive to buy from services.

Picture, slide, and film collections were also fairly common among the various categories of libraries. Again, the agency and media libraries more frequently collected pictures (about one-half have picture files). The creative work of the advertising agencies would indicate that picture searching is an important activity in their libraries.



Indexes

The libraries were asked what periodical indexes they used. Almost 70 different indexes were listed in the replies. Many of these were specialized subject indexes and were held by only one or two libraries. Listed in Table 8 are the eleven indexes held most frequently. Interestingly, *Topicator*, an index covering advertising, marketing, and media publications, was held by only 8 libraries.

	Advg. Agencies	Companies			University		
Index	& Media	Mfg.	Non-Mfg.	Assns.	& Public	Total	
Business Periodicals Index Reader's Guide Funk & Scott Index PAIS Applied Science & Technology Index N. Y. Times Index Vertical File Index Vall St. Journal Index Index to Supermarket Articles Biography Index Predicasts	83% 63 37 20 15 27 27 17 32 17 32 17 7	93% 55 48 35 48 38 28 35 21 24 35	75% 56 31 37 31 13 25 19 19 19 19	69% 54 15 31 15 23 15 8 15 0	86% 71 57 100 71 71 29 86 43 43 43	83% 59 38 33 30 29 26 26 26 26 25 21 18	
Base: 106 libraries							

Table 8. Periodical Indexes

Table 9. Services

	Advg. Companies		panies		University		
Services	& Media	Mfg.	Non-Mfg.	Assns.	& Public	Total	
Reference and Research							
Reference questions	98%	100%	94%	100%	86%	97%	
Literature searches	76	76	81	77	57	76	
Bibliographies	66	76	63	69	57	68	
Market profiles	49	17	25	38	0	32	
Summaries of published							
information	34	28	19	21	0	26	
Publications							
Acquisitions bulletins	54	76	56	54	57	60	
Other regular publications	7	28	13	31	43	19	
Irregular publications	44	17	6	23	29	27	
Indexes Prepared							
Pamphlets	54	45	44	77	29	51	
Periodicals	46	41	19	54	43	42	
Corporate publications	22	28	19	54	0	26	
Corporate speeches	15	21	19	38	0	19	
New product file	24	10	13	23	0	17	
User Programs							
Selective dissemination							
of information	61	76	50	77	43	64	
Patron interest profiles	17	31	37	38	14	26	
Library user surveys	20	24	31	54	29	27	
Other							
Inter-library loan	81	79	69	85	71	78	
Photocopying	59	72	63	85	71	67	
Central book orders	76	38	75	85	29	63	
Central periodical orders	68	31	75	85	29	59	

Base: 106 libraries

Services

The questionnaire listed a number of services and asked the libraries to indicate which ones they offered. Table 9 shows the results by category of library.

Almost all libraries offered reference service although a few did not. Literature searches and bibliography preparation were performed by three-fourths of the libraries although only about one-half the university and public libraries offered these services. The even more specialized services of market profiles and summaries of published information which involve analysis and synthesis of information by the library staff were performed by all but the university and public libraries, with advertising agency and media libraries leading in both services.



All categories of libraries reported some type of publication with library acquisitions bulletins the most popular.

Company libraries are also more involved in the maintenance of various special indexes and files than the university and public libraries. Pamphlet and periodical indexes are mentioned by about half the libraries. Indexes of company publications and speeches are prepared by about a quarter of the com-

September 1969

pany libraries. About 25% of the agency, media and association libraries maintain special files of new products—an area of much interest in marketing.

User programs was another area surveyed; 64% of all A&M Division libraries reported use of some type of Selective Dissemination of Information. Manufacturing company and association libraries are most frequently found to have such programs with about 75% reporting them. Patron interest profiles and library user surveys are made by about onequarter of the libraries with company and association libraries leading in this activity.

About 80% of the libraries report they participate in inter-library loan. Photocopying is offered by 67% of the libraries. Central book and periodical ordering is fairly common among the organization libraries with agency, media, non-manufacturing company and association libraries most frequently handling this function.



Non-Conventional Systems

Finally, the survey inquired about the use and applications of non-conventional index or information retrieval systems and microfilm equipment in A&M Division libraries. Because the information received was sketchy, it is not presented in tabular form.

Of the 106 responding libraries 24 reported using or considering use of microforms, either rolls, fiche or card. Applications included internal reports (9 libraries), periodicals (5 libraries), theses, government reports, newspapers, and computer printouts (1 library each).

Ten of the libraries were operating information retrieval systems: 4 computers, 2 Termatrex, 1 Uniterms, and 3 did not state the system used. Applications included internal reports (6 libraries), cataloging (2 libraries), pamphlet files (2 libraries), and directories and books (1 library each). Eight libraries were using either a computer or McBee cards for magazine routing, union lists of periodicals, and in preparation of a book catalog.

Use of the Survey

The results of the survey indicate that while the Advertising & Marketing Division encompasses many different kinds of libraries, these libraries do have many interests and activities in common. It is hoped that these results will be of value to librarians who wish to assess their libraries against other libraries of similar background and interest.

The organizational location and superior executive information may give support to librarians who are asked for their recommendation on where the library should be located in relation to the rest of the organization.

The information on special materials and types of services may aid those librarians who are debating directions for expansion of collections and services. The list of periodical indexes, by indicating which indexes are found most useful in similar libraries, may aid in selection of indexes.

Although the use of non-conventional information retrieval systems and microfilm equipment is not widespread in advertising and marketing libraries, these libraries are finding applications for them and their use may well increase.

Standards and A&M Division Libraries

Although this survey was not structured to measure the performance of Division libraries in terms of the *Standards* (1) and the *Profiles* (2), it is interesting to compare some of the results of the survey with the applicable parts of these documents.

The Standards represent qualities to be sought in special libraries and information centers. The Profiles develop and apply these qualities to various special libraries. One Profile has been developed especially for advertising agency libraries. (It is to be expected, of course, that the agency libraries in this survey would match the Profile fairly well since the Profile was drawn from consultations and visits to agency libraries.) The ranges given for size of staff (Table 4) indicate that some Division libraries do not meet the minimum recommended in the *Standards* of one professionally qualified librarian and one clerical worker.

The standards for service are not quantitative nor do they present a minimum level of service. However, they do present guidelines for the major types of services which the special library should offer. Table 9 of this survey includes some of these services.

Almost all A&M Division libraries do perform reference work, and a substantial number conduct the literature searches and bibliography compilations listed in the *Standards* as aspects of reference service. Only about half the Division libraries prepare indexes to supplement commercial indexing services as recommended in the *Standards*.

Inter-library loan, another recommended service, is also practiced by 78% of the Division's libraries.

Through publication of library bulletins or other methods of dissemination of information, more than half the Division's libraries carry the responsibility for informing their clientele of their resources, another recommended service function.

The three documents—the *Standards*, the *Profiles* and now this Division survey—reinforce each other in picturing library service and together provide well-documented guide-lines against which advertising and marketing librarians may judge their libraries and plan for continuing growth.



Literature Cited

- 1. Objectives and Standards for Special Libraries. *Special Libraries* 55 (no. 10): 672–680 (Dec 1964)
- 2. Profile of the MNOP Advertising Agency Library. Special Libraries 57 (no. 5): 327–329 (May/Jun 1966)

Mrs. Wolfe developed and conducted this survey of the Advertising & Marketing Division. She was librarian at the Pillsbury Co., Minneapolis. She is now engaged in a research project in the Department of Civil Engineering, University of Minnesota, where she is investigating methods of literature and information handling in the fields of traffic safety and transportation.

Mrs. Christianson is past-chairman and a director of the Division. She was librarian at J. Walter Thompson Co., Chicago and is now a predoctoral student at the Graduate Library School, The University of Chicago.

Illustrations in this article are from 1800 Woodcuts by Thomas Bewick and His School (Dover Pictorial Archive Series). N.Y., Dover, 1962.

User Needs and Their Effect on Information Center Administration

A Review 1953/66

Robert W. Coover

Pennsylvania State University Libraries, University Park, Pa. 16802

■ A determination of the needs of users is absolutely essential to the management of an Information Center. Various techniques of doing this (e.g., interview, diary, questionnaire, etc.) are detailed along with their limitations. Some specific user need studies are described with their significant results. Interactions between users and an information system are described. Finally, all of these factors are considered in assessing the user needs that might be used to properly manage Information Centers.

I NFORMATION is derived from a Middle English word, which in terms of its original would mean "giving form" or "giving shape." Today one might say that information, in the sense of "data," "facts," and "intelligence," has "gotten out of shape"; by its prolific increase it cannot be completely formed or shaped. To give one an idea of this increase, it is estimated that there are two million scientific-technical articles each year. The growth rate is judged to be doubling every ten to fifteen years. Thus it is expected that there will be three million such articles produced by 1975.

There are considered to be two causes of this information growth: 1) the encouragement given by private organizations and the government to research and development; and 2) the population growth itself which has brought more people into the field of science and technology, thus increasing the amount of information. Some would question if this really is a crucial problem, since it does seem to have a natural cause-perhaps the solution will follow automatically as a result of the numerical increase of researchers (1). Much discussion has transpired on this subject. Suffice it to say here that the bulk of studies indicate that the information problem does seem crucial. Researchers are concerned that they may be working on projects for which solutions have been found and published elsewhere. It could be added that there may be an element of propaganda in this "information crisis." Part of the dilemma is simply a matter that the information seekers are not adequately trained in searching.

The problem seems due partly to the bulk of material and partly to the nature of the communication process. There is an increased quantity of information in many different languages and in many different forms. In addition, there is the increased specialization of some newer disciplines and increased proliferation of both older and newer ones. Relative to scientific communication, there is a normal lag between the discovery of a certain solution and its communication to others. One aspect of this may be attributed to the publication time lag-a period of two to three years between discovery and appearance in the primary journals, with perhaps an additional year or so before appearing in the

appropriate abstracting media. Another may be a reticence on the part of the researcher to publish his results for fear that his partly answered question may be solved by someone else before he himself can find the solution.

The foregoing provides the setting in which may be focused the problem of a scientific organization's personnel as they attempt to obtain needed information. The situation can be quite serious, as a sampling of science and technology management personnel revealed that they spent 25% or more of their time looking for recorded information (2). How fair a sampling this may have been is open to question. It is fairly apparent from the nature of science and technology that there must be a recurrent need to consult sources for pertinent data and information. A natural consequence of this would seem to be that the larger the organization engaged in this type of work, the greater the frequency of consulting various sources. The greater this frequency, the more the need for an organization of resources to facilitate this referral. It would also seem to follow that the "resource organization" should effect certain economies if it becomes centralized. The "resource organization," which now becomes an Information Center, exists only to provide services to user groups, and its monetary value is in terms of the service to the group(s) that it helps. It must continually demonstrate that it can find information better for people than they can find it for themselves. Consequently, this organization must continually appraise the needs of the user in order that the Information Center can obtain and have available what the user needs when he needs it. In fact, the value of the Information Center can be known only in terms of its satisfying the users' needs.

Methods of Studying User Needs

What are the needs of the information seeker, particularly those in a science-technology organization? (Here, the user will be defined simply as a possible user of an Information Center.)

The first consideration concerns the methods of determining user needs. Practically all methods rest upon taking a sample of some segment of the user population—a sample that should be representative, e.g., the sample of circulation should not be limited to a certain time of the year. It should be fairly free of bias, e.g., the nature of circulation statistics indicate only what has been collected. By the same token, reference questions represent the product of what the user construes to be the capabilities of the existing system. In general, a brief analysis of large samples is better than brief analysis of many small samples (3).

The interview method, which is popular, has two extreme forms: *structured* with a predetermined set of questions in prescribed order, and *unstructured* which is adaptable to the situation's demands. The former has the advantage of being standardized with results that are easy to tabulate, while the latter has a more definite requirement for a trained interviewer who would be able to follow through on suggested leads (4). One of the most notable recent user interviews was conducted by the Auerbach Corporation for the Department of Defense and Technical Information Program. This study was of

Mr. Coover has been active in library work since 1951, when he began work at the U.S. Naval Academy Library. His library experience since then has been in such specialized libraries as the Naval Postgraduate School and General Electric Company's Small Aircraft Engine Department. He was supervisory librarian at General Dynamics/Convair (San Diego) and supervisor of the Technical Information Center, Chrysler Corporation/Space Division (New Orleans). Since Sep 1967, he has been chief catalog librarian at the Pennsylvania State University Libraries. This paper was prepared while the author was an Adjunct Instructor in the Department of Library Science at the Drexel Institute of Technology.



a semi-structured form, using an interview guide, centered around some identifiable task and having a scientific or technical input and an identifiable output (5). These interviews were conducted with the basic tenets that assume nothing about the habits of technical people and require a large sample. The latter provided data of the type and quality needed in determining how people acquire and use information. After a test pilot, it was concluded that current awareness could not be suitably measured under the conditions of this test (6). Herner adds from his experience with interviews that one has to be wary of the problem of subjectivity in matters such as the empathy of the interviewer and the failure to pursue certain questions for fear of appearing ignorant (3).

The diary technique is a detailed record of events, e.g., reading in a given period of time. Shaw used this technique at the Forest Products Laboratory. The participants were 105 members of the professional research staff. They recorded their technical reading and library use on a personal data form, which included such data as the type and date of the documents read, amount of time spent reading, method of obtaining the particular document(s), etc. Shaw concluded that this type of experiment was not good over an extended period of time, but could be useful during a short period of perhaps a day at a time or over a period of several months (7). Bourne comments that it is an open-ended monologue which may include everything or simply a sample with entries recorded only at specific intervals. It generally interferes with the daily work of the recorder to an excessive extent. Finally, the large amount of unstructured material must be examined, correlated and interpreted at the end of the test period (8).

Questionnaires are usually written sets of questions that require answers in writing. They are generally aimed at finding user reaction on a given service or type of information. They vary in complexity from simple questions with Yes or No answers to a flow chart questionnaire. One of the latter was directed to the users of the Columbia University Engineering Library. This was designed to study the library as an economic system, with the user tracing his path and making a record on the questionnaire of his use of various tools. Pretesting of questions is usually needed in order to resolve the problem of ambiguity, which leads to misinterpretations. Generally, questionnaires are helpful in objectifying data and may be sensitive enough to detect important differences (7). To truly accomplish their mission, these must be a representative sample of the data desired. If all these precautions are taken, there is still the possibility that the reply will be in terms of the expected answer rather than the actual one (4).

Another approach is the survey which may vary considerably in its technique. It may select respondents independent of their research habits, or it may select at random those within a given class of researchers. Records are made of observations; these are usually objective comments of actual events. Sometimes a recording of preferences is required which can be quite subjective. Lack of common ground among various surveys usually makes it impossible to demonstrate relationship in the results of one survey with those of another (9).

Critical-incident studies have a special unit of observation, among others perhaps of a certain kind, that have been received. The Auerbach Study, previously referred to as a semi-structured type of interview, could be classed as one of this group, as it centered around an identifiable task. A specialized aspect of this kind of study is the critical-incident decision study which tries to trace back from the point that some decision is reached by the researcher to determine the information in-takes that played a part in reaching the decision (10).

A method used for some years has been reference counting or citation counting. This technique has utilized some prime reference materials-books or periodicals-in the particular field of study and has studied the various bibliographic citations given. The assumption has been that such citations would represent a good cross-section of literature in the particular field. Past criticisms of this technique have been its assumption that the material actually referred to may not actually have been used. Additionally, it generally has not assessed the importance of the materials cited as references; certainly no assessment has been made of materials that were used but not cited. Further, the technique has not provided information on the use of current literature (11). However, utilization of the computer with its capability of handling large amounts of material quickly will probably affect the complexion of this technique. The citation indexing program designed by Garfield and others has the feature of being able to work from a citation forward and provide data on the utility of references and also on related references. One can readily determine the number of recent citations in a particular journal, and thus evaluate its utility (12).

Study of circulation records is limited to the utility of an existing collection. Also, if the collection is an open access one, it does not provide records of other use than circulation. It can be helpful on a local basis as an indicator of the use of certain types of materials (7). Having similar limitations are references questions which represent direct contact with the user, thus a direct indication of his needs. No additional record is usually required with this technique, assuming that some record was made of the question initially. The answers can be analyzed to give some indication of the type and form of material consulted. Negative replies are also helpful as guides to obtaining new material. In one study—a total sampling of 171 inquiries-7.6% of the inquirers (13 persons) asked 31% of all the questions. Another interesting point of this study was that 74% sought information for direct use, while 22% sought information for indirect use (13).

An interesting study was made by Jahoda on the use of personal index files by research personnel. Records are made of reasons for use, the file or index heading searched, and if questions are answered. A case history is compiled by Jahoda from this information (7). Finally, there is the method of experimentation in which a hypothesis is made and certain conditions are established from which certain conclusions may be reached that relate to the original hypothesis. An example of such an experiment was one by Lipitz in which a citation index was specially prepared in the field of physics. The object of the experiment was to prove that increased use of the Soviet physics journals would be effected through the use of this index. Follow-up was by questionnaire and interview with the results that: 1) increased use of the

journals was quite small; 2) only a few physicists actually tried to apply the index in their search problems, and 3) those that did made favorable comments (10).

Summary of Study Methods

There have been many different studies that have utilized one or a combination of the preceding methods. These have provided a large array of data, but there is an uncertainty about their value. This doubt is attributed in part to the independent nature of these studies-even those on similar subjects have different bases or methods for their study. Secondly, their validity is questioned because the available measuring tools are judged inadequate to assess the present system or to judge a proposed system (6). Carlson, who put forth the second opinion. was apparently not completely convinced of the hopelessness of the situation; his agency directed a large and comprehensive user need study within the Department of Defense. However, the lack of complete objectivity of these studies must be admitted. Further, many of these studies have tried to test the various degrees of publications being used. Perhaps a more fundamental question is why one source is used and not another. Assuming that both sources have the needed information. the answer may be partly in the nature of the sources (14). Another aspect of the answer rests with the user's work habits (15). With this latter aspect in mind, Menzel says the problem should be approached from the standpoint of the behavioral scientist. He would define the approach in terms of *wants* and needs. The former represents constraints that the user may feel are feasible within the system in which he is operating. Needs, on the other hand, grow out of the present situation and conditions. They are modified by circumstances; consequently they cannot be extrapolated from the past.

Menzel feels that the scientist and his environment must be examined empirically to determine those needs that remain unfulfilled. This would involve exploring the efficacy of the interaction of the information services with the skills, habits and circumstances of scientists. These information needs must be defined in association with developing knowledge and must be learned through a study of the experiences of scientists in receiving and using scientific information. All the information gathering habits of scientists must be carefully examined. While most of the other methods structured the observation around a technique, Menzel stressed the importance of the overall idea of the observable units, along with consideration of variables, methods of analysis and relating factors. Finally, research into the information needs of the scientist must be both discriminating and comprehensive. In fulfilling the former, it must consider the different disciplines of scientists, as well as their different stages of progress in their work and at different phases of their careers. It should be comprehensive to include all channels of communication that were utilized in the transmission of scientific information. These are very numerous and complex processes, frequently involving many individuals between the source of information and an individual scientist (16).

Actual Studies of Libraries and Information Centers

Having considered the various methods of investigation, we turn now to look at the people who have been examined. Our first consideration is the identification of types of people who use Information Centers. A study by Mote at the Thornton Research Center, Chester, England, resulted in the conclusion that there was a distinction among three groups of scientific activities. These classifications in turn indicated whether the researcher's work was confined within a single subject; the individuals were grouped by function.

The first group comprised subject activities in which the underlying principles were well developed; the literature was well organized; the width of the subject area was well defined, but not necessarily narrow. An example of work in this group would be the search for structure of synthesis for a complex organic polymer. The second group of activities was concerned with a wider field of information than the first, and this information was less well organized. An example of this work would be studying the application of a lubricant; this study would be concerned with chemistry and physics in

an engineering environment. Here the literature cuts across several subject fields; thus it is not organized as a discipline. Information on the application of a lubricant was found in: the unpublished reports of industrial firms, government reports, the proceedings of many professional societies, work shop manuals, specifications, and also in the published literature which was approachable by indexes. The final group of activities is literature-wise less well organized than the previous one. Herein, there are a number of different subjects that the scientist is pursuing, while the problem he faces is subject to greater variation. Actually there is no literature organization to speak of for this pursuit (17). Mote does not seem to give too clear a picture of this group, perhaps because the nature of its requirements makes it somewhat vague. There is a description, offered by Bernal, of a type of scientist seeking information that would perhaps more aptly describe the activities of the third group. He refers to this scientist as one who does not know what information he wants, or enough to pinpoint his subject to make use of existing indexes. Further, he does not know if information exists on the subject, or even that he really needs such information (14).

The Mote study differentiated groups of users according to their activities. This grouping also conformed to the degree of use of the literature of one or more subject fields. Others have conducted studies showing use according to discipline; Bernal pointed out that there were differences in the literature use of biologists and the more exact scientists. The latter, particularly the physicist, made use of relatively few sources of information, but these quickly grew obsolete. The biological scientists, on the other hand, had need for information and sources for a much longer period of life---some would even say for an indefinite life (14). In another study, Flowers concluded that there are differences between the literature use of chemists and that of physicists. The former make more use of abstracts than do the physicists, who up to the present really have nothing comparable to Chemical Abstracts. Physicists make greater use of reports (18). A study by Holm indicated that only 34% of the membership of the American Institute of Chemical Engineers made some use of the indexing materials provided by that organization, while only 7% made use of the *Chemical Engineering Thesaurus*. An interesting parallel to this was that those who did not use the aforementioned material had a tendency not to be users of any information service (1). The needs of the scientist, as reported by Hanson, were more frequently connected with current work, while engineers had to seek information on marginal or peripheral subjects (19).

Slater surveyed 14 industrial libraries and found four main groups of users. The degree of their composition of the whole is indicated in percentages: Working Scientist (50%), Technician (20%), Administrative/Executive (12%), Technical/Executive (11%), Non-Scientific Specialist (5%), and Clerical/Secretarial (2%). The Working Scientists included engineers and other graduates who were directly engaged in research and development. Because of their numerical superiority, they constituted as a group the largest portion of library users. Actually they were less frequent users than the Technical/ Executives, who used it most frequently. The latter were graduate engineers and scientists, who were likely to look up information without consulting the library staff. They seemed more familiar with the subject and its literature than any other group of users. The Working Scientists were not as self-reliant as the Technical/Executives, but did usually make an effort to locate information independently of the librarian. Whenever they did ask questions, these were usually well formulated. The Administrative/Executive usually came to the library personally, rather than send his secretary for information. However, he seemed less willing and able to cope with the mechanics of finding his "way" around the library, than any other group. An average of 33.9 minutes was spent by some member of the library staff in helping each of this user group, as opposed to an average of 9.8 minutes upon inquiries by Working Scientists. The administrative group seemed to use the library to check simple factual matters, or to obtain a description of an object, process or method. It is also noted that this group was more interested in obtaining data from outside sources than any other group. The remaining large significant group



of users were the Technicians whose information requests were for handbook or textbook type of material, rather than periodicals. This group required a longer period to find material, and having had little experience in using the library, they thus required help. However, the nature of their questions was relatively easy to answer even though poorly posed. Consequently the librarian spent only about 5.3 minutes on their average inquiries (20).

There were additional user identification data gleaned from the Slater study. It was concluded that the user could be identified in terms of project or routine work. Of a sample of 212 persons, 175 were identified with a succession of defined projects. This sample was analyzed in terms of library usage. There were 120 persons who came to the library with requests that could be identified with their project; 66 came with questions more indirectly related, while 26 came with problems that had no bearing on their project at all. The total of the last two groups represented potential subject areas that were peripheral in nature (20). This indicates the possibility of referring to many resources outside the scope of the usual industrial information unit. Additional aspects of the effect of working environment on information needs are indicated by other researchers. Bernal refers to the practical scientist in industry as perhaps needing more information than the research scientist. They must deal with questions as they arise on a variety of subjects. Speed seems to be a definite requirement, not exhaustive information (14). Another study indicated that the industrial scientist in the United Kingdom is less dependent upon literature than is the pure scientist. Seemingly, the personal contacts have been better developed by the industrial researcher (18). Finally, Hanson summarizes certain differences between the researcher in industry as opposed to his academic counterpart. The former wants information: more quickly, more recent, more frequently just single facts and figures, by subject rather than by document name, and of a greater

percentage of peripheral literature. It can also be added that the industrial scientist has been more willing to entrust the library staff with the job of finding material, rather than make the search himself as his academic colleague is prone to do (19).

User and System Interaction

Three reasons for the use of any information system were defined by Voigt. These were termed approaches and identified as: Current, Everyday, and Exhaustive (11). To these Menzel added two: the need to brush up in the field, and the need to be advised of information outside the present areas of attention in order to obtain all relevant material (16). These will be discussed with some examples, as applicable, from different studies.

The current approach refers to the activities of other scientists in respect to broadening a field of which they feel a part. In this activity Voigt has referred to scientists using bibliographic aids by themselves without actually referring to the source indicated. However, he may also use the bibliography itself as a guide to reading about other problems. In a study by Feinler and others, on the needs of scientists in the field of atomic and molecular physics, one of the expressed needs was for a journal on this branch of science which would alleviate some problems, because much of this material is scattered among a number of existing journals (21). Also a study by Flowers indicated that Chemical Abstracts and Physics Abstracts are used to keep current, for specific information, and as aids in selecting papers to read (18). In an investigation by Hanson, the conclusion was reached that the scientist cannot keep up-to-date by reading papers in the primary journals of his field, unless he is able to devote more than three hours a week to this activity. It should be added that current awareness is an essential function, as Carlson has suggested, for the scientist in adding bits of knowledge to his store. These are correlated with new meaningful observations made, and then stored until that time when they may become productive (6).

The everyday approach is defined as the pursuit of a problem that may occur any day, in which there is a need for some published information, as the description of some apparatus, an equation, etc. While not specific to this point, yet relative to it, is the observation made by Flowers that scientists, in general, do not know how to make the best use of existing library sources. They require training in use of literature at the beginning of their careers. The librarian did not escape criticism, for when systematic literature searches were undertaken, they were done without the librarian's consultation, practical assistance or advice in more than 70% of the cases. Thus the librarian was felt to be playing little more than a passive role in the research process (18).

In another case, only about 1% of the documents discovered by the librarian were helpful to the researcher, while none were discovered through the card catalog. Further, the users showed lack of confidence in their library and information service. The library was considered to be a store for obtaining specific documents, for reference purposes and fairly elementary information searches. These comprise at least one-half of their needs (19). One user expressed his viewpoint on the use of published information. This was mainly from the standpoint of a researcher at a university, and the picture presented was a composite of his own experiences and those of others. He felt that there are three levels of users. The first level will accumulate as many books and documents as he can afford-and store for use in his own office. The second level uses stores accumulated by immediate office neighbors, while the third level refers to other libraries in the order of their proximity. A related aspect of this study was that the user judges a library in terms of its answers to his requests, and in terms of the time it takes to answer. The reply is desired in a form that can be taken to his office, e.g., reproduction, computer print-out, by telephone, etc. (22). Also relating to library use, it was concluded from a series of investigations that at least onehalf of the total requests were for a kind of information that would not entail prolonged searches (19).

The exhaustive approach is considered a rather complete search of references on a certain topic. The degree of completeness varies with the purpose of the search. In general, this type of search is much less fre-



quently requested than others, but the librarian usually attaches major significance to it. The experience of a group of atomic and molecular physicists indicated that replies on exhaustive searches were not quick enough; that they gave a large bulk of references somewhat indiscriminately, and that there was a lack of understanding between the searcher and the scientist. (The searcher had an inadequate knowledge of scientific materials) (21).

The two other approaches are briefly identified as the need to brush up, which refers to the efforts of one to familiarize himself with a well defined field of activity that had previously been outside of his attention range; the second refers to the need for information, outside the present scope of his studies, related to his interests.

Another approach to this subject of user interaction with the Information Center was perhaps best capsulized by Herner. According to his scheme, users need four types of information: conceptual, empirical, procedural, and stimulatory. The conceptual may be satisfied by the quest of the previously indicated five approaches, except perhaps for the everyday approach. It is, however, usually associated with primary journals and original research. The empirical and procedural requests are associated with the everyday approach, but could also be connected with the need for brush up. These two approaches differ from the others in that they can be delegated to someone else. The former of these refers to the use of handbooks, texts, and abstracting and indexing services, while the procedural usually uses textbooks and laboratory manuals. The stimulatory access is primarily concerned with the current approach. It also utilizes direct contact with colleagues and observations (3).

A final word on the matter of user interaction was perhaps well-expressed by Voigt from his study of Scandinavian scientists. He felt that this group was relatively free of a language bias, as each scientist had to use other languages, since there are relatively few bibliographic services in the Scandinavian those scientists derived their information from oral sources, while less than half derived information from print. Additionally, approximately one-third of the scientists' reading in connection with his work was actually located via browsing through the important journals of his field of interest (11). Other studies on the importance of personal contacts to scientists in their information quests have arrived at the estimate of between 25–50% (19). In another study, Flowers reported that personal contacts were highly regarded, but that there were less than might be expected by an experienced information officer (18).

languages. He found that at least half of

Systems Modification

The previous sections have not really discussed the administrative aspects of meeting user needs, which will now be considered. First of all, one might review the various methods of research and the various studies of the problem for their value to his own center. An understanding of the methods used is necessary to interpret the studies and to realize their limitations. It is most doubtful that such studies could be applied in a formal way to the local center, because of the time, expense, and lack of qualified experimenters. However, these large scale studies can have local applications. Some conclusions reported by Fishenden from various user surveys were that nearly all research students at the National Lending Library were, when given appropriate guidance, able to find information of which they were previously unaware. The resources of existing libraries and staff were also very incompletely exploited (23). The implications of these for local center application would seem to be in determining what segment of the center's users need instruction to better help themselves, and in investigating programs that would lead to greater utilization of existing center resources. (Some of the possible programs will be discussed in a little more detail later.) Another implication is, from the conclusion of Voigt's and other studies, that scientists use libraries for different purposes, and that they also have oral sources of information. Certainly the designer of an information center system would have to consider that each user has certain overall needs, but that he has different kinds of needs at different times. Further, the oral sources of information should be considered in overall systems design.

Studies at the local center will probably not be as formal as the large scale studies. They should, first of all, be directed toward the total organization of which the center is a part. What are the organization's objectives? What are the means of fulfilling them? What components of the organization are directly related to accomplishing these objectives? The answers to such questions would give some direction to defining the overall goals of an information center. Once the components were defined, these could be investigated to determine more specific needs. The department heads or group leaders of these potential users should be interviewed, guided by a carefully constructed list of questions, as to what their information needs are and how the center may help them in getting information. These interviews can establish a second purpose, that of establishing rapport with the user groups (24). A series of questions relating to the determination of users' sources of information, their form, actual and potential uses is enumerated by Holm (1). These may be useful in obtaining facts relative to systems modification. Other studies relating to activities of users in terms of scientific-technical organizations, can be of considerable value in ascertaining interests and needs. Once these needs have been objectively expressed, there must be some formulation of the means of satisfying them. This can then be translated into a money value (2) in order to negotiate with the users in some objective fashion the degree to which the center will supply their needs.

From the data derived through these various studies some plan must be developed. It should be realized at the outset that almost any plan will be a compromise. It probably cannot satisfy all the needs of one user group, let alone the sometimes conflicting needs of various user groups (3). For example, to provide a mechanized system with a personal intermediary between the file and the user will automatically eliminate the capability of browsing (16). There will also be a conflict in establishing a centralized file as opposed to continuing support of personal files. The two files are different in purpose, structure, and application (25). In practice, the excessive building up of personal files is detrimental to a centralized file in that material becomes scattered and unavailable to many. One may also conclude that when large personal files are allowed to continue and grow, the information center is not really satisfying user needs.

The second point to be considered is the establishment of service standards acceptable to the customer and expected of the center's employees. This would include standards for different types of searches that would in turn meet different needs-a few searches being of exhaustive type, while others would be rather limited. Another consideration would be additional means of help for the user, e.g., through instruction, through arrangement of materials, through signs, etc. Perhaps the use of technical liaison people who work for the center, but with the user, could affect greater rapport between the user and center. The user could be tactfully instructed in the use of materials in this relationshipa learning experience that he might reject from a non-technically oriented "teacher." One might also think of everyday approaches to meeting user needs, e.g., organizing informal files indicating special subjects in which users are interested (based upon informal conversations, order and circulation records) (26); devising an in-plant directory of such expertise; determining science-technology organizations to which users belongmaking lists of meetings held, subjects of meetings that are of special interest to users; etc. The final aspect of the plan would allow for feedback. In his study of the user groups in terms of scientific activities Mote referred to one of these groups whose subject field was well developed and the literature of the field was well organized (17). This group, as contrasted with the other two who required more help from the library staff, did not automatically give feedback to the center. In arranging for feedback, the head of the center must take steps to allow for it, when such is not provided by the usual means of circulation, personal contact with library staff, etc. The center staff must arrange a definite encounter with such users, through the technical liaison people, an arranged interview, and/or other means.

Summary and Conclusions

User needs and Information Center administration is a very practical subject. The centers exist to satisfy user needs; and such centers are no longer of value when they fail to fulfill them. There have been many large scale studies and many methods advanced for study. Some of these may seem contradictory, as their bases are frequently different. To administrators of most centers, these studies may serve to direct their thinking toward certain problems that they might overlook, due to the myopic nature of their position.

Generally, these studies serve as a stimulant to the administrator in order that he may draw certain conclusions for his own application, and to think about informal



studies and activities that he could undertake to foster better working relationships between the center and its users. New methods must be continually tried as the lines of communication become entangled and ensnarled with age. Also conditions change, so that a method appropriate at one time is not appropriate at another. For this reason there must be provision for continuous feedback so that the Information Center's service will be designed to meet both present and continuing needs.

Literature Cited

- 1. Holm, B. E. / Techniques and Trends in Effective Utilization of Engineering Information. *Aslib Proceedings* 17: 134–169 (1965)
- 2. Reeds, A. M. / "Information Needs and Patterns of Usage" in *Information Retrieval in Action*. Cleveland, Western Reserve University Press, 1963. p.17–23.
- 3. Herner, Saul / "The Determination of User Needs for the Design of Information Systems" in Information Systems Workshop: The Designer's Responsibility and His Methodology. Washington, D. C., Spartan Books, 1962. p.47-60.
- Borko, Harold / "Determining User Requirements for an Information Storage Retrieval System: A Systems Approach" in Information Systems Workshop: The Designer's Responsibility and His Methodology. Washington, D. C., Spartan Books, 1962. p.37-46.
- 5. Seiber, H. F. / "The Methodology of the DOD Scientific and Technical Information Use Study" in Proceedings of the American Documentation Institute: Parameters of Information Science Annual Meeting,

October 5-8, 1964. London, Cleaver-Hume Press, 1964. v. 1: p.235–242.

- 6. Carlson, Walter M. / "Scientists' Requirements" in *Electronic Information Handling*. Allen Kent and Orrin E. Taulbee, eds. Washington, D. C., Spartan Books, 1965. p.85–91.
- Jahoda, G. / "Information Needs of Science and Technology—Background Review" in Proceedings of 1965 Congress, International Federation for Documentation, 31st Meeting and Congress. Washington, D. C., October 7-16, 1965. Washington, D. C., Spartan Books, 1966. v. 2: p.137–142.
- Bourne, Charles P. / "A Review of the Methodology of Information Systems Design" in Information Systems Workshop: The Designer's Responsibility and His Methodology. Washington, D. C., Spartan Books, 1962. p.17-25.
- Barnes, R. C. M. / Information Use Studies. II. Comparison of Some Recent Surveys. *Journal of Documentation* 21: 169–176 (Sep 1965)
- 10. Menzel, Herbert / "Information Needs and Uses in Science and Technology" in Annual Review of Information Science and

Technology. Carlos Cuadro, ed. N. Y., Interscience Publishers, 1966. v. 1: p.41-69.

- 11. Voigt, Melvin J. / The Researcher and His Sources of Scientific Information. *Libri* 9: 177–193 (1959)
- 12. Garfield, E. and Shera, J. H. / New Factors in the Evalaution of Scientific Literature Through Citation Indexing. *American Documentation* 14: 195–201 (Jul 1963)
- 13. Cole, P. F. / The Analysis of Reference Questions Records as a Guide to the Information Requirements of Scientists. *Journal of Documentation* 14: 197–207 (Dec 1958)
- 14. Bernal, J. D. / The Supply of Information to the Scientist: Some Problems of the Present Day. *Journal of Documentation* 13: 195–208 (Dec 1957)
- 15. Brosin, Henry W. / "Expressed and Unexpressed Needs" in *Electronic Information Handling*. Allen Kent and Orrin E. Taulbee, eds. Washington, D. C., Spartan Books, 1965. p.75–84.
- 16. Menzel, Herbert / The Information Needs of Current Scientific Research. *The Library Quarterly* 34: 4–19 (Jan 1964)
- 17. Mote, L. J. B. / Reasons for the Variation in the Information Needs of Scientists. *Journal of Documentation* 18: 169-175 (Dec 1962)
- Flowers, B. H. / Survey of Information Needs of Physicists and Chemists. *Journal of Documentation* 21: 83–112 (Jun 1965)
- 19. Hanson, C. W. / Research on Users' Needs: Where Is It Getting Us? Aslib Proceedings 16: 64–78 (Feb 1964)

- 20. Slater, Margaret / Types of Use and User in Industrial Libraries: Some Impressions. *Journal of Documentation* 19: 12–18 (Mar 1963)
- Feinler, E. J. et al. / Attitudes of Scientists Toward a Specialized Information Center. *American Documentation* 16: 329–333 (Oct 1965)
- 22. Dolby, James L. / University Libraries and the Information Needs of the Researcher. II. A Consumer's View. *Aslib Proceedings* 18: 185–190 (Jul 1966)
- 23. Fishenden, R. M. / "Methods by Which Research Workers Find Information" in International Conference on Scientific Information Proceedings, Washington, D. C., November 16-21, 1958. Washington, D. C., National Academy of Sciences, National Research Council, 1959. v. 1: p.163-179.
- 24. Herner, Saul / Improving the Internal Information Services in Scientific Research Organizations. *Special Libraries* 44: 15–19 (Jan 1953)
- 25. Becker, J. / "Getting to Know the User of an IR System" in Information Systems Workshop: The Designer's Responsibility and His Methodology. Washington, D. C., Spartan Books, 1962. p.61–67.
- Campbell, W. R. / "Feedback from the User—Sine Qua Non" in *Information Handling, First Principles*. Paul W. Howerton, ed. Washington, D. C., Spartan Books, 1963. p.107–134.

Received for review Jan 30, 1969. Accepted for publication Jul 20, 1969.

This Works For Us

Moving a Fragmented Collection

Constance Uzelac

School of Medicine, University of Southern California, Los Angeles, California

 $T_{\rm HE}$ University of Southern California School of Medicine Library has undergone numerous moves from temporary quarters in a basement on the main campus, to a wartime barracks, to the Operations and Maintenance Building located on the medical campus. Twenty years of planning were fulfilled with the dedication of the Norris Medical Library.

The collection was scattered in several locations because of lack of space in the Central Library. The serials collection presented an interesting problem since it was housed in three different locations. We estimated that approximately 8,000 volumes were boxed and inaccessibly stored. Eight thousand volumes were shelved in Storage Room A and were accessible for measuring, though not actually located in the Central Library, and 10,000 volumes were located in the Central Library. This article describes the methods used in moving and integrating approximately 27,000 volumes which comprised the circulating serials collection.

A set of microfilmed cards, which were almost a duplication of the shelf list, were numbered consecutively. It was decided to measure everything rather than make rough estimates, since each shelving section varied in length. Some varied in height and depth, and some shelving, because of the depth, contained a double stacking of volumes. The unknown measurements of the boxed items also played a major role in our decision to measure everything else that was accessible. Long runs were calculated judging from the indications of the shelf list. The 8,000 volumes in Storage Room A were measured first and the measurements written on the microfilmed set of cards. The height of each title was also noted in order to be able to shift the shelves to accommodate oversized titles in advance of removal. The serial collection in the Central Library was measured next. The Central Library housed the collection dating from 1954/55 to the present as it accumulated and any back runs and complete sets of titles acquired since the last relocation of the library.

The shelf list indicated which titles were boxed and the approximate number of volumes and years for each title. However, this gave no indication of the height or linear footage of the run. The average of 5.5 volumes per foot (1) was used in estimating the number of shelves needed for a single title if the entire set was boxed. In cases where part of the set was boxed and part was accessible for measuring, an estimated figure based on the measurements of the accessible volumes was used. For current titles, a five year growth period was estimated by measuring the current volumes on the shelves for one year, and multiplying by 5. The measurements for each title were converted from inches to number of shelves (in our case it was 35" per shelf) needed for each title, including the five year growth.

A plot plan was drawn and each section of shelving was numbered with the numbers continuing straight across the aisle. The plot plan was drawn as accurately as possible to include the following features: wherever possible to leave at least one-third empty shelf between each title; to leave the top and bottom shelves of each section empty; to leave one empty section per row of sections; to include all shelves that had to be shifted to accommodate the oversized volumes; and to place the 20 study carrels in alternate rows throughout the stacks.

With the plot plan complete, titles in Storage Room A and titles in the Central Library were labelled indicating the following: the title number assigned on the microfilmed set of cards and present location; the section location and an approximate shelf location in the new library. The sections of shelving in the new library were also numbered, and necessary shelves were shifted. Several copies of the plot plan were made since some circulation staff members, in addition to the two librarians, were used to supervise the movers. We were ready to make an alternate plan if our calculation of the boxed items proved inaccurate.

The move was carried out by the USC Operations and Maintenance Division using one panel truck and 20 consecutively numbered library book trucks during the course of one week (only part of which was spent moving the serial collection). The difficulty of access to the entire collection made moving complicated. Access to Storage Rooms A and B (Storage Room B housed less-used textbooks) was limited to certain hours of certain days since these rooms were adjacent to classrooms.

The boxed items were moved first, unpacked and placed on the shelves in their approximate locations, and shifting adjustments made thereafter. This was the most critical phase since the smoothness of the operation hinged on the accuracy of the estimates for this part of the collection. Storage Room A was moved next. The aisles in Storage Room A were so narrow that only one library book truck and two men could make use of any aisle at one time. In view of this, it was decided that the best method of moving the collection was to keep it in the same kind of order as it appeared on the shelves, but to work from two starting points. These limitations along with the reduced access to the storage rooms because of classes necessarily slowed the progress of moving.

All went well with only two book trucks overturned and three very minor shifts of volumes which had been boxed. We did have one incident of a mover misshelving a rather long run! We found it necessary, also, to close the library to patrons for the period from Friday through Tuesday.

Shelf reading was easily accomplished by the two librarians and a library assistant; it was sporadically done by title during the move and once by volume upon completion of the move. The section numbers which were used during the move for location purposes will continue to be used to assist patrons in finding titles. These are also being used on the shelf list, and it is intended to include them on the range-finders and Linodex.

Reference

1. Spyers-Duran, P. Moving Library Materials. Rev. ed. Chicago, ALA/LTP, 1965, p.5.

Selected Bibliography

- Kurth, W. H. *Moving a library*. New York, Scarecrow Press, 1966.
- Metcalf, K. D. Planning Academic and Research Library Buildings. New York, Mc-Graw-Hill, 1965.

Article received Apr 25, 1969. Mrs. Uzelac is acquisitions librarian at the School of Medicine Library of the University of Southern California.

<u>vistas</u>

New HUD Library

Secretary George Romney of the Department of Housing and Urban Development welcomed the Washington, D. C. Chapter of SLA, the DCLA Law Librarians and other professional librarians to the new HUD Building and Library on April 17, 1969.

The main address was given by Lester P. Condon, Assistant Secretary for Administration. Richard D. Althaus, Director, HUD Office of General Services described the architectural design and characteristics of the building.

Mrs. Elsa Freeman discussed the new library layout. The group was then guided on a tour of the extensive facilities which have merged the three former libraries of the Housing and Home Finance Agency, the Public Housing Administration and the Federal Housing Administration.

The HUD Library is a technical information and document resource, designed to serve HUD staff, other Government agencies, outside organizations, universities, and the general public. The books, periodicals, documents, films, and reports are concerned with every aspect of housing and urban affairs. The law collection is considered outstanding.

"Housing and Planning References" is a regular issuance of the HUD Library; it in-

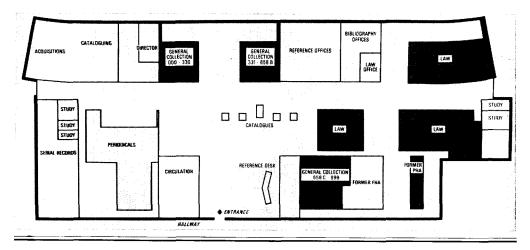


Reading and exhibit area of the Department of Housing and Urban Development Library.

dexes books and significant periodical articles received within a two-month period. It is designed to assist staff and other interested individuals in keeping current with the latest thinking and recorded experiences in the field.

Bibliographies on special subjects are also compiled, ranging from published syntheses of the literature to brief typed lists. These are obtainable upon request. Special study rooms are available to those engaged in longterm projects using library materials.

> Catherine D. Scott Publicity Chairman SLA/Washington, D.C. Chapter



September 1969

National Engineering Information Conference

The National Engineering Information Conference (Jun 24-25, 1969) in Washington, D. C., should have been very profitable for its attendees. There was every likelihood that it would be. It was sponsored by the highest echelon of the scientific portion of the Executive Branch of the U.S. government; it had an impressive array of speakers, session chairmen and panelists; physical facilities were superb; and there was to be a selected audience of engineers and others concerned with technical information—drawn from industry, government, techncial societies and related fields. Yet when looked back upon, the conference fell short of the expectations of the average attendee. To coin a cliché, you can't judge a conference by its printed program.

The chief emphasis of the conference was on existing information systems used by industry, government and technical societies. Its tutorial flavor, while useful in some circumstances, took up valuable time, and left little opportunity for discussions of what many attendeees would rather have heard, namely papers or panel discussions on the general outlook for improving our information systems. Anyone, even modestly informed on this subject, is aware of problems facing engineers and scientists in obtaining the information they need. Yet the conference barely mentioned most of these problems. It would have been far more useful to have concentrated on where we should be heading, information-wise, than to have spent so much time hearing about where we are at the present. And it wasn't even a very broad picture of where we are, since the speakers representing governmental, society and private agencies spoke of their own particular systems for 30-45 minutes each, giving specific details of little interest to the average attendee. Two or three papers summarizing the principal features of systems to be found in these sectors would have served much better the goal of bringing us all up to date with current developments than the many papers and sessions devoted to the precise description of a small portion of the over-all scene.

The conference was sponsored by the Office of Science and Technology (of the Executive Office of the President). OST's director, Dr. Lee A. DuBridge, was on hand to give a brief word of greeting to the 300 conferees. Government and industry seemed to be the best-represented groups; invitations had been sent to other types of groups, including SLA, for representatives. The keynote speaker, Dr. Eric A. Walker, president of the National Academy of Engineering, made his main contribution to the program by drawing our attention to a recent report on scientific and technical communication, prepared by a committee jointly sponsored by the National Academy of Sciences and the National Academy of Engineering (1). The 30-page summary of the full report prepared by the committee (known as SATCOM) had nine pages of specific courses of action on system coordination, user services, research sponsorship, etc. A recent article also summarized the SATCOM report (2). On the face of it, this report might well have served as a working paper distributed to attendees in advance, with group discussions of its many facets. One of its topics, government organizational problems, was at least touched upon when Congressman Emilio Q. Daddario (D., Conn.) spoke at a luncheon on some of the goals of hearings to be held soon by the House Subcommittee on Science, Research and Development, where he, as its chairman, is guiding a study on ways to improve the organization of federal science agencies (3). His comments were brief, due to a tight schedule "on the Hill" for him that day.

The first session was probably the best and was the one in which general observations, rather than specific descriptions, of informational problems were given. Walter Carlson described the findings of a 1967 Department of Defense survey of the informational needs of practicing engineers of various types, such as design *vs.* developmental. J. C. R. Licklider surveyed young engineers and found them expecting computer-type systems to provide their information; at the same time they are generally ignorant of present systems available for their use. Robert B. Chapman III spoke of a wide range of problems in industry; he gave a very strong vote of confidence to special librarians in industry.

- 1. National Academy of Sciences. Scientific and Technical Communication; A Pressing National Problem and Recommendations for Its Solution. Washington, 1969. 336p. (NAS Publ. 1707) \$6.95.
- New Commission Would Guide Communication. Chem. Eng. News 47: (24) 78-79 (Jun 9, 1969)
- 3. Centralized Federal Science Agency Need To Be Aired. *Chem. Eng. News* 47: (23) 24–25 (Jun 2, 1969)

Ellis Mount Science and Engineering Library Columbia University New York 10027

New Dimensions in Acquisitions

Special librarians face a 5–10% increase in budget for procurement of periodicals in the future. This was the principal conclusion for special librarians from a preconference session of ALA's Resources and Technical Services Division at the Atlantic City ALA Conference. The session was attended by some 500 librarians of whom 10% were specials as evidenced by the latter's attendance at "Group Analyses of Solutions to Acquisitions Problems" on Friday morning. This last group emphasized the urgency with which material was required as contrasted to emphasis elsewhere in the conference in obtaining material at the very lowest cost.

Special librarians did not have to put up with the bid procedure which many of the other librarians felt to be obnoxious. Relations with jobbers were not uniformly satisfactory, and there was a suggestion that the investment in library time for repeated follow-up and multiple claims should be brought to the attention of the jobbers.

Representations during the general discussion period made clear the dissatisfaction in the jobber community with their low profit margin from handling library accounts. There was the prediction that the not yet general practice of charging 5–10% above the list price for periodicals as a service charge would become a general practice in the very near future. In view of the high proportion of special library budgets that periodicals represent, it seems desirable that this potential trend be brought to the attention of the SLA members.

> E. B. Jackson IBM Corporation Armonk, N. Y. 10504

SATCOM Forum

A forum reviewing the recently published SATCOM report, held at the auditorium of the Natural History Museum, Smithsonian Institution, under the auspices of the Committee on Scientific and Technical Information (COSATI) Jul 23, was attended by more than 150 persons from the Washington metropolitan area concerned with information use and dissemination.

Dr. Robert W. Cairns, chairman of SAT-COM, provided an overview of the report, primarily by reading and commenting on the

September 1969

first paragraph of the report sentence by sentence. This paragraph, he said, contains the most complete general statement of the report's purposes and findings. He noted that the SATCOM group's mission had been to survey the present state of information production, dissemination, and use in the scientific and technical community, and to make recommendations. The most important of the 56 separate recommendations (which can be grouped into a smaller number of major subject recommendations) was the desirability of establishing a Commission on Scientific and Technical Information in the National Academy of Sciences/National Academy of Engineering complex to continue to survey information needs and to initiate studies, experiments and further recommendations to action.

Dr. F. Joachim Weyl, executive secretary of SATCOM, in an extemporaneous tale emphasized the framework of ideas within which it was constructed.

Each of ten other speakers, from the university, industrial, government sectors, and from the information industry and professional societies, spoke briefly on his impression of the report with whatever criticism that occurred to him. All speakers agreed on the great value of the report. "It is a landmark report" was the identically-worded opinion of two of them (Scott Adams and Dr. Milton Harris). A third man noted wryly that the first report on scientific information produced about ten years ago was only a few mimeographed sheets; the Weinberg report was a dozen or so pages saddlestitched, but the SATCOM report was a bound book which librarians could catalog and shelve-a comment which drew appreciative applause from the audience.

Criticism of the report centered on four or five areas. They were: that universities as sources of information or as information processors were largely ignored (Bernard Fry and Mr. Adams). The place of the university in training information handlers and processors was also not covered in the report (Mr. Fry and Dr. Koch); later, it was pointed out that the report did not attempt to discuss any phase of training for information operations, since training was considered too big a subject to tackle in connection with a survey of information use as it now is.

DeWitt Myatt and William T. Knox felt the report was "provincial" in that it emphasized information for science, but ignored engineers and information users, the application of information in the high technology, and industry itself as a source, user, and disseminator of information. Mr. Knox also noted the report did not consider how different pieces of information may differ in value. Dr. Robert B. Howard, of the Bureau of the Budget, made the same comment from a different point of view, when he stated it was necessary to measure the value of information and that, at present, only the financial standard, as illustrated by "use charges," had any validity. He held, as did other speakers, that much more needed to be done in the way of experimenting and investigation to determine how information is used and disseminated, and what methods can achieve most satisfactory and economic availability. In this, he agreed with the report itself.

All speakers agreed that the chief recommendation of the SATCOM report-the establishment of an information commissionshould be carried out promptly. A representative from the Office of Education, speaking from the floor, expressed the hope that the behavioral sciences would be represented on such a commission and noted that very little mention of their needs was made in the report. Dr. Weyl replied that the omission resulted from the fact the behavioral science societies had begun work on a similar study of information use and dissemination in their field as SATCOM, but, being a smaller group, had published their report last year. He also noted that two social scientists were members of the SATCOM group but their attendance at meetings of the group was not continuous.

A new phrase may have been created by Dr. Jordan J. Baruch when he noted that our problem is not the information explosion but *information pollution* because the bits of data we need are often so intermingled with greater quantities of information we do not want that it is hard to separate, much as the "polluting" elements in air and water are valuable in themselves when separated from air and water.

The two anchor men, Dr. Koch, president of the American Institute of Physics, and Dr. Harris, chairman of the American Chemical Society, noted that the objections that could be raised to the report were of much less importance than the report itself, and that there have been few reports produced which did not have holes which critics could point out. Dr. Harris' statement, in his summation, that he felt a manager of information dissemination must have the same status as the higher levels of management which applies the information was favorably received by the audience, composed as it was of Washington area librarians, managers of information centers and others in the information field invited by COSATI for this special meeting.

HAVE YOU HEARD?

Theatre Library Association Award

The first George Freedley Memorial Award was presented to Louis Sheaffer for his distinguished book, O'Neill, Son and Playwright (Little, Brown and Company), at a reception at the Algonquin Hotel, N. Y. The award, in the form of a plaque, was made on the basis of scholarship, readability, and general contribution to knowledge. It was established in 1968 by TLA to honor the late founder of the association, theatre historian and first curator of the Theatre Collection of the New York Public Library.

Journal of Library History Award

The recipient of the journal's third annual award for the most outstanding manuscript published in its pages during 1968 was announced to be Joseph Z. Nitecki, whose paper "Reflection on the Nature and Limits of Library Science" appeared in the Apr 1968 issue. Mr. Nitecki is assistant professor and coordinator of technical processes at the library of the University of Wisconsin—Milwaukee.

Golden Eagle to Iowa State

CINE, the Council on International Nontheatrical Events, has awarded a "Golden Eagle" certificate to an 11 minute color/sound 16mm motion picture filmed in the Iowa State University Library by the University's Film Production Unit. The film, ". . . A Book by Its Cover," will be placed in international film festivals in 1969 and 1970. Prints may be purchased for \$150 from the Film Production Unit, Iowa State University, Ames 50010.

Three More Accredited

The ALA Committee on Acceditation has announced that three more graduate programs have been accredited: University of Missouri (Columbia) School of Library and Informational Science (Ralph H. Parker, dean); University of Montreal (Montreal, P. Q.) Ecole de Bibliotheconomie (Laurent-G. Denis, director); and San Jose State

SEPTEMBER 1969

College (San Jose, Calif.) Department of Librarianship (Leslie H. Janke, chairman). The total number of ALA accredited library schools is now 48.

USOE Grant to U.Wisc/Milwaukee Study

The purpose of this new study is a followup to the 1968 ALA publication, *North American Library Education Directory and Statistics, 1966-68,* edited by Dr. Frank L. Schick. The new study will include information on graduate and undergraduate programs in librarianship and junior college programs for preparation of library technical assistants. The survey will also include programs in Mexico.

Michigan's New Dean

Russell E. Bidlack became the first dean of UM's School of Library Science on Jul 1. The new school replaced UM's Department of Library Science. Bidlack joined UM's faculty in 1950.

Beta Phi Mu's Eighteenth

Sigma Chapter, the 18th chapter of the international honorary society of library science, was installed at Drexel Institute of Technology on May 4 by Dr. Katherine M. Stokes (USOE), president of Beta Phi Mu.

Pitt Reorganizes

Two academic departments have been created within the University of Pittsburgh's Graduate School of Library and Information Sciences. Dr. Frank B. Sessa is chairman of the Department of Library Science; and Allen Kent is chairman of the Department of Information and Communication Science. The Master of Library Science degree will be awarded by both departments. Dr. Harold Lancour continues as dean of the Graduate School of Library and Information Science.

Tech Assistant Program Expanded

The Wilson Campus of Chicago City College has announced an expanded twoyear program for library technical assistants. Present courses are: Introduction to Library Procedures, AV Procedures, Library Public Service, Materials Acquisition Procedures, Preparation Procedures, Library Practicum, and School Library Procedures.

Luxury Condominium to Replace Old SLA HQ Site

The land at 31 E. 10th St., New York has been acquired by a real estate firm whose spokesman indicated that the existing eight-story building will be razed and that drawings for a luxury condominium are being prepared. Stechert-Hafner, SLA's former landlord for 30 years, will relocate outside of New York City. Stechert-Hafner, Inc. has been purchased by Crowell Collier and Macmillan.

International Loan Form

The IFLA Committee on Union Catalogues and International Loans has announced the availability of the new International Loan Forms. Orders should be addressed to the printer: J. Jörgensen & Co., 40, Artillerivej, DK-2300 Copenhagen S., Denmark. Without an imprint the price is 0.05 Dan.kr. per copy.

Canadian Association for Information Science

A constitution is being written for the newly established Canadian Association for Information Science under the chairmanship of Rev. August-M. Morriset, director of the University of Ottawa Library School. An organizational meeting of a Toronto Section of the new association is scheduled for Sep 26 at the Student Centre of St. Michael's College, University of Toronto.

Association of Cooperative Library Organizations

During ALA's Atlantic City meeting in June the new association was formed to provide a channel for exchange of information on cooperative ventures. The new association has no present affiliation with any formal library organization. Chairman of the new association is Mrs. Evaline B. Neff, Rochester Regional Research Library Council, Hall of Justice, Rochester, N. Y. 14614.

Western Michigan

A fully implemented program for 1970/71 has been announced that will lead to a degree of Master of Science in Information Science (MS). A master's program for map librarians has also been announced by the Department of Librarianship in conjunction with the Department of Geography. The program will lead to the Master of Science in Librarianship (MSL).

FID Publications

The 1969 FID Publications Catalogue is available without charge; the FID Yearbook 1969 costs \$1.40. Address orders to: International Federation for Documentation, 7 Hofweg, The Hague, Netherlands.

Oil Spill Archive

An archive on oil drilling operations in the Santa Barbara Channel has been established by the University of California, Santa Barbara. Material is being solicited for the new collection. Contact: Mrs. Maria Patermann, science librarian at the UC—Santa Barbara Library.

Two New Regional Medical Libraries

Two grants of \$150,000 each have been announced by NLM. The awards were to the New York Academy of Medicine (to serve New York State and the 11 northern counties of New Jersey) and to the UCLA Biomedical Library Center (to serve the states of California, Nevada, Arizona and Hawaii).

Cooperating Libraries in Consortium (CLIC)

Seven college libraries and the James Jerome Hill Reference Library in St. Paul, Minn., have established a consortium with full use privileges to all faculty and students of each participating institution. Included in the consortium are the libraries of Augsburg, Bethel, Concordia and Macalester Colleges, Hamline University, and the Colleges of St. Catherine and St. Thomas. CLIC headquarters are at the Hill Reference Library.

Medical Library Technology

A program in medical library technology is to be offered jointly by the Onondaga Community College and the SUNY/ Upstate Medical Center, Syracuse. The twoyear program leads to a degree of Associate in Applied Science.

Scarecrow Press

Eric Moon has been named chief executive officer of Scarecrow Press, Inc., a division of Grolier Educational Corporation. Mr. Moon had been editor of *Library Journal* from 1959 to 1968 when he was appointed director of editorial development for the R. R. Bowker Company. Dr. Ralph R. Shaw is president of Scarecrow Press.

ALA's New Officers

William S. Dix, librarian at Princeton University, was installed as president of the American Library Association on Jun 27 in Atlantic City. He succeeds Roger H. Mc-Donough, director of the New Jersey State Library. Mrs. Lillian M. Bradshaw, director of the Dallas Public Library, has been elected vice-president and president-elect of ALA. Hoyt R. Galvin, director of the Public Library of Charlotte and Mecklenburg County (North Carolina), was elected second vicepresident.

New Micropubs

City directories of selected major cities and regional centers for 1861–1881 are being filmed as one stage of a program that will be carried at least to 1900. Directories through 1860 are already available. The records of the original Thirteen Colonies are also being filmed. For information write: Research Publications, Inc., 254 College St., New Haven, Conn. 06510.

Italian Art Works to Be Filmed

All Italian works of art inside the country and those abroad owned by the Italian government will be microfilmed in a project of the Italian Ministry of Education. The microfilm system is one developed by the 3M Company; the reproductions will be

September 1969

mounted in aperture cards. The first three microfilm centers will be installed in 1969 in Rome, Florence and Bologna. Equipment will be installed in six other cities in 1970.

Microprint

By means of micro-image printing (without distortion) trade catalog pages are being reduced and reprinted in loose leaf form. The reduced pages can be read with a handheld $5 \times$ illuminated viewer. Write: Micro-Graphix, NBS Building, 2d & Clearview Ave., Trevose, Pa. 19047.

Social Security & Medicare Bookmarks

Two new bookmarks are available from the Social Security Administration at no cost. Their titles are: "Starting Young with Social Security" and "Read about Medicare." Order from your nearest Social Security office or from the Office of Information, SSA, Baltimore, Md. 21235.

Careers in Planning Libraries

"How Do You View Your Ecosystem?" is a new career brochure prepared by The Council of Planning Librarians, Request copies from: Alfred Maupin, Development Research Associates, 731 Flower St., Los Angeles 90017.

Holdings of Georgia Tech

The 1969 revision of the Serials Holdings List of the Georgia Institute of Technology Library is available at \$25 per copy. The list now contains 11,000 serial publications. Address orders to: Price Gilbert Memorial Library, Attn: Mrs. Helen Citron, Georgia Institute of Technology, Atlanta 30332.

Special Libraries in Japan

The 1968 edition of the Directory of Special Libraries [in Japan] was published in Apr 1969. More than 1,300 libraries are listed. The price is US\$15.00. Address orders to: Japan Special Libraries Association, c/o National Diet Library; 10-1, Nagata-cho, 1-chome; Chiyoda-ku; Tokyo, Japan.

Current Awareness in Agricultural Chemicals

A new biweekly information service, Update/Agricultural Chemicals, combines information concentrates with tables of contents. For descriptive literature, write to: Information Company of America, 225 S. 15th St., Philadelphia 19102.

New Hampshire's Special Collections

The New Hampshire Library Association has recently published Special Collections and Subject Area Strengths in New Hampshire Libraries. All types of libraries in the state are included. Orders at \$1.00 per copy should be addressed to: Joseph Green, Treasurer, N. H. Library Association, Fiske Free Library, Claremont, N. H. 03743.

Arizona Union List

The Intermountain Union List of Serials has been published by the Arizona State Library Association. Part I. Periodicals, which lists 13,000 periodical titles, sells for \$30 a copy. Address orders to: Intermountain Union List of Serials, c/o Donald W. Johnson, Hayden Library, Arizona State University, Tempe, Arizona 85281.

Religious Periodicals

More than 100 of the major American religious periodicals are included in a new quarterly index, *Religious Periodicals Index.* Subscriptions are \$10 for one year. Write: Jarrow Press, Inc., 250 W. 57th St., N. Y. 10019.

Unlisted Drugs

More than 45,000 drug entries are included in the Unlisted Drugs Index-Guide which has just been published. Single copies are available at \$95. Order from: Unlisted Drugs, P.O. Box 401, Chatham, N. J. 07928.

Dutch Equipment Manufacturers

The major Dutch manufacturers of machines, equipment and materials are listed in the 1968/69 edition of *Capital Goods*

from Holland. Copies are available free of charge—but in limited quantities. Write: Netherlands Consulate General, Commercial Division, 10 Rockefeller Plaza, N. Y.

Leather Information

The Central Leather Research Institute (India) has announced two leather information services. *Leather Titles Service* is published three times a month; *Current Leather Literature* is published monthly. The annual subscriptions (overseas) are \$35.00 for each service or \$60.00 for both together. Address orders to: Central Leather Research Institute, Adyar, Madras-20, India.

Scientific Documentation

National Science Foundation has issued the fifteenth and final volume of *Cur*rent Research and Development in Scientific Documentation. It is available from GPO at \$3.00 a copy. Although the CRDSD series was initiated by NSF in 1957, the series has been discontinued because new media have been developed for this field.

Book Catalogs: Selected References

Virtually every significant publication on the subject of book catalogs in the English language is included in 117 citations collected by Leasco. While the supply of these bibliographies lasts, copies are available free. Write: Leasco Systems & Research Corp., Book Catalog Services, 4833 Rugby Ave., Bethesda, Md. 20014.

Mechanized Support Study

The Research Center Library of the Corps of Engineers is responsible for an investigation of equipment and systems for library mechanization—exclusive of computers. The survey includes a wide range of items from simple office equipment to large complex machinery. Methods and procedures are also included. The investigation is part of the Department of the Army Technical Information Support Activities (TISA). Questionnaires are available from Alan G. Skelton, Research Center Library, Waterways Experiment Station, Corps of Engineers, P.O. Box 631, Vicksburg, Miss. 39180.

Conference Papers in Engineering

A new monthly journal began publication in July: Current Index to Conference Papers in Engineering. Subject and author indexes are included; it is expected that 50,000 papers will be included each year. The annual subscription is \$95; semi-annual accumulations are \$35. Address orders to: CCM Information Sciences, Inc., 866 Third Ave., N. Y. 10022.

Engineering Index

The 1968 Engineering Index Annual has been published in two volumes. The annual is available at \$175, and is now offered on a 30 day trial basis. Write: Leonard Ennis, Engineering Index, Inc., 345 E. 47th St., N. Y. 10017.

Engineering Periodicals

The Engineering Societies Library has published *Periodicals Currently Received*, with more than 1,800 entries and cross references. The publication is available at \$5.00 a copy from: Engineering Societies Library, 345 E. 47th St., N. Y. 10017.

Engineering Index Trustees

At the annual meeting of the Board of Trustees of Engineering Index, Inc., Eugene B. Jackson (IBM Corporation, Armonk, N. Y.) was elected president for a one year term. Other SLA members elected include: S. Kirk Cabeen (Engineering Societies Library, N. Y.) as director and trustee for a three year term; Everett Brenner (American Petroleum Institute, N. Y.) and Robert W. Gibson, Jr. (General Motors Corp., Warren, Mich.) as trustees for three years.

Auto-Typist

Any electric typewriter can be attached to a new Auto-typist (Model 6330). Typing is done automatically from punched tape with capacity of 300 lines of copy. Speeds of 130–150 words per minute are possible when operating at full capacity of the typewriter. The price of the Model 6330 is \$1500. Contact: American Automatic Typewriter Co., 2323 N. Pulaski Rd., Chicago 60639. A Guide to Personal Indexes Using Edge-Notched and Peek-a-boo Cards. Foskett, A. C. Clive Bingley, Ltd., London, 1967. Distributed in the U. S. by Shoestring Press, Hamden, Conn. 80p. \$3.50

The author, Senior Lecturer at the College of Librarianship, Wales, needs no introduction to American readers. He has succeeded in writing a short, practical book detailing the construction of small indexing systems for the individual researcher or the small library or information center. Theory is kept to a minimum and the writer, moreover, has limited his use of the library science jargon to an absolute minimum.

The larger portion of the book is given over to edge.notched cards. Especially helpful here is the careful explanation of various coding schemes to use with the limited number of coding positions available on any edge.notched card.

The balance of the book is given over to optical incidence cards and their preparation. Appendixed is a list of 12,000 surname roots with their appropriate numerical code. Such a list could be used in coding edge-notched or tabulator cards.

This little, inexpensive book could be helpful to the special librarian who has suggested to his engineer or scientist client articles in *Factory Management* or *Product Engineering* or other sources—only to have him return unsatisfied.

> John J. Miniter Assistant Professor, Library Science Texas Woman's Unversity Denton, Texas 76204

History of the Book. Dahl, Svend. 2d Engl. ed. Metuchen, N. J., The Scarecrow Press, 1968. 299p. illus. \$7. (LC68-12627)

Originally presented as a series of lectures in the 1920's, this work was expanded and translated from Danish into English in 1957. It is now reissued with the addition of an index an obvious improvement. The author's emphasis is on the book as an essential factor in the history of culture. Instead of dealing with each phase of bookmaking in separate units, he discusses the writing, the production, the distribution and the use of the book as a whole in each period of history from the early Egyptian to the present. It is a concise and straightforward account: no frills, no chills, no thrills —just the facts.

> Jean Deuss Assistant Chief Librarian Federal Reserve Bank of New York New York, N. Y. 10045

September 1969

LETTERS

In Re: Membership Requirements

At the recent SLA meeting in Montreal I listened with considerable interest to the discussion of membership requirements for the Association. It seemed to me that members were showing two important concerns in what they were saying. First, that the educational requirements for the librarian/information specialist are high and secondly, they were saying that the professional association should provide a pathway to a career for those whose education has not yet reached the level defined by a master's degree. Proponents for what appeared to be two points of view spoke in opposition to each other and in support of linking membership requirements to one or the other concern.

The speakers representing these points of view were not, however, at diametrically opposite poles. Rather, each said—or seemed to say—I agree with the other point of view, but the particular concern I am advocating seems most important to me. The result was that each segment of the membership seemed only slightly away from a common point of view which was not verbalized at the meeting.

Would it be possible for the Association to show its commitment to a high level of education and at the same time to provide a career pathway for those who have not yet attained the ultimate level? One such plan would provide levels of membership for those who do not have the master's degree and require that they continue their education to remain members. Evidence of continuing education would automatically move the member to a higher level of membership. If the Association desired, there could be a super-level (such as Fellow of the Association) for those who have the required professional degree and who over a period of time have shown considerable leadership, productivity and creativity. Such a plan would approximate, in professional terms, the familiar trade pattern of apprentice, journeyman, master craftsman-a proven useful device.

Furthermore, the Association now has the means of providing for the requisite continuing education within its own organization. The overwhelming success of the Education Committee's Continuing Education Seminars at the Montreal meeting clearly shows that members will attend such sessions, will pay extra for the privilege and will relate such training to their jobs. By extending the means to the regional and local level while controlling its quality from the Association level, an important educational pathway to improved career service would be provided for both basic professional education and the acquisition of new skills for those with degrees.

Why not demonstrate to the professional world this Association's concern for both a high level of education for practitioners and a responsibility to provide educational pathways?

Martha Jane K. Zachert, D.L.S. Associate Professor, The Florida State University Tallahassee, Florida 32306

Ethics of Citations

Now that citation indexing has become a valuable and integral part of the computerized systems by which we gain access both to archival and to research front literature, the editorial practices regarding citations may need re-examination. Such things used to be rather arbitrary matters of taste and convention; now, with this new use, they should be treated as are the titles of the articles published. Over the past few decades we have come to prefer titles that contain several useful descriptors of the content, so that the work may be noticed adequately by those who use key-words, permuted title indexes and pages of contents. In just the same way as we prefer not to use titles carrying little description, we should avoid any attitude to citations that takes no advantage of this facility.

In the past we used citations as a means of giving credit to previous researchers, of noting authority for statements and data not part of the conventional wisdom, and even for historical piety or learned decoration . . .

A paper that carries no such citations is in effect divorcing itself from cumulative scholarship in that area; a paper padded with too many that are largely decorative creates random noise in which it may get lost. Editors and their referees should therefore help their authors and readers by encouraging authors to cite work strongly related to their contributions. This is especially important in technological journals and in articles for the general reader where hitherto citations were often customarily avoided. Three or four citations, preferably given as end-notes, would often be quite sufficient for good use; one is very much better than none at all. Please help by regarding the absence of citations as being just as odd as the lack of a title or an author's name.

> Derek J. de Solla Price Avalon Professor of the History of Science Yale University, New Haven, Conn. 06520





NEWS photo by Mel Finkelstein

Astronaut Watchers

Even though SLA's Headquarters building didn't quite make the news— New York's "Daily News," that is—the street signs at our corner of Park Avenue South and E. 19th St. did. On Aug 14 the astronauts' motorcade passed Headquarters en route from City Hall to the United Nations. Budget deliberations by the Association's Finance Committee were hardly disturbed, however, because the motorcade was 30 minutes ahead of schedule. (P.S. The four watchers on top of the truck are not SLA employees; all our staff wear shoes during working hours!)

MEMBERS IN THE NEWS

Albert G. Anderson, head librarian of the Worcester Polytechnic Institute, Worcester, Mass., will direct a Massachusetts Technical Referral Center established at WPI under a grant from the Massachusetts Commonwealth Technical Resource Service.

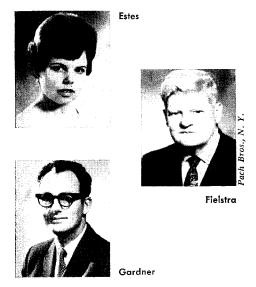
Charles K. Bauer, Lockheed-Georgia, has been awarded the National Security Industrial Association's Certificate of Merit; he was cited for his long and outstanding service in the cause of national defense through industry-military department cooperation.

Larry X. Besant, assistant director for technical services at the University of Houston Libraries, has been named to the Speakers Bureau of the American Chemical Society; his topic will be chemical literature information. Alfred N. Brandon, formerly director of the Welch Medical Library, Johns Hopkins University, became chairman of the Department of Medical Library Science, Mount Sinai School of Medicine, N. Y. on Jul 1. Mr. Brandon, who has been editor of the Bulletin of the Medical Library Association since 1961, will be succeeded as editor by Harold Bloomquist, currently associate editor of the Bulletin. Mr. Bloomquist is librarian of Harvard's Francis A. Countway Library of Medicine.

Morton Brown, librarian of Smith, Barney & Co., Inc. for the past ten years, was appointed a second vice president of the company in early 1969.

Mrs. Elizabeth Casellas has been appointed head of the library, Graduate School of Business Administration, Tulane University with the rank of associate professor. She has been head of the Business, Science and Technology Department

September 1969



of the Orlando (Florida) Public Library; she had been chairman of the Organization Committee for SLA's new Florida Chapter.

Portia Christian has been named to the newly created post of communications section director of St. Joseph's College Academy of Food Marketing, Philadelphia; she has been the librarian of the Academy for the past year.

Mrs. Alice P. Estes has been appointed head librarian of Dravo Corporation, Pittsburgh; she received her MLS this year from the University of Pittsburgh.

Gerritt E. Fielstra, chief of the New York Public Library's Photographic Service, retired after 41 years with the library. Since he joined the NYPL staff in 1928, the 3-man photostat service has expanded to a staff of 60. Mr. Fielstra is a past president of SLA's New York Chapter.

Bernard Foy is head of readers' service at the Florida Technological University, Orlando, Florida.

Agnes S. Galban, former reference librarian at the American Iron and Steel Institute, is now director of research/library at Hill and Knowlton, Inc., N. Y.

John L. Gardner has been promoted to supervisor of the Acquisitions and Cataloging Division in the Technical Libraries Department at Sandia Laboratories, Albuquerque, N. M.

Berry Gargal has been appointed as associate librarian at Lehigh University (Bethlehem, Pa.) in charge of the new Mart Science and Engineering Library; she had been librarian for Sprague Electric Co., North Adams, Mass. Robert P. Haro has joined the staff of the University of Maryland's School of Library and Information Services as librarian/lecturer; he has recently been librarian of the Institute of Government Affairs at the University of California, Davis.

Herman H. Henkle, who retired as executive director of the John Crerar Library in March, is engaged in a survey of the Twin Cities Metropolitan Area (Minneapolis/St. Paul) to determine the educational, cultural, industrial and other aspects of the area as they are related to information services, both supply and demand.

Elizabeth Hughey, librarian of the Methodist Publishing House, Nashville, Tenn., is serving a four-year appointment on the Commission on Archives and History of the United Methodist Church.

Ted Kopkin, Lockheed-Georgia Company, received three awards from the company where he is research information scientist. The first two awards were for cost reduction savings by use of the services of the Interagency Data Exchange Program. The third award is a Technical Excellence Award for his expert knowledge and outstanding assistance to personnel of the research laboratory.

Dr. LeRoy H. Linder has been elected first vicepresident of the Friends of the Library, University of California, Irvine.

Marguerite McLean has been appointed librarian of the Group Health Cooperative of Puget Sound, Seattle; she has been a member of the faculty of the School of Librarianship, University of Washington.

Anne P. Mendel, senior librarian at the Chase Manhattan Bank, retired in March; she served the bank and its predecessor firm for 40 years. Miss Mendel is a past chairman of SLA's Financial Division and has held many elective offices in the New York Chapter.

Stanley D. Moreo, a student member, was initiated into the University of Illinois Graduate School of Library Science chapter of Beta Phi Mu, international honor society for library science.

Johnn Patton, former librarian of the Standard Educational Corp., Chicago, is now librarian of the Medical School, University of Saigon; he is a former editor of What's New in Advertising and Marketing.

William Sipfle, an SLA Scholarship winner for 1968/69, has graduated from the University of Minnesota; he has accepted appointment as a systems analyst at the Bell Telephone Laboratories, Murray Hill, N. J. Francine Tiller, formerly a member of the Newsweek library staff in N. Y., is now assistant head of the Business, Science and Technology Department of the Orlando (Florida) Public Library.

Mrs. Elizabeth R. Usher (Metropolitan Museum of Art) has been elected to the Board of Trustees of METRO; James Humphry III (H. W. Wilson Co.) has been re-elected. METRO is the N. Y. Metropolitan Reference and Research Library Agency.





Moran

Libraries in Total Information Programs was the topic of a seminar on May 8 during the annual conference of AREA (Association of Records Executives and Administrators) in N. Y. Moderator of the seminar was Marguerite K. Moran, supervisor of M & T Chemicals Information Center, Rahway, N. J. Panelists were Alice Yanosko Chamis (B. F. Goodrich Company Research Center) and Ernest L. Horne (General Motors Corp. Research Laboratories).

Elizabeth L. Tate, chief of the Library Division, National Bureau of Standards, is president of the District of Columbia Library Association for 1969/70. Other SLA members elected to the DCLA Executive Board include: Bernice G. Reynolds (Prince Georges County Memorial Library) as assistant treasurer, Virginia C. Hills (National Geographic Society) as member-atlarge, and Mary E. Kahler (Union Catalog Division, LC) as DCLA member of the ALA Council. Alice D. Ball (USBE) is immediate past president of DCLA.

Marjorie R. Hyslop (American Society for Metals) and Carmen M. Marin (Tobacco Abstracts) have been re-elected as directors of the National Federation of Science Abstracting and Indexing Services.

Mrs. Theodora A. Andrews, Pharmacy Librarian, Purdue University, and Dr. Martha Jane Zachert, Associate Professor, School of Library Science, Florida State University, jointly presented a series of short courses at the Pharmacy Librarians' Meeting held in conjunction with the Teachers' Seminar of the American Association

SEPTEMBER 1969

of Colleges of Pharmacy at the University of Cincinnati on Jul 20-23. Mrs. Andrews presented two courses on indexing services of importance in pharmacy libraries: one for beginning pharmacy librarians and one for experienced pharmacy librarians. Dr. Zachert presented a course on the management of books, periodicals, trade literature and microforms for beginning pharmacy librarians and one on trends in administration and planning for the experienced group.

Albert P. Bradley has been elected chairman and Mrs. Shula L. Schwartz, vice-chairman of the Special Libraries Division of the Texas Library Association. Maryann Duggan was elected vice-chairman of TLA's Reference Round Table.

"Fundamentals of Company Library Management," an American Management Association Seminar in San Francisco on Sep 8-12, was under the direction of co-chairmen Edythe Moore (The Aerospace Corp., Los Angeles) and Mrs. Elizabeth B. Roth (Standard Oil Co. of California, S.F.). Speakers were Margaret R. Anderson (North American Rockwell Corp., Thousand Oaks, Calif.), Mark H. Baer (Hewlett-Packard Co., Palo Alto), Marjorie Griffin (IBM/ASDD, Los Gatos), Lorraine Pratt (Stanford Research Institute, Menlo Park), Jeanette Privat (Seattle First National Bank), Elizabeth Walkey (Bell & Howell Research Laboratory, Pasadena), and Theodor B. Yerke (U.S. Forestry Service, Berkeley).

SLA Authors

Goodwin, Jack. Current Bibliography in the History of Technology (1967). Technology and Culture 10: (no.2) 228-303 (Apr 1969)

Howard, Edward N. Interlibrary Cooperation in the Indianapolis Metropolitan Area. Library Occurrent 16-18+ (Feb 1969)

Ladendorf, Janice M. The Revolt in India 1857-58: An annotated bibliography of English language materials. Zug, Switzerland, Inter Documentation Company AG, 1966. 191p.

Llaverias, Rita K. Bibliography of Remote Sensing of Earth Resources for Hydrological Applications 1960-67. Washington, D. C., Office of Remote Sensing, U.S. Geological Survey, 1968. 71p. (Free on request to Office of Remote Sensing, Washington, D. C. 20242.)

Mullins, Lynn S. New Periodicals of Geographical Interest. Pt.2. The Geographical Review 59: (no.2) 290-94 (Apr 1969)

Mullins, Lynn S. The Railroad in History: A bibliographical introduction. *In:* American Geographical Society. Occasional Publ. no.3. *The Golden Spike: A centennial remembrance,* by E. Roland Harriman & others. N. Y., American Geographical Society, 1969. p.99–118.

Pizer, Irwin H. A Regional Medical Library Network. Bulletin of the Medical Library Association 57: (no.2) 101-15 (Apr 1969)

Ristow, Walter W. Facsimiles of Rare Historical Maps: A list of reproductions for sale by various publishers and distributors. Washington, D. C., Library of Congress, 1968. 3rd ed. 20p. Shank, Russell. Automation in Design for Change. Missouri Library Association Quarterly 30: (no.1) 65-72 (Mar 1969)

Simon, Beatrice V. The Need for Administrative Know-How in Libraries. Bulletin of the Medical Library Association 57: (no.2) 160-70 (Apr 1969)

Vormelker, Rose L. Industrial Research and the Academic Library. *Journal of Education for Li*brarianship 9: 60-71 (Summer 1968)

—In Memoriam——

John J. Asero, chief of the technical library of the Defense Atomic Support Agency . . . on Apr 10 in Silver Spring, Md. A member of SLA since 1947.

Ruth Overman Bostwick, noted children's librarian, died May 4 at the age of 78. She was on the staff of the St. Louis Public Library from 1910 until her retirement in 1961. Her husband, Andrew Linn Bostwick, was President of Special Libraries Association in 1915/16. Mr. Bostwick died in 1939.

Elizabeth O. Cullen, retired librarian, Association of American Railroads . . . on Feb 24, 1969. Miss Cullen joined SLA in Sep 1926. Elsie Rackstraw . . . on Dec 11, 1968 in Towson, Maryland at the age of 87. She had served the library of the Federal Reserve Bank of New York and the library of the Board of Governors of the Federal Reserve System in Washington. From 1944 until her retirement in 1950 she was chief of LC's Loan Division. Miss Rackstraw joined SLA in Nov 1923.

Anne Rand . . . on Feb 11 in San Francisco. Mrs. Rand was librarian of the Research Department of the International Longshoremen's & Warehousemen's Union in San Francisco from 1945 until her retirement in 1966. An SLA member since Feb 1941.

Support for Medical Library Communications Assistance Bill

July 29, 1969

SENATOR ROBERT W. YARBOROUGH SENATE LABOR & PUBLIC WORKS COMMITTEE SUBCOMMITTEE ON HEALTH WASHINGTON, D. C.

SPECIAL LIBRARIES ASSOCIATION WISHES TO EXPRESS ITS COMPLETE SUP-PORT OF YOUR BILL S.2549, WHICH IS THE MEDICAL LIBRARY COMMUNICA-TIONS ASSISTANCE AMENDMENT OF 1969. OUR MANY MEMBERS IN MEDICAL AND HEALTH SCIENCES LIBRARIES LOOK TO THIS CONTINUED SUPPORT TO MEET THEIR NEEDS FOR ADEQUATE MEDICAL LIBRARY SERVICES, FACILITIES AND RESOURCES. THE ORIGINAL ACT SUPPORTED THE CREATION OF THE INFORMA-TION NETWORK WHICH IS SO VITAL A PART OF THE MEDICAL COMMUNITY.

WE FURTHER ENDORSE YOUR PROPOSED FIVE YEAR EXTENSION OF THE ORIGINAL ACT AS THE EFFECTS OF THE CONTINUING INCREASE OF MEDICAL INFORMATION AND THE RESULTING PROBLEMS IN SCIENTIFIC COMMUNICA-TION OBVIATE THE VALIDITY OF EXTENSIONS OF THIS ACT ON A YEAR TO YEAR BASIS.

> ROBERT W. GIBSON, JR., PRESIDENT, SLA

Academy of Management Book Awards Program

Nominations of five titles of management books published between Jan 1, 1968 and Dec 31, 1968, in accordance with the criteria established by the Academy, were submitted before the closing date for nominations, Jan 31, 1969, by the Standing Committee representing Special Libraries Association.

Agnes O. Hanson

Admissions

There was a dramatic decline in the amount of work the Admissions Committee was called upon to do this year, due in part to a decrease in number of applications for membership but primarily as a result of more efficient handling of applications by the Membership Department at Headquarters under the direction of Miss Ann Firelli. Whereas decisions were made on an unusually high total of 271 applications last year (1967/ 68), the Committee this year handled only 18 borderline or disputed applications referred to it from Jun 1968 to Apr 23, 1969.

A break-down of these decisions, based on Article II of the Association Bylaws, is as follows:

2
2
6
1
6
1
18

In addition to denials handled by the Committee, the chairman also received copies of letters handled at Headquarters concerning 25 additional denials (8, because the individual was not employed at time of application; 15, because the applicant had no college degree and lacked the required 7 years experience; 2, because the applicant had no college degree and lacked the 2 years out of 7 required as professional experience).

As has been customary each year, the work of this Committee is handled by correspondence. Applications which Headquarters feels are disputed or borderline cases are mailed to the chairman, who makes a decision and routes each to the other Committee members; the last person returns it to Headquarters. Should there be a difference of opinion the application is returned instead to the chairman and in a few such cases the application might be routed a second time. One meeting of the Committee was held during the 1968 SLA Conference in Los Angeles with Miss Ann Firelli in attendence.

The Committee regrets it was not informed in advance when plans were made for a member to discuss at the Advisory Council meeting in Rochester, on Jan 16, 1969, his concern that the Association might be turning down or discouraging potentially good members. To summarize the impromptu remarks we made at the meeting—we certainly do agree that the Association does not want to turn away good and qualified applicants, and we also are well aware of the fact that membership requirements *have* at times caused confusion and/or hard feelings both among some members and also some applicants. However, SLA members are reminded:

- 1) that the Admissions Committee can only interpret the membership requirements as they are stated in Article II of the Association Bylaws.
- 2) that a few of these misunderstandings are caused by members who do not read the Bylaws or by applicants who fill out incomplete or incorrect application forms.

Some of the special problem areas will probably be eliminated if certain of the recommended changes in membership requirements (to be discussed at the Annual Meeting in Montreal, Jun 3, 1969) are passed. For instance, eager librarians just out of library school and starting their first job will be able to become full-fledged members immediately rather than to be delegated as an "associate" member for the first three years; persons will not be denied membership simply because they are not working at the time of application, etc.

Complaints of slowness in processing an application should no longer be occurring since the operation at Headquarters is now running very smoothly and efficiently. Changes in routine can be made if these do not put an added burden on Heaquarters staff. One that was suggested at the Advisory Council meeting was to delay notification of a denial until one week after the President of the Chapter closest to that applicant had been notified. The Chapter President could then investigate any possible error and/or omission that might make it possible for the applicant to be accepted. In this connection the Admission Committee chairman recommended to the Executive Director that decision on this or any other possible procedural change be postponed until after discussion on membership requirements in June, because a modification in Section II of the Bylaws might make these recommended procedural changes unnecessary.

LORNA M. DANIELLS

Archives

As usual the Minutes of the Board of Directors have been indexed by Genevieve Ford, one of our Committee members. All material received from past officers and Committees, Divisions and Chapters has been processed and filed. Two meetings with our Board proctor, Rosemary Demarest, have been held at Headquarters, to acquaint her with the work involved in the Archives files.

Louise Field, a member of the Committee, has been going over the Division files to coordinate reports and decide if it is necessary to keep more than one copy of each report. This was necessary to conserve space in the files. We have had some requests for copies of material in the file from Division and Chapter officers. These have been supplied.

We have been fortunate this year to have the services of the Library and Archives Clerk most of the time. Since the former clerk has been promoted, a new clerk has been employed by the Executive Director to file current material.

Josephine Greenwood

Awards

There has been no activity in this Committee for the past two years. In view of this, it is the Committee's recommendation that this committee be either: 1) discontinued as a Standing Committee and reappointed on an *ad boc* basis (that is, as a Special Committee) as need arises, or 2) combined with one of the other special awards Committees.*

S. K. CABEEN

* The Committee was discontinued by the Board.

Bylaws

The Bylaws Committee performed the following reviews during 1968/69:

Princeton-Trenton Chapter Bylaws, South Atlantic Chapter Bylaws amendments, Nuclear Science Division Bylaws amendments, and

Natural Resources Division Bylaws.

The chairman continued as chairman of the Special Committee on Membership Requirements and in this capacity prepared an article on the proposed requirements changes. The article was published in *Special Libraries* (Nov 1968). The Bylaws Committee published the proposed changes as amendments in *Special Libraries* (Mar 1969).

MARGARET L. PFLUEGER

Chapter Relations

During the Los Angeles Conference last year, preliminary plans were made for Chapter visits by the President and President-Elect. The President visited the Colorado, Minnesota and Pacific Northwest Chapters. The President-Elect visited the Heart of America, Louisiana, Rio Grande and Texas Chapters. The regional concept was adopted last year and President White attended a joint meeting at Santa Barbara of the San Diego, San Francisco Bay Region and Southern California Chapters. In this instance, the distances involved were too great to insure that a large number of members could meet and talk with the President of the Association. Instead of suggesting that the regional meeting be abolished, I recommend that it be continued for another year or two. in order to gain further experience. Perhaps the regional meeting could be continued with those Chapters that are closer to one another.

Your Association is continuing to show its energy and vitality. There is a new Chapter in our family, the Florida Chapter. The Board has approved the petition of this Chapter. A good deal of preparation and work was involved by all the members in forming this new Chapter. Mrs. Elizabeth R. Casellas initiated that petition and was helped by Dr. Martha Jane K. Zachert. Our President-Elect, Florine Oltman, served as Chapter advisor.

The Chapter Relations Committee was charged with the responsibility of revising the Chapter Manual. A preliminary draft was prepared and submitted to the Board. We hope that a new manual will be made available to the Chapter officers within a reasonable time.

The changed deadline for Chapter financial reports proved successful. In 1968 all of the Chapters but one had their financial reports in by July 15. This year annual reports of Chapter activities have not arrived as requested. Only 25 reports have been received.

The Chapters have been active and energetic in many areas. Some of our Chapter presidents have expressed frustrations and perhaps some disappointment in not accomplishing more than they expected and wanted. I quote several: "This has not been a year of tremendously significant ac-complishment"; another wrote: "This has been only a moderately successful year"; a third asks: "Have we done enough?"; and a fourth comments: "Some tasks remain to be done." Many of our Chapter presidents are trying to reach the "Expectations and Excellence" outlined by Dr. Frank McKenna in his inaugural address in 1966 but are frustrated by a general apathy on the part of some of their members. This is particularly emphasized by the president of one of the larger Chapters who said, "It is very difficult, despite a large membership, to obtain a large enough group of volunteers to undertake such a project.'

Is the Association expecting too much from its membership or does the general membership expect too much from the Association? The strength of SLA has always been its members—members who have generously given their time and energy. As special librarians are broadening their scopes and viewing larger vistas, it becomes more difficult for them to channel their interests only toward SLA. Of necessity, they are joining other library-oriented associations on various levels which is a drain on their resources. There are church, civic and family obligations which must be met. How much should the Association expect from its members who volunteer their time and efforts? How much should the members expect from the Association when they should realize that much of what is produced is by the members themselves?

Several Chapters embraced the idea of environmental involvement. The Boston Chapter deposited \$500 of its funds in the Unity Bank and Trust Company of Roxbury, Massachusetts, a depressed area. A member of the Boston Chapter is devoting her services in establishing a neighborhood library in a blighted location. In San Francisco, several programs were presented on the social issues facing the librarian, the needs of the minorities and the relation of man to his environment.

Many of the Chapters are preparing union lists and the Washington, D. C. Chapter produced three publications in the last year for sale and distribution. National Library Week was observed by several Chapters by having high school and college students visit special libraries during NLW. The Pittsburgh Chapter had booths in several shopping centers to distribute SLA literature as part of National Library Week.

Joint meetings were held by several Chapters, and many meetings were with local and state library associations. The Washington Chapter and the District of Columbia Library Association held a one-day meeting which was so successful that they plan to do this annually. Several members of the Rio Grande Chapter are members of the State Library Development Council which acts as an advisory group to the state library. Mrs. Helen Redman, a former SLA Director, and member of this Chapter Relations Committee, is chairman of this Council. Calla Ann Crepin, immediate pastpresident of the Rio Grande Chapter, is presidentelect of the New Mexico Library Association.

Louisiana followed the advice of our former President, Mrs. Elizabeth Usher, and had a joint meeting with the Catholic Library Association when it had its annual meeting in New Orleans in Apr 1969. Louisiana also prepared a consultants pamphlet which was sent to the Chambers of Commerce of the various cities in the Chapter.

In reading the Chapter annual reports, not one Chapter invited a political candidate to address them during their autumn meetings.

What are we to do with Mrs. Hannah Atkins, president-elect of the Oklahoma Chapter? Mrs. Atkins was elected to the Oklahoma Legislature as a member of the House of Representatives. This could be a first in SLA history. The Washington Chapter flirted with political overtones and had as its speaker, George Romney, Secretary of the Department of Housing and Urban Development.

The president of the Minnesota Chapter appeared at a hearing of the state legislature regarding the certification of librarians. The New Jersey Chapter president wrote the governor of the state when the announcement was made that the Newark Public Library was to be closed for lack of funds. The Illinois Chapter is preparing an Information Sources Directory which will be published by the Chicago Association of Commerce and Industry. Pittsburgh became a member of the Pittsburgh Commerce Institute Board of Directors. The Upstate New York Chapter was the host for the 1969 Mid-winter SLA meeting; the arrangements set high standards and style for future Mid-winter meetings. Upstate New York also started a Student Papers Project as a program with the library schools in the Chapter's area. Students prepare papers which are judged by the Chapter and cash awards are made.

The San Francisco Bay Region Chapter presented a successful workshop for library assistants, which was later repeated for the staff of the California State Library. This same Chapter through an energetic and imaginative approach to advertisers has made its bulletin self-sustaining. The Southern Appalachian Chapter issued a booklet which described the Chapter's growth from 1953– 1968.

In preparing the report of this committee, the Chapter Liaison Officer usually confines his comments to the activities of the Chapters and not individual members. However, I feel it appropriate to call your attention to Virginia LaGrave, of the Oklahoma Chapter, who was named *Outstanding Librarian* in the "First Annual Air Force Library Competition." Her library was also named number one in the Air Force.

Several Chapter presidents indicated to me that they were disappointed in what the Advisory Council was doing or not doing. One felt that we had a ruling Board of Directors rather than a governing Board. Another suggested to make participation on the Advisory Council more meaningful and to give its members a stronger voice in the Association, some steps should be taken to make the Council more of a legislative body.

The strength of this organization is in its members—those who work at a Chapter level with little glory but lots of determination to get the job done. The smaller Chapters have traditionally produced more in proportion to their size than have the larger. I recommend that more Chapters be established so that we have greater participation by the members. This should be encouraged to strengthen the Association and to develop an esprit de corps between the new and young members.

The Chapter Liaison Officer has the responsibility of representing the Chapters at Board meetings. He can speak for the Chapters but has no vote. The Chapters have nothing to say in the selection and appointment of the CLO and yet he is to be their representative. I think this is unfair to the Chapters and to the membership. I am recommending that the Chapter Liaison Officer and a Chapter Liaison Officer Elect be elected in the same manner as the Chairman and Chairman-Elect of the Advisory Council. He should have the same stature as other Board members.

As our Association grows and more Chapters are established, it becomes more difficult for our President and President-Elect to visit as many Chapters as they would like. To strengthen the

September 1969

lines of communication between the members on a Chapter level with the Board, I suggest that the Chairman of the Advisory Council and the Chapter Liaison Officer visit some of the Chapters during their terms of office.

In closing, I wish to express my appreciation for having the opportunity to work with our present President, Herbert S. White, last year's President, Mrs. Elizabeth R. Usher, and the Board members for the past two years.

JOSEPH M. SIMMONS

Committee on Committees

Recommendations approved by the Board of Directors in Sep 1968:

- 1) A revision of the Conference Committee definition.
- 2) Change in Headquarters contact for the International Relations Committee.
- 3) Change in membership of the Headquarters Operation Committee.

In Jan 1969:

- 1) A new title and revised definition for the SLA Scholarship Committee (formerly Scholarship and Loan Committee).
- 2) A revised definition for the Special Libraries Committee.
- 3) Request for the Publications Program Committee to study the work of committees on Special Libraries, Scientific Meetings and Technical Book Review Index and give advice, in Sep 1969, on the formation and functions of a Serials Committee.

Recommendations submitted to the Board of Directors for consideration at its Jun 1969 meetings:

- 1) Revised definitions of the Governmental Relations, Government Information Services and Translations Activities Committees.
- 2) Recommendations of the Subcommittee on Structure of the Committee on Committees.

The Committee is indebted to Lorraine Ciboch for continuing to serve as chairman of the Subcommittee on Structure. The structure study is recommended reading for all Committee chairmen.

Procedural activities:

- 1) Files were checked for revisions on the Association's 1969/70 Directory.
- 2) The Committee will send revisions to Headquarters for SLA Committee Information booklet.

SARA AULL

Committee on Committees: Report of Subcommittee on Structure

In Jun 1968, the Committee on Committees submitted to the Board of Directors a "Study of Association Committee Relationships and Organization," prepared by its Subcommittee on Structure. The Board requested a continuation of the study.

Miss Lorraine Ciboch and Miss Ruth Nielander agreed to complete the study for the Committee. They sought participation by all 1967/68 Committee chairmen through answers to a short questionnaire and comments on a slightly revised version of the structure study. A copy of the study, which includes an excellent and thoughful analysis of Committee structure in relation to SLA objectives (as stated in the Bylaws) and SLA Goals for 1970, and a copy of the Subcommittee report are attached (not reproduced here).

The Subcommittee's recommendations concern means to effect better communication between Committee chairmen, SLA officers, Advisory Council and Headquarters. Some positive measures have already been taken by the Board and by Headquarters.

Assignment of a proctor role to six Directors for 32 committees was approved by the Board in Jun 1968. Hopefully, each Committee chairman and the Board proctor will critically examine a Committee's work and make recommendations for desirable changes. These may entail expansion of the Committee's scope, merger with another Committee, transfer of some functions to Headquarters or dissolution.

Publication of an Association Directory in the Summer of 1969 is planned. A Directory at the beginning of the Association year will facilitate communication.

Some suggestions in the Subcommittee's report are primarily for the President-Elect in preparation for the next year's Committee assignments. A forum for Committee chairmen is one of the Subcommittee's recommendations. Most of the respondents to the questionnaire felt that there should be some place in the Conference program for such a forum.

No drastic changes in structure can be made until we are ready to assume financial responsibility for additional paid staff at Headquarters.

The following Recommendations* of the Subcommittee are presented for the Board's information and action, if desired:

- 1. A forum for Committee chairmen, conducted by the President-Elect, should be established and time provided for them to meet during the Annual Conference.
- 2. The better utilization of Committees with Chapter and Division counterparts should be investigated with some functions transferred to Headquarters with paid staff.
- 3. Mechanics and details of Committee operation should be examined with the purpose of de-

^{*} The Board did not act on Recommendation 1 because it is already the "Sense-of-the-Board" that such action be initiated; President-Elect Gibson had already scheduled such a meeting in Montreal. The Board urged ConC to continue its work in the areas of the remaining recommendations.

termining those activities which might be transferred to Headquarters, and an estimate of the cost to the Association be included.

4. A task force or panel approach should be used for one short and specific program.

SARA AULL, Chairman Committee on Committees

Conference 1969

A more detailed report will be submitted later. The total registration was 1,746. More than 1,-000 attended the First General Session, and more than 700 were at the Second General Session.

Over 100 members have worked hard on the planning and carrying out the Conference plans. As has been pointed out by the 1968 Conference Chairman, it is hard to know whom to contact in the Divisions regarding their programs and other activities. We found ourselves dealing with as many as five persons in one Division.

A real problem is a lack of guidance. How much of a budget really exists? What net earnings does the Association expect to derive from a Conference? Should we struggle to use volunteer help or should we pay experts? A guide to legitimate expenses would be valuable.

There are continuing problems with meal functions on Monday. Hotels require a one or two day guarantee. Until Sunday night after some tickets had been sold, no one had a real idea of the number who would attend. One Division estimated 100, but only 48 attended the luncheon. The hotel allows only a 10% margin. Therefore the Division must pay for the uneaten meals from the Division treasury.

An enormous amount of work was required for the Scholarship Event. Preliminary figures indicate that the event has produced about \$1,500 for the Scholarship Fund.

The Montreal Chapter has been pleased with the Conference. We have a dedicated group of Conference Committees. The new revision of the Conference Manual has been very useful; additional comments and constructive criticisms will be of assistance to Conference Committees in the future.

MIRIAM TEES

Conference Advisory

The Conference Advisory Committee, at the direction of the Board of Directors during the Rochester, N. Y. meeting in Jan 1969, submits the following recommendations for consideration and approval of the Board (with the exception of Recommendation 1; see *Note*). They represent in general a consensus majority concurrence of the Committee.

1. *Headquarters Coordinator*. Much dialogue is necessary between the Executive Director and the Conference Chairman. Since the Conference revenue is an essential ingredient of the annual SLA

budget this Chairman was in a schizophrenic state between the desire to "give them a bash," not "sparing the horses" and watching every last dime that is spent. (It is hoped a prudent balance was maintained in Los Angeles.)

In the not too distant future it would be advisable in the interest of good communication and interchange to appoint a member of the Headquarters staff to serve as such a liaison adviser and/or coordinator. It could be inaugurated as a collateral part-time assignment to a person already on the staff. (*Note:* The Executive Director does not feel that there is now a need for a Conference liaison adviser or coordinator. No action is requested; reported for the record only.)

2. Scholarship Fund Event. Thanks to the imagination and enthusiasm of the Metals/Materials Division, this Conference social event has become a very popular annual program feature. By its nature it has become a more complex undertaking even when the Division has a representative number of members in the Conference Host Chapter. Several times in the past few years (St. Louis, Philadelphia, and more recently Los Angeles) there were not enough interested Division members to undertake it, and the arrangements went by default to the local Committee. By the nature of the event, the entertainment resources (chuck wagon, race track, boat ride, music center, special theater, etc.) of the host city determine the selection of the activity. Division officers located in other parts of the U.S. and Canada cannot be expected to gauge the potential of such resources.

It is therefore recommended that the Conference Scholarship Fund event be made the responsibility of the Conference Chairman and his committee, with the assistance or the cooperation of the Metals/Materials Division.

3. Division Program Chairman. Each division should either elect or appoint a Division Program Chairman to coordinate event schedules and arrangements between the Division Chairman and the local Liaison Division Representative. Considerable confusion results when this final decision making is batted back and forth without a final authority point of reference. Seven of the Divisions had no Program Chairman for the Los Angeles meeting, and the result was far from satisfactory. It should be emphasized that each Division has the fiscal responsibility to pay for all audio-visual equipment rentals and other services incidental to the presentation of programs. After a careful study it might be advisable to limit the maximum number of Division Conference events. Some Divisions feel they have to have something going every day of the Conference week, for example, on Conference Monday in Los Angeles there were 17 meal events scheduled. Even the adequate Statler Hilton had only 14 rooms to accommodate them.

4. Preliminary Program and Advanced Registration. It is recommended that the preliminary program not be mailed to the members until at least February 15. With the change in the Bylaws which established January 31 as the deadline date for

payment of dues (renewal of membership), a January mailing of the advanced registration results in a number of non-members (delinquent members) erroneously and unwittingly registering at the special rate for members. The checking of such irregularities becomes an increased burden for the Registration Committee. It is further recommended that a check-list for all meal events scheduled (please check those events you think you will attend) should accompany the mailing of the preliminary program. This will not be a guarantee, merely an estimate so that the potentially expensive guarantee "guesstimate" given to the hotel banquet manager can be a bit more accurate. This is especially true for the Conference Sunday and Monday meal events, which estimates at the Los Angeles Conference for several luncheons were from 10% to 60% below the contracted guarantee. If it hadn't been for a very sympathetic and cooperative Maitre D' (Mr. Monte Gordon) at the Los Angeles Statler Hilton we might have had to pay for over \$600 worth of meals guaranteed but not sold on Jun 3, 1968 (Monday). Ideally, but utterly unrealistically, we should avoid scheduling meals events on Conference Mondays as it is most difficult providing any meaningful guarantees by 10:00 a.m. on such meager advance sales. (Note. Miriam Tees, our Montreal Conference Chairman, distributed with the preliminary program such a check-list. This effort should be evaluated in terms of its usefulness.)

5. Exhibitor Registration. It is recommended that the registration of exhibitor representatives, as a part of the contract routine, be a responsibility of the Headquarters staff. A maximum of not more than five representative registrations (nontransferrable) should be issued to each vendor. Copies of the list of representatives should be sent not later than three weeks before the Conference to the Exhibits and Program Committee Chairmen. The Exhibits Committee can distribute the appropriate identification badges, and the Program Chairman can edit the list of representatives for submission to the Printing Committee for inclusion in the Conference Program.

6. Call for Papers. There should be an *emphatic* statement to the effect that on all Conference program papers submitted, the Editor of Special Libraries has first option for possible publication. After this priority has been met, the editors of the various Division bulletins, newsletters, etc., should then have the opportunity to review them for possible acceptance for their publications. It is so recommended.

7. Committee Meetings. Presently no formal provision exists for Committee meetings at the annual Conference. Such meetings as are necessary are scheduled on a haphazard basis. It is recommended that during the Conference, a two-hour block of prime time sacrosanct to Committee meetings be made a part of the official programs of the Conference.

8. Budget Guidelines. Since the Conference reve-

nue is an essential ingredient of the annual SLA budget, a schizophrenic state exists between the conflicts to "give them a bash" or to "skinflint" every dime that's spent. It is recommended that at each September Board Meeting the Conference Chairman and the Finance Committee establish an informal budget outline to assist the Conference Chairman and his Executive Committee in their conference cost and expense responsibilities.

JOHN M. CONNOR

Consultation Service

It is encouraging to report that the downward trend in the use of the courtesy Consultation Service begun in 1965 has been reversed. Approximately 10% more requests have been received this year than last. One more library was established than was last year. The big gun for 1968-1969 was the Minnesota Chapter which had a total of twenty-four inquiries. This number more than doubles the number for last year. The New York, Southern California, Boston, New Jersey and Virginia Chapters were the runners-up.

The Executive Director forwarded the chairman one request for an SLA Professional Consultant. The Committee reviewed three applications for appointment as Professional Consultants. Two were forwarded to the Board of Directors for approval.

The Committee held one meeting in New York to consider the charge given it by the Board of Directors at its Mid-winter meeting. The Committee has been asked to review the criteria by which applicants for Professional Consultants are examined. The Committee has prepared recommendations which will be reviewed by the Board of Directors at its meeting on May 31.

As has been the custom in past years, the Consultation Service Committee has arranged for a meeting at the Conference in Montreal for Chapter Consultation Officers, Professional Consultants and interested members. It is expected that the meeting this year will be of particular interest to CCO's. Miss Nina Root of Nelson Associates, Inc. will speak to the group on interviewing techniques of particular value to members conducting the one-day courtesy consultation service.

It was noted in last year's annual report that a revised edition of the Consultation Manual would be presented to the Board of Directors in Sep 1968 for its approval. This was done and the Manual, as revised, was approved. This Manual is of considerable help to all concerned with the Consultation Service and considerable appreciation must be afforded Gloria Evans and her Committee for its work on this publication.

A form was sent to all Professional Consultants asking for information to update the records which are kept at Headquarters.

John P. Binnington

Division Liaison Officer

This was a year of concern about the potential proliferation of Divisions. But it was one in which

a new Division (Natural Resources) was approved and another (Public Utilities) will probably be approved by the Board at its Montreal meeting. It was also a year of concern about the relationship between different Divisions and about the relationship between several Divisions and SLA. This will be commented on in more detail in the body of the report.

As DLO, I have been actively involved in direct assistance to almost everyone of the 22 Divisions and to the Chairman for the Montreal Conference.

The major efforts of the Divisions have been directed toward preparing for the Montreal Conference. The many excellent papers and events reflect the work and planning that went into the program.

Reviewing the Divisions' annual reports has been a rewarding experience. A few are optimistic. A few are pessimistic. Many Divisions have active, meaningful, on-going programs, but this is not true with an uncomfortably large number of Divisions. One very important activity was planning for the Montreal Conference. Another was producing a well-prepared bulletin that fills a need. Several areas of concern were common to many of the Division annual reports. These included:

1. Division members seem to be overcommitted to SLA work, unusually busy with other activities, or perhaps apathetic. It has become increasingly difficult to involve dynamic SLA members in Divisional activities.

2. Automation of the membership list has caused many problems. There is a large discrepancy between the membership lists supplied to Divisions and the records within these Divisions. In general, the list sent by SLA shows a substantial decrease in membership. The reaction to this discrepancy was varied. In some Divisions it was considered an accident of the system which will soon be corrected. Others considered the decrease in membership a reflection of the current unrest in SLA. Both the dues increase and the membership requirements have been given credit for this apparent decrease. I think it is very important that we establish as soon as possible whether this decrease is real or apparent.

3. There seems to be an ever-increasing number of joint meetings at our Conferences. If these really fill a need, they are certainly worthwhile. My concern is that they are done as a matter of convenience in many cases rather than to fill a need. I think each Division must examine its motives very carefully before agreeing to a joint meeting.

4. Most Divisional on-going projects continue to be on-going, but most of the Divisions seem to have great difficulty stirring up interest in new projects. Divisions have tried a variety of techniques for developing new projects, such as surveys by project committees, notices in bulletins requesting ideas for projects, requests for discussions at annual business meetings, and efforts of interested individuals to promote a project within a Division. These have been almost uniformly unsuccessful in developing new projects.

This report provides an opportunity for the Board to learn about specific Division activities. Therefore, highlights from Division annual reports follow. The purpose of presenting these highlights is to reflect the tone of the annual reports rather than list in detail the contents of each report.

The Advertising and Marketing Division reports that *Special Libraries* will publish "A Look at Advertising and Marketing Division Libraries" by Elin Christianson and Peggy Wolfe.

The Biological Science Division finds that its largest problem is publication of *The Reminder*, its Division bulletin. Efforts have been made to involve more people in *The Reminder* and a special ad hoc committee was established to study the name, format, and content of the bulletin.

Documentation Division continues to be active in a variety of areas. In response to the SLA Board's recommendation that the Documentation Division assume responsibility for cooperating with AFIPS at its Spring and Fall Joint Computer Conferences, a very active committee under the Chairmanship of Betty Boyd participated in the SICC in Boston during May. Over 85 SLA members from the Boston Chapter area participated in this cooperative program. A Pre-Conference SLA seminar on May 13 was entitled "Today's Systems for Today's Libraries." The success of this program attested the excellent planning that went into it. Two papers presented at the Documentation Division's programs of the 1968 Conference have been published in Special Libraries. A Committee has been appointed for the FICC.

The Geography and Map Division annual report expresses great concern over the Division's relationship with SLA. The Division not only failed to grow for several years; it declined in membership this past year. This is blamed on high dues and rigid membership requirements imposed by SLA. The Geography and Map Division is also having trouble producing and financing its bulletin.

The absence of a Chairman-Elect in the Insurance Division caused difficulty in publication of the Division's bulletin. However, three other publications of the Division continued to be successful. *Insurance Literature* has a total subscription list of 288.

The optimistic tone of the Military Librarians' report made it a pleasure to read. Division membership reached an all-time high in 1968. Bulletin coverage was improved by the addition of special reporters for DOD, Army, Navy, and Air Force.

The Museum Division is concerned about those who feel a need for a new Division in the Humanities and Fine Arts. Perhaps better communication is needed between the membership of SLA at large and the various Humanities Divisions. A positive step is being made by discussions among Geography and Map, Picture, and Publishing Divisions for producing a co-operative bulletin which can be more comprehensive and less demanding financially on each of the Divisions.

As a new Division, Natural Resources found most of its activities devoted to getting organized and preparing a program for the Montreal Conference. A bulletin editor has been appointed. Several projects have been proposed by Division members.

The Nuclear Science Division has prepared a new Division manual and also revised its Bylaws. This was one of the few Divisions having an increase in membership.

The Petroleum Division is preparing a revised edition of its procedures manual. In addition, the project chairman has sent out a questionnaire concerning publications issued by libraries which have members in the Petroleum Division. The Bylaws have also been revised and approved.

The Pharmaceutical Division presented a very pessimistic report. Activities of the Division seem to be at an all-time low. Publishing activities of the Division have diminished to only the COPNIP List.

By contrast the Publishing Division report is optimistic. This Division's Bulletin is outstanding.

The Science-Technology Division has had a decrease in membership of almost 15 percent from 2,000 to about 1,700. This Division feels it is time to consider some kind of activity-groups such as SDI techniques, machine indexing, and space planning and utilization. One possible approach for these groups is to make them committee-like with a fixed life span such as three years (with renewal options). Sci-Tech News continues to be an extremely successful bulletin despite difficulty in getting copy from the sponsoring Divisions. The duplicate exchange program also continues to be successful. The Division is anticipating withdrawal of the Public Utilities Section after the Board meeting of the Montreal Conference. If this occurs, only one section, Paper and Textile, will be left in Sci-Tech.

The Social Science Division has two active sections. The Planning, Building, and Housing Section will issue a directory of planning libraries and planning agencies. This is expected to be available at the Montreal Conference at a price of \$5.00. The Social Welfare Section sponsored a three-day Institute for Social Welfare Libraries last November in conjunction with the Drexel Institute of Technology Graduate School of Library Science. Unfortunately, the attendance was lower than anticipated, probably as a result of conflicting meetings sponsored by the Council on Social Work Education.

A very substantial effort, perhaps the greatest of any extended by me in my DLO activities during the past year, was spent in pursuing members of the various Divisions to persuade them to turn in material which was long overdue and badly needed. Failure to submit some of these items (such as annual reports and financial statements) could possibly be ignored, except that this would be detrimental to the Divisions and ultimately to SLA. Items such as program arrangements, tour arrangements, names of speakers, Conference arrangements can be ignored only to the great detriment of SLA as well as the Divisions. When a Division member accepts responsibility for an office or a committee assignment, he should realize that his is a very key function and he should expect to discharge the responsibility promptly and completely.

The active Divisions continue to be the real strength of our Association. These Divisions, and there are many of them, plan timely, well-organized Conference Programs. These active Divisions do not consider an apparent decrease in membership or lack of a new project as portents of disaster. They accept these as challenges and reasons for meaningful self-examination.

I have appreciated the opportunity to work with so many different members of SLA. Detailed exposure to the activities and problems of Divisions normally outside my field of interest has been exciting. At the recommendation of the Board, this was the first year the DLO operated without a committee. This method of operation was quite satisfactory.

CHARLES ZERWEKH, JR.

Education

The Education Committee has concentrated its activities on continuing education for librarianship. Pre-Conference seminars are being held on Jun 1, 1969 in Montreal. At this date, total registration is 223, with registrations being received from as far away as Austria and Bulgaria. The 1970 annual report will include a detailed analysis of the reception and projected effectiveness of these seminars.

The Upstate New York Chapter's proposal to hold a planning session on continuing education was received favorably by the Committee, but action was deferred until 1969/70 due to the amount of work required to organize the Pre-Conference seminars.

The Colorado Chapter's proposal for a continuing education project utilizing a mobile unit has also been deferred until 1969/70 for the reasons as stated in the preceding paragraph.

In conjunction with the Montreal Conference, the Committee has arranged an informal gathering on Monday, Jun 2, for cocktails, followed by a Dutch dinner. Invitations were sent to all graduate library schools. Hopefully this gathering will provide an opportunity for representatives of SLA and teachers of special librarianship to get to know each other better and discuss problems they have in common.

MARGARET N. SLOANE

Finance

This year we had the distinction to meet the missions and objectives of the Finance Committee under the direction of two chairmen. Dr. Frank McKenna held the chairmanship from Jun 1968 through the end of Sep 1968, and resigned when joining Headquarters personnel as Manager, Publications Department. He was followed by Charles K. Bauer who was appointed by President White for the unexpired term until 1970.

During the early part of the year the Committee accomplished a monumental task in creating for the first time in many years a true picture of our financial condition. The task was not an easy one but the Committee was determined to propose a more realistic "Program Budgets" for 1968/69 in line with the Board's actions of Jun 1967. To accomplish that, expenditures and income for Scientific Meetings, Technical Book Review Index, and Special Libraries and other funds and programs were converted to "Program Budgets." The five-year comparative financial table, developed by the 1967/68 Finance Committee, was an invaluable aid in the preparation of the 1968/69 budget which was approved by the Board at its Sep 1968 meeting.

In the course of developing the budget, several recommendations were made by the Finance Committee and approved by the Board as follows:

A. Non-Serials Publications Fund

Recommendation 1. That the Non-Serials Publications Checking Account be closed, and that the balance be transferred into the NSP Savings Account. (Funds of this checking account were transferred as recommended and the separate checking account no longer exists.)

Recommendation 2. That the balance of the NSP Fund be reduced from approximately \$46,000 at present to a maximum of \$25,000 by transfer to the General Fund, and with subsequent transfers of interest income and other earnings in excess of a balance of \$25,000 to the General Fund. (In Feb 1969, \$23,218 was actually transferred to the General Fund.)

Recommendation 3. That after preliminary approval for a new NSP publication has been given by the NSP Committee and the Editor, that preliminary approval of the new NSP Project by the Board not be required, and that preliminary expenses of up to \$500 be permitted per NSP Project without specific prior Board approval. (This recommendation has been put into effect.)

B. Scholarship Fund

Recommendation 1. That the total amount accruing to the Scholarship Fund each year be built into an endowment fund, by restricting annual awards to a maximum of \$8,000, effective FY 70/71, until the principal provides sufficient investment income to support at least one scholarship per year.

C. Surplus of 1967/68 Budget

Recommendation 1. That at the close of FY 67/68 all surplus for that year (excess income over expenses) be transferred from the General Fund to the Reserve Fund. (This excess income over expenses in the amount of \$21,400 will be transferred in Jul 1969.)

Recommendation 2. That \$10,000 of the income for FY 68/69 be transferred to the Reserve Fund as soon after the beginning of the fiscal year as possible. (This transfer is in line with instructions from the Board in Jun 1967.)

Recommendation 3. That \$7,000 of the income for FY 68/69 be transferred to the Equipment Reserve Fund.

Recommendation 4. The Finance Committee concurred in the recommendation of the Special Libraries Committee to the Board that the price of classified line advertising be increased from \$0.50 per line to \$1.50 per line, except for ads placed by members in "Positions Wanted" which will be to \$1.00 per line for paid-up members. All categories are subject to a minimum charge of 3times the price of one line. These charges to be effective with the Jan 1969 issue of Special Libraries.

Recommendation 5. In concurrence with the Special Libraries Committee, advertising rates in Special Libraries for the basic full page display ads be increased from \$150 to \$200 (with proportional upward adjustment for preferred positions and fractional pages and rates for multiple consecutive insertions—the actual dollar values to be determined by staff); these changes to be effective with the Jan 1969 issue of Special Libraries.

D. Reserve Fund

Recommendation 1. In response to a request by the Board for a definition and purpose of the Reserve Fund, the Committee suggested a further study (possibly by a Special Committee) to investigate the problem more fully. (This Special Committee was appointed and will report to the Board at its Montreal meeting.)

Recommendation 2. The Committee suggested that Item 2 of the existing Reserve Fund Policy be interpreted to mean that interest accruing to the Reserve Fund remain in the Reserve Fund (until definitions and guidelines are developed as stated in Recommendation 1).

Recommendation 3. With the Reserve Fund at its maximum of \$100,000 the Committee recommended that the Association seek the services of an investment counsellor to determine the best way to invest the reserves. That motion was approved by the Board which requested the Executive Director, the Treasurer, and the Chairman of the Finance Committee to seek such advice. Their findings will be reported elsewhere by the Treasurer.

Recommendation 4. That the Reserve Fund Policy be amended by deletion of Item 4 of the Reserve Fund Policy, because the Board of Directors by virtue of the Bylaws has the authority to manage the affairs and finances of the Association; that a vote on this recommendation be scheduled for the Annual Business Meeting in Montreal. (The Advisory Council went on record at its Jan 1969 meeting supporting the Finance Committee's recommendation.)

Other activities of the Finance Committee were:

1. The Finance Committee deferred decision on the recommendation to hire a permanent secretary to the Board until the Headquarters Operations Committee could review the possibilities of such a position at Headquarters.

2. The Committee met several times to amend the 1968/69 budget to identify unexpected expenditures as approved by the Board and adjusted the September budget projections accordingly.

At this time the Finance Committee submits herewith three new recommendations:

Recommendation 1. Presently the Fiscal Year of the Association is 1 Oct through 30 Sep which is, of course, reflected in the budget as well. To make this budget more realistic and logical, it is requested that the Association's fiscal year be changed to 1 Jan through 31 Dec. This would afford a much better way to comply with all our financial expectations and obligations, particularly since this change would coincide with our membership year and payment of SLA subscriptions.* Recommendation 2. If Recommendation 1 is approved, it is recommended that, to make an easier transition between the present and proposed Fiscal Year, a one time 15-month budget covering 1 Oct 1969 through 31 Dec 1970 be submitted to the Board at its Sep 1969 meeting.*

Recommendation 3. The Committee recommends to the Board that Price Waterhouse and Company be approved as auditors for FY 68/69.*

CHARLES K. BAUER

* Recommendations 1 and 2 were approved unanimously by the Board members present and voting (10-0). Recommendation 3 was approved by a vote of 9-0 (with one abstention because of possible conflict of interest).

Government Information Services

The Government Information Services Committee selected for attention during 1968-69 the following topics:

1. Centralized services.

2. Subject tools—the TEST Thesaurus and the NASA Thesaurus.

3. Government information agency plans.

A Committee member assumed responsibility for each of these topics, and worked toward a report for the Montreal Conference.

1. Centralized services were given attention by a Subcommittee (Sarah Thomas, chairman), and consisting of Patricia Andrews, Marguerite Ritchie, Helen Kolbe, and Margaret Emerson. Their intent was to determine by a questionnaire how well the centralized services of DDC, NASA, AEC, and the Clearinghouse were being received by the users. Their questionnaire was to be circulated to representative users by several key people in all parts of the country.

In March, while the Subcommittee was readying its questionnaire, an inquiry was made to

President White from the COSATI Subcommittee on Information Dissemination, asking aid in gathering SLA opinion on aspects of dissemination of the government information services. President White referred the inquiry to this Committee, and the offer was made to Chairman Currie S. Downie of the COSATI Subcommittee to coordinate efforts with Sarah Thomas' Subcommittee. Sarah Thomas and Jeanne North worked with Col. Downie to produce a questionnaire which represented the best efforts of the Subcommittee and the mutual aims of the SLA Committee and the Task Group. The resulting questionnaire (Appendix A*) was to be sent to as large a user group as possible, the hope being that all members of the Sci-Tech Division and the science-oriented Divisions could be contacted. In early May the prospects of carrying out this expensive mailing were diminished, and with the expected absence of Sarah Thomas from the country, the approaching deadline of the COSATI Task Group's report, and the change in Committee chairman to occur in June, the plans to make a request to the SLA Board for funds to support this mailing were shelved. The Committee was disappointed not to reach a productive result in its long-hoped-for cooperation with COSATI.

It is strongly urged by the present Committee that its successor Committee make a user survey, requesting a moderate amount of SLA money for postage. The possibility of government money for such a project is extremely remote, and the validity of the results of a small inexpensive survey are open to question. It is hoped the next Committee can take the existing questionnaire, modify as desired, refine it with pretesting, and produce a report which speaks for the users.

2. Subject tools, the NASA and TEST Thesauri, were investigated by Laura Rainey, who designed and mailed a questionnaire (Appendix B*) to 75 librarians across the country. By May 1 returns had been received from 30. The results of the questionnaire, which showed a generally favorable opinion of these new tools, will be presented at the Montreal Conference by a representative of Miss Rainey.

3. Government information agency plans were followed by Louise Montle. She contacted the agencies and obtained statements of their shortand long-range plans for future service, for presentation at the Montreal Conference.

At the 1969 SLA Conference, the work of the Committee was reported at a meeting on Monday, Jun 2. User reactions were solicited at the meeting, in an unstructured way.

At the request of a few representatives of government information service agencies, the Committee made arrangements for a meeting room for the scheduled use of the representatives for presentations or consultation with users. Representatives of ERIC, AEC, NASA, and DDC were invited to use the room for 2-hour periods.

Efforts by the Committee members and by their

^{*} Not reproduced here.

Subcommittees, by those who cooperated in producing or answering questionnaires, and by representatives of COSATI and government agencies, produced some good results. It does not seem wise for the outgoing Committee to make formal recommendations to the Board of Directors for actions which, if approved, would be the responsibility of a new chairman and Committee. Therefore our recommendations are only to the 1969/70 Committee: to pursue cooperation with COSATI, the Federal Library Committee, and any other groups, and to find some means to acquire a representative opinion of services, if necessary with money budgeted to the Committee.

JEANNE B. NORTH

Governmental Relations

In Apr 1968 I was asked by Elizabeth R. Usher to fill James Olsen's unexpired term as chairman of the Governmental Relations Committee through Jun 1970. In reviewing the Committee's history, and from my own experience as a member, I felt that the Committee as presently organized was unable to carry out the duties assigned to it, since it had no means of receiving information on a state, local, or international level. Therefore, after calling a meeting of the Committee members and conveying my conclusions, we recommended that the Board of Directors refer the organization of this Committee to the Committee on Committees. This the Board did at its Fall 1968 meeting.

Consideration was given by the Committee on Committees to the recommendation of limiting the Committee to one person who would report on national affairs only. This person would have to be someone located in the Washington area who would maintain close liaison with the American Library Association (Washington Office) and the appropriate divisions of the U.S. Office of Education. The reason for limiting the Committee to one member was based on the difficulty in getting additional members in the Washington area who would not be connected with Government. Recommendations from the Committee on Committees will be made at the Jun 1969 meeting.

It is felt that this is an important Committee because of the increasing amount of federal legislation affecting libraries of all kinds. We do not want special libraries to be left out at the national level and, therefore, need a "watch dog" in Washington to see that our interests are protected.

BESS P. WALFORD

Headquarters Operations

Headquarters Staff. Job descriptions were developed and approved for the fifteen types of positions filled by twenty employees. At the recommendation of the Headquarters Operations Committee a previous action of the Board not to fill the position vacancy of Membership and Placement

September 1969

Assistant was rescinded by the Board at its Sep 1968 meeting, and the vacancy was subsequently filled. An HOC recommendation to add an additional departmental secretary to the staff was approved by the Board on May 31, 1969.

Fringe Benefits. The Board, in January 1969, approved the recommendation of HOC to increase the number of paid holidays for Headquarters staff from nine to ten. The Staff Manual was subsequently changed to read: "There are eight normal paid holidays for the Association's employees. . . Two added paid holidays will be scheduled each year at the discretion of the Executive Director." At its May 31, 1969 meeting, the Board approved the recommendation of the HOC that the Association absorb total Blue Cross and Blue Shield insurance costs for Headquarters staff beginning with the 1969/70 budget. These changes in fringe benefits are in keeping with the practices of similar nonprofit associations in the New York area.

Revised Pay Plan. The Committee presented a revised pay plan for Headquarters staff which the Board approved in May. This pay plan updates the salary ranges and salaries for Headquarters positions in line with both New York area and general salary rates.

Systems Study and Equipment. IBM punched card equipment from MAI was installed at Headquarters in the Fall of 1968. The conversion of the membership and subscription records from the Addressograph was more complicated and thus slower than anticipated. It was completed in time for the membership and subscription renewal notices for 1969. Additional uses for this equipment are under study by the Executive Director. Equipment and furniture such as a collator and a folder/inserter were purchased from the Equipment Reserve Fund, and a Cheshire Mailer has been leased.

SLA Travel and Expense Policy; and Advisory Procedures & Practices for Use in Connection Therewith. There was some confusion as to the policy regarding travel expenses incurred particularly by SLA Committee members. The Board approved the HOC recommended revision of the Travel and Expense Policy and clarified the wording of Advisory Procedures & Practices.

Distribution of Board Minutes. The Board at its May 1969 meeting approved the HOC recommendation to distribute decisions from the Open Board Sessions to Committee Chairmen and Advisory Council Members, and full sets of Minutes of Open Sessions upon request.

ELIZABETH R. USHER

International Relations

During the year, the Committee continued to assist in the hospitality and arrangements for visiting foreign librarians and will do so in Montreal at the Annual Conference.

It is true that in the statement of responsibilities and activities of the Committee there are aspects which we have not, up until this time, been able to do much about but hope to move in that direction in the near future. It need not be pointed out that communication by letter in such a vast area of concern as international relations, not to mention the development of libraries abroad, is not easy, but the chairman has used this means through the year to sound out Committee members as to how best we can fulfill our functions.

The Committee believes that it should: 1) encourage contact with foreign library associations; 2) encourage exchange of librarians; 3) support IFLA and its sections; 4) co-operate with FID and IFLA; and 5) investigate the possibility of a central greeting house for visiting foreign librarians.

It also believes that an increase in the number of members of the Committee might give a better national representation. As a directive from the Board of Directors at its Mid-winter meeting in Rochester, New York, the Board voted "to encourage the Committee to prepare a report recommending structure and other Committee changes to improve representation and handling of visiting foreign librarians."

We will meet as a group in Montreal and as a result of that meeting will then be in a position to offer recommendations to the Board.

VIVIAN D. HEWITT

Membership

The Committee started the year with a three-point program especially designed to lay the groundwork for conducting "grass roots" membership campaigns once the new membership requirements became effective. Its mission was to:

 Bring about a closer relationship between Chapter and Division membership committees and the Association Committee through communication, reporting and a sharing of experiences.
 Compile a "membership campaign package" to distribute to all membership committees; this package or manual is to contain sample form letters, suggestions regarding contacts (who, when, how) and a description of appropriate special functions for the purpose of inviting new members to join the Association.

3) Survey, through the Chapter and Division membership committees, the losses in membership, to find out the "whys" of the apparent drops.

The survey report on the "why" of the apparent losses in Association membership failed to materialize due to lack of feedback from Chapter and Division chairmen. Recommendation is made to the 1969/70 Committee that such a survey be conducted in Sep, rather than in the Spring.

The Committee also recommends that the new Committee persist in the endeavor to foster better communication between local membership responsibilities and Association membership responsibilities, that it enlist the help of the CLO in this regard, and that more formalized communication channels be outlined in the Chapter Manuals.

Edythe Moore

Nominating

The slate of nominees for office in 1969/70 was published in the Feb 1969 issue of *Special Libraries*.

W. ROY HOLLEMAN

Non-Serial Publications

Action taken during the year included the following:

Publications carried over from previous years Published	11 2
Still active (hope for publication in 1969)	2
Still active (hope for publication later)	7
Proposals received during 1968/1969	6
Approved and recommended to Board	3
Active (hope for publication in 1969)	2
No decision reached as yet	1

Those published during the year were "Selected Materials in Classification" (NSP Project 185) and "International Directory of Back Issue Vendors," 2d ed. (NSP Project 191). The latter publication is already proving to be a best seller.

The three projects which are expected to be published this year are the "1969/70 Directory of Members" (NSP Project 182), "Library Use of Computers" (NSP Project 184) and "Directory of Transportation Libraries" (NSP Project 195).

At its January 1969 meeting, the Board of Directors gave preliminary approval to "A Dictionary of Advertising Slogans" (NSP Project 196) and "Handbook for Pharmacy Librarians" (NSP Project 198). The Board also approved \$1250 for composition for "Subject Headings in Chemical Engineering" (NSP Project 123), which was initially submitted in 1957.

The Committee was pleased that the Board also approved the recommendation of the Publications Program Committee that the Association should do away with the fixed pricing formula, and that selling price for each publication should be set by the Manager, Publications Department.

The status of all current NSP Projects is summarized in a table submitted to the Board.

BEVERLY HICKOK

Personnel

Salary Survey. At the request of the Board of Directors a poll, by Chapter, of member use of the survey was undertaken in the Fall of 1968. Fifteen Chapters participated by obtaining responses to five questions about the survey at Chapter meetings or, in two cases, by mail. These responses were tabulated and individual comments were listed in a report submitted to the Board for its meeting in Jan 1969. At that meeting the Board voted to conduct a second salary survey in Jan 1970, three years after the first survey. The Committee is cooperating with the Executive Director in preparing for this survey.

Other Activities. In the Fall of 1968, the Committee asked Chapters to cooperate in a survey of special library staffing, by mailing questionnaires to heads of libraries in the Chapters. Seventeen Chapters participated in this survey. Results are currently being tabulated and a report will be prepared for submission to *Special Libraries*. Respondents were asked to supply job descriptions if they were available, and these will be the basis for another Committee project.

SHIRLEY F. HARPER

Placement Policy

The Committee withdrew its report; a revised report will be submitted to the Board in Sep 1969.

MARK H. BAER

Planning

The following report is specifically in response to the Board of Directors' request that "the Planning Committee . . . present a draft of SLA Goals for 1980 to the Board at their Jun 1969 meeting."

During the period, Feb/Apr 1969, the Planning Committee individually reviewed and critiqued the SLA 1970 Goals, and suggested tentative Goals for 1980 for each Committee member's consideration. On Apr 26, five members of the Committee met at SLA Headquarters to select those Goals that they felt merited the consideration of the Board of Directors and also outlined the contents of this report.

Our initial comments are directed toward the 1970 Goals. The 1970 Goals as officially stated are:

1) At least 30,000 well-trained special librarians and information specialists working in the field by 1970. Recruitment activities, an extensive program of initial and continuing education, and the development of standards for special libraries will help achieve this goal.

2) Special librarianship must be better known and understood by research management organizations, information scientists, college students, and public figures concerned with research and information dissemination.

3) The Association should continue to insure the existence and improvement of all needed secondary bibliographic publications and services such as the Translations Center and to identify and encourage the establishment of other essential information centers, services, and publications.

4) By 1970 the Association should have initiated an active research program, preferably one that would evaluate choices of techniques in organizing and disseminating information as new methods are developed.

The Planning Committee feels that these goals were unrealistic when they were written. In ad-

dition to being unrealistic, not enough has been done by the Association to attain the goals. The Planning Committee is still in accord with the areas selected for future planning as elucidated in the 1970 Goals, but not with the specific wording of the goals as published. Our recommendations will deal with certain of the 1970 Goals for future Association planning.

As part of the preliminary work prior to identifying tentative 1980 Goals, the Planning Committee evaluated the 1970 Goals and summarized their comments in a document "Planning Committee Reaction to the Goals for 1970."

The following criteria were used in analyzing the 1970 Goals:

- 1) Validity of setting this goal, accuracy of need;
- 2) Association capability to insure meeting goal;
- 3) Cost to Association/ability to finance;
- 4) Overall importance of goal in retrospect;
- 5) Perception (of Planning Committee members)
- of what has happened to implement goal.

Copies of this summary matrix document are available.

The Planning Committee then considered an array of 17 tentative Goals for 1980 that were submitted prior to the Apr 26 meeting and six additional goals brought up during the meeting. From this working list of 23 possible goals, the Planning Committee is recommending that the Board of Directors consider the following six candidates.

Recommendations. It is recommended by the Planning Committee that the Board of Directors consider the following Goals. It is the considered opinion of the Planning Committee that these goals should not be considered for 1980, but due to their urgency a closer date be selected for implementation and action programs. Although the Planning Committee selected 1975 as that year in its discussion, the issue as to timing was not resolved and left for the Board of Directors' consideration.

1) Special Libraries Association should actively participate in library education in the following ways:

- a) Programs should be encouraged and developed for the continuing education of the Association's membership;
- b) The Association should prepare guidelines for curricula content in special libraries courses in library schools;
- c) The Association should prepare guidelines for curricula content and quality levels for recognized library technician programs being conducted in community colleges and technical institutes;
- d) The Association should develop criteria for establishing personal attributes for careers in special libraries.

2) SLA must encourage research; it must identify areas in which research should be conducted that

would be of value to the SLA membership, and the Association should participate in an advisory capacity in the conduct and evaluation of research projects and their results.

3) The Association should investigate means for "knowing" the membership of SLA and improve communications with a wider segment of the membership to determine their professional needs, 4) The Association should determine the special library manpower needs through 1980 and implement the necessary programs to recruit the appropriate numbers of persons to the profession at the proper levels of education and skill.

5) The Association should develop improved cooperative relationships with other library associations, other professional associations, and information producing services.

6) The Association should have a policy-making role and implement means for participating in information networks.

The foregoing recommended Goals* for 19?? are not presented in order of priority but rather as they were resolved during the Planning Committee's deliberations.

R. E. Fidoten

Professional Standards

At the request of the Board of Directors the Committee reviewed and evaluated the Proposed Standards for Library Services in Health Care Facilities which had been submitted to the Board by the Executive Secretary of the Association of Hospital and Institution Libraries, American Library Association, in Sep 1968. The chairman transmitted constructive criticisms made by Committee members to the Hospital Library Standards Committee and recommended to the Board at its Mid-winter meeting in Rochester that the proposed standards be approved in substance.

The Committee has made some progress toward making SLA's Standards better known and more widely used through contacts with the American Management Association and the National Bureau of Standards; and through a letter to a selected list of organizations which might find our standards of value and/or might have standards of interest to the Committee as a guide for revision or expansion. The response to the Committee's letter to the accredited library schools reminding the deans of the schools that additional copies of "Standards" and "Profiles" were available upon request, was gratifying.

The Chairman has continued to represent the Committee as a member of the Special Committee on Membership Requirements, and has revised the annual statement, "Implementation of Standards of Special Libraries," that appears in the Bowker Annual of Library and Book Trade Information.

The Committee has no doubt that new "Profiles" are needed but has no concrete plan for their compilation. As previous reports have pointed out, surveys to obtain statistical and descriptive data are needed and such surveys do not seem to the Committee to fall within its purview. It is hoped that cooperative arrangements with the several Divisions can be made, to review and implement the "Standards" and to promote the compilation of "Profiles." The chairman has made a concrete proposal to the Division Liaison Officer which will be considered during the coming year.

The second sentence of the SLA definition of the Professional Standards Committee reads: "The Committee shall recommend and review standards of professional qualifications for membership." The Committee recommends that the Committee on Committees reconsider whether this part of the definition is now appropriate.*

RUTH S. LEONARD

* The Board asked the Committee on Committees to report in Sep 1969.

Publications Program

On Jun 2, 1969, at a meeting of the three serial publication committees (Special Libraries, TBRI, and Scientific Meetings) and the Non-Serial Publications Committee with the Publications Program Committee and Messrs. McKenna and Gonzalez, it was suggested that a meeting of all members of these five Committees and the editors of the three serial publications (a total of 20 persons) be held at Association Headquarters this Fall to promote closer coordination in devising a total, effective Association publications program. In addition this will provide an opportunity for the committees to meet with their editors, the Manager of the Publications Department and the Board proctor for these Committees. Future sessions, conceivably on an annual basis, may be recommended based on the reactions to the initial effort.

Full support for this proposal was indicated by all committees represented (*TBRI* was not represented although invited) and the Manager of the Publications Department.

The Publications Program Committee therefore recommends that such a meeting be arranged by the Publications Program Committee and held at Association Headquarters as suggested.*

Robert G. Krupp

^{*} The Board adopted the six proposed Goals. The first was assigned to the Education Committee for implementation. The other five were referred back to the Planning Committee for its recommendations regarding implementation (with a report in Jan 1970). The Board did *not* define the year of these new Goals.

^{*} The Board approved the concept of such a meeting with travel expenses of staff to be charged to appropriate Program Budgets, and with the proviso that Committee members attend in line with present Association travel policy.

Publisher Relations

The following activity took place this year:

1. Survey of acquisition practices of SLA members. The Committee continued to take steps to bring about a survey of SLA members as to their practices in such areas as how books are selected, how books are purchased, what advertising media used by publishers are most effective, etc. It was decided to present it to the American Book Publishers Council (see report of ABPC/SLA Joint Committee for more details), and SLA Board approval of the joint project was given at the midwinter Board meeting. If the ABPC Board agrees to the project, then it should take place early in the summer. Joint rights of ABPC and SLA to the findings would be one proviso of the proposed project. It is felt that the information would be useful to both SLA and ABPC members. Only matters pertaining to books would be covered in the survey. If this is successful, perhaps joint work with one of the associations primarily concerned with periodicals would, some day, lead to a survey on periodical acquisition problems and practices.

2. Letters to publishers. A few letters were sent to publishers this year, mostly to bring problems to their attention. Once written, the publishers responded with a cooperative tone to their letters. An SLA member called one book to our attention with unusually large numbers of errors—the publisher seemed more than interested to hear of our interest. A periodical publisher who changed titles without proper notice before or after was advised of the existence of the USASI Z39 Committee's efforts to prepare the standard on periodical format; he was quite interested and will purchase the standard. The more these problems are called to our attention by the membership, the more action we can take on behalf of SLA.

3. American Association of University Presses, A letter has been sent to them to inquire about the nature of their Committee on Library Relationships. Perhaps communication between the two committees will be fruitful.

4. USASI Standards. Members of the committee have been kept informed of the activities of the Z39 Subcommittee working on the proposed USASI standard on book publishers' advertising practices.

Ellis Mount

Recruitment

No report received.

Reprography

The Committee has kept up-to-date with current developments in copying equipment, microfilm technology and with the computer-microfilm interface. The chairman attended demonstrations by several manufacturers of new microfilm equipment. The Committee sponsored a program on microforms jointly with the Picture Division on Jun 3 at the 1969 SLA Conference.

The Committee received 32 requests for information of which five were from Marketing Research Managers of major manufacturers. One complaint against a service company was received by the chairman who acted on it.

The Committee made a survey of libraries on a geographic basis to determine whether or not the members of the microfilm industry were making information and representatives available to them. The results of the survey are to be brought to the attention of the microfilm industry. The Committee has decided to extend the survey and will be very glad to receive comments and suggestions from all SLA members.

The Committee is drafting a questionnaire to request information from SLA members about current applications of microfilm. It is designed to report on unique systems, unusual materials that have been microfilmed and specialized indexing of microforms.

The chairman has discussed the reprinting of an out-of-print publication, *Microphotography for Archives*, by A. Leisinger (National Archives). The National Archives has agreed to reprint this publication which will be reviewed by the chairman.

The Committee would be glad to receive comments and suggestions from the members.

LORETTA J. KIERSKY

Research

One meeting of the entire Committee was called on Jan 26, 1969 at the Eisenhower Library of Johns Hopkins University with Dr. William Garvey and his staff. The purpose of the meeting was to outline the scope and aims of the SLA Conference study approved by the Board at its Jan 18 meeting in Rochester, New York.

As a result of that meeting, a proposal was developed, copies sent to interested Board members and revised in accordance with Committee and Board suggestions. The finished proposal was submitted to Headquarters on Apr 9 to be forwarded to appropriate agencies. (Both agencies approached felt that the proposal did not fit their requirements.) At this time (Apr 27, 1969) there has been no response as to the likelihood of funding.

The Committee recommends* that:

1) Should funding not be available in time for the Montreal Conference to be studied, as now seems likely, the Association, through the Executive Director, actively seek funds so that the 1970 Conference in Detroit can be analyzed.

2) The Board, in consultation with the incoming

^{*} The Board accepted Recommendation 1, deferred action on Recommendation 2, and took no action on Recommendations 3, 4 and 5.

chairman, consider the expansion of the Committee by one or two members, in order to cope with the work of reviewing and interpreting the findings of the study and assisting Dr. Garvey and his staff in the preparation of the reports.

3) The research proposal of Dr. Martha Jane K. Zachert to conduct an Oral History research project in 1969/70 be approved and funded immediately as she originally proposed (\$650) with the exception that Footnote 4 be replaced by a new version submitted in her letter of January 24, 1969.

4) When possible, a Committee chairman should be drawn from the members of the Committee so as to provide some measure of continuity in the work of the Committee.

5) The charge to the Research Committee should be defined specifically by the Board of Directors in order to give the Committee a mission, and that this charge not be changed annually if the Board expects the Committee to function.

IRWIN PIZER

SLA Professional Award and Hall of Fame

Mrs. Margaret H. Fuller was named to the SLA Hall of Fame for 1969. The engraved SLA Hall of Fame medallion and the scroll (redesigned in 1968) were presented at the banquet in Montreal. Miss Beatrice V. Simon was named the recipient of the 1969 SLA Professional Award. The announcement was made at the banquet in Montreal; the engraved sterling bowl and scroll were presented at that time.

This Committee recommended to the Board that two persons be presented to the members at the Annual Business Meeting for election as Honorary Members of SLA:

Elizabeth Homer Morton, S.M., former executive director of the Canadian Library Association/ Association canadienne des bibliothèques, and Hubert H. Humphrey, former Vice President, U.S.A.

F. E. MC KENNA

Scholarship

Eighty-four applications were received for the five scholarships offered by Special Libraries Association. Last year (1968) seven \$2,000 scholarships were awarded. The Board decided to award five scholarships worth \$2,500 each in 1969.* At the Sep 1968 meeting the Board decided to restrict the total amount awarded to \$8,000 for 1970/71 and thereafter (see the report of the Finance Committee).

This year there was a slight decrease from previous years in number of applications. Our requirement for library school acceptance (at least provisional admittance) is a major cause of delay in fulfilling the requirements. The logistics of the Chapter interview also results in delays. Both of these are very important. We try to allow for delays and give consideration to strong candidates who have not met all requirements. In order to be a scholarship winner, one must be admitted to a library school in the United States or Canada.

There were 14 foreign applicants from seven countries. Only four had acceptance at a library school. Their qualifications are difficult to compare with U.S. or Canadian applicants. Twenty-four states and two Canadian provinces were represented. New York state led with ten. About 40 percent of the applicants were married. Their ages ranged from 20 to 53. The ratio of women to men remained at 4:1.

About 17% had no working experience in libraries. The remainder had a wide variety of library experiences from elementary and high school libraries to university libraries, medical, public, state, industrial, rare books, law, art museum, newspaper libraries, and the Library of Congress.

The academic background was more varied than the experiences listed above. Degrees were earned in music, French, Spanish, biology, art, chemistry, home economics, law (J.D.), physics, business administration, political science, elementary education, sociology, economics, geography, civil engineering, humanities, journalism, mathematics, psychology, anthropology, philosophy, dentistry, agriculture, and, the most popular, history and English.

The procedure for selecting the scholarship winners was handled more efficiently this year due to great effort by the Headquarters staff, especially Ann Firelli. The applications were received by Miss Firelli. She sent letters to the references and to the Chapter presidents. The replies together with the application form, library school acceptance, transcripts, and essay were placed in folders. Near the end of April these folders were sent to the chairman of this Committee. He examined and screened the candidates. A selection was mailed to the other two Committee members. A meeting was held on May 4 and the final selections made.

In order to be fair to the selected winners and to the Board, this process must be completed near the beginning of May. Because of the slowness of replies in fulfillment of the requirements, this makes for a hectic three weeks. Closer adherence to deadlines is the only likely way to help remedy the situation.

During this past year the Scholarship Committee recommended the cessation of the loan program which the Board approved at its Sep 1968 meeting. The Committee also revised many of the forms used. Although these revisions were an improvement further revisions are recommended. The procedures for selecting scholarship winners was studied and improvements made as noted above. A questionnaire was sent to the library schools having scholarship winners in the past. The response was very good. We learned that our winners have been superior students and often leaders in their class. Further study will be made of the questionnaires. The name of the Committee was

^{*} The scholarship winners were listed in the Jul/Aug issue of *This Journal*.

changed to Scholarship Committee from Scholarship and Loan Fund Committee.

Recommendations*:

1) That three scholarships of \$2,500 each be awarded for 1970/71.

2) That applicants from countries other than U.S. and Canada not receive encouragement to apply for scholarships. Distribution of announcements of the award should be restricted to the United States and Canada. Evaluation of foreign applicants is very difficult, and they usually cannot meet the requirements.

3) That the eligibility for scholarships be restricted to those persons *without* an advanced degree in library science. The purpose of the scholarship should be to recruit persons into the profession and not to advance members already in the profession.

JULIAN LARSON

* The Board accepted Recommendations 1 and 3, and rejected Recommendation 2.

Scientific Meetings

Scientific Meetings continues to improve in content and format. It is easy to use and telephone inquiries for meetings information usually can be answered immediately. The information is organized in such a manner that the user can locate information about forthcoming meetings by use of any one of the indexes or the alphabetical or chronological listing of the meetings.

The format of the entries has been changed to allow more entries per page, thus reducing printing costs.

Beginning with Volume 13 (Jan 1969) Scientific Meetings started publication on a quarterly basis, instead of three times per year—at no increase in subscription price. Both the Scientific Meetings Committee and the Editor are constantly studying possibilities for further improvement.

Scientific Meetings, which has been published continuously for twelve years, is an alphabetical, chronological and geographical listing of future conventions and symposia of scientific, technical, medical, and management organizations—regional, national and international.

NELSON W. HOPE

Special Libraries

No report received.

Statistics

No report received.

Tellers

The mail ballots for SLA Officers and Directors were officially counted at SLA Headquarters in

September 1969

New York City on Apr 9, 1969.

2,619 ballots were received 42 ballots were declared invalid 2,577 ballots were tallied

The Officers and Directors elected are:

President-Elect, FLORINE A. OLTMAN Chairman-Elect, Advisory Council, KEITH BLAIR Director (1969/72), EDYTHE MOORE Director (1969/72), LOYD R. RATHBUN

MARILYN M. BOCKMAN

Translations Activities

There were several large adjustments which the Translations Activities Committee (TAC) had to make in 1968/69. The first, of course, was due to the transfer of the SLA Translations Center from SLA/NSF to Crerar/NSF grant status, which drastically changed SLA's relationship to the Center. The second was the 5-month wait (Jun-Nov 1968) when TAC first heard officially that the Crerar/NSF grant had been approved. The third was the change in chairman of the Committee. The main work of the Committee was altered rather abruptly during the past year from necessary preoccupation with helping to administer the funding of the Center to the present job of promoting the Center to SLA members. The chairman is now SLA's Representative to the Center.

Summary of the Past Year's Activities. In Nov 1968, as soon as TAC knew of the NSF grant to Crerar, the Committee started on a two-pronged attack to dispel the concern expressed by some SLA members that SLA had abandoned the Center completely. One prong was the creation of "package" program which could be presented at Chapter meetings; the program stressed the services provided by the Center, and underlined the importance of contributing copies of translations to the Center. The other prong was a one-page article on the Center, which was published in the Feb 1969 issue of Special Libraries. It is believed that most SLA members will thus be made fully aware of the importance of the Center and their continued support thereof.

At the Rochester Mid-winter meeting, the TAC chairman gave a "dress rehearsal" of the package program to the Advisory Council and called on Chapter presidents to appoint Chapter Translations Representatives (CTR's) who would be willing to present the package to the Chapters and act as liaisons between the Chapters and TAC. Response was moderate, with a dozen Chapters appointing CTR's and asking for the package. News of several successful meetings have been received.

W. S. Budington called a meeting of the National Translations Center Advisory Board at John Crerar Library on Mar 19, 1969. Attached are the agenda, a chart reflecting activities of the Center, and a list of the Advisory Board members (Not reproduced here). The Advisory Board is drawn from two sources: the library/information center group, and the subject-professional group. The meeting was quite successful. Board members were introduced to the Center and its services, and there was ample time for a barrage of questions. The consensus was that a national center was necessary and should be supported, and that, alternatively, if each individual society were to manage its own translations, the job would never get done.

Mrs. Nowak explained that from Jan to Jun 1967, there were no announcements made of translations, since *Technical Translations* was phasing out and *TR-I* hadn't yet picked up the slack. When *TR-I* started, there were only 400 subscribers, compared with 2,000 for *TT*. Another factor was the simultaneous initiation of a \$5 service charge on each translation.

Means of communication with the Center are, of course, by telephone, TWX, and letters. Telephone is entirely acceptable, but they suggest a follow-up letter to confirm the phoned-in request in the case of esoteric journal titles. Besides Mrs. Nowak, there are two more members of the staff qualified to handle requests. The turn-around time on a TWX request is "immediate." As to letters, their rule is to handle the request within 3 working days. If it takes 2 days each way by mail, the answer then will be received in 7–10 days depending on when the weekend falls. If this schedule is not met, Mrs. Nowak would like the particulars so that she can take proper corrective action.

There was considerable discussion on *Translations Register-Index*. There was some feeling that the Register part was an unnecessary expense. Bill Budington admitted that the "Register" was included mainly at the behest of the National Science Foundation, the grantor.

Plans for the Coming Year. The activities for the coming year will continue to be concerned with SLA's use of and contributions to the Center but will also branch out into other translations activities.

The public relations campaign for the Center, started this year, will continue, to the end that all Chapters will become actively involved. It is envisioned that the Chapters will be divided into regions, each region being coordinated by a Committee member. TAC will also be a watch dog for *Translations Register-Index* and will submit suggestions for improvements when necessary. The Committee will also make appropriate suggestions concerning the forthcoming cumulative index to translations.

A meeting of the Committee and CTR's has been planned for Montreal and more definite ideas for the future will be discussed. Ways and means will be explored to assist the SLA Board and members on other aspects of developments in the translations field. These would include publication of a check list for librarians to consult before they order translations, liaison with other organizations (American Translators Association, Society of Federal Linguists, foreign organizations) transliteration standards, and the like.

CHARLES E. KIP

H. W. Wilson Company Chapter Award

No report received. (The results of the 1969 competition are reported in the Jul-Aug issue.)

Reports of Special Committees 1968/69

Advisory Committee to Elizabeth Ferguson on a Book: Descriptive Bibliographies . . .

The Board accepted the Committee's recommendation that it be dissolved.

Case Study

The following report summarizes the work of the Case Study Committee, 1967/69. The Committee was organized originally to investigate the feasibility of having the Association sponsor or publish a collection of case studies dealing with special library situations.

Feasibility of Sponsoring a Publication. In investigating its first charge the Committee surveyed library school faculties and a selection of special libraries and librarians. It was established that the library school is the only current major consumer of case studies. It was further established that the case method of teaching is not used by a majority of the faculty. Advocates of the method were strong in its support and stressed the obvious fact that the method cannot be used until cases become available.

Respondents, in general, doubted the value of a collection dealing exclusively with special libraries. Respondents also criticized the quality of cases in print (in 1967). In the course of the investigations it was discovered that several different persons were involved in collecting and publishing new case collections which would include special library situations.

As a result of the 1967 survey the Committee recommended that the Association:

1) Reject any plans to collect and publish case studies, and

2) That the Committee be continued with a different assignment—to assist library school faculty in collecting data and in identifying possible case study situations. The Board accepted the 1967 recommendation for a change in the Committee assignment.

Collection of Case Study Data. A limited

amount of case study materials have been collected and have been released to appropriate library school faculty. Additional data are in process and will be forwarded during the summer. All work in progress will be completed by Sep 1969. Data for 20–30 cases will have been submitted through the Committee's channels. In a few cases it is known that library school faculty have been contacted directly by librarians who had material for review.

Three factors regularly restricted the work of collecting case data:

1) Librarians found that collecting data is time consuming, and they had higher priorities for work.

2) Administrative clearance for release of internal information could not be secured.

3) The Committee did not have faculty-case writers in its membership.

Recommendation. It is recommended that the Committee be discharged upon completion of the work now in progress.*

BETSY ANN OLIVE

* The Board dissolved the Committee.

Code of Ethics

No report received.

Special Committee to Investigate and Initiate Closer Relationships and Liaison with Other Associations in the Library and Documentation Professions

An initial contact letter was sent to: American Association of Law Libraries, American Theological Library Association, Medical Library Association, Music Library Association, Society of American Archivists, and Theatre Library Association.

The Special Committee's intention was to take this initial step and then should there be evidence of interest from the contacted societies, follow-up with meetings and constructive joint action. However, the strong emphasis by SLA on the possible merger with ASIS pre-empted time and effort which might have been expended on associated societies.

It is suggested, however, that the original concept of "talks" with other library and documentation professions has merit and should be continued and enlarged during this next year.

ROBERT W. GIBSON, JR.

Copyright Law Revision

No report received.

Special Committee to Study Feasibility of Merger with ASIS (American Society for Information Science)

Summary of Report to the SLA Board of Directors. From Feb 7 to Apr 26, 1969 we met for a total of 5 days with a similar Committee representing ASIS. Our objectives were:

1) To determine if merger was indeed feasible.

2) To present to the SLA Board a specific plan for merger.

Between our meetings, we made extensive and intensive studies of both organizations.

Jointly we recognized that merger offered many potential benefits. During our final meeting, however, the ASIS representatives expressed dissent to the merger concept and proposed an alternate form of "federation alliance." The SLA Committee feels that the federation alliance would be less effective than full merger, but because we could not reach mutual agreement we were not able to fulfill Objective 2 above.

For us on the Committee, this assignment was a most revealing exercise, and it helped us especially to understand better the strong and weak points of SLA and, even more important, it showed us to some degree how others view SLA.

We offer two recommendations to the Board of Directors for future action:*

1) That SLA continue discussions with ASIS relating to some form of alliance.

2) That we drop further discussions and proceed with a plan for changes within SLA which will achieve similar beneficial objectives. The specific areas this committee considers most important include:

Name change (To describe better our membership and our objectives)

Membership requirements (To bring in more individuals who can benefit SLA and who would gain from such membership)

Annual Conference (Better program content and format, more efficient operation, more responsive to members' needs)

Division and Chapter structure (Simpler, more efficient, better reflection of changing interest of SLA).

GRIEG G. ASPNES

* * *

The following is a Joint Report subscribed to by all six members of the SLA/ASIS Joint Committee. The complete report summarizes the results of their deliberations.

1) We agree that alliance between SLA and ASIS offers mutual benefits to both organizations and to their members.

2) There are many forms that such alliance might take. The attached study reports (B1 through B4, not reproduced here) support our investigation of one form of alliance—merger, that is, the creation of one new organization from the present two.

3) Another form of alliance that was discussed

^{*} See Activies of the Board reported in this issue.

was a federation in which certain functions would be centralized but with each organization retaining its identity and autonomy.

The functions that could be so centralized include the following:

- (1) Headquarters operations; common secretariat
- (2) Public relations activities
- (3) Governmental relations (lobbying); liaison with other organizations of related interests
- (4) Membership services
- (5) Education and scholarship activities
- (6) Publications; editing, printing, advertising

- (7) Conferences; planning, organizing, operations
- (8) Research efforts

We did not agree on either form of alliance: merger or federation. But we do recommend that further study should be made to explore these forms or any other possible ways in which SLA and ASIS might take common action to their mutual benefit.

For ASIS:	For SLA:
PAULINE ATHERTON	GRIEG G. ASPNES
Herbert Koller	LOUISE K. MONTLE
Ann F. Painter	THEODORE D. PHILLIPS

Reports of Joint Committees 1968/69

American Association of Colleges of Pharmacy. Joint Committee on Pharmacy College Libraries.

No reported received.

American Book Publishers Council–Special Libraries Association Joint Committee (ABPC/SLA)

Joint meeting with American Book Publishers Council. Three of the SLA members of the Joint Committee met with several ABPC members on Nov 8, 1968, at what may come to be our annual meeting. At least a dozen publishing companies were represented. One of the agenda items which drew immediate interest on their part was our proposal of a survey of the acquisition practices regarding books by SLA members (see also the report of Publisher Relations Committee). A Subcommittee to plan the questionnaire was formed, and two meetings have been held. The approval of the ABPC Board for the project, which will be funded by ABPC if it is carried out, is now being sought. Mr. Ginader gave the group a brief description of SLA and its goals. ABPC members described progress on the Standard Book Numbering System and on the ALA preconference symposium on acquisition practices to be held in Jun 1969. USASI standards on indexing and book publishers' advertising were discussed. Much interest in SLA views towards reprints was evident. Altogether, the meeting was one more method of keeping publishers aware of SLA and the viewpoints of its members.

Survey of SLA members. Once the approval of the ABPC Board is gained, the SLA members of the Joint Committee are going to handle the actual mailing and sorting of survey forms, with analysis of the results to be another duty of the SLA members. It is felt the questionnaire will provide valuable information to publishers, and will give SLA members an opportunity to comment on matters of concern to them, such as their reaction to various marketing techniques by publishers, etc. ELLIS MOUNT

American Library Association/Association of Hospital and Institutional Libraries (ALA/ AHIL). Joint Committee on Revision of Hospital Library Standards

No reported received.

Council of National Library Associations (CNLA). Joint Committee of Exhibit Managers

Committee dissolved by action of CNLA.

CNLA Joint Committee on Library Service in Hospitals (formerly Joint Committee on Hospital Libraries)

Two meetings were held in Chicago during this report year—Jul 12, 1968, at the American Library Association Headquarters and Feb 14, 1969, at the Medical Library Association Central Office. I attended the Feb 14 meeting.

The Committee's exhibit was discussed and it was decided that a guest book or register would be used in the future so that some idea of the number of people visiting the exhibit could be obtained. Also, it would be a record of who visited the exhibit and could be used as a source of addresses for sending the material requested by visitors. It was decided to exhibit at three meetings in 1969: Catholic Hospital Association in Minneapolis, American Library Association in Atlantic City, and American Hospital Association in Chicago. More detailed plans for the exhibit to be used at these meetings were explained at the February meeting and the final plans for the American Hospital Association meeting will be made in July.

During the year the Organization Guide for the Committee was revised to include changes agreed on at the July meeting. This was distributed to members of the Committee in October. One of the important changes is the change of the name from Joint Committee on Hospital Libraries to Joint Committee on Library Service in Hospitals.

Information about the Committee and its membership was furnished for the *Bowker Annual* at the publisher's request.

In Oct 1968 the 4th edition of the Basic List of Guides and Information Sources for Professional and Patients' Libraries in Hospitals was published. In February the 1969 edition was discussed and suggestions for additions and deletions will be considered at the July meeting. Although the supply of this publication was low, Helen Yast agreed to have enough printed to be distributed at the three meetings mentioned above.

Since the Committee is vitally interested in the better definition of standards for hospital libraries, it is eagerly awaiting the final draft of the proposed standards which is being prepared by the Joint Committee on Revision of Hospital Library Standards (AHIL) with the excellent advice of Miss Ruth Leonard. During the year the Boards of ALA, SLA, and MLA approved, provisionally, the proposed draft, and other Associations represented on the Committee expressed their enthusiasm that something definite was at long last being done in this area.

ALA published a revised edition of its brochure, The Librarian in the Hospital, and MLA updated its recruitment brochure, Medical Library Careers.

GENEVIEVE COLE

CNLA Joint Committee on Library Careers

Committee dissolved by action of CNLA.

CNLA Joint Committee on Library Education

No report received.

CNLA Joint Committee on Placement

Committee dissolved by action of CNLA.

CNLA Joint Committee on Visiting Foreign Librarians

Committee dissolved by action of CNLA.

Committee on National Library/Information Systems (CONLIS)

The Committee was originally formed in 1966, in response to the COSATI report of late 1965. As the result of deliberations by CONLIS, a report was prepared, approved (as a whole or in recommendation) by the constituent associations, and presented to the National Advisory Commission on Libraries. The latter group, appointed by President Lyndon B. Johnson, in turn issued its report recommending establishment of a permanent National Commission on Libraries and Information Science. Legislation is now before Congress to take such action (S. 1519, HR 8839).

On Jan 28, 1969, the CONLIS met in Washington to consider its continuing function, if any. Four alternatives are submitted to the constituent associations.

By now, some of Item 1 is out of date, in view of current legislative action, although the outcome has not yet been determined. Should the permanent commission not be established, it is likely that concerted response from such a group as CONLIS might well be suggested.

Item 2, in my view, is far too limiting a concept. Much better would it be to expand and support ALA Washington office with this objective.

Item 3 represents the most logical function which CONLIS might serve, in view of probable trends and developments in information services.

1. To take no immediate action but to await developments in the Congress resulting from the Commission's Report; to receive responses to the report by the constituent associations of CONLIS; to synthesize (if possible) a consensus from the library and information sciences profession to proposals contained in the report and to relevant Congressional activity; and to communicate such overall reaction to appropriate government bodies. 2. To propose the redefinition of CONLIS as a group concerned with legislative matters, which group might represent all elements of the library and information sciences profession on a continuing basis.

3. To focus the points of view of all types of libraries and information centers on problems of implementing a truly national information system, tapping all of these and other appropriate information resources in the country.

4. Having prepared a report according to its original charge, delivering this report to appropriate recipients, and having observed its impact on the deliberations of the National Advisory Commission on Libraries, to consider its mission completed and disband.

It is recognized that certain functions in the above alternatives might be served through the Council of National Library Associations. However, it was the feeling of members present that continuance on an informal basis outside of any existing structure might better accomplish objectives.

Recommendation. That CONLIS be continued, using Item 3 in its report as its principal function; and that it also observe the legislative and administrative progress on a National Commission on Libraries and Information Science, serving as a joint body for discussion and action as necessary and appropriate.*

WILLIAM S. BUDINGTON

September 1969

^{*} The Board rejected the recommended Item 3, but approved Item 4 instead.

Interagency Council on Library Tools for Nursing

Two meetings were held in New York City, in Nov 1968, and Mar 1969. At the latter meeting I served as secretary, pro tem, a rotating position. Reports of the library-related activities of the sixteen organizations represented on the Council were made and discussed at each meeting, as were the plans for the Council's booth at the National League for Nursing convention in Detroit in May 1969. An exhibit of library tools for nursing was also planned for the International Council of Nurses convention in Montreal in Jun 1969. As upcoming chairman, pro tem, of the Council, I wrote a letter to the Honorable John Jarman, Chairman of the Subcommittee on Public Health and Welfare, Committee on Interstate and Foreign Commerce, U.S. House of Representatives, expressing the Council's support for the bill to extend the Medical Library Assistance Act. THOMAS H. REES, JR.

Joint Committee on the Union List of Serials

The National Serials Data Program has been engaging the attention of the Joint Committee on the Union List of Serials. The three national libraries (National Library of Medicine, National Agricultural Library and the Library of Congress) accepted the responsibility for implementing the first phase of the program. The Information Systems office of the Library of Congress has had the responsibility for direction of the project. Phase I (Preliminary Draft) has now been completed. It had as objectives: the definition of serials, the data elements needed to control them, and the development of a content format for serials. Based upon the definition and objectives of a national system, those data elements could be selected which would carry out the objectives. Because objectives were to be accomplished at least cost, those items and elements were to be included which would be most useful to the user. A survey of prospective users was conducted by Nelson Associates to determine what was most beneficial. The LC group attempted, by applying analogous costings, to arrive at the cost of such a system and to determine cost by data element. The data available were not sufficient to compute a cost-benefit ratio for each data element. A subtask of Phase I, the responsibility for the development of a universal numbering scheme for serials, has been assumed by Subcommittee 20 of the USASI Z-39 Committee.

The National Library of Medicine is concerned with the overall function desired for the system. Its librarian, Scott Adams, presented a recommendation to the Joint Committee calling for a preliminary conceptualization of a functional model of the system, which could be modified in the light of facts derived from testing of the model.

With the completion of Phase I, decisions must now be made concerning Phase II (Reduction to Practice).

Idris Smith

Joint Committee on Fair Use in Photocopying

No report received.

Reports of SLA Special Representatives to Other Organizations

American Association for the Advancement of Science (AAAS) (Section T. Information & Communication)

The representatives of affiliated organizations (such as SLA) are members of the AAAS Council. A representative should be a Fellow of the AAAS, although a Member of AAAS may be accepted. At the Dec 30, 1968 meeting of the AAAS Council in Dallas, action was taken regarding the use of herbicides in Vietnam, and reports were heard from the Committees on: Science in the Promotion of Human Welfare, Public Understanding of Science, Science Education, and Arid Lands.

The Council elects the officers of the Association, and the chairmen of the Sections (who are also vice-presidents of the Association). A discussion of the restructuring of the Council was referred back to a committee; the proposal would have had the majority of the Council members elected by the Sections—rather than being composed of the representatives of the affiliated organizations.

The \$10 annual dues for affiliated organizations has been discontinued; at the same time the mailing of *Science* to the offices of each organization is also discontinued.

There is some question in my mind as to the value of this affiliation to either SLA or AAAS, *unless* our representative can take an active part in the affairs of AAAS Council and its Section T for a number of consecutive years. I attended the Dec 1967 meeting in N. Y., but was not able to attend the Dec 1968 Dallas meeting. Ammarette Roberts represented SLA; she feels that SLA should participate more actively to enhance the SLA image in the eyes of scientists. In this regard, it should be noted that the majority of the members of AAAS are affiliated with universities and tend to be oriented towards the biological sciences. (Because of the university affiliations, the meetings are always held between Christmas and New Year.)

SLA has not had a booth at an AAAS meeting since there was a very small booth (contributed) staffed by members of the N.Y. Sci-Tech Group about 10 years ago. Booth rentals at the Dec 1969 meeting in Boston are \$320 and \$400. Such participation could be considered for "Promotion" in the preparation of SLA's 1969/70 budget; an additional \$150-\$200 must also be recognized for shipping costs, rental of supplementary furniture for the booth, etc.

The term of representatives to AAAs are Jan 1 to Dec 31. I recommend that my successor be delegated to represent SLA at the Dec 27-31, 1969 meeting in Boston in addition to his normal term of appointment.

F. E. MCKENNA

American Federation for Information Processing Societies (AFIPS)

This report summarizes AFIPS activities for the fiscal year ending Jun 30, 1969. It contains information on the 1968 Fall Joint Computer Conference (FJCC) and the 1969 Spring Joint Computer Conference (sJCC). Many SLA members participated in the Joint Computer Conferences (JCC) this fiscal year. Conference attendees have been enthusiastic concerning their experiences.

Last year the Board instructed the SLA President to apply for member status in AFIPS. Due to the new AFIPS Constitution and other organizational changes, this application was deferred to November at the 1969 FJCC. Until the outcome of this application is known, SLA will continue as an affiliate member of AFIPS.

BURTON E. LAMKIN

American Society for Information Science (ASIS)

I have made arrangements for a special session at the ASIS annual meeting in San Francisco (Oct 1-4, 1969) to be sponsored by the Special Libraries Association. The program for this meeting is under the direction of Dr. Edward Olson, Associate Professor, School of Library and Information Services, University of Maryland. His general topic will be "Objective Measures of Library Service Policies in Special Libraries." More specifically, he will, with some students if possible, and with my assistance, document the tool which can be administered by a librarian to measure his library service policies objectively. This tool has been developed first for academic medical libraries under the direction of Dr. Richard Orr, and since that time, with the assistance of special librarians in the Washington, D. C. area serving as consultants to the Library School at the University of Maryland.

PAULINE A. ATHERTON

American Library Association/Reference, Service Division (ALA/RSD). Interlibrary Loan Committee

No report received.

American Library Association. Library Technology Program Advisory Committee

No report received.

American Library Association. Statistics Coordinating Committee

No report received.

Council of National Library Associations (CNLA)

During the past year there has been a transition in the SLA Representatives to CNLA from Past President and Executive Director to President and Executive Director. This new representation is in line with those of other member associations. As a result, Mrs. Usher served Jun-Dec 1968, and Mr. White is serving Jan-Jun 1969.

Perhaps the most important activity of CNLA has been a scrutiny of its many committees and joint committees, followed by the discontinuance of many of the "paper" committees which have existed for many years without real purpose or which have continued in existence after their purpose had been achieved. Hopefully, these actions to clear the decks will allow the officers and trustees of CNLA to concentrate their efforts to convert CNLA into a viable forum for joint discussions of common areas of interest of the Council's member associations.

At its May 2, 1969 meeting CNLA received a report from CNLA's representative to CONLIS (Bill M. Woods). The members of the Council felt that the continuation of CONLIS was duplicating the purposes of CNLA (especially in the area of representation to governmental agencies). There was also discussion about the need for CNLA representation on CONLIS when individual associations had their own CONLIS representatives. Because the CONLIS recommendations were received too late for adequate study, the Council authorized the CNLA Trustees to act at their Jun 26, 1969 meeting and to reply to CONLIS. (From the comments by the Council, it can be expected that the CNLA Trustees will recommend to the CNLA member associations that each association withdraw its representative to CONLIS, and to concentrate necessary functions in CNLA.)

CNLA officers for 1969/70 are:

Chairman: Mrs. Helen Brown Schmidt, Executive Secretary, MLA

Vice Chairman: Dr. F. E. McKenna, SLA

- Secretary-Treasurer: Mrs. Mary Hatch (Theatre Library Association)
- Trustees: Rev. James J. Kortendick, S.S. (Catholic Library Association); Roger McDonough (American Library Association)

Mrs. Schmidt, Dr. McKenna and Mrs. Hatch were elected for their second one-year terms. Of the officers and trustees, only Mrs. Schmidt currently represents one of the member associations.

GEORGE H. GINADER

Documentation Abstracts

Editorial Work. Dr. Ben-Ami Lipetz has continued during the year as Editor of Documentation Abstracts and is responsible for its having returned to the proper publication schedule. The number of abstracts has increased from 1,200 in 1966 to 2,000 in 1969. Of recent concern to the Editor has been the potential duplication of effort resulting from establishment (by ASLIB) of Library and Information Science Abstracts. Hopefully, a cooperative agreement will continue between this successor to the Library Science Abstracts and our journal. A significant number of exchanges have been established. Notables among these has been the inclusion of abstracts from the ERIC Clearinghouse for Library and Information Science in Documentation Abstracts.

Subscription Statistics. Subscriptions increased from 713 for Volume 2 (as of Dec 31, 1967) to 996 for Volume 3 (Dec 31, 1968). The goal for 1968 was 1,000 subscriptions. Of this number, roughly 70% was domestic and the rest foreign (including Canada). About 20% of the subscribers are billed at the individual membership price, but it is estimated that half of these are really fulfilling institutional subscriptions. About 30% of subscribers are universities in the United States and abroad and another 30% represent company libraries. The balance is made up of Government and public libraries, professional societies and other institutions.

Finances. Documentation Abstracts, Inc. has continued on a firm financial basis. The final monetary support promised by one charter sponsoring society was received. Early in the year \$5,000 of the previous year's cash balance was transferred to a savings account. The budget for 1968 was met within \$200.

Late in 1968 tax exemption for Documentation Abstracts, Inc. was approved under Section 501(c)3 of the Internal Revenue Code of 1954.

It is appropriate to note that although DA, Inc.'s subscription rate policy has continued, only about half of the subscriptions at the reduced price appear to be for personal use. The loss to Documentation Abstracts, Inc. by abuse of this preferential subscription rate continues to be a source of frustration.

Production and Subscription Fulfillment. Magnetic tape production methods were abandoned for it was found that these modern composition techniques were too demanding of our manpower and our financial resources at the present time. The Board of Directors and Editor have selected hot-type composition by the John J. Corbett Press of New Haven, Connecticut. Subscription fulfillment was not handled satisfactorily by the new printer, Goodway, Inc., and the Board felt Goodway's bid for 1969 for subscription services was exorbitant. Bid activities were initiated which resulted in re-establishing our printing arrangement with Port City Press and deciding to maintain subscription fulfillment "in-house" for 1969.

Advertising. During the year Documentation Abstracts, Inc. prepared a hand-out to potential advertisers in the journal. The sheet was distributed to exhibitors at several conferences and to a fairly extensive mailing list compiled by Mr. Morris Schoengold. Unfortunately, there were few responses to this effort and advertising revenue amounted to only \$360 during the year.

Promotion. Pauline Lybeck accepted the post of Promotion Manager for Documentation Abstracts, Inc. The culmination of Miss Lybeck's work is expected in the publication of a four-page brochure on *Information Science Abstracts* to be printed during 1969. A special exhibit poster was prepared with the assistance of the American Chemical Society and used with appropriate handout materials at several conventions. DA, Inc. has received permission from the sponsoring societies to use their display areas. To date no display space has been rented at conventions. *Documentation Abstracts* was also displayed in the Combined Periodicals Exhibit at the 1968 ALA Convention.

Personnel. In 1968 for the first time, a full-time clerical assistant was employed by the Editor. In addition to her work, part-time assistants aided both the Editor and the Business Manager. The latter maintained subscription fulfillment at the Drexel Institute of Technology Library until that operation was turned over to Goodway.

In the proposed budget for 1969 the DA Board has approved the employment of a full-time professional Editorial Assistant/Business Manager to report directly to the Editor, and a half-time clerical position to assume in-house subscription fulfillment duties at Yale University. Part-time wages will also be available to the Editor and Business Manager.

Prospective Additional Sponsor. The Treasurer was assigned the duty of contacting the Information Science and Automation Division of the American Library Association to discuss the possibility of their becoming a sponsor of the Documentation Abstracts, Inc. Action by ALA/ISAD awaits authorization from the American Library Association.

Board of Directors. The Board of Directors at the end of 1968 were Dr. Carleton Conrad, Chairman (ACS/DCL); Joseph Kuney, Vice-Chairman (ASIS); Richard L. Snyder, Treasurer & Acting Business Manager (SLA); Dr. Lee N. Starker (ACS/DCL); Miss Judith A. Werdel, Secretary, (ASIS); Pauline Lybeck, Promotion Manager (SLA). It should be noted that Morris Schoengold, an SLA nominee for two years, resigned in the fall 1968 for personal reasons. His service to Documentation Abstracts, Inc. is sorely missed.

PAULINE LYBECK

International Federation for Documentation (FID)

The 34th FID Conference and International Congress originally scheduled for Sep 9-18, 1968, in Moscow was postponed because of international conditions. It was later held at The Hague on Dec 2-6, 1968. I did not attend and of its proceedings know only what I have read in the press and in professional journals. During the period of my appointment as SLA's Special Representative to FID, no action has been required of me and I have done nothing beyond trying to follow FID activities in the periodical literature. Except for a few communications forwarded to me by SLA Headquarters during the summer of 1968, I have heard nothing from FID and have been unable to deduce what my responsibilities might he

Two possible obligations that have occurred to me are:

1) to prepare for possible inclusion in *Special Libraries* brief news notes about any actions taken by FID;

2) to keep the SLA President informed about FID committees to which he might wish to nominate specialists in accordance with the May 1968 ruling which reads: "National and Associate Members, National Associates and institutional Affiliates may nominate specialists to a given committee (institutional Affiliates may each nominate only one such person per committee). The number of representatives of institutional Affiliates in each committee should not exceed 50% of the total membership of a committee. The acceptance of a candidate will be the responsibility of the Chairman." (Rules of Procedure for Technical Bodies, Art. 2.1a)

I believe it would be helpful to the next Special Representative to FID to have the duties and responsibilities of the post clarified.

HELEN F. REDMAN

National Microfilm Association (NMA)

The past year has been a very active one for the National Microfilm Association. Seminars up-dating the state-of-the-art were held at both the annual convention in Boston and also at the mid-winter meeting in Key Largo, Florida.

The Association has been restructured during the past year. A new position of Executive Vice-President has been filled by Frederick L. Williford who will guide NMA along new paths of expansion commensurate with its greatly increased membership. Additional personnel have been added to the Headquarters' Staff. Your Representative has completed one year of a threeyear term as a member of the NMA Board of Directors. The outstanding new development this year was the formation of ten local chapters throughout the country. Chapters will bring the activities of the Association and the programs held at the local level, closer to other local groups such as SLA Chapters. They may also serve as a local source of information about the microfilm industry.

A presentation about microfilm and its uses, designed for education of the general public, has been made. It is a non-commercial talk called "The Word for Microfilm" which consists of a collection of $2" \times 2"$ color slides and a descriptive sound track. It will soon be available for showing by local NMA Chapters. Information about it may be obtained from the NMA Executive Secretary, P. O. Box 386, 250 Prince George Street, Annapolis, Md. 21404.

Some restructuring of the following Committees has been completed: Publications, Standards, Research, Seminars, Public Relations and Awards. Your Representative is a member of the Publications Committee which has an expanded program for publications.

The advances in automatic retrieval and transmission of microfilmed information and the computer microfilm interface were emphasized in both exhibits and seminars at the 1969 Convention. Fourteen seminars were held. For the first time an experiment was tried in making on-thespot tape recordings during each seminar. These are available in the form of one two-hour tape cassette per seminar at \$5.00 each. A great many orders have been received at Headquarters. The Seminar Program, with an abstract of each seminar, is listed in *Micro-News Bulletin*, no. 5, 1968/69, available from NMA Headquarters.

Plans are now being made for the 1970 Convention to be held in San Francisco.

LORETTA J. KIERSKY

United Nations Non-Governmental Organizations Observer

Notification of briefing sessions held at the United Nations continue to be received by the Observer. These sessions cover a wide range of topics of indirect concern to the Association, and those of pertinent interest have been attended by the Observer.

The Annual OPI-NGO Conference theme, "The United Nations at 25—Realities and Prospects," took place on May 27 and 28; and Special Libraries Association was represented by the Observer.

There is a folder for the Association on file in the Office of Public Information; it contains information about the Association as well as anything on the United Nations which has appeared in our official publication. Included, therefore, in this folder is a copy of the release concerning the availability of materials and films for the observance of "Human Rights Year, 1968," which was published in the Jul/Aug 1968 issue of Special Libraries. Since the United Nations represents one of the areas of legitimate concern to the Association's members, I recommend that we reaffirm our support of it by continuing the appointment of a Non-Governmental Organizations Observer.

VIVIAN D. HEWITT

United States of America Standards Institute (USASI). Sectional Committee on Photographic Reproduction of Documents, PH-5

The work of this Committee results from the specific activities of its subcommittees. Each of these has met one or more times during the past year in addition to two meetings, December and June, of the entire membership of the Sectional Committee.

Subcommittee PH 5.3 continues to analyze a first version of a proposed *Standard Test Chart* to be used to determine the copying ability and quality of print-out from copying machines and micro-film reader-printers. The sponsor is the American Library Association.

PH 5.4/111 (Revision of PH 5.4-1957) Proposed USA Standard Practice for Storage of Processed Silver-Gelatin Microfilm has been sent to letter ballot of the full Committee for vote. The Sponsor is the American Library Association.

PH 5.6/103 Proposed USA Standard, Dimensions for 100-ft Reels for Processed 16 mm and 35 mm Microfilm is now before the Photographic Standards Board for approval.

PH 5.9/113 Proposed USA Standard, Specifications for Microfiches has been sent to letter ballot of the full Committee for vote. The sponsor is the American Library Association.

PH 5.10/108 Proposed USA Standard, Method for Determining the Screen Luminance of Microform Readers with Translucent Screens has been sent to letter ballot of the full Committee for vote. The sponsor is the American Library Association.

Additional standards must be developed to cover the microimages for facsimile transmission. These are now under consideration.

The Representative wishes to note that United Nations Microfiche Standard ST/PB/28 has been issued to establish requirements for microfilming UN documents either by the UN itself or by commercial companies under contract.

The Representative would like to have any comments or suggestions from the members on areas in which they would like to see standards written in the field of documentary reproduction.

LORETTA J. KIERSKY

United States of America Standards Institute Sectional Committee on Library Work and Documentation Z-39

The USA Standards Institute Sectional Committee Z39 on Standardization in the Field of Library Work, Documentation and Related Publishing Practices announces the recent publication of three Standards: Basic Criteria for Indexes, Compiling Book Publishing Statistics, and Library Statistics.

Basic Criteria for Indexes was prepared by a subcommittee under the chairmanship of Dr. John Rothman, Director of Information Services at The New York Times. It revises the 1959 edition and provides "guidelines and a uniform vocabulary for use in the preparation and evaluation of indexes." Its techniques apply both to book publishers, who are chiefly concerned with manually compiled "back-of-the-book indexes," and to technical information indexers, who are strongly computer-oriented. Emphasis is placed on basic problems of preparing and using indexes, regardless of the type of document indexed or the kind of indexing process used. The Standard defines the principal elements of an index, discusses common structural problems and clarifies problems of vocabulary control

Compiling Book Publishing Statistics was prepared by a subcommittee under the chairmanship of Mrs. Anne J. Richter, Director of the Book Editorial Department of R. R. Bowker Company. It revises the 1966 version and presents guidelines for the application of book publishing statistics as well as definitions, methods of enumeration, classification and tables for the area.

Library Statistics was prepared by a subcommittee under the chairmanship of Dr. Frank L. Schick, University of Wisconsin-Milwaukee, School of Library and Information Science, to assist statisticians, librarians and researchers in collecting, organizing, and interpreting library related statistical data. Librarians, library educators, publishers and statisticians were consulted and represented on the committee and the recommendations made are applicable to public, college and university, school and special libraries, and library education. This Standard is based on the ALA Library Statistics Handbook and the two publications were designed to supplement each other. It contains individual sections for each type of library and library education and provides an extensive list of statistical definitions and terms relating to librarianship in the U.S.A.

ANNE J. RICHTER

United States of America Standards Institute Sectional Committee on Library Equipment and Supplies Z-85

No report received.

United States Book Exchange (USBE)

No report received.

U.S. National Libraries Task Force on Automation and Other Cooperative Services Advisory Committee

Two meetings of the Advisory Committee were held during the year in March and July.

The SLA member was charged with drafting a statement of endorsement of the MARC II format for submission to the associations represented on the Committee. This was done and the resultant statement submitted to the SLA Board at its January meeting. The Board unanimously adopted the statement of endorsement.

The March meeting was devoted to the serials control problem and the establishment of a national serials data base. Minutes of that meeting are attached.* The Committee's resolution in final form has not been returned to the Committee by the Chairman, and therefore, the draft resolution and the SLA members' comments are appended in its absence.

Recommendation: The Board of Directors take

all suitable steps available to it to publicize its action of January, 1969. These should include a formal letter of endorsement to the Librarian of Congress, announcement in *Special Libraries* in a more forceful manner than as a report of Board action (perhaps as an editorial by the President urging the membership to adopt the format in their library operations), and a news release to all professional journals and national library associations, etc. Unless such steps are taken quickly, the Board's decision will prove valueless to the profession and to the National Libraries.

IRWIN H. PIZER

* Not reproduced here.

Advisory Council Committee to Investigate a Change in Name for Special Libraries Association

This Committee was appointed by the Advisory Council Chairman, Mrs. Charlotte S. Mitchell, at the Midwinter Advisory Council meeting, Jan 17, 1969, to report back to the Council in June with specific suggestions of alternative names to "Special Libraries Association." The final question to be voted upon, if a vote is taken, is not whether any specific alternative suggested should be adopted but whether or not to recommend to the Board of Directors that such a change should be made.

Background. At the Advisory Council meeting in Jun 1968 in Los Angeles a majority of those present voted against a proposal to change the Association name. There was no discussion at that time of any alternatives to "Special Libraries Association," so it seemed to certain members of the Council that the vote could be construed as not a total rejection of a new name in principle but opposition to changing a familiar and reasonably descriptive name for some unknown one which might not work as well. Therefore, members of the Advisory Council who were interested in reopening this question were invited to stay after the Council session on Jan 16, 1969 to express their interest. The number who did so stay was sufficiently large to justify the appointment of this committee to pursue the matter further.

Deficiencies of "Special Libraries Association" as a Descriptive Title

1) "Special Libraries Association" is a misnomer since this is an organization of personal members, not of institutional ones.

2) "Special libraries" is too vague a term. Other library organizations, with the exception of ALA

and similar all-inclusive national professional societies, indicate in their titles their geographic or subject orientation, as "New England Library Association," "Medical Library Association," et al. "Special libraries" are so difficult to identify that the proposed membership requirements define a 'special library" as "a library or information center maintained by an individual, corporation, association, government agency or any other group." Coupled with its second definition as "a specialized or departmental collection within a library . . . primarily offering service to a specialized clientele," this takes in every information file from a single bookcase to the Library of Congress. 3) "Special libraries" is too restrictive a term. There is a noticeable trend toward the incorporation of the "library" so-called into a larger information processing and disseminating operation often called the "information center." It is significant that in the membership requirements definitions cited above, "information center" is given equal billing with "library" and that the title "librarian" appears nowhere in the new SLA "Résumé." In the Jan 1969 issue of INSPEL (1), the journal of the IFLA Special Libraries Section, the author defines a "Milic" as "a special library developed into a specialized information centre" (emphasis ours). A recent Stanford Research Institute Long Range Planning Service report (2) and a federal report on information systems (3) emphasize in similar ways the absorption of the "library," conceived of as an almost archival collection of conventionally-formatted materials, into the more dynamic and inclusive "information cen-ter" or "information system." If these authors, familiar with the field, identify libraries per se as static and outmoded institutions in the process of being absorbed into the modern all-encompassing information system, it is even more likely that the potential recruits to information work, and thus to SLA, are not attracted to an association specifically restricted to such outmoded institutions.

Criteria. The Committee has considered the defects of the name "Special Libraries Association" as outlined above and has concluded that any modification of this name must satisfy the following requirements.

1) The society's name must reflect accurately the nature of the organization. The present title is misleading since this Association is not one of institutional members but of personal ones.

2) The name should define the society's goals rather than the places of employment of its members. "Special libraries" cannot be distinguished from similar agencies by geographic location, by particular subject coverage of collections, or by nature of sponsoring institution.

3) The name should not restrict or seem to restrict membership but enlarge it to encompass all phases of information work. The areas of employment of members will increasingly be referred to as "information centers" or the equivalent rather than as "libraries" and correspondingly present or potential society members will be termed "information specialists" or "information scientists" rather than "librarians."

4) The name should indicate Association involvement with any and all aspects of satisfaction of users' informational needs. As is demonstrated by SLA Conference programs, members' interests are not confined to traditional library processes but extend to any means of information production, processing, retrieval, and dissemination which will best serve each patron.

5) The name should distinguish this society from others with which it might naturally be confused but also allow for potential merger with an association of related interests. This quality of uniqueness should, if feasible, be extended to the acronym by which the society will inevitably be known as well as to the name itself. Thus it would be desirable to avoid any title starting with the word "association" since over twenty familiar society acronyms (including ALA, ASIS, and Aslib) begin with an initial "A."

The specific alternatives the Committee feels satisfy these requirements are:

a) International Society of Library and Informa-

tion Services (ISLIS); or Society of Library and Information Services (SLIS).

b) International Society of Librarians and Information Scientists; or, Society of Librarians and Information Scientists.

c) International Society of Library and Information Specialists; or, Society of Library and Information Specialists.

Conclusion and Recommendations. According to its charge from the Council, the Committee presents the above names as alternatives to the title of "Special Libraries Association" for this society. The Committee has also listed the requirements it feels any name chosen should satisfy. However, the Committee does not mean that its list should be regarded as definitive nor that other titles, such as those which might be recommended by a public relations consultant to the Association, might not meet these criteria equally well or better.

To summarize: It is the opinion of this Committee that the present society name, "Special Libraries Association," is inaccurate and restrictive and will hamper the future growth of this association. We therefore recommend to the Advisory Council that it refer this matter of a name change to the Council Agenda Committee for action at the Jan 1970, Midwinter meeting, at which time a vote should be taken to determine whether or not to recommend to the SLA Board of Directors that such a change should be effected. We further suggest that prior to this action (i.e., between Jun 1969 and Jan 1970) the criteria and alternative titles set forth in this report be presented to constituent groups represented by Council delegates for discussion so that a true consensus of membership opinion of the adequacy or inadequacy of the name now used to the encouragement of SLA growth may be obtained.*

ZOE L. COSGROVE, Chairman

^{*} The recommendations were approved by the Advisory Council.

^{1.} Peters, K. I. L. M. Bibliographic Work in Ministerial Libraries and Information Centers (MILIC). *IN-SPEL* 4: (no. 1) 4 (Jan 1969).

^{2.} Bourne, Charles P., et al. The Corporate Library/ Information Center. Stanford Research Institute. Long Range Planning Service. *Research Report*, No. 363 (Dec 1968).

^{3.} Borko, H. The Conceptual Foundations of Information Systems. Washington, D. C., U.S. National Bureau of Standards, 1965. (AD 615 718).

BENJAMIN BANNEKER:

A Biographical Request

A comprehensive biography of Benjamin Banneker (1731-1806), the selftaught Afro-American astronomer and almanac-maker, is presently being completed by Silvio A. Bedini of the Smithsonian Institution, Washington, D. C. Mr. Bedini, a historian of early American science has already published on Banneker, having been engaged in research on Banneker's life and work since 1955. In addition to a biography, his project will encompass a compilation of Banneker's almanacs issued from 1792 through 1797, and a critical bibliography. Mr. Bedini is seeking surviving documentation of all aspects of Banneker's life and work, including family records, business accounts, and such related materials as the personal papers and scientific instruments of George Ellicott of Ellicott City. In particular he is trying to find the individual collection owning Banneker's manuscript commonplace book and astronomical record book. Write: Silvio A. Bedini. The National Museum of History and Technology, Smithsonian Institution, Washington, D. C. 20560.



and a second and a second a se

Hundreds of Libraries—big and small—now print 3 x 5 professional catalog cards and postcards (any quantities) with new precision geared stencil printer especially designed for Library requirements. Buy direct on Five Year Guarantee. FREE—Write TO-DAY for description, pictures, and low direct price.

CARDMASTER, 1920 Sunnyside, Dept. 49, Chicago 40



☐ 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."

Name

Library

City

State Zip THE HECKMAN BINDERY, INCORPORATED NORTH MANCHESTER, INDIANA 46962 TELEPHONE (AREA CODE 219) 982-2107 "BOUND TO PLEASE"®

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.

Pre-publication offer

Save almost 20 per cent on The New York Times Obituaries Index. Pre-publication price: \$45 (until October 31, 1969). Regular price: \$55.

To reserve your copy at the pre-publication price, write to:

The New York Times/Library Services and Infor-mation Division, Box SL-9A, 229 West 43d Street, New York, N.Y. 10036.

SYMPOSIUM PROCEEDINGS AVAILABLE

13TH ANNUAL SOCIETY OF AEROSPACE MATERIALS AND PROCESS ENGINEERING "Energistic Materials—Energy to the Benefit of Aerospace and Mankind" Chicago, Illinois—May 7-9, 1968

Contents include: Processing of carbon reinforced composites by internal electrical resistance heating. Long life materials for spacecraft. Designing optimum deep submergence hulls for satisfactory fabrication with collimated tape. Welding and phase reactions in the solid state using pulse energies. Ultrasonic treatment of 7075 aluminum alloys. The effects of deionized water immersion of prepared aluminum surfaces on adhesive bondability. **\$25.00**

14TH ANNUAL SOCIETY OF AEROSPACE MATERIALS AND PROCESS ENGINEERING "Advanced Techniques for Material Investigation and Fabrication" Cocoa Beach, Florida—November 5-7, 1968

Contents include: The use of the polarized light microscope for metallic crystallographic stud-ies. Microwave studies for determining re-entry heat shield bond integrity and thickness. Mass spectrometric thermal analysis of polymers. Methods of testing the plastic laminate phase of com-posite armor. Reliability aspects of microjoints. Rotogravure printing of flexible printed circuits. \$35.00

2ND ANNUAL SOCIETY OF LOGISTICS ENGINEERS "Logistics in the Seventies" Washington, D. C.—September 19-20, 1967

Variantiation, D. C.—September 19-20, 1907 Contents include: Rapid evaluation systems to repair equipment. Application of optimizing tech-nique to initial provisioning of aircraft programs. The role of ADP in national inventory control point management. Systems planning for transportation of large launch vehicles and spacecraft. Developments in unconventional transportation, 1970-1980. Methods for determining the eco-nomic impact of value engineering changes. Logistics in public management. Computer produced maintenance documentation. \$15.00 maintenance documentation.

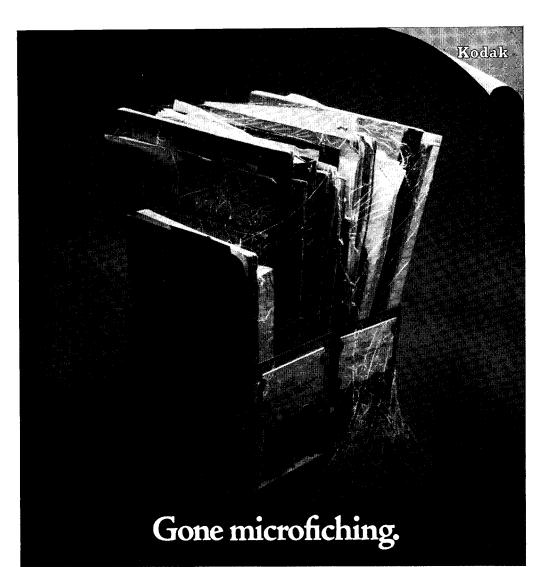
3RD ANNUAL SOCIETY OF LOGISTICS ENGINEERS "Technology and Education" Los Angeles, California—September 5-6, 1968

Los Angeles, California—September 3-6, 1960 Contents include: A modern educational program in maintainability engineering. On the deter-mination of group relative values for maintenance criteria. On the application of digital com-puter simulation as a maintainability design and prediction tool. Space station logistics prob-lems, analysis and management decision aids. Programmed technical manuals. Algorithm in fault detection and isolation. Measuring maintenance effectiveness. \$17.50

Send for Free Catalog

WESTERN PERIODICALS CO.

13000 Raymer St.
 North Hollywood, California 91605
 (213) 875-0555



It's true. People don't use those old-style research files nearly as much these days. Not since so much technical data has become available on microfiche.

Just one microfiche can hold up to 98 pages of microfilmed data. Thousands of these filmcards can be filed for easy reference in an ordinary card file.

And think of the money you can save. For example, the Defense Documentation Center now charges its "customers" a \$3 fee for "hard copies" of most technical reports. The very same data in microfiche form is free.

And with a Recordak Easamatic reader by Kodak you can retrieve individual images on any microfiche in seconds. Just slip the microfiche in place, move the pointer to the desired index number...and there's

> your image on the screen. Simplicity itself. If you would like a line on microfiching with Easamatic readers, write Eastman Kodak Company, Business Systems Markets Division, Dept. VV-9, Rochester, New York 14650.

Eccordak is a registered trademark for microfilm Systems by Kodak.

BRITISH TECHNOLOGY INDEX

Current subject index to

British technical articles

on

ENGINEERING, MANUFACTURING and CHEMICAL TECHNOLOGY

Detailed subject analysis Up to date

A-Z arrangement

Monthly

Annual

THE LIBRARY ASSOCIATION 7 Ridgmount St., Store St., London W.C. 1 England

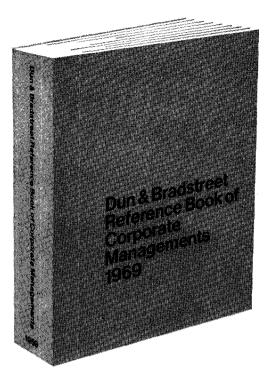


P. O. Box 2070 Birmingham, Ala. 35201 (205) 323-6351

540 Granite Street Braintree, Mass. 02184 (617) 843-2383/843-2384

Dallas, Texas 75225 (214) 369-7591/369-7592 512 Nicollet Bidg. Minneapolis, Minn. 55402 (612) 333-5081 Denver, Colo. 80217 (303) 433-3235

EBSCO Indust tries. Inc.



Find out who's where, who's what in American business.

If you want to know a business, you've got to know its management. And if you want to know management, you've got to know the men behind it. Yet, until Dun & Bradstreet put it together, there wasn't one comprehensive source of information where you could find all the facts.

Now in its 3rd edition, the Dun & Bradstreet Reference Book of Corporate Managements provides solid, useful information about 30,000 top executives in some 2,000 internationally important companies. It gives you information on:

 Name • Age • College background (including degrees granted) • Marital status • Complete chronology of business or professional experience • Outside business affiliations.

For the first time, you can go beyond the standard statistical understanding of business situations and get right down to the human element. All this heretofore unavailable information is now compressed into one 1,800-page volume measuring just 9x11 inches. All data is arranged by company alphabetically, and includes the company's DUNS identification number.

The Reference Book of Corporate Managements gives you the facts you need to know about America's corporate leaders. It's an invaluable tool for marketing people, grantors of credit, investors, personnel officials, researchers, and anyone else interested in the men who make the decisions heard throughout the business world. Order yours today.

Dun & Bradstreet, Inc., Dept. C P.O. Box 1770, Church St. Station, N.Y., N.Y. 10008

Please send me _____ copies of the Dun's Reference Book of Corporate Managements at \$40.00 per single copy and \$32.00 for each additional copy.

___ Bill me ___ Bill my company

COMPANY	
STREET	
CITY	STATEZIP
Dun &	Bradstreet

Business Information Systems, Services and Sciences

T R-I

TRANSLATIONS REGISTER-INDEX

(The sole American translations announcement medium)

Valuable new research tool for the English-speaking scientific community

A semi-monthly journal which announces and indexes all translations currently collected by the National Translations Center. Newly received translations are recorded in subject categories arranged by COSATI classification in the register section, along with prices for paper and microfilm copies.

The index section covers journal and patent citations, conference papers, and monographs. Cumulating quarterly for all entries to date in a volume, with an annual cumulation, the index shows the original journal or other citation, an identifying number by which copies can be requested, and symbols or initials indicating sources to which orders or requests should be sent.

Compiled by

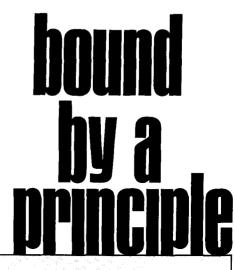
National Translations Center The John Crerar Library, Chicago

Subscription: \$30 a year

(Accepted on a calendar year basis only.)

Orders to:

Translations Register-Index Special Libraries Association 235 Park Avenue South New York, N. Y. 10003



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

Number Words and Number Symbols Karl Menninger 467 pp. \$15.00	
Heralds of Science Bern Dibner 96 pp. \$2.95	
Neurosciences Research Symposium Summaries edited by Francis O. Schmitt, et. al. 594 pp. \$12.50)
Survey of Applicable Mathematics Karel Rektorys, editor 1350 pp. \$16.95	
Star Atlas Smithsonian Astrophysical Observatory 152 loose sheets \$18.50	
Computerized Library Catalogs J. L. Dolby, V. J. Forsyth, and H. L. Resnikoff 176 pp. \$10.00	
Two Chicago Architects and Their Clients: Wright and Shaw, Leonard K. Eaton 272 pp. \$10.00T	
General Theory: Social, Political, Economic, and Regional Walter Isard 300 pp. \$10.00	
The Bauhaus Hans Wingler 696 pp. \$42.50T until December 31, 1969 \$55.00T thereafter	
Science in France in the Revolutionary Era Maurice P. Crosland 240 pp. \$10.00	
Gyroscopic Theory, Design, and Instrumentation W. Wrigley, W. Hollister, W. Denhard 464 pp. \$21.0	0
Systematic Analysis of Library Policies Jeffrey Raffel and Robert Shishko 128 pp. \$6.95	
Che: Selected Writings of Ernesto Guevara R. Bonachea and N. Valdes, editors 512 pp. \$10.00T	
Science Reference Sources Frances Briggs Jenkins 300 pp. \$2.95 paper; \$10.00	
Hunting for Dinosaurs Zofia Kielan-Jaworoska 204 pp. \$10.00	
In Honor of Philip M. Morse H. Feshbach and K. Uno Ingard, editors 352 pp. \$20.00	
Information, Mechanism and Meaning Donald M. MacKay 224 pp. \$6.95	
Jewish Folkways in Germanic Lands (1648-1806) Herman Pollack 368 pp. \$12.50	
The Acquisition of Syntax in Children from 5 to 10 Carol Chomsky 144 pp. \$5.95	
Psychological Research in Communist China 1949-1966 Robert and Ai-li Chin 240 pp. \$10.00	
Atomic Order Enrico Cantore 336 pp. \$12.50	
Arcology The City in the Image of Man Paolo Soleri 256 pp. \$25.00	
The MIT Press Cambridge, Massachusetts 02142	

T: trade discounted



subscriptions to all magazines serving the special librarians and their companies throughout the world for over forty-five years a service built on promptness—accuracy and personal attention to individual requirements

The **Turner** subscription agency, inc. 235 park avenue south, new york, n. y. 10003

(212) ALgonquin 4-4454

New from S–H Service Agency

Now available

William Starling Sullivant

Icones Muscorum, or figures and descriptions of most of those mosses peculiar to Eastern North America which have not been heretofore figured. 216 pages, 129 plates; with supplement 109 pages, 81 plates. Bound in 2 vols. 1864-74 (reprint 1969). \$60.00

The reprint of this classic work on American mosses is issued with a new preface by Andrew Denny Rodgers III, his biographer and great-great-grandson. No further introduction is necessary to this work by the "Father of American Bryology."

Send your order to:

STECHERT-HAFNER, INC. 31 East 10th Street New York, N. Y. 10003

*Research and Microfilm Publications

SEPTEMBER 1969

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 & MICRO CCM Information Corpo A subsidiary of Crowell Collier 909 Third Avenue, New	ration and Macmillan, Inc.	Dept. M39
Please send me the	RMP catalog and	d more information.
TITLE		
LIBRARY		
ADDRESS		
	STATE	ZIP

The 4-way locator for efficient planning and participation in . . .

Associations Societies Congresses Meetings Symposia Institutes Colloquia Regional National International Universities & Colleaes Scientific Engineering Health Sciences Technical Management

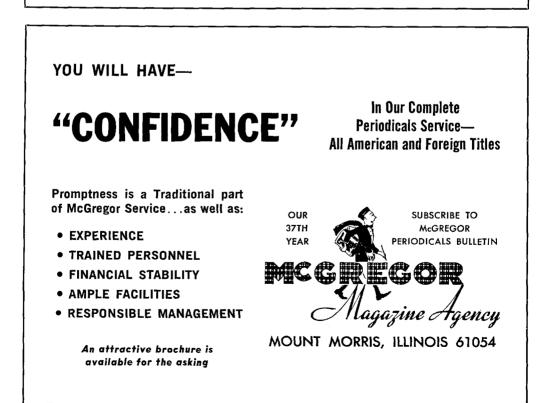
- Alphabetic List of Sponsors
- Chronological Locator 1970-1975
- Subject Locator Based on Key Words
- Worldwide Geographic Locator

by an experienced editorial staff

Selected and prepared

Subscriptions: \$15 per year in U. S. and Canada; add \$1.00 for other countries. Single copies: \$6.00 each. Published quarterly by

SPECIAL LIBRARIES ASSOCIATION • 235 Park Avenue So., New York 10003



Catalogs of the Scripps Institution of OCEANOGRAPHY Library University of California, San Diego

The Scripps Institution of Oceanography Library holds outstanding collections in oceanography, marine biology, and marine technology with imprint dates ranging from 1633 to the present. In addition to maintaining a basic reference collection in mathematics, physics, and chemistry, the SIO Library specializes in atmospheric sciences, fisheries, geology, geophysics, and zoology. The Library owns a major collection of oceanographic expedition literature. The cataloged collections include 80,000 bound volumes and 13,000 documents, reports, and translations.

Author-Title Catalog

Estimated 116,000 cards, 7 volumes Prepublication price: \$395.00; after April 30, 1970: \$490.00

Subject Catalog

Estimated 36,500 cards, 2 volumes Prepublication price: \$125.00; after April 30, 1970: \$155.00

Shelf List

Estimated 27,800 cards, 2 volumes **Prepublication price:** \$95.00; after April 30, 1970: \$120.00

Shelf List of Documents–Reports–Translations

> Estimated 13,400 cards, 1 volume Prepublication price: \$45.00; after April 30, 1970: \$55.00

Dictionary Catalog of the MAP Division The Research Libraries of The New York Public Library

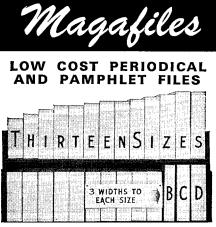
This dictionary catalog, approximately 175,000 cards, lists maps and other cartographic publications from early American and European rarities to up-to-date representations of all parts of the world, even including recently explored parts of the universe. Represented in the catalog are the 280,000 sheet maps of the Map Division. A depository for the U. S. Army Map Service, the division also has extensive holdings of maps issued by foreign governments.

Navigation charts before 1900 of the U. S. Hydrographic Office, the U. S. Coast Survey and the U. S. Coast and Geodetic Survey are represented in the catalog by place entry cards. In addition, the catalog contains entries for manuscript maps in the Manuscript Division, early printed maps in the Rare Book Division, and the Phelps Stokes American Historical Views in the Prints Division.

There are nearly 11,000 volumes other than atlases including works relating to the history of maps and the techniques of map making, periodical articles and bibliographies. Maps and articles contained in non-cartographic books, and periodicals housed in other divisions of the library, are represented by analytical cards.

Estimated 175,000 cards, 10 volumes **Prepublication price:** \$585.00; after January 31, 1970: \$730.00 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

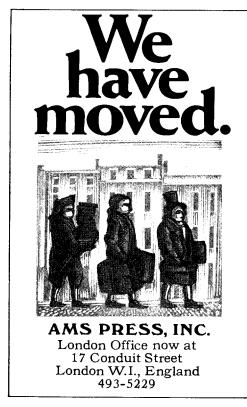


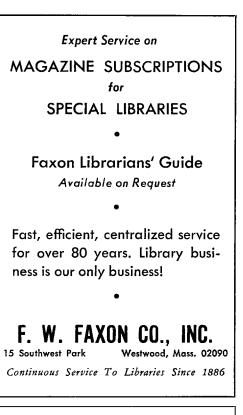
Sturdy—Attractive—Unique ALL SIZES SAME PRICE

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.









Analytical Chemistry

A-page Reprints 1969

BIND important A-page material with original research papers

Volume 41 A-page reprints package will include the Reports for Analytical Chemists, Instrumentation Columns, Book Reviews, Editors' Columns, and other features, without advertising. Orders may be placed now for delivery in January 1970 Price for set of A-page reprints is \$3

Price for set of A-page reprints is \$3 Send name and address to ACS and reserve your set of A-page reprints

TO: Special Issues, Sales American Chemical Society 1155 Sixteenth St., N.W. Washington, D.C. 20036

Bills will be mailed when reprints are available for distribution.

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	J	UNI	Ξ	19	70
S	М	T	w	Т	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 \$35.00 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-37

WORLD MEETINGS A PUBLICATION OF CCM INFORMATION CORPORATION A subsidiary of Growell Collier and Macmillar, 909 Third Avenue, New York, New York 10022

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 (MLS)—Man, 55—10 yr. experience metallurgical library, all phases library detail. Proficient in several European languages. Prefers Midwest. \$12,500. Box C-108.

College library/Special Library—Young man, 26. 3 years experience, 1 yr. as professional. Possess MSLS. Enjoy contact with people. New York City area preferred. Write: Box C-115.

POSITIONS OPEN

Research Librarian—To assist in the management of an information storage & retrieval system in a rapidly growing trade association. Salary between \$8,000-\$8,500 to start. Contact: Research Director, International Council of Shopping Centers, 445 Park Avenue, New York, N. Y. 10022.

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.

Technical Librarian—Technical Librarian to supervise and coordinate the activities of an established and progressive research library serving the needs of over 200 research scientists and various supplemental operations. Applicants should have a masters degree in library science, several years experience in a pharmaceuticaloriented library environment, and have preferably an undergraduate degree in Chemistry, Biology or Pharmacy. Please send résumé to: Personnel Department, Wyeth Laboratories, P.O. Box 8299, Philadelphia, Pa. 19101

Atlantic Richfield Company, an international petroleum company, seeks an experienced literature specialist to assist in the operation of coordinated technical information services located in Southern California. Position involves all phases of technical library operation, information retrieval and selective dissemination of information and the development of a technical correspondence system. A bachelor's degree in physical science with a master's degree in library science desirable. Please send résumé to M. E. Magee, P.O. Box 787, Wilmington, California 90744.

An Equal Opportunity Employer

POSITIONS OPEN

Special Librarian—Aggressive, young, international concern based in Birmingham, Michigan, seeks experienced librarian to initate and direct an information center and business finance collection. This is a challenging position with a real growth potential. Kindly include education, professional training and experience as a special librarian, as well as salary history. Reply in complete confidence to: Employment Manager, P.O. Box 408, Birmingham, Michigan 48012

An Equal Opportunity Employer

Transportation Center Library-Northwestern University has two positions open on a professional staff expanded to five. This is a research library specializing in transportation economics and traffic safety serving the University and the transportation industry. Applicants should have the M.L.S. (1) Cataloger, for original cataloging of books, documents and research reports (library-developed subject heading list); to work under the librarian in charge of technical processes. Initial salary \$8,500 or substantially more for experience in cataloging transportation related literature, e.g., business, planning or public administration. Open September 1. (2) Professional assistant with duties in reference work, serials cataloging and supervision of circulation assistant. A background in social science is desirable; experience is not required. Initial salary to \$8,500. Open now. Send résumé to Benjamin Jacobson, Librarian, Transporta-tion Center Library, Northwestern University, 1810 Hinman Avenue, Evanston, Illinois 60204.

Orange (N. J.) Public Library—Children's librarian to work with experienced librarian. Serving heterogeneous community. Competitive salary and benefits. Unusally cooperative staff. Easy commuting from New York City. Open May or June. 348 Main St. 07050. (201) 673-0153.

Reference Librarian—Master's Degree in Library Science, BA in Math, Physics or Chemistry preferred. Comprehensive reference and bibliographic work with Western Electric and Bell Telephone Laboratories. Prefer candidates with experience, but will consider recent graduates. Located near Universities of Duke, North Carolina and Wake Forest. Starting salary \$8,600-\$11,000. Write to M. D. Kenny, Western Electric Company, Incorporated, 201 N. Elm Street, Greensboro, North Carolina 27401.

An Equal Employment Opportunity Employer

Chief Science Librarian—To supervise public reference services and assume responsibility for the selection, organization and use of extensive reference and bibliographic collections in a large Science/Engineering library. Qualifications: MLS, minimum of undergraduate major in science or engineering, acceptable experience in reference and information work, some supervisory experience. Salary \$11,520 and up, depending on qualifications; fringe benefits. Apply to: Wm. S. Budington, Executive Director and Librarian, The John Crerar Library, 35 West 33rd Street, Chicago, Illinois 60616.

LIBRARY CATALOGUER

required for Main Library CHALK RIVER NUCLEAR LABORATORIES

to provide a cataloguing service for scientific and technical book acquisitions in nuclear science and technology. The library is a national repository with a book collection of more than 35,500 items subject classed by the Library of Congress scheme.

Applications are invited from B.L.S. and M.L.S. graduates of an accredited library school who have some cataloguing experience.

Most professional employees live in Deep River, located in a resort setting on the Ottawa River, 125 miles west of Ottawa. Excellent educational facilities. Year-round cultural and recreational activities. Good transportation connections to Ottawa and Toronto.

Please quote File 8 A and state all pertinent qualifications in first letter to:

Employment Supervisor Atomic Energy of Canada Limited Chalk River, Ontario

TECHNICAL LIBRARIAN.

To be in charge of reference services and act as assistant to the Manager of Technical Information Services. Supervision of a staff of eight, with responsibility for literature surveillance, literature searching and general reference. MLS required with an undergraduate degree in science preferred. Must have 3-5 years industrial experience in reference including some administrative responsibility.

For consideration send resume to:

Ray Rutman 2655 Bay Road Redwood City, California 94063

An Equal Opportunity Employer



LIBRARY SUPERVISOR

Shell has an opening in its Houston office for a highly qualified Librarian to supervise a centralized Library serving a staff of Business and Technical Analysts and Programmers and Data Processing Specialists. The Librarian will also coordinate the services of several regional Libraries. The Library System is part of Shell's Computer Program Standards Management and Program Information Exchange Operation. The Librarian will have an opportunity to develop new services, to recommend to management long-range objectives and to investigate the application of Data Processing to Library services.

Candidates should have a BS or MS in the Physical Sciences or Mathematics and at least five years experience in Library or Information Center work, two of which have been in a supervisory capacity; or an MS in Library Service and at least three years professional experience in a Technical or Special Library, one of which has been in a supervisory capacity. A knowledge of or experience in the Data Processing Field is desirable but not essential.

Salary commensurate with experience; excellent fringe benefits program.

Convenient personal interview will be arranged. Please forward resume and salary requirements to Mr. N. Gibbons, Employee Relations Department, 2nd floor, 7 West 51st Street, New York, New York 10019.



THE SHELL COMPANIES

Shell Oil Company • Shell Chemical Company Shell Development Company • Shell Pipe Line Corporation An equal opportunity employer

POSITIONS OPEN

Applications are invited for—A Japanese language and literature specialist to catalog Japanese books, periodicals and government documents and provide reference and bibliographic service in a large (130,000 volume, of which 25,000 are Japanese) Asian Studies collection. Applicants must have a 5th year degree in librarianship and be fluent in English as well as Japanese. Experience in cataloguing Far Eastern materials according to L.C. rules desirable. Salary for this senior specialist position is open and will be commensurate with background and experience. Please apply to: Mr. I. F. Bell, Associate Librarian, University of British Columbia Library, Vancouver 8, British Columbia, Canada.

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.

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

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

Foreign Books and Periodicals. Specialty: Search Service. Albert J. Phiebig Inc., Box 352, White Plains, N. Y. 10602.

For Sale—Complete set of Chemical Abstracts from 1907 to 1967 with Indices. Issues to end of 1965 in good quality bindings; all issues in excellent condition. Asking price is \$8,500, Canadian funds. Please send offer to W. A. Johnstone, Lever Brothers Limited, 1 Sunlight Park Road, Toronto, Ontario.

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 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

INDEX TO ADVERTISERS

AMS Press. Inc. 264
AMS Press, Inc.26AAnalytical Chemistry26A
Bell & Howell, Micro Photo Div. 10A
R. R. Bowker Company
Bro-Dart Cover II
CCM Information Corp. 8A, 13A, 23A, 27A
Cardmaster Company 15A
Dun & Bradstreet 19A
Eastman Kodak Company 17A
Ebsco Subscription Services 18A
The Faraday Press, Inc 1A
F. H. Faxon Co., Inc 26A
Gale Research Company Cover IV
The Globe and Mail Cover III
G. K. Hall & Co
The Heckman Bindery, Inc 15A
Institute for Scientific Information . 2A
The Library Association 18A
Library Binding Institute 20A
The MIT Press 21A
The Magafile Co 26A
McGregor Magazine Agency 24A
The New York Times 14A, 16A
Special Libraries Association . 20A, 24A
Stechert-Hafner, Inc
The Turner Subscription Agency 22A
The Vermont Printing Company 30A
Western Periodicals Co 16A
John Wiley & Sons, Inc 5A, 6A
Xerox Corp., University Microfilms 12A



'A serious newspaper, excellently produced in all respects, The Globe and Mail well deserves its place among the world's elite dailies.

John C. Merrill

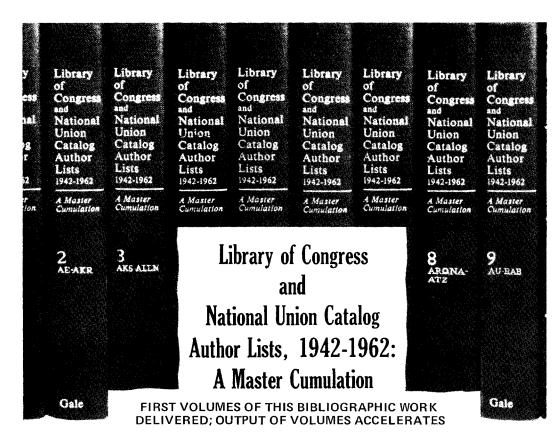
In his new book, Professor John C. Merrill, of the University of Missouri School of Journalism, takes a close look at the top 40 newspapers and examines in this elite company.

the factors that make them great. The Globe and Mail is honoured to be one of the two Canadian dailies included

More than 70 libraries throughout the world use the microfilm of The Globe and Mail. You may subcribe to The Globe and Mail microfilm service by writing to: The Library, The Globe and Mail, 140 King Street West, Toronto 1, Ontario

The Globe and 2

CANADA'S NATIONAL NEWSPAPER



With the initial volumes of the Master Cumulation in print and the output of new volumes accelerating, the editorial and production staffs are now geared to completion early in 1970 of the 152-volume, onealphabet cumulation of the four important supplements to A Catalog of Books Represented by Library of Congress Printed Cards:

Catalog of Books Represented by Library of Congress Printed Cards---Supplement (1942-1947) The Library of Congress Author Catalog, 1948-1952 The National Union Catalog: A Cumulative Author List, 1953-1957

The National Union Catalog: A Cumulative Author List, 1958-1962

LC:NUC Author Lists, 1942-1962, will provide libraries with a quick, easy, one-reference source for the bibliographical and cataloging data covering books, maps, atlases, periodicals, and other serials cataloged by the Library of Congress during the twenty-one years, 1942-1962, and by other North American libraries, 1956-1962.

Subscribers to *LC-NUC Author Lists, 1946-1962,* can anticipate the imminent availability and use of this twenty-one year bibliographic record and the substantial savings in both the time and labor which are required now of catalogers, bibliographers, acquisitions personnel, scholars, and others who must consult the four separate supplements.

Total cost of the 152-volume set is \$2,888.00 or \$19.00 per volume. Write us or call us (313-961-2242) collect for additional information. Examination copies will be sent upon request.

GALE RESEARCH COMPANY