ED 309 780	IR 052 850

AUTHOR	Daval, Nicola, Ed.
TITLE	ARL: Setting the Agenda for the 1990s. Minutes of the Membership Meeting (112th, Oakland, California, May 5-6, 1988).
INSTITUTION	Association of Research Libraries, Washington, D.C.
PUB DATE	89
NOTE	123p.; For the minutes of the 110th and 111th meetings, see ED 290 484 and ED 308 873.
AVAILABLE FROM	Association of Research Libraries, 1527 New Hampshire Ave., NW, Washington, DC 20036 (members $40.00/year; nonmembers $60.00/year).
PUB TYPE	Collected Works - Conference Proceedings (021) -- Viewpoints (120) -- Reports - Descriptive (141)

EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Bibliographic Utilities; *Computer Networks; Cooperative Programs; Futures (of Society); Library Associations; *Long Range Planning; Standards; *Systems Development
IDENTIFIERS	*Association of Research Libraries; Library of Congress; *Linked Systems Project; Open Systems Interconnection

ABSTRACT

    The first of two program sessions at this semiannual meeting addressed the agenda of the Association of Research Libraries (ARL) for the 1990s, and the report provides summaries of remarks by Elaine Sloan on the background; D. Kaye Gapen on a report from the Task Force on Review of the ARL Five-Year Plan; and Duane E. Webster on the ARL framework of capabilities. A summary of reports from small group discussions by D. Kaye Gapen is also provided. The second program session focused on the Linked Systems Project (LSP), and the text of each of the following presentations is provided: (1) "Background: Open Systems Interconnection (OSI)" (David F. Bishop); (2) "LSP and the Library Community" (Henriette Avram); and (3) "LSP: Implications for Our Libraries" (Dorothy Gregor). A list of 12 suggested readings on LSP is included. The report on the business meeting provides summaries of current topic sessions on preservation, serials prices, and government information; a statement of principles on government information in electronic format; an update on the FBI in libraries; reports from the Committee on ARL Statistics the president, the executive director, and the Office of Management Services; and a special report on the Library of Congress. Appended materials include a report on ARL activities from November 1987-May 1988; a status report on OMS (Office of Management Systems) programs from October 1987-April 1988; and excerpts from the 1987 OMS Annual Report. Also appended are lists of meeting participants; ARL officers and members of the Board of Directors, committees, and task forces; the membership of the association; and a 1987 financial report. (BBM)

May 5–6, 1988
Oakland, California

Minutes

of the

112th
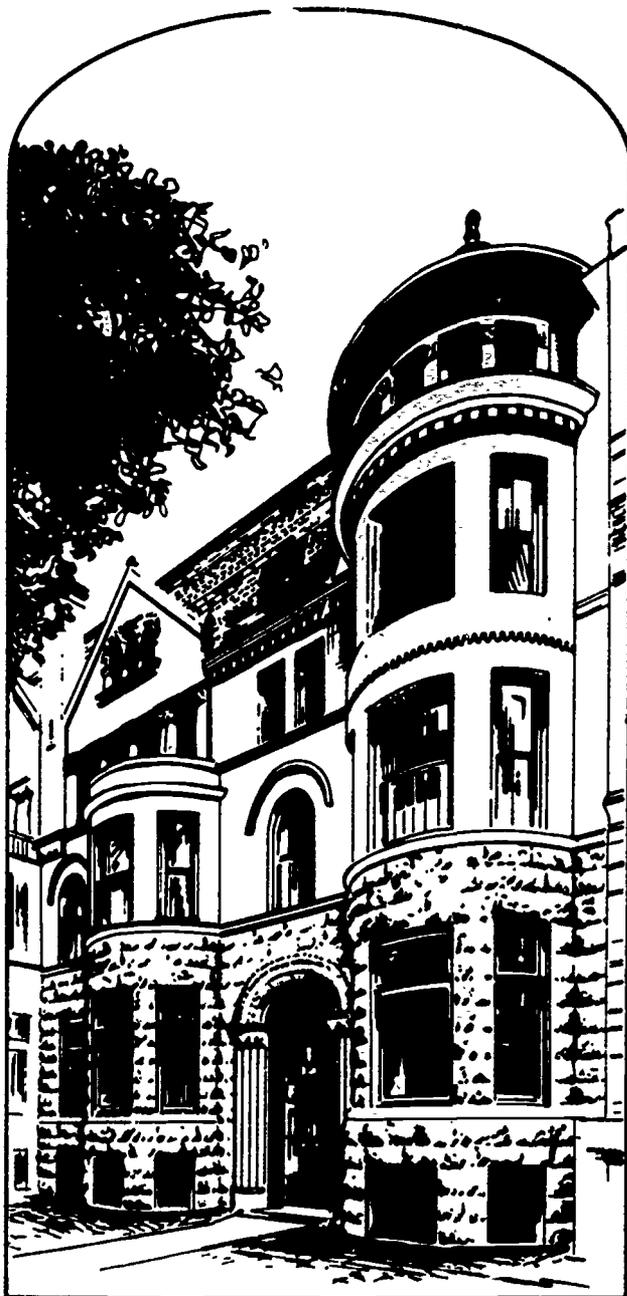
Meeting

The Association of Research Libraries

BEST COPY AVAILABLE

2

ASSOCIATION OF RESEARCH LIBRARIES

OFFiCERS AND BOARD

1988

Elaine F. Sloan. Indiana University – President

Charles E. Miller, Florida State University – Vice President/President-Elect

Herbert F. Johnson, Emory University – Past President

David F. Bishop, University of Illinois (October 1989)

Peter Freeman, University of Alberta (October 1989)

D. Kaye Gapen, University of Wisconsin (October 1990)

Carlton C. Rochell, New York University (October 1990)

Martin D. Runkle, University of Chicago (October 1988)

Marilyn Sharrow, University of California, Davis (October 1990)

Merrily Taylor. Brown University (October 1989)

STAFF

Duane E. Webster .... Executive Director

Jaia Barrett .... Program Officer

Nicola Daval .... Program Officer

Jeffrey J. Gardner............................... Director, Officer of Management Services

Susan Jurow .... Program Officer, Office of Management Services

Jutta Reed-Scott .... Program Officer

Maxine K. Sitts.................................. Program Officer, Office of Management Services

ARL:
Setting the Agenda for the 1990s

Minutes

of the

112th

Meeting

May 5–6, 1988
Oakland, California

TABLE OF CONTENTS

APPENDICES

ASSOCIATION OF RESEARCH LIRBARIES

Minutes of the 112th Meeting

Elaine F. Sloan, *Presiding*

The 112th Membersip Meeting of the Association of Research Libraries was held in Oakland, California, May 5-6, 1988. The first program session, *ARL: Setting the Agenda for the 1990s*, took place on Thursday morning, May 5. The second program session, *Linked Systems*, took place on Friday morning, May 6. The Business Meeting was held on Thursday afternoon, May 5.

ARL:

SETTING THE AGENDA FOR THE 1990S

ARL: SETTING THE AGENDA

FOR THE 1990S

Background

Elaine Sloan (*Indiana University*) opened the program with a review of the planning process to date. In 1983, the Association agreed to undertake an ambitious Five-Year Plan to change the organization in significant ways. The purpose of this portion of the program session was to assess the accomplishments of that plan and current planning activities, and to help determine future directions for the Association.

In addition to the plan, a number of other significant events have taken place that help to shape these discussions.

- The report from the Task Force on the Association's Responsiveness to Membership's Needs. The task force was chaired by Kenneth Peterson of Southern Illinois University. A number of recommendations from the report have already been implemented, and others will be implemented in the near future.

- ARL Vision Statement, prepared at a planning retreat in September 1987.

- Change in leadership for the Association with the appointment of Duane E. Webster as Executive Director.

Report from the Task Force on Review of the ARL Five-Year Plan

D. Kaye Gapen (*University of Wisconsin*), chair of the Task Force on Review of the ARL Five-Year Plan, began by reviewing the charge to the task force.

1.   to assess the strengths and weaknesses of the ARL Five-Year Plan;

2.   to highlight the accomplishments of the Association during this period;

3.   to update the mission and objectives statement;

4.   to suggest changes needed in the plan to allow ARL to pursue its vision;

5.   to clarify the relationship between ARL's planning efforts and its budget;

6.   to suggest ways to coordinate ARL planning with institutional planning.

Ms. Gapen noted that the charge was a means of defining the Association, the continuity that has existed over the previous five years, and how that continuity might continue into the changing environment of the future. She described the task force's two-part approach: first, identifying the priority concerns within each ARL member institution, and second, relating these local concerns to what ARL, as a membership organization with some influence, can accomplish on behalf of its members. Consideration of ARL's mission—stated simply: increasing access to scholarly communication—is also a point of the task forces deliberations.

Historically, ARL has tended to become involved as an association only in those areas where no other organization was taking the leadership role. However, over the last few years, this orientation seems to be changing to a more active leadership role for ARL in relation to other professional organizations.

In order to help determine the issues of primary concern to ARL member libraries, a survey of ARL library directors was conducted in April 1988. The survey focused on the six major objectives of the Five-Year Plan: scholarly communication, access to research library resources, preservation, information policy, staffing, and management. Survey results indicated that there was no interest in less activity in any of these six areas, and two areas—scholarly communication and information policy—were identified for increased ARL activity and impact. Issues of priority concern to ARL libraries locally were grouped into ten broad categories: staffing, technology, public services, preservation, space, collection management, finances, university relations, collective action, and technical support.

The task force also met with the chairs of ARL's standing committees, asking the following questions:

1.   Should the objectives your committee supports remain one of the
      selected number of ARL objectives?

2.   Is the present objective statement for your committee's area useful
      as a framework for the Association's activities, or should it be
      revised?

3.   What impact has ARL had in the issues encompassed by the
      objectives with which your committee is concerned?

4.   What issues in the area your committee addresses should be part
      of the Association agenda for the next five years?

At the meeting, which had been held the night before the committee chairs identified work that needs to be continued in support of all six current Plan objectives, the chairs saw a need for more coordination between the committees and the Board in planning and establishing priorities for ARL, and a need to coordinate efforts among committees as different aspects of interrelated issues are addressed. In addition, chairs saw a need for increased contact and work with other professional organizations. Committee chairs also identified two areas of ARL interest not sufficiently emphasized in the current Five-Year Plan objectives: information technology and financial support for university libraries. They also stressed the importance of ARL's involvement in library education.

Small Group Discussions

Ms. Gapen then outlined the purpose and focus of the small group discussions the membership were to engage in at that point in the meeting. She asked directors to relate what they considered important concerns for their libraries to the issues ARL should be addressing now or anticipating for the future. What new challenges, what new questions will be asked of research libraries. Then, among the many concerns facing the Association, how can ARL focus on the priority areas where it can be most effective.

* * * * * * * * * * * *

The following morning, Ms. Gapen summarized the reports from small group discussions with the following points:

— A consistent interest in a greater role for ARL staff, acting in cooperation with the membership.

— A sense of searching for new dimensions to look at issues that are becoming increasingly interrelated. As illustration of this point, she reported on the various ways discussion groups categorized and related the major issues targeted for action in member libraries in the near future. In one group, the top two issues identified are scholarly communication (including information policy, external relations, and organization issues such as staff training, development, and recruitment) and the role of libraries and librarians on campuses. Another group targeted higher education research agenda, relations with external organizations, and scholarly communication as the areas of most importance to ARL's agenda.

— A consistent theme of concern for finance, space, and the role of technology (both as something to respond to and as a possible solution to some problems).

— A consistent theme that ARL should play a coordinating and reaching-out role with all other professional organizations.

— A message that for this planning process to result in benefit to members, the ARL Plan needs to be designed in the context of realistic resources. If activities are identified beyond current resources, we should seek strategies to develop resources necessary to reap those benefits.

Ms. Gapen reported that the task force will address the role of ARL in focusing these increasingly diverse and interrelated issues, as well as being part of a solution to address and influence these issues. She also noted that the task force will address ARL activities in the context of Canadian and U.S. perspectives.

ARL Framework of Capabilities

Mr. Webster concluded this session of the meeting with a detailed look at the current operational structure of the Association within a framework of capabilities. In particular, Mr. Webster focused on deployment of staff and monetary resources among the capabilities:

> Statistics
> Communications
> Membership Meetings
> Governance
> ARL Committees and Task Forces
> Office of Management Services
> Federal Relations and Information Policy
> Relations with Scholarly and Professional Communities
> Access to Scholarly Information Projects
> International Relations

LINKED SYSTEMS

BACKGROUND:

OPEN SYSTEMS INTERCONNECTION

DAVID F. BISHOP
Director of Libraries
University of Illinois

We will talk today about linked systems. Because this is a large topic and because there is not a great deal of time available, we have set limited objectives for ourselves. We have tried to focus on the points we believe will most likely be of interest and of value to you as library administrators.

The linked systems project is a complex enterprise with many players involved in its development. It seemed in doing the planning for this program that we had two choices. The first choice was to involve a majority of the players responsible for the development of the Linked Systems Project (LSP) and present eight or nine very brief reports. The result of that approach, I am afraid, would have been most of you going away more confused than enlightened. The second choice was to deal with the more fundamental concepts of linked systems in some depth and in the process ignore—or perhaps a better way to state it would be to fail to acknowledge—some very important contributions that have been made to the development of linked systems.

We have decided to deal with concepts. But before exploring these concepts, I would like to take a minute and describe some of the contributions that have been made to the Linked Systems Project. I hope this will give you a sense of the breadth of the involvement that has occurred.

In looking at contributions to linked systems one would have to begin with the Council on Library Resources (CLR) and Bibliographic Services Development Program (BSDP), which was directed by Lee Jones. Certainly, one of the important contributions of the Council was significant financial support. But equally important was the leadership and vision that existed and that continues to exist within the Council.

Another major contributor is the Library of Congress (LC). The Library of Congress shared in CLR's leadership and vision, and had a great deal to do with initiating the project. And of course, without LC's commitment, the success of the Linked Systems Project would have been highly unlikely.

The Research Libraries Group, Inc. (RLG) has been a major participant. The thing that is most impressive to me about RLG's contribution is that a significant commitment of RLG's resources, both of funding and staff time, were made when those resources were extremely scarce. The linking of systems has clearly been a high priority for those at RLG.

OCLC joined the Linked Systems Project after it had begun and has become a major contributor. If the leaders at OCLC were paranoid, they could easily be convinced that the timing of the development of linked systems was calculated to place OCLC in the worst position

possible. OCLC has done a commendable job of finding creative ways of fitting linked systems activities into a massive systems redesign effort.

The National Library of Canada is another participant. A number of important studies have been done by the National Library of Canada, as has some particularly significant work in the area of interlibrary loan and standards for interlibrary loan messaging.

There have been local systems involved in linked systems. For example, GEAC has been an active participant in the project and has successfully established and maintained a link between its system at New York University and RLG. NOTIS is another local system. Jim Aagaard was heavily involved with the initial software development for the Linked Systems Project, and is working on developing a general linking capability for NOTIS users that could be used by other IBM-based systems as well.

And finally there is AVIAC. AVIAC stands for the Automated Vendors Industry Advisory Committee. The major area that AVIAC has focused on is the development of a standard for patron records to allow circulation systems of different vendors to interwork.

You can see that, while we will talk about a limited number of aspects of linked systems, the overall effort has involved a substantial commitment of time and funding by a large number of organizations and individuals.

Before I address my part of the program, which is the open systems interconnection, I would like to take a minute and tell you why the topic of linked systems is worth two hours of your time. I believe that the impact that linked systems will have on libraries during the next twenty years will be as great or greater than the impact the MARC formats have had during the past twenty years. I believe that the linking of systems will transform the way libraries function and will alter fundamentally the relationship among libraries.

It is as difficult for us to envision the possible uses of the linked systems capabilities today as it was for us to envision the uses of MARC in the late 1960s. In the '60s, we could understand the value of computer- produced catalog cards (they could be customized) and we had vague ideas about what we might be able to do with the machine-readable records. We are in that same position today with linked systems. We can understand the value of a direct connection from our local systems to our utilities rather than having duplicate terminals and engaging in clumsy downloading through printer ports, but we cannot conceive of much more. And, if understanding the uses of linking systems is difficult, understanding the impact that those uses can have on the way libraries function is many times more difficult.

There are a number of parallels between MARC and linked systems. In each instance the development of MARC was, and of linked systems is, ahead of the current technology. With MARC, the kinds of applications that we take for granted today would have been completely impossible in terms of hardware capacity twenty years ago. Also, the structure of the format presented some real programming challenges, particularly for programmers who worked only in high level languages. Today with linked systems we do not have the standard off-the-shelf vendor software we need. We do not have the telecommunications networks we need. There would not be much of a market for off-the-shelf software even if we had that software because the necessary relationships for linking do not exist. And finally, until recently we have not had a complete open systems interconnection standard.

There is an advantage to being ahead of the technology and it is one of the positioning. We saw this with MARC. Because of the early development of the MARC formats, we in libraries do not have to contend with a half dozen competing bibliographic formats. Hopefully, the aggressive way in which the linked systems participants have moved will mean that we will

avoid conflicting telecommunications conventions as well.

Now that I have, I hope, convinced you that this topic is worth your time, let me turn to my part of the program, which is the open systems interconnection, or OSI. OSI is an agreed upon standard set of convention or rules that, when implemented, will enable computers of different manufacturers, controlled by different types of internal programs, to communicate with each other, as equals, with minimal prior negotiation.

There are four key concepts in that definition that I would like to discuss. The first is that of a standard. The specifications for OSI are agreed upon internationally by the International Standards Organization, or ISO. As our library relationships expand, the fact that OSI is not only a standard but an international standard becomes significantly more important.

The second concept is that of different computer manufacturers and software. Computers of the same manufacturer have communicated with one another for a long time. SNA, which is IBM's product, is an example of a single manufacture's telecommunication system. IBM says that SNA stands for Systems Network Architecture. There are others, though, who say it stands for Stop Non-IBM's Applications. This points out an advantage of OSI. OSI does not give large manufacturers an advantage nor does it exclude smaller ones. The result is that OSI frees libraries to select systems and computers without worrying about whether those computers will be able to communicate with computers in other libraries.

Another way in which computers have communicated with one another for some time is by using emulation programs. Emulation programs do the type of thing that OSI does from one particular computer to another. These emulation programs connect computers in a nonstandard way by making one type of computer look like another type of computer. The problem with this approach is obvious. One would have to have as many different emulation programs as there are types of computers with which one wishes to communicate, a sort of telecommunications tower of Babel.

The third concept I would like to discuss is that of equals. OSI does not establish a slave-master or terminal-computer relationship. It establishes a relationship between equals, with each computer regarding the other as a peer. We will see later that this equality requirement complicates things considerably.

The fourth concept is that of minimal prior negotiation. The way I like to think of the capability of OSI is that it is like speaking to someone on a telephone. I can dial anywhere in the world and communicate with minimal prior agreement. Among the prior agreements that I would have to have is that we speak English. The ability to have one computer communicate with another computer spontaneously is a powerful capability that will be increasingly important in the future.

Finally, I would point out that OSI is not a library standard. Each application group—for example, libraries—will take from the standard certain aspects and create an application implementation. Henriette Avram will be discussing the library implementation later.

Now let us look at OSI in some more detail. At this point I must introduce the difficult part, which is layering. I wish that in presenting OSI I could ignore layering completely, but the minute people begin discussing OSI they talk about things like "the status of the session layer standard" or "the availability of transport layer software," and so for that reason alone we need to spend some time on layering.

As background for layering, I would like to look at structures of library applications programs and then relate those structures to OSI. Chart 1 (page 18) shows a multi-application library system with a controlling program that is responsible for the three subsystems:

acquisitions, circulation, and the online catalog. In the early days of multi-application library systems, each subsystem or application tended to be self-contained. Programs within the subsystem – such as file update, display record, and search – were written in an individual and often idiosyncratic way, and programs that did identical functions in different subsystems were, in many cases, completely different. For example, in Chart 1 there are three display records programs, one for each subsystem, and each display program probably was completely different. There was one advantage of this approach: a change in the circulation subsystem did not affect the acquisitions or the online catalog subsystem. But, in most cases, the nature of the change required that more than one subsystem be altered, and this resulted in having to change similar but different programs in a number of subsystems.

CHART 1

CONTROLLING PROGRAM				
ACQUISITIONS		CIRCULATION		ONLINE CATALOG
FILE UPDATE		CHARGE/ DISCHARGE		AUTHOR/TITLE/ SUBJECT SEARCH
DISPLAY RECORDS		OVERDUES/ BILLS		DATABASE MAINTENANCE
SEARCH		DISPLAY RECORDS		DISPLAY RECORDS
ETC.		ETC.		ETC.

A better way to organize applications programs is to generalize the software. This approach uses programs that cross applications as shown in Chart 2. Here, the controlling program has a number of generalized routines or programs associated with it. These programs include such things as database load, database search, display records, and maintain database. Connected to the controlling program are the three subsystems: acquisitions, circulation, and

the online catalog.   These subsystems use the generalized routines through the controlling program to perform functions that are common to all subsystems.   This results in less software and software that is easier to change because each routine does a specific, defined task and has a controlled number of entrances and exits.   The controlled entrances and exits may be the most important feature of this approach.   If one replaces the database search routine, one can merely test the information that enters and leaves the new database search routine and in that way assure oneself that the program is functioning properly.

CHART 2

CONTROLLING PROGRAM				
DATABASE LOAD	DATABASE SEARCH	DISPLAY RECORDS	MAINTAIN DATABASE	OTHER FUNCTIONS

ACQUISITIONS

ACQUISITIONS
SPECIFIC
PROGRAMS

CIRCULATION

CIRCULATION
SPECIFIC
PROGRAMS

ONLINE
CATALOG

ONLINE
CATALOG
SPECIFIC
PROGRAMS

CHART 3

```
  PROGRAM  <-------------------------->  PROGRAM

  APPLICATION                            APPLICATION
  LAYER                                  LAYER
           7                                      7

  PRESENTATION          OSI              PRESENTATION
  LAYER               LAYERS             LAYER
           6                                      6

  SESSION                                SESSION
  LAYER                                  LAYER
           5                                      5

  TRANSPORT                              TRANSPORT
  LAYER                                  LAYER
           4                                      4

  NETWORK          NETWORK               NETWORK
  LAYER                                  LAYER
           3                                      3

X.25                                 X.25
  LINK                                   LINK
  LAYER                                  LAYER
           2                                      2

  PHYSICAL                               PHYSICAL
  LAYER                                  LAYER
           1                                      1
```
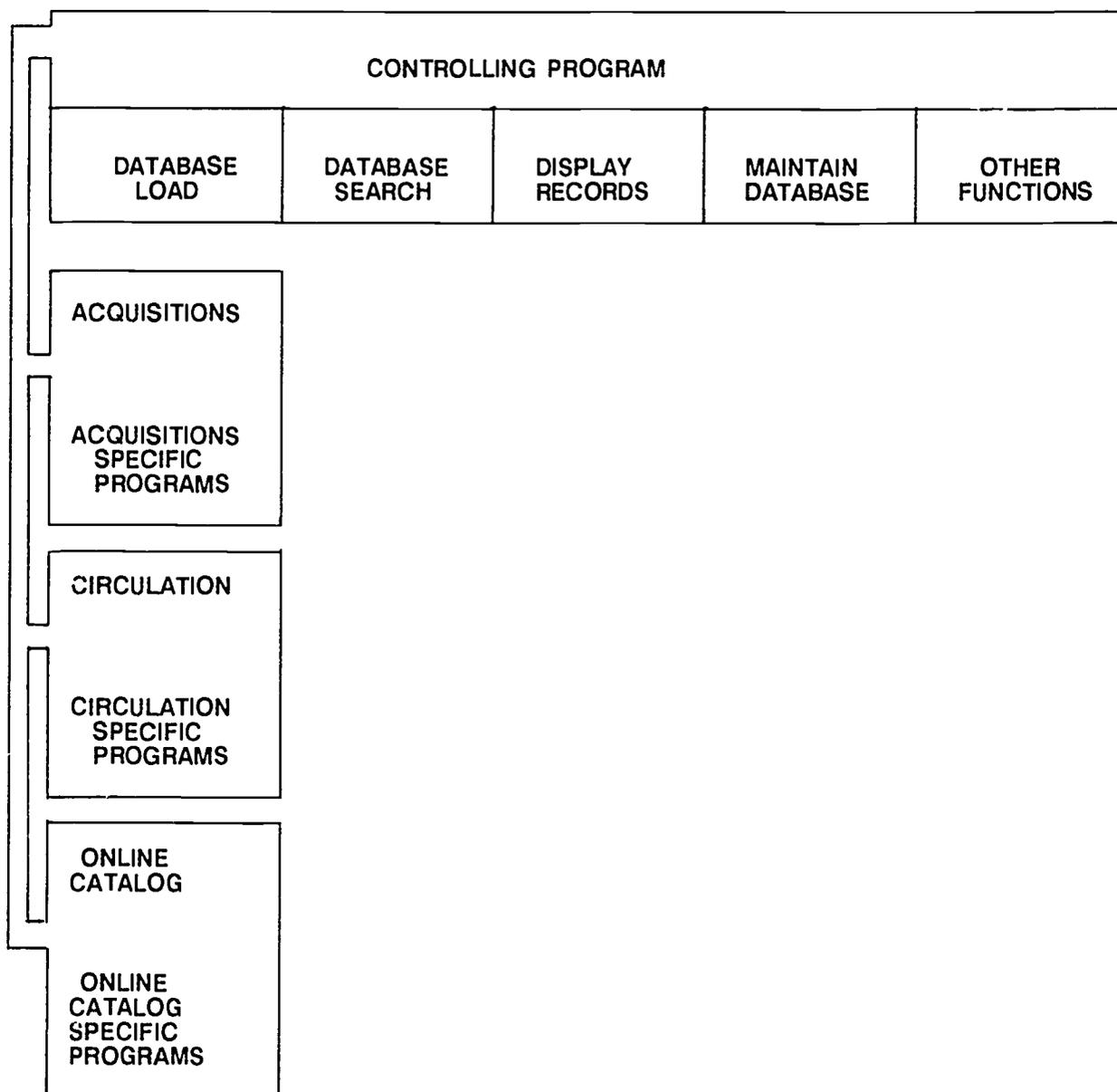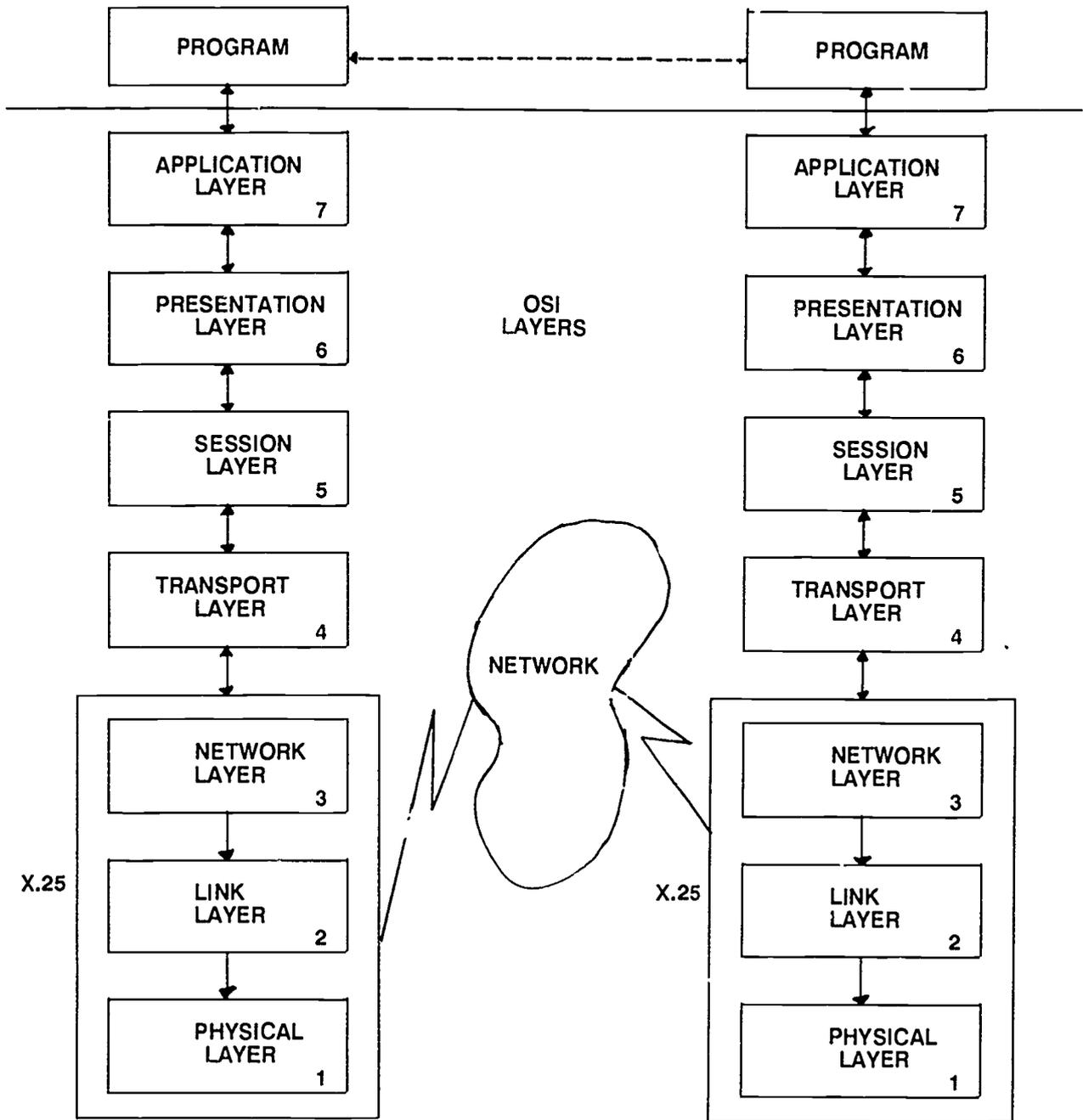
Now, let us return to OSI. Layering in OSI is similar to the generalized applications program approach in that each layer does a specific task and has controlled entrances and exits. But there is a difference because the OSI layers are hierarchical with each layer connected to another layer rather than having the layers managed by an overall controlling program.

The seven OSI layers, which are shown in Chart 3, are the application layer, the presentation layer, the session layer, the transport layer, and the bottom three layers--the network layer, the link layer, and the physical layer. We will not be concerned with the bottom three layers because in the present LSP implementation, these layers are a standard which is called X.25. Examples of X.25 networks are TELENET, TYMNET, UNINET and, maybe someday in the future, LIBNET.

The flow of the information is from layer to layer. The two programs at the top of Chart 3 communicate with each other by sending a message down through the layers until it gets to the X.25 portion. Then, it travels across the physical network to the receiving computer and up through the layers until it reaches the receiving program.

Now we will look at Chart 4 (see page 10), which shows the functions of each layer in more detail. It is unlikely that many readers will want to remember the functions of each of the layers; I have difficulty remembering all of them except when I am working with them. But it is important to understand the type of thing that each layer does.
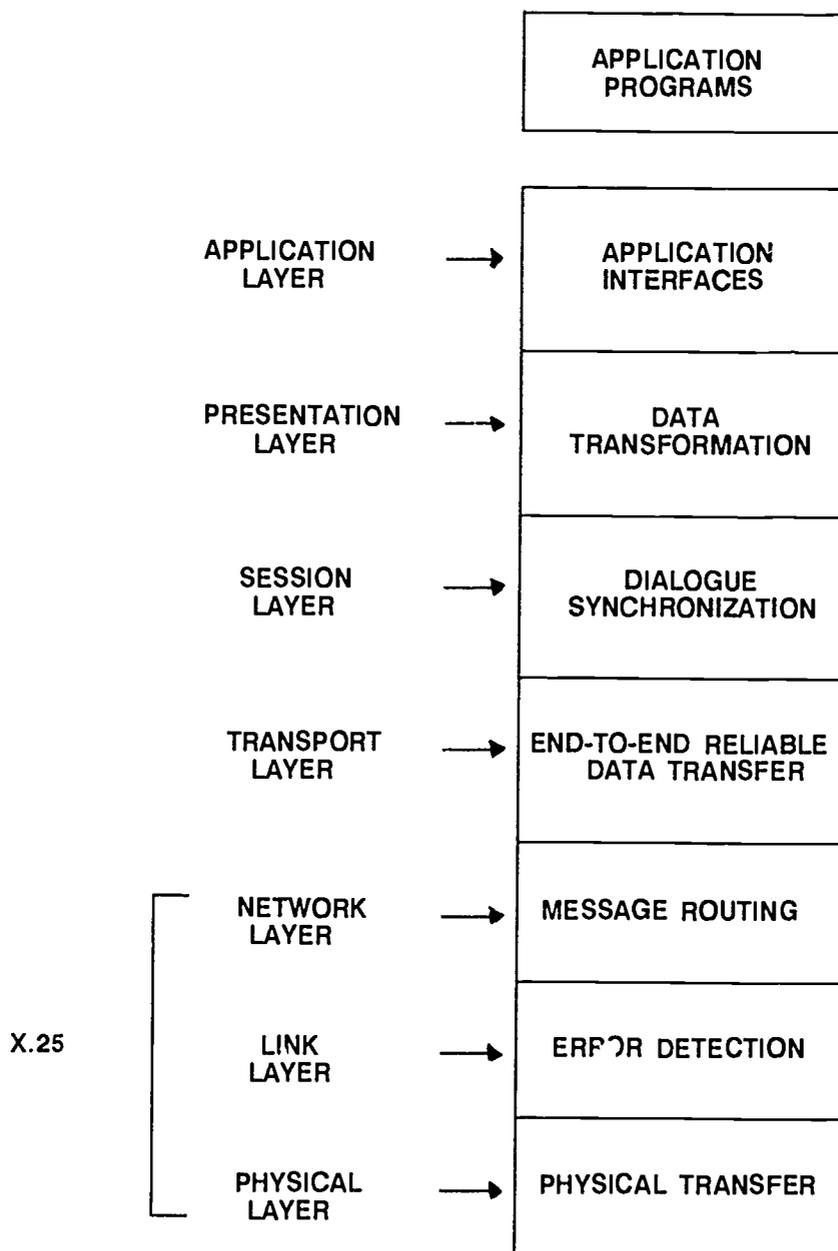
The application layer, in a library application, contains library-related programs. These programs do such things as taking search requests and translating them into intersystem search formats. The presentation layer does data transformation. It is responsible for translating data from EBCDIC to ASCII, if that is necessary. It could also do data compression, and for applications that require security, it could do encryption. Also the presentation layer handles the representation of graphic information such as videotext.

The session layer keeps different application programs separate, thus allowing a number of programs to share the same communications path. There might be a search program, an interlibrary loan request program, and a record transfer program all being executed at the same time. The session layer keeps those programs separated so that they do not become confused. A good way to think of the session layer is that it connects programs the way the lower layers connect computers.

The transport layer does three things. It handles multiplexing, which I will not talk about, error detection and recovery, and flow control. Error detection is fairly self-explanatory. The transport layer finds transmission errors. It accepts messages with errors that are found by the lower layers and, in some cases, it attempts to recover from errors.

Flow control is an interesting part of the transport layer and is a good example of the problems that arise when two equal or peer computers attempt to communicate. Flow control between a computer and a terminal is simple. The computer controls the flow; we call it response time. With equal or peer computers that is not the case. It would be possible to have three computers sending data to the same receiving computer as fast as possible all at the same time, which the receiving computer probably could not handle. Flow control regulates the amount of data that can be transmitted in the following manner. The sending computer must ask permission of the receiving computer to send messages. The receiving computer authorizes a given number of messages, after which the sending computer sends those messages and then asks permission to send more. The receiving computer controls the amount of information that is received by controlling the number of messages that it will allow to be sent. It is the transport layer that manages the flow data. The network, link, and physical layers as I said

CHART 4

```
                                              +--------------------+
                                              |   APPLICATION      |
                                              |    PROGRAMS        |
                                              +--------------------+

                                              +--------------------+
   APPLICATION        ------->                |   APPLICATION      |
     LAYER                                     |   INTERFACES       |
                                              +--------------------+
   PRESENTATION       ------->                |   DATA             |
     LAYER                                     |   TRANSFORMATION   |
                                              +--------------------+
   SESSION            ------->                |   DIALOGUE         |
     LAYER                                     |   SYNCHRONIZATION  |
                                              +--------------------+
   TRANSPORT          ------->                | END-TO-END RELIABLE|
     LAYER                                     |  DATA TRANSFER     |
                                              +--------------------+
   NETWORK            ------->                |  MESSAGE ROUTING   |
     LAYER                                     |                    |
                                              +--------------------+
X.25   LINK           ------->                |  ERROR DETECTION   |
       LAYER                                   |                    |
                                              +--------------------+
   PHYSICAL           ------->                | PHYSICAL TRANSFER  |
     LAYER                                     |                    |
                                              +--------------------+
```

earlier we will not consider.

Now I would like to look at the relationship between the sending and the receiving layers as shown in Chart 5 (see page 10). In Chart 5, there is a user query that is sent to the application layer or entity, and the application entity formulates a search protocol message. That search protocol message is intended for the receiving application entity, and the dashed line between the two application entities shows this relationship. The application information that is to be transmitted to the receiving application entity is the APDU, or application protocol data unit. The APDU is sent down to the sending presentation layer where the presentation entity adds the presentation protocol control information. That message is to be communicated to the receiving presentation entity through a PPDU, or presentation protocol data unit. Next, the message moves down to the session layer, or entity, where the same general process is repeated. When the message reaches the network layer, the X.25 information is added, and it is sent across the physical network and up the layers on the receiving side, where in each case the layer strips off the information that is intended for it and sends the remaining message to the next higher layer, where more data is stripped off until the message finally reaches the receiving program. When the message reaches the receiving program, it looks exactly the same as it did when it left the sending program. Each layer, then, is communicating with its peer or its comparable layer. The process is an add-on process where the higher level message is encapsulated in the lower level message until it is actually transmitted and then the process is reversed. The important thing to remember is that each of these layers performs a fairly simple task in the overall communication process, receiving messages from one layer, and passing them on to the next. But in fact, each layer is communicating with its peer or comparable layer.
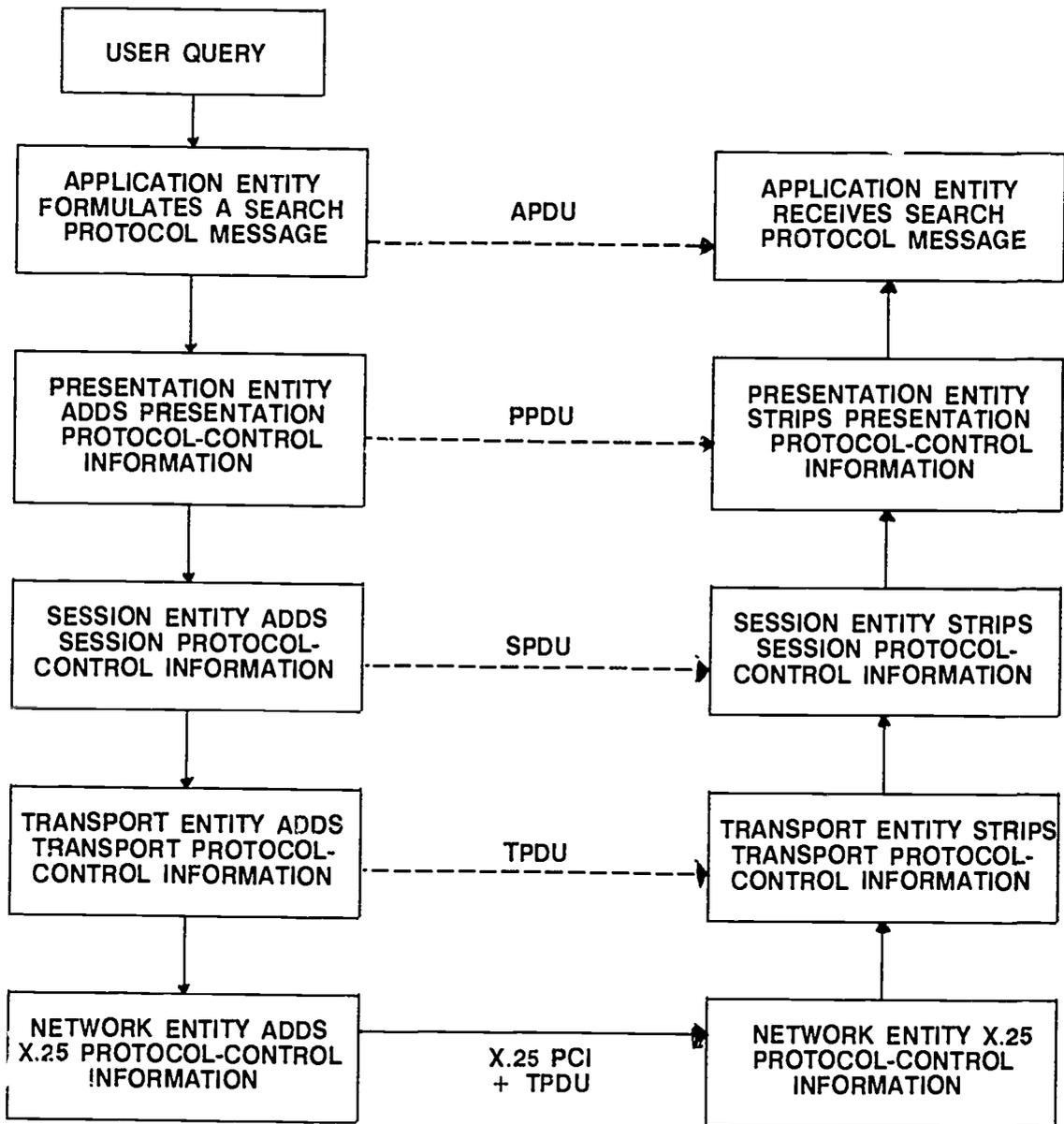
So to review, OSI is a set of rules that dictate, in detail, the conventions that are necessary for computers of different manufacturers, using different controlling programs, to communicate with each other without or with minimal prior agreement. These protocols are described in layers so that each element or layer is simple enough to be explained easily and so that it can be tested against a standard easily. And, the rules that make up OSI must be implemented in order to actually achieve communications.

I would like to finish my part of the program by addressing some OSI issues. One can think of this section as an OSI survival kit for library directors in dealing with their computer centers, local systems vendors, and network people at the state and regional levels.

The first OSI issue to address is interworking, and it is important to understand what is meant by interworking. There is a parallel between OSI and AACR2. If two libraries had implemented AACR2, and if in each case where AACR2 provides for options the two libraries selected different options, their cataloging would not interwork or in the case of catalog cards would not interfile very well. OSI has options just as AACR2 does. Therefore, interworking, or the ability to actually communicate, requires agreement about which options to chose or a program's ability to accommodate multiple options automatically.

Interworking is clearly necessary if library systems are to communicate with each other. There must be interworking from one vendor's software as a sender to another vendor's software as a receiver. There must also be interworking of different layers by different vendors. For example, one vendor's transport layer software must interwork with another vendor's session layer software. It is dangerous to state the status of anything on a subject that is changing as rapidly as this is, but I know of no example of interworking of off-the-shelf standard OSI software from different vendors. Clearly, interworking must take place before libraries can make much practical use of OSI software. As I said earlier, we are ahead of the technology.

CHART 5

```
┌──────────────────┐
│   USER QUERY     │
└──────────────────┘
```

| APPLICATION ENTITY FORMULATES A SEARCH PROTOCOL MESSAGE | APDU | APPLICATION ENTITY RECEIVES SEARCH PROTOCOL MESSAGE |

| PRESENTATION ENTITY ADDS PRESENTATION PROTOCOL-CONTROL INFORMATION | PPDU | PRESENTATION ENTITY STRIPS PRESENTATION PROTOCOL-CONTROL INFORMATION |

| SESSION ENTITY ADDS SESSION PROTOCOL-CONTROL INFORMATION | SPDU | SESSION ENTITY STRIPS SESSION PROTOCOL-CONTROL INFORMATION |

| TRANSPORT ENTITY ADDS TRANSPORT PROTOCOL-CONTROL INFORMATION | TPDU | TRANSPORT ENTITY STRIPS TRANSPORT PROTOCOL-CONTROL INFORMATION |

| NETWORK ENTITY ADDS X.25 PROTOCOL-CONTROL INFORMATION | X.25 PCI + TPDU | NETWORK ENTITY X.25 PROTOCOL-CONTROL INFORMATION |

The second OSI issue is efficiency. There are claims that the OSI protocols are inefficient. One author actually calculated the delays that would occur as messages move from one layer to the next and suggested that the protocols would be too slow for many applications.

There are two points that should be made with regard to efficiency. First, a protocol is neither efficient, nor inefficient, nor fast, nor slow--only implementations or programs are. The early X.25 programs were inefficient and slow; and through reprogramming they improved. The upper layer implementations of OSI should become more efficient as well.

The second point about efficiency is that layers are not necessary for a particular implementation. Layers are a means of describing and understanding the OSI standard. Ray Denenberg from the Library of Congress addresses this issue in an article in *Library Hi Tech*.[1] He says "the layering technique is used to allow individual groups of experts who are developing protocols to concentrate on well defined subsets of the range of communication functions. However, OSI does not prescribe that the internal implementation of a system reflect layering." He goes on to say "some of the criticism leveled at OSI reflects a misunderstanding of this point. The belief that layering is elegant but too expensive refers to a mistaken interpretation of the OSI model that individual layer entities must be constructed and that the resulting system is overburdened by all of the interactions between layer entities. In fact these distinctions and interactions between layers are only conceptual." So, while efficiency will be a matter of concern for the next little while, there is no reason to believe that efficiency will be a long term problem for libraries or for the overwhelming majority of other computer applications.

The final issue I would like to discuss is TCP/IP. TCP/IP are five letters with which anyone involved with OSI becomes familiar very quickly. TCP/IP stands for Transport Control Protocol/Internet Protocol. TCP/IP does the same type of thing that an implementation of OSI would do. The reason that you should know about TCP/IP is that it is used by many of today's supercomputer networks. National Science Foundation sponsored programs and universities with heavy NSF commitments are where you are most likely to find TCP/IP networks.

There are good things about TCP/IP. First and foremost, software for TCP/IP exists. It is possible to go out and buy off-the-shelf TCP/IP software, which is not the case with off-the-shelf OSI products. Also TCP/IP is a mature protocol and so TCP/IP programs are fairly efficient.

In spite of its availability, there are two major problems with TCP/IP. The first problem is that it is not a standard. There is no guarantee that software from different vendors will interwork and there is no arbitration mechanism when software from different vendors does not interwork. A second problem is that government agencies including the National Science Foundation and the Defense Department have been directed to migrate from TCP/IP to OSI in the near future.

There will most certainly be a general migration from TCP/IP to OSI. One strategy that has been proposed is to take an OSI message and encapsulate it in a TCP/IP message, much way that OSI does in passing messages from layer to layer. Then, over time, the TCP/IP portion of the message would be eliminated, leaving a standard OSI network message.

The migration from TCP/IP to OSI will likely be a slow one largely because there are so many TCP/IP networks in place. It is important that the library community, which has been a leader in the development of OSI, work closely with TCP/IP computer people to develop migration strategies. We in libraries may find ourselves using TCP/IP networks in conjunction with OSI for some time. But in the long run there is little doubt that OSI will prevail and the fact that we in libraries made the commitment to OSI when we did should make our transition

1.   Denenberg, Ray. "Open Systems Interconnection." *Library Hi Tech 3*, no. 1, Consecutive Issue 69 (1985): 15-26.

relatively painless.

A development that should have a significant impact on the availability of OSI software occurred recently and was reported in the May 5, 1988 issue of USA Today.[2]   In an article, entitled "High-Tech World Sets Product Standards," an event of considerable significance was described.   The article began

> "Mark your calendar: Wednesday, May 4, 1988, was the day the Information Age left its Dark Ages behind. In New York, 12 USA computer executives stood shoulder-to-shoulder and told the world how all their products—representing 80% of industry sales—will exchange information in the months and years ahead."

The article went on to describe how telephone standards were developed in the late 19th century to allow international calling. Then the article said, "Wednesday, the computer industry followed suit. IBM, Digital Equipment, Unisys, Hewlett-Packard and eight others said their computers will conform to a standard called Open Systems Interconnection, development by the International Standards Organization." The article concluded by describing some of the events that have encouraged the shift to OSI. First, it stated that "starting in 1990, all computers purchased by Uncle Sam must conform to OSI." Secondly, William Gates, chairman of software giant Microsoft Corp., said "software products matching the OSI standard will hit the USA market this year." Thirdly, Telenet Vice-President, Stuart Mathison said Telenet's network of OSI-based computer systems, now serving 300,000 users throughout the world, is growing "into a truly global messaging network." And finally, "customers will demand OSI products to make computers more reliable, and eliminate the money and time spent mixing and matching computers. By installing OSI computers: General Motors Corp. has cut factory downtime in Pontiac, MI, by 50%; and Boeing Co. expects to shave its computer networking costs by 30%."

This agreement by computer manufacturers is just one more step toward the eventual realization of national and international OSI telecommunication networks.

I have tried to explain the basics of the open systems interconnection, looking particularly at those things that would be of interest to library directors. I believe that the linking of systems will have a dramatic impact on the way libraries function in the years to come. The emergence of off-the-shelf software will be some time away, as will the development of general OSI networks that are available to libraries. We in libraries need to be aware of continuing OSI developments and we need wherever possible to influence those developments. There are, as I indicated at the beginning, many groups and individuals in the library and information science profession who are monitoring the progress of the implementation of OSI and are playing a role in determining how that implementation will evolve. There is little doubt that we will all benefit from their efforts.

---

2.   Hillkirk, John. "High-Tech World Sets Product Standards." *USA Today* (May 5, 1988): 1B.

LSP AND THE LIBRARY COMMUNITY:

PRESENT STATUS

HENRIETTE D. AVRAM
Assistant Librarian for Processing Services
Library of Congress

As a community, libraries have been involved in networking activities for some years now. What may not be so well-known to you as library managers are the ongoing efforts to lay the framework for a library network supported by technology that has been in existence for some time now. I will describe the project though which the lib.ary community, using the Open Systems Interconnection (OSI) which David has described, has marshalled that technology to make certain that the library network grows into a viable and enduring structure that will serve libraries well in the coming years. I am referring to the Linked Systems Project, or LSP. I will discuss what LSP was intended to do and what we are doing now. You as library administrators have a critical role to play in LSP's success as a networking tool for librarians and should therefore be knowledgeable about what is going on.

Networking among libraries has been sustained by a well-established tradition of sharing resources. But beyond the altruism implicit in this long held tradition, there are the escalating costs associated with operating libraries of which all of you are certainly well aware. The high cost of purchasing materials needed by users and the equally high cost of bringing those materials under bibliographic control so that they can be accessed by users have become prime factors driving the library community to seek expedient means to share data through the building of networks.

The availability of cataloging data in machine-readable form facilitated the computer-based systems we know today as bibliographic utilities and most, if not all, of you are members of these utilities. By the beginning of the 1970s, there had emerged four major databases—the three major utilities (OCLC, the Research Libraries Group's RLIN, WLN), and the Library of Congress—with no way, except for LC data, to share the large repositories of data residing on each utility. What was needed was a way to share data from one system to another without the necessity of learning each individual system and having the prescribed terminal for each system. The development of LSP was aimed at achieving this end.

The Library of Congress, RLG, and WLN (OCLC was to join later and WLN was to become less actively involved) came together in 1980 to continue the development of a program begun in the mid-1970s to meet the challenge of constructing a nationwide system composed of large independent systems, each with its own tailor-made system architecture, that could operate with the efficiencies of a single network, and thereby increase national resource sharing.

Basic to the success of LSP was the selection of a suite of protocols to define the building of the computer-to-computer links. In the development of LSP, as David has indicated, it was decided to embrace the International Organization for Standardization's Open Systems Interconnection (OSI) Reference Model, and to base the LSP communications facility, the

Standard Network Interconnection (SNI) on the model.

In addition to the communications component, the other LSP component is the applications component. The two general applications necessary to effect data exchange are Record Transfer and Information Retrieval. Record Transfer enables records of any type and any number to be transferred between systems. It has two aspects: contribution and distribution. Information Retrieval, by supporting intersystem search, permits users of one system (e.g., OCLC) to access a remote system (e.g., RLIN) and to view data found in the remote system on their own system, using the search commands of their own system. This means that the user sees little or no difference between local searches and the resulting displays and LSP searches and displays. The search and response are controlled by the system initiating the search and appear to the user to be quite straightforward, since the search instructions are the ones normally employed by the user. The complex task of translating a search query from an origin system into an intersite syntax and back into the search query of the target system is the responsibility of the computer and is transparent to the user. This should be clearly understood and is one of the most significant aspects of LSP.

Now that I have set the stage by providing some background, it might be useful to enumerate the project priorities that have been set by the present LSP partners to realize their goal of creating a logical network through the interconnection of systems. They are as follows:

1.   **Complete the Authorities Implementation.** The Authorities Implementation was selected as the first priority for LSP because the most expensive part of cataloging is creating headings and related cross references for the building of consistent catalogs.

2.   **Develop the means to transfer bibliographic records** to facilitate the implementation of a coordinated cataloging program.

3.   **Synchronize the local system linkages to the systems of the LSP partners,** i.e., develop local system linkages to OCLC, RLIN, or LC that are identical to the ones linking OCLC, RLIN, and LC.

4.   **Develop the means for intersystem searching to support snared cataloging as we know it today,** i.e., the user searches the database of his utility which in turn could search the database of a remote utility to see if an item has been cataloged, and if so, the record will be transferred from the remote system to the user's utility.

5.   **Develop the means to support interlibrary loan transactions.**

Priority one, the Authorities Implementation, is basically completed now and a program is in place to take full advantage of its benefits. This program is the National Coordinated Cataloging Operations, or NACO as it is more commonly called, and is housed at the Library of Congress. The NACO operation, which started in 1977, involves the cooperative building of a database of authority records created by 43 libraries participating in the program

administered by LC. The authority records they create are submitted to LC in a variety of ways: on worksheets mailed to the Library; via terminals connected to the LC database; and now computer-to-computer via LSP. Under the LSP configuration, staff at other libraries input their records to their utility and the records are then transmitted via the LSP link to the authority file on LC's database. This is referred to as "contribution." LC sends these records, along with its own authority records, over the link to the utilities where all members of the utilities can use them. This is referred to as "distribution." By utilizing the LSP applications Record Transfer (for contribution and distribution) and Information Retrieval (for intersite searching), records are contributed in a timely fashion (within 24 hours) and all members of OCLC and RLIN are searching against the most up-to-date national authority file; thus the costly duplicate creation of records is significantly reduced.

Distribution ot approximately 2,500 authority records daily from LC to the RLIN database has been in operation for over two years now (approximately one million records). OCLC has been receiving the same authority records in this mode for more than a year. Neither utility any longer loads tapes of LC authority records into its database. In June of last year, RLG began sending authority records, contributed by their members via the link to LC to be added to the authority file. Yale and Princeton Universities, and the University of Michigan are the RLG member libraries contributing in this mode. OCLC began in February of this year; Indiana University is the first institution to participate and will be followed by the University of Illinois at Urbana. It is our intention to have all NACO libraries that are members of OCLC and RLIN contribute authority records via LSP.

In the development of the application protocols, care was exercised to tailor them to be generally applicable and not peculiar to a particular application. With some modification and augmentation, then, it is possible to expand the LSP applications to other purposes. Work is already underway to make Record Transfer and Information Retrieval support the exchange of bibliographic records (priority two). This exchange will come about as part of another cooperative venture involving LC and eight selected research libraries. The eight libraries are Yale University, Harvard University, Indiana University, the University of Illinois at Urbana, the University of Michigan, the University of Chicago, the University of California at Berkeley, and the University of Texas. Designated the National Coordinated Cataloging Program (NCCP), its purpose is to contribute standard records to the national database of cataloging records. NCCP will operate similarly to NACO, taking advantage of many procedures currently in place for NACO. In both projects, the participating libraries have agreed to follow LC cataloging practices in creating these records. Participants in NCCP must be NACO members and must create authority records related to the bibliographic records they submit. They also will provide subject headings. LC has been giving personnel from the participating libraries special training for this effort.

Like the authority records created through NACO, these NCCP records will be contributed to the database residing at LC, where they will in turn be distributed over the LSP link to the utilities for access by their members. The two-year pilot to test this undertaking began last month operating on a combination of LSP links (for some authority records) and terminal-to-LC database (for all bibliographic and the remaining authority records). The first NCCP-created records have been received at LC and added to the database. NCCP appears to be off and running!

It is probably worth my taking a few minutes here to explain why it was decided to proceed with NCCP even though LSP for bibliographic records was not available. A lot of

momentum had been generated among the participants; significant agreement had been reached among the originators of the program—e.g., members of RLAC (the Research Libraries Advisory Committee to the OCLC), RLG, and LC—as to how the program should operate; and the Council on Library Resources had granted funding to help defray the costs. It was also felt that much could be learned, even in this less than perfect environment, that could be carried over to the full LSP mode. So the planners gritted their teeth and forged ahead, but not without considerable impediments.

The importance of LSP is underscored by our experiences thus far with the NCCP pilot. Based on only one month's duration, the pilot has already demonstrated to all the advantages of LSP and what a boon it would be to the smooth operation of NCCP. LC and the participating libraries have encountered considerable problems in installing LC terminals and printers at the local sites and getting the telecommunications lines connected. Most of these obstacles would be eliminated if LSP links were fully operational, because participants could then use their own system terminals and familiar search commands for searching, input, and update. LC's commitment to LSP has been greatly reinforced by these experiences.

If the pilot proves successful, the switch will be made to the full LSP environment as soon as it is available. To help determine the success of the pilot, CLR has formed a panel of experts in the field of library evaluation and statistical analysis to evaluate the effectiveness of the pilot. The evaluation will be based on input from LC and the eight participating libraries related to their experiences during the pilot. The results of this ambitious evaluation should have implications for all types of future cooperative programs.

The goal of these cooperative projects is to provide national-level records for items acquired by the Nation's libraries. The Library of Congress cannot possibly catalog everything that is required, but it can work with other libraries to increase the aggregate number of high quality bibliographic records available to libraries. Areas of cataloging responsibility have been agreed upon, although it is not mandatory that the responsible library input everything it receives within its area of responsibility. This division of responsibility is also based on the available cataloging expertise, that is, staff competencies at particular institutions. Rigid allocations of responsibility have tended to cause problems in past cooperative efforts. For the pilot, leeway for overlap is built in, i.e., if an institution receives an item outside its normal scope and needs a cataloging record, and on searching the database finds that it has not been cataloged by the responsible library, the library in need of the record may input it. The results of the pilot are likely to cause the cataloging assignments to change.

LC enters into cooperative arrangements in the interests of efficiency and economy. When resources can be conserved through the selective use of the work already being done elsewhere, a savings results. Further, our remaining resources can be directed to other areas. These considerations have been fundamental to LC's active participation in LSP and have been central to its involvement from LSP's incubation stage back in the mid-1970s.

Agreement has been reached among the LSP partners that the LSP protocols will be used to effect the linkage of local systems to the bibliographic utilities or to each other (priority three). Local systems have been developed among libraries in response to a need to execute more efficiently tasks performed at the local level, such as circulation control or serials check-in. LSP can make possible the uploading of cataloging records (from a local system to a utility) and the downloading of such records (from a utility to a local system). It is through LSP that these potential "islands" of communication can be bridged, ensuring that resources, and in particular cataloging data, are shared nationwide. New York University's use of a GEAC local system

applying the LSP protocols to connect with RLIN is representative of how LSP can be channeled in this direction. Records will be transferred from RLIN to NYU using Record Transfer.

Much work remains to be done to achieve priorities four and five. For priority four, shared cataloging, there is agreement that the member networks (OCLC and RLG) will make intersystem searching available to their member institutions following some agreed upon plan. The National Library of Canada has been working on an interlibrary loan protocol for several years now that will be compatible with LSP requirements and that protocol will most likely be the basis for any LSP interlibrary loan implementation (priority five) in the United States.

As with any undertaking of such magnitude and complexity, it was necessary to have a mechanism for coordinating the activities of the various LSP players. To this end, several committees were established. The LSP Policy Committee is the overarching forum and as such provides general policy and direction for the linking process. Additionally, it is concerned with costs, accounting, and related administrative matters. It further gives guidance to and receives reports and recommendations from the following two committees.

The LSP Technical Committee was formed with the primary charge of ensuring that the LSP communications protocols conform to the OSI standards and are compatible with OSI implementations. The committee also coordinates any needed changes to implementations, shares expertise among LSP implementors concerning those implementations, and promotes and encourages the use of OSI for library networking. David Bishop has chaired this committee since its inception.

The LSP Application Committee plans and coordinates the implementation of applications, develops and maintains the application layer information exchanged between systems, and specifies application requirements. Currently the committee is working on the analysis and specification requirements for implementing computer-to-computer exchange of bibliographic records in book format. LC has been given administrative responsibility, with me as chair, for this segment of activity. Taking an accelerated approach of intensive and frequent meetings at LC, and with the full and active cooperation and participation of the representatives from RLG, OCLC, GEAC, NOTIS, and the Triangle Research Libraries Network, the committee has made tremendous inroads. The requirements documents are nearly finished and the LSP partners are setting timetables for implementing the bibliographic component. Mid-1989 to mid-1990 is targeted as the likely range of implementation dates for LC, OCLC, and RLIN. When this phase of its work is completed, the committee will tackle requirements for exchange of non-book records and further resolution of local system-to-utility processing problems. The first meeting of the committee to address local systems to utility processing is scheduled for June 1988.

David mentioned the differences in approach to building networks and the network infrastructures that are emerging to link university campuses running on different protocols. As more is known about the various other networks such as National Science Foundation Network (NSFNet) and the New York State Education and Research Network (NYSERNet), it becomes increasingly clear that there is a major difference between what their proponents are establishing and what libraries are attempting. They are planning a pilot project in which a scholar will be able to sit at a workstation and have searching access to data available on the network, including libraries. I do not minimize this effort but ours is a production-oriented network. By that I mean we are searching and creating records online in an interactive mode. We are inputting data to be exchanged, built upon, and otherwise manipulated for diverse

purposes.   The planners of the education networks are busily wiring the universities of this country, connecting powerful computers to form a national network.   But to date they have few applications for the "supernetwork."   Libraries are part of these universities; the opportunity must not be missed to work together.   My contacts with key personnel associated with these groups has lead me to believe that we can work together—they are eager to have the library community join with them in building the nation's network.

Just last month a meeting was called by invitation.   Its principal aim was to begin to investigate how to address the issues involved in establishing a national network.   Large organizations are involved in these plans, e.g., IBM, AT&T, New York Telephone, the National Science Foundation (NSF), and EDUCOM.   And yet it was very obvious they have just begun to face problems we have struggled with so long—e.g., standards, governance, copyright, etc. This difference notwithstanding, however, with some careful planning and cooperation with the education and information communities, there is no reason that the national networks being built by these diverse constituencies cannot operate together for the mutual benefit of all of the nation's information seekers.   For this to happen, the various communities must become keenly aware of what others are doing, what protocols govern their network structures, and seek ways to tie their networks.   LC, OCLC, and RLIN are all working towards this end.

We in the library contingent are certainly becoming attuned to prospects and implications of these networks and the different protocols running them.   Moreover, we are mindful that we must cooperate in making sure that we can communicate.   For instance, we at LC have worked closely with representatives from EDUCOM to try to ensure that library networking and academic networking do not continue to move in different directions.   LC participates on the EDUCOM Networking and Telecommunications Task Force Network Resource Committee.   We have also formed a local group that meets periodically and includes LC personnel and staff from the University of Maryland, NSF, and the Department of Education.   We have dubbed ourselves the Network Resource Group.   Our most recent meeting was last month and our next is scheduled for July.   We have had detailed discussions with key individuals in the academic networking community on the subject of aligning our architectures for interoperability.

The LSP Policy Committee has recognized the need for cooperation as well by devoting parts of its agenda to these developments.   In the committee's view, it is important to illustrate how library networks foster scholarship across all disciplines.   It will further stress that it is imperative that the national network be designed to accommodate the transfer of bibliographic records and other library support data in order to be totally serviceable to the entire information community.

LSP: IMPLICATIONS FOR OUR LIBRARIES

DOROTHY GREGOR
University Librarian
University of California, San Diego

David has talked about the OSI side of linking systems and Henriette has provided an overview of the Linked Systems Project. My job is to suggest some of the future directions for the linked systems capability in our libraries by looking briefly at three areas: extending our current use of the link, looking at what the Canadians are doing in protocol development and, finally, to suggest some possibilities for our local systems development.

As Henriette has described, the current use of the linked systems protocols is in support of bibliographic record production facilities among the Library of Congress and the largest of the bibliographic networks. We have begun to use the link for building cooperatively our national authority file through NACO, and we are looking at its use in support of the National Coordinated Cataloging Program, which will focus its cataloging efforts on monographs in the MARC BOOKS format. What is next?

Those of us who have been involved in the frustrations of trying to build the CONSER file with participation from libraries who are not OCLC users will no doubt think immediately of CONSER as an extension of the production facility use of the link. CONSER is already one of the best things on the bibliographic market and to be able to add those non-OCLC libraries which either are trying, have tried, or would like to try to add records to CONSER would add significantly to the national serials database.

We heard earlier in this meeting that we can expect increased funding from the National Endowment for the Humanities (NEH) for preservation microfilming as part of the preservation effort being organized by the National Commission on Preservation and Access. As we gear up to increase the production of preservation masters to save our collections, we are also thinking about the requirements for recording the salvation of another text. OCLC and RLIN have agreed to exchange records for preservation masters, but tape exchange never seems to work smoothly or promptly—and sometimes it does not at all. As microform master production increases, there is an increasing need to record that production in a more timely fashion in order to avoid duplicating the expense of filming. There is not yet agreement on the record requirements for preservation masters—that is a topic for ARL's Committee on Bibliographic Control—but there is agreement that we need to provide records for our preservation masters as rapidly as possible and to build a national preservation database. As you know, NEH has funded the conversion of the National Register of Microform Masters and RLG has been adding to its database of master microform records at a good rate. I believe we should extend the use of the link systems capability to records for preservation master microfilms in order to build a national preservation database with the Library of Congress as the manager of the file. This use of the link would move our preservation efforts forward and help convince potential sources of funds that we are serious about sharing the results of our efforts.

Another category of records that lends itself to the production facility use of linked systems is the cataloging of Chinese, Japanese. and Korean titles—the CJK records. And to those we might add any of the more exotic languages in which libraries have particular needs to share expertise because there is not enough to go around. CJK, however, is already an organized cataloging process on systems at LC, RLG, and OCLC and, again, the timely sharing of those expensive to create records would assist in making materials in those languages more readily available to our clientele.

You may well have other categories of materials that would be candidates for early use of linked systems. It would be useful to have some conversation about our greatest needs, so we get the most out of this early, limited capability.

In the U.S., largely under the leadership of the Council on Library Resources and the Library of Congress, our focus has been to link part of the cataloging operations of four of our large bibliographic institutions. The Canadians have taken a different approach. The Bibliographic and Communications Network Pilot Project of the National Library of Canada (NLC) is focused on achieving an open, decentralized, voluntary library and information network, operating nationwide within the OSI environment. The National Library's goal is to foster wide acceptance of OSI within our bibliographic sector by making application protocols and sample programs available to any organization wishing to use them—including vendors of library systems.

Four applications have received most of NLC's attention: file transfer, information retrieval, interlibrary loan, and acquisition. The NLC recognizes that the work it is supporting on applications may not end up the OSI standard, but they ai ₋racking and influencing the eventual standard and, in this way, advancing the standards needed to build their open system.

The interlibrary loan application is the most developed. It has been tested and implemented at the National Library of Canada and is considered a standard within Canada. NLC has sent it forward for consideration as an international standard. NLC has also turned over the ILL application to seven vendors and provided seed money to develop the software for the standard in a variety of hardware environments, including GEAC, UTLAS, and PC-based systems. NLC has also developed a conformance tester for the vendors to check out their conformance to the standard. The application should be ready for widespread use in Canada by next year.

The file transfer application is in use at three Canadian libraries, but is not undergoing further development because of NISO's acceptance of the File Transfer Access and Management (FTAM) application protocol developed in the U.S.

Things are also quiet on the acquisition application front because, while the NLC has had some success in getting Canadian libraries organized, the publishing sector seems less amenable to organizing efforts.

For the information retrieval application protocol NLC is looking at the work of NISO's Standards Committee D, developed in the U.S. as part of the Linked Systems Project.

Canada is also working on a "directories" protocol. The directories protocol work is aimed at meeting the need to know what is where in a world of decentralized systems and distributed databases. This is very complex stuff and, again, part of the National Library of Canada's motivation for their work is to track and influence emerging protocols--to help set the agenda for OSI protocol development and to engage the vendors to make the protocols available once they are developed. As you can see, the approach is quite different from that of the U.S.

Now let's look at what we can do with our local systems. Ultimately, the linked systems protocols are one of the tools we will use to make it seem as though there are not so many bibliographic and other systems in the library world. For example, we can think about connecting local systems to our bibliographic networks. Some of this has already been done in the same kind of record transfer application used for the cataloging projects. A GEAC system at NYU is downloading records from RLIN. The NOTIS system at Northwestern is working to develop the link to upload records from NOTIS to RLIN and download records from RLIN to NOTIS. Again, we're looking at moving bibliographic records around to support cataloging operations.

We can also think about the possibilities of linking local online catalogs with the networks for public service searching. At the moment, not many vendors are working to make the software available on their online catalog systems, although most indicate that the software is "under development" or will be undertaken when standards become available. Vendors respond to market demand, and libraries are not demanding the capability. But if, for example, OCLC offered the linked system capability and all local libraries had to do was buy some software in order to make it possible for their online catalog users to move from searching the local catalog to searching the OCLC (or any other) system, then libraries would probably start demanding the software from their OPAC vendors. Or, think about the possibility of one of the database vendors like BRS being available for searching over the link from your OPAC terminals. Multiple systems could be available from a single terminal. And then, of course, we would need to think about how we would organize and pay for such service.

When enough libraries are ready for that additional search capability, the message will get to the OPAC vendors. The large vendors will no doubt be the first to develop linked system software and I understand that it's a bit easier to do in a UNIX environment, but library demand is required if we want this kind of capability in our OPACs. Vendors need to see that link software is a viable product.

Within the University of California, the makers of MELVYL in the UC systemwide Division of Library Automation are working with a vendor, Innovative Interfaces, to develop a two-phased link between the MELVYL UC Union Catalog and INNOPAC, Innovative Interfaces's online public access catalog. Initially, the link will allow an INNOPAC user to issue a command and bring up the MELVYL system for searching. For example, a user on the San Diego campus, not finding the item in our catalog, would switch over to MELVYL and have all the resources of UC available for searching. And, a MELVYL user could switch over to INNOPAC. In other words, one terminal can access either system, but users will need to know the search software of each system. In this first phase, the OSI application protocol will be layered over TCP/IP to connect the MELVYL and INNOPAC machines.

In the second phase of the project, we will be working on transmitting searches between the two systems, so that a user does not need to know the searching commands for both systems, but can use the system with which he or she is familiar. In these information retrieval applications, users connect to the remote system through their own system, so they do not need to learn yet another set of system commands. We must, however, recognize that some system capabilities may be lost in translation until and unless we develop some standards for query languages.

We can continue to speculate about future uses of the link—for example, to deliver documents as well as data—but widespread use among disparate systems is not going to happen very fast. A few years ago all wide area networks used different protocols and could not

communicate with one another. Today most networks are migrating toward DARPA's TCP/IP with a commitment to use the OSI protocols when they become standardized and available. This is the direction taken by the University of California and Innovative Interfaces, Inc., in their cooperative project. The Corporate on Open Systems has recently announced a commitment to OSI, but the realization of that commitment will take several, if not, many years. Still, the commitment has been made and we can be proud and ve   :˙   ꝺd that major vendors are heading in thɔ direction set by library—particularly Library of Cₓ ·   . ɟs—leadership.

Meanwhile, we need to think about how to distribute the costs, how to handle problems of authorizing system use in increasingly open systems, and how to deal with the legalities of sharing in a copyrighted world. And we need to determine what uses of the link capability will benefit our users the most and promote their development with our bibliographic networks and with the vendors who serve libraries. We are just beginning to envision the reality of linked systems and it is up to us to enlarge that vision in the service of our users.

SELECTED READINGS[1]

Avram, Henriette D. "Avram on LSP," *Library Journal* 112, no. 5 (March 15, 1987): 8, 10.

_____, and Beacher Wiggins. "The Role of the Linked Systems Project in Cooperation and Resource Sharing Among Libraries," *Libraries & Computing Centers* 2 (May 1987): 1-4 (Insert of *Journal of Academic Librarianship* 13, no. 2).

Council on Library Resources, Bibliographic Services Development Program. *Technical Report on Linking the Bibliographic Utilities; Benefits and Costs*, by Donald A. Smalley [and others] Columbus, Ohio: Battell Columbus Laboratories, 1980.

Denenberg, Ray, "NISO Draft Standard Z39.50: Information Retrieval Protocol." *Library Hi Tech News* 39 (June 1987): 1, 7-8.

_____. "Open Systems Interconnection." *Library Hi Tech 3*, no. 1, Consecutive Issue 9 (1985): 15-26.

Hillkirk, John. "High-Tech World Sets Product Standards." *USA Today* (May 5, 1988): 1B.

Library of Congress Network Advisory Group. *Toward a National Library and Information Service Network: The Library Bibliographic Component.* Preliminary Edition. Washington: Library of Congress, June 1977.

The Linked Systems Project: A Networking Tool for Libraries. Edited by Judith Fenly and Beacher Wiggins. Dublin, Ohio: OCLC Online Computer Library Center, 1988.

McCallum, Sally H. "The Linked Systems Project: Implications for Library Automation and Networking." In *Advances in Library Automation Networking.* Edited by Joe A. Hewitt. Greenwich, Conn.: JAI Press Inc., 1987.

McGill, Michael J., Larry L. Learn, and Thomas K. G. Lydon. "A Technical Evaluation of the Linked Systems Project Protocols in the Name Authority Distribution Application." *Information Technology and Libraries*, 6, no. 4 (December 1987): 253-65.

NCLIS/NBS Task Force on Computer Network Protocol. *A Computer Protocol for Library and Information Science Applications.* Washington, D.C.: National Commission on Libraries and Information Science, Dec. 1977.

Rice, James. "Open Systems: A Second Opinion." *American Libraries* 18, no. 6 (June 1987): 450-53.

---

[1] This list of selected readings is based on "Selected Linked Systems Project Bibliography," compiled by Beacher Wiggins of the Library of Congress and published in *The Linked Systems Project: A Networking Tool of Libraries.*

BUSINESS MEETING

Summary of Current Topics Sessions

Preservation: David Weber (*Stanford University*) reported on this session, which fell into two parts. First, Patricia Battin, President of the Commission on Preservation and Access, summarized recent activity to encourage more government support for preservation of research library materials. Rep. Sydney Yates, chair of the House Subcommittee on Appropriations for the National Endowment for the Humanities, has taken a keen interest in preservation activities. Several weeks earlier, Lynne Cheney, chairwoman of the National Endowment for the Humanities, reviewed for Rep. Yates a multi-year plan for gradual increases in the budget of the NEH Office of Preservation, from $12.5 million in FY 1989 to $20.3 million in FY 1993, to support a number of coordinated activities. Ms. Battin reported that this would take expenditures for the brittle book preservation filming level from its present level of $2.2 million to $7.5 million in FY 1989. 42,000 volumes would be filmed with FY 1989 funding, increasing to 72,000 volumes in FY 1990, 12,000 volumes in FY 1991, 175,000 volumes in 1992, etc. She noted that this could not be considered a matching grant program, as universities simply could not raise matching money of that magnitude. Also, institutions have an obligation to care for their own manuscripts with their funds; the federal program must function on its own.

Mr. Weber then summarized a number of the issues and concerns that were identified during the course of the meeting.

- Potential hidden costs that might impact a participating library.

- Practical extent of reliance on commercial microfilming firms.

- Possible need for a western MAPS, or two or three more.

- Adequacy of the $60 per volume estimate to cover all preparation costs, including adequate bibliographic records.

- Best means to record queuing decisions so as to economize cataloging.

- How to define "brittle books." Feasibility of a fast sure test.

- Best economical method for determining degree of brittleness.

- Individual volume selection versus filming all items in a collection.

- How to handle serial runs with some but not all volumes being brittle.

- Physical problems of non-brittle volumes exposed during identification of brittle items, and how to pay for their treatment.

- Need for foundation help with conservation, as NEH may help on brittle book reformatting.

- Finding six or seven institutions able to film 42,000 volumes in 1989-90.

- Worry over smaller institutions needing some form of funds to help them get going.

- How to give assurance of dependable access to all other libraries.

- Availability of a transfer machine to convert film for ready access.

- Use of a central facility for storage—needed or not.

- Location of films of manuscripts/archival materials, or only brittle books.

- Suspect quality of much filming done 10 or 20 or 30 years ago.

- Extent to which circulation should drive selection for filming.

- Reliance on a few/strongest research collections in a particular field on topic as a "sufficient" filming coverage.

- Suitability of a major library working with a few large or small libraries as subsidiary/associated participants in one NEH grant.

- Concern that the pre-filming search for archival master on a reprint will result in perhaps 1 in 10 needing reformatting in early years, later 1 in 20, then 1 in 30, etc.

- Concern about coverage of social sciences and scientific/technological materials within the NEH program.

- Who guides the total program so no field is overlooked. Reliance on NEH or CPA or ARL to coordinate and monitor.

- Need for pressure on publishers to use alkaline paper today.

- Use of a central or national online office to search for existing master films and reprints; on a unified database to serve that purpose.

- Concern that Congress be convinced of need for steady sustained effort so as to support constant production effort after space, staff, procedures, lab. etc., are up to required speed.

Serials Prices: Kent Hendrickson (*University of Nebraska*) reported on the panel discussion. Members of the panel were Mary Fugle of Springer Verlag, Amy Lucker of Faxon, Alain Henon of the University of California Press, and Richard Dougherty of the University of Michigan.

Mr. Dougherty began the discussion by reporting on a survey he had conducted recently, noting that many librarians had received one-time money from their campus to help meet the serials crisis, but then they faced a greater problem the following year. At the same time, these libraries must cut back on the number of monographs they purchase. The serials crisis had resulted in a general re-allocation of funds and at least some attempt at increased cooperation among various campuses. He reported that most of the research library community believes that prices will continue to increase at the same rate as in the last few years, and thus cause more pressure within the university community. He stated the need for more pro-active work on the part of libraries instead of just reacting to the situation, and suggested that libraries and university presses might join forces to publish serials to replace some of the higher priced—particularly Western European—journals.

Amy Lucker reported on Faxon's projections of serials' inflation over the next year, noting that the figures are down from previous years. For European serials, the increase projected is 10%, for U.S. journals it is 8%, and for Japanese serials, 18%. During the discussion period, it was noted that the projections for the larger research libraries should be broken out from the other figures.

Alain Henon focused more broadly on scholarly communication and distribution of information. He believes that sales of monographs have decreased significantly due to the serials crises. Several years ago, the University of California Press was producing 1000 to 1500 copies of new publications. Now they produce about 500 copies, because that is the level of projected sales. He noted that the University of California Press also publishes journals, particularly in humanities and social sciences. In the current environment, they have found it very difficult to start new journals, so in many cases, information is just not getting into print.

Mary Fugle concentrated on the weakened state of the dollar. In response to a question about the level of subscription cut-backs Springer Verlag has experienced, she responded that they have not seen an appreciable across-the-board decrease.

Mr. Hendrickson concluded by noting a consensus that the whole area of scholarly communication is at risk, and that there must be increased communication among all parties concerned: librarians, publishers, jobbers, faculty, and administrators.

Government Information.   Paul Gherman (*Virginia Polytechnic Institute & State University*) reported on the presentation by Scott Armstrong, Executive Director of the National Security Archives (NSA). The purpose of the NSA is to gather government documents that are not available to the public. Most of this information has been declassified through the Freedom of Information Act, and NSA's goal is to gather, archive, index, and cross-index this material. NSA is currently supported by grants, but in the next year plans to start a publishing program that will contribute to its support. Mr. Armstrong stated that in the past, there has been no systematic attempt to organize this information and make it available to the public, and that some Government agencies find this threatening. They have discovered, for example, that classification restrictions used by the Government are not necessarily for security, but to keep information from other Government agencies, as in the cases of internal investigations. Mr. Armstrong urged librarians to stress, in the education of new professionals, the right to know of the U.S. citizenry, and to keep reminding the Congress of its oversight responsibilities.

Government Information in Electronic Format: Statement of Principles

James Wyatt (*University of Rochester*), chair of the ARL Committee on Government Policies, reviewed the six principles concerning government information in electronic format, which were developed by the Task Force on Government Information in Electronic Format during 1987. The task force was chaired by Kaye Gapen. The six principles, in draft form, were included in the report of the task force, which were accepted by the ARL Board in 1987 and had been distributed widely. Many comments were received about the report and ARL's position on this issue. The principles are:

1.   The open exchange of public information should be protected.

2.   Federal policy should support the integrity and preservation of government electronic databases.

3.   Copyright should not be applied to U.S. Government information.

4.   Diversity of sources of access to U.S. Government information is in the public interest and entrepreneurship should be encouraged.

5.   Government information should be available at low cost.

6.   A system to provide equitable, no-fee access to basic public information is a requirement of a democratic society.

In discussion, William Welsh (*Library of Congress*) noted that principle 3 and principle 6 created problems for the Library of Congress. The Library tries to secure revenue through sales of its publications outside of the U.S., so LC MARC data is copyrighted when it is distributed outside the border of the United States. Mr. Wyatt commented that the position recommended for the Association assumed that materials and information produced with public funds were in the public domain and should not be copyrighted. Ms. Gapen commented that questions regarding copyright of U.S. Government information outside the U.S. and other controls for national security reasons are exceedingly complex. The task force decided the principles should make a general statement of the sense of the membership, and questions involving operations of the Library of Congress and the National Library of Medicine should be addressed as a separate issue.

Another member offered an amendment to principle 3 that, "Copyright should not be applied to U.S. Government information within the United States." There was no second. Mr. Welsh reiterated that LC's copyright of the MARC database is done in accordance with the Copyright Office and is fully legal. Its primary purpose is to protect the market and to ensure wide dissemination of the data in accordance with the standards under which LC operates. Ms. Gapen commented that the task force had spent a substantial amount of time discussing this issue, and they realized it was not a legal question. Rather, they attempted to work out a general statement of a principle with the realization that there would be exceptions to the principle—some of which ARL can agree to and some it cannot. She urged that the membership separate the principle from an exception in considering the Statement of Principles.

The following amendment to principle 3 was proposed again, and seconded: "Copyright should not be applied to U.S. Government information within the United States." Ms. Gapen spoke against the amendment, noting that there was difficulty in even defining what is foreign and non-foreign use of material, both outside the U.S. and by foreign companies within the U.S. It seems more rational to deal with this as a separate issue rather than a statement of principle.

A vote was taken to adopt the amendment, and it failed. Ms. Sloan noted that as a report from a committee, there was no need for a formal motion to adopt the Statement of Principles. A vote was then taken to adopt the Statement of Principles as proposed by the Task Force and endorsed by the Committee on Government Policies, and it passed.

LC/GPO Appropriations

Susan Brynteson (*University of Delaware*) reported that, on March 24, she testified for ARL before the House Subcommittee on Legislative Appropriations, in support of appropriations for the Library of Congress, and Katherine Mawdsley of the University of California, Davis, testified for ARL and the American Library Association in support of appropriations for the Government Printing Office. She reported that Subcommittee Chairman Vic Fazio (D-CA) was very interested in the testimony and commented that many legislators are not clear about the roles of LC and GPO. He indicated support for the GPO and LC appropriations, but commented that he needs grass roots support. Ms. Brynteson urged directors to write to their own representatives urging support for the LC and GPO, as, those two bodies perform functions critical to libraries across the country.

FBI in Libraries

Merrily Taylor (*Brown University*) gave a brief update on the FBI Library Awareness program and its affect in the research library community. ARL has been monitoring this issue for some time. In the fall of 1987, the office alerted members to the fact that the FBI program existed, distributed to the membership relevant portions of the ALA Policy Manual regarding confidentiality of library records and Government intimidation, and began collecting information on FBI visits to libraries around the country. During the winter and spring of this year, ARL continued to monitor what was going on and continued to report to the members, made press contacts in regard to this issue, and participated in meetings of groups concerned about the FBI program. In April 1988, a letter from ARL went to the Chairman and Vice-Chairman of the Senate Intelligence Committee expressing opposition to the FBI program and opposing recruitment of library staff to conduct counter-intelligence for the FBI.

This week, several related activities have taken place at the ARL Meeting. The FBI program and related developments were discussed by the Board and the Government Policies Committee with the following results.

-   Elaine Sloan, as President of the ARL, will write to Jerry Newman, Chairman of the National Commission on Libraries and Information Science, expressing, in strong terms, ARL's opposition to the FBI program, and shock and dismay at his blatant disregard for libraries, including an unfounded personal attack on an ARL library staff member at a recent NCLIS meeting.

—   The Government Policies Committee and the Board have provided guidance to the ARL Executive Director for any meetings with the FBI officials. ARL urges that these meetings be open and that the Executive Director make cle˙ ˉ to the FBI that he will report fully on the meeting the ARL membership and, further, that representatives from all key organizations be included in such meetings. "Key organizations" means, among others, the American Library Association. The Board and the committee also recommend endorsement of a statement reaffirming ARL's opposition to programs such as this one. Ms. Taylor then read the following statement:

> "The Association of Research Libraries is committed to the principle that unrestricted access to and dissemination of ideas are fundamental to a democratic society. Libraries, in addition to their other information services, exercise a unique responsibility in preserving the freedom of citizens to receive and exchange ideas. Public confidence in libraries must not be shaken by any breach in the confidentiality of individual use of library resources.
>
> "The Association condemns the efforts of any Government agency to violate the privacy of library users, to subvert library patron records, and to intimidate or recruit library staff to monitor so-called 'suspicious' library patrons or report on what or how any individual uses library resources. Such action are an affront to First Amendment freedoms, individual privacy and all citizens' right to know. These actions violate the basic tenets of a democratic society."

She then moved that the Association endorse the statement and it subsequently be released as a press release.

It was noted that over 30 states have laws safeguarding the privacy of library records, and that compliance with the FBI program might require libraries to violate these laws. A number of members expressed strong support for the actions ARL had taken to date. The motion carried.

Ms. Taylor added FBI agents frequently approach student assistants and support staff, rather than someone with administrative authority, and some of these staff members have been intimidated into cooperation. The Committee on Government Policies urges directors to alert their staff to the FBI program and make it clear that the library does not encourage cooperation with the project and that they should refer the agent to the appropriate library official.

Report from the Committee on ARL Statistics

Thomas Shaughnessy (*University of Missouri*) reported on behalf of the Committee on ARL Statistics. He noted that the Committee has been concerned about the delays in

publication of the *ARL Statistics* and the *ARL Annual Salary Survey*, over the past few years, and has taken some steps to address the causes of the delays. He reviewed several factors contributing to the lateness of the *ARL Statistics*, including: turn-over in staff handing the statistics in ARL libraries; slow returns on the part of some libraries; and verification of the data (almost all libraries have had to be called at least once, and many several times to check on mathematical errors, missing data, or anomalies with data submitted in previous years). He urged that directors stress with their staff the importance of returning the questionnaire on time; double-checking the form to catch mathematical errors, missing data, and similar problems; and responding promptly to calls from the ARL Office about the statistics questionnaire.

To help ensure that this year's data collection goes smoothly, a production schedule for both publications has been prepared. Also, for the first time in 1987-88, preliminary tables will be issued for the *ARL Statistics* as well as for the *Salary Survey*. He noted that no changes are anticipated for the 1987-88 Statistics, and that the committee is putting additional efforts into clarifying the instructions. Also under consideration is a workbook and/or workshop for those responsible for completing the statistics.

To help produce the *ARL Annual Salary Survey* in a more timely fashion, the data for university libraries will be collected in machine-readable form. It is anticipated this will speed up the data gathering process substantially.

During 1988, the committee will continue to investigate access measures as well as comparable methods for recording government documents resources in ARL libraries.

A number of members commented on the usefulness of the statistical publications and expressed support for the 1987-88 production schedule. It was noted that the ARL membership criteria index is not included in the publication. A copy of the index is prepared for publication, omitting those libraries that request that they be omitted, and is distributed to the membership and to anyone else who requests a copy.

President's Report

Elaine Sloan reported on major activities and actions taken by the Board since the October 1987 Membership Meeting.

—	Appointment of Duane E. Webster to be Executive Director.

—	Continuation of the planning process, including the program earlier in the day.

—	Review of ARL's fiscal situation and recasting of ARL's finances based on the programmatic efforts of the Association. A Task Force on Financial Strategies will be appointed to review alternative funding strategies for ARL and report back to the Board.

—	Initiation of the Serials Pricing Project to investigate rapidly increasing serials prices and to recommend strategies for ARL actions. A special assessment of $200 per institution was approved by the membership to support this initiative.

- Consideration of ways to make Membership Meeting more responsive to the needs of the membership. The October 1990 meeting will be in Washington, and the May 1991 Meeting will be in Montreal. Also, the dates for the September 1988 meeting, which will be held in York, England in conjunction with the Standing Conference of National and University Libraries (SCONUL), have been shifted to ensure that there are no official ARL activities on Yom Kippur.

She then introduced two motions from the Board for membership action.

- The Board recommends that the $15,000 surplus from the ARL Recon Project be applied to ARL's operating reserve. The motion carried.

- The Board recommends that the ARL Microform Clearinghouse be transferred to OCLC, Inc. The motion passed.

Following the vote, members raised several points with regard to ARL's finances. First, it was reiterated that special assessments are to be used only for a specific purpose. Another member noted that there had been several special assessments over the past few years, and that this should not be adopted as a financial strategy for the association. Also, ARL has become a more diverse group. Special projects that appeal to some members but are not part of the Association's ongoing activities should be paid for those that are interested rather than from Association funds. Ms. Sloan responded that the Task Force on Financial Strategies would consider this point as part of its charge.

Executive Director Report

Duane Webster, ARL Executive Director, began by thanking Elaine Sloan for her support during this transition period. He also thanked members of the Board for the Executive Committee for their support and enthusiasm and for their willingness to take on extra work. Noting that ARL is working at a reduced staffing level, he thanked the staff for their commitment and willingness to work so hard and so well under difficult and changing circumstances. He also thanked the membership for their support and encouragement over the passed few months.

Mr. Webster reviewed the major issues ARL is facing at present: preservation, government information policy, and the skyrocketing cost of serials. He also explained a new approach to organizing and describing the activities and resources of the Association in terms of capabilities. This new framework will allow for a more effective monitoring of ARL allocation of resources by program.

Preservation. William Welsh of the Library of Congress was asked to report on LC's efforts, particularly in preservation, over the past few months. Mr. Welsh reported that the Office of Technology Assessment (OTA) has issued its report on deacidification processes. OTA looked favorably on the LC approach, though they do want some further investigation of alternative technologies and of privatization. LC had actually investigated working through a private company some years earlier, but proposal were rejected. Now, the climate seems more favorable. Several options are being investigated.

Mr. Webster reported on recent activities of the ARL Committee on the Preservation of Research Library Materials. The committee, which is chaired by David Weber, has encouraged ARL staff to examine ways for ARL to take a stronger stand urging domestic publishers to use alkaline paper. It was noted that there has already been good progress in this area within the medical field. Mr. Webster and Jeff Gardner had met recently with John Moore, Head of the Columbia University Press, who is chair of the Association American of University Presses Library/Publisher Task Force.

One director mentioned that the University of California Press is not using acid-free paper for paperbacks, and wondered if this were common practice for university process. Another member remarked that this practice is fairly common among university presses. It was noted that university presses do not understand that libraries will often choose paperbacks and have them bound by a commercial binder in order to have a permanent binding. ARL could help communicate this to publishers.

Mr. Webster commented that the ARL Committee on the Preservation of Research Library Materials has been very active in providing feedback to the planning task force.

Government Information Policy. Mr. Webster acknowledged the important contributions in this area of Jaia Barrett, ARL's Federal Relations Officer, and the Task Force on Government Information in Electronic Format.

Serials Pricing Project. Mr. Webster noted that the Serials Pricing Project, supported by special assessment, is an experiment. At this time ARL does not have a reserve to turn to on short notice to fund this kind of project, thus this need to go through the cycle of getting approval, collecting the funds, and then initiating the project. This can be time consuming.

The project, while focusing on the economic underpinnings of this phenomenon, will also look beyond the causal factors to assess the impact on scholarly communication and library users.

Finally, the project will also seek to identify and investigate options for Association responses to this phenomenon, beyond local response of increasing serials expenditures and/or cutting subscriptions. Other groups, including the Association of American Universities, are interested in solutions to this problem, beyond just the trends. This does not appear to be a temporary phenomenon. Rather it is the tip of the iceberg with regard to larger problems happening in scholarly communication. From this project, ARL hopes to understand more clearly how the issue of serials prices fits into the dynamics of the charging system of scholarly communication, and how ARL and research libraries can have some influence on those prices through specific, collective action.

In addition to these issues, ARL has been working in some internal areas as well.

- As mentioned by Tom Shaughnessy, establishing procedures to speed the production and distribution of the *ARL Statistics* and the *ARL Annual Salary Survey.*

- Retiring the 1987 deficit of $63,000. As of the first quarter 1988 budget, ARL is operating within the limits of the redesigned and balanced budget.

- To help balance the budget, the office has been operating at a reduced staffing level and the Visiting Program Officer Program has been suspended for the immediate future. However, the office is still interested in having staff from ARL Libraries to work on projects with Association staff, if they have a

sabbatical and can secure their own funding, either from their home institution or through grants. In response to a request from the floor, Mr Webster agreed to send out a list of projects the office is interested in having someone work on.

Mr. Webster reviewed the assumptions that are guiding the planning process currently in operation.

— A strong, active leadership role for the executive office. This position will involve taking risks and may result, from time to time in actions that individual members may not support completely, or may not consider relevant.

— Managing within the Association's resources, i.e. continuing the level and variety of activities to meet ARL's responsibilities and resources. The staff will explore ways to re-deploy resources, to secure additional resources, and to find creative ways of deploying the unique resources that ARL can bring to bear on the issues now facing research libraries.

Office of Management Services Report

Mr. Webster began with two announcements.

1. On the recommendation of the ARL Committee on the Management of Research Library Resources, the name of OMS has been changed from the Office of Management Studies to Office of Management Services. This reflects more accurately the fundamental interest and orientation of the office and the support it provides to the Association.

2. Jeffrey Gardner, Associate Director of OMS, has been appointed Director, effective May 2. Mr. Gardner had been serving as Acting Director for the past six months.

Mr. Gardner, gave a brief report on the office noting the status report provided for the meeting and the recently published 1987 Annual Report. The Annual Report serves not only as a summary of OMS activities, but also as a catalog of services and products.

Special Report on the Library of Congress.

Ms. Sloan announced a portion of the Business Meeting had been designated as an opportunity for directors to have direct input to the planning and review activities now in progress at the Library of Congress. Ellen Hahn, chair of LC's internal Management and Planning Committee, was present. Jay Lucker (*Massachusetts Institute of Technology*) who, along with Ms. Sloan, is a member of the National Advisory Committee, was also present.
Ms. Hahn noted she was at the meeting on behalf of Librarian of Congress James Billington, who was unable to attend. She began by giving a brief overview of the management planning review that is underway at the Library. Mr. Billington has noted that, coincident with his appointment, there are a number of significant milestones that will be coming up during the

next ten years: the bicentennial of the U.S. Congress, the quincentennial of Columbus' discovery of America, the Centennial of the Thomas Jefferson Building and LC's own bicentennial in the year 2000.

There are two internal components of the management planning efforts. The first, and central. is the Management and Planning Committee, which comprises middle management staff, and individuals with a variety of experience at the library. They are working in several committees to come up with a vision of the library in the year 2000. A second component is a management consulting firm, Arthur Young, Inc., that has just been awarded the contract to work with LC to do a basic review of the work flow and procedures and policies within the library and to help put some flesh to the ideas developed within the staff.

There is also an external component, the National Advisory Committee, which consists of 28 people. Jay Lucker and Elaine Sloan served on that group as well as does Margaret Chisholm, representing the American Library Association, and a number of other representatives of libraries and librarians in addition to academicians, scholars, authors, and the legal community.

The fourth component is the series of regional forums, and the fifth component is Congress. LC reports to key Congressional committee staff, on a regular basis, on the progress of the project.

The charge to the Management and Planning Committee is actually covers the whole management planning effort. Two aspects of that charge are particularly relevant to ARL:

- Increasing and deepening the direct scholarly usage by the American people of these great collections.

- Broadening and rationalizing Library of Congress National Library service to its external constituencies.

The internal staff committee organized into subcommittees early in the process and identified issues that they agreed need to be addressed, grouped the issues, and organized into groups of seven people to work on them. They came up with the vision statement for the year 2000. Draft statements were sent to the staff for comment and reaction, and several internal forums were held. The committee has received a lot of input since the beginning of January, and it will begin compiling a report in June.

The National Advisory Committee will supply a substantial amount of input. Their charge is to communicate directly with Dr. Billington their suggestions and hopes for how the Library of Congress can meet their needs as a national library by the year of 2000.

Jay Lucker, a member of the National Advisory Committee, commented how impressed he has had been by the quality of LC's middle management staff that have been working on this review project. Other librarians on the National Advisory Committee include Elaine Sloan (*Indiana University*), Margaret Chisholm (*University of Washington Library School/President, American Library Association*), Richard De Gennaro (*New York Public Library*), Donald Lindberg (*National Library of Medicine*), Joseph Howard (*National Agricultural Library*), Anne Mathews (*Department of Education*), Emily Mobley (*Purdue University*), Patrick O'Brien (*Dallas Public Library*), Gary Strong (*California State Library*), Robert Wedgeworth (*Columbia University School of Library Service*), and Anne Weeks (*American Association of School Librarians*).

The committee met for two days at the end of March. A portion of the time was spent in orientation for committee members not familiar with LC. The committee then broke into

four small groups, each of which include staff members as well, to address in depth particular issues about which the National Advisory Committee was supposed to be concerned.

The groups looked at the following topics:

- Education and media

- The role of the Library of Congress as a national library, including a more active role in the national library network and in information policy development, and in conducting its own research.

- Technology and business

- The role of scholars, including how to make the Library's collections more accessible.

The Advisory Committee members are to respond to Mr. Billington by June 15 on these topics, then the group will reconvene in the fall of 1988 to look at all the responses that have been gathered during the review process.

Mr. Lucker stressed that this is an opportunity for research libraries to influence the future directions of the Library of Congress. He urged ARL directors to make their concerns known, either through member of the Advisory Committee or by writing to Mr. Billington directly.

Ms. Sloan also urged that directors make their concerns known, and that, as President of the Association, she recognizes her responsibility to reflect the suggestions and concerns of the ARL membership. She then opened the floor to questions and comments.

Merrily Taylor expressed concern over possible decreases in cataloging of foreign language materials at LC. She noted that her institution—as with most other ARL libraries—relies on LC to provide cataloging copy for these items, particularly those in more esoteric languages. Mr. Welsh commented that one approach might be to assume that ARL libraries could take more responsibility to English language materials, allowing LC to devote more of its resources to foreign language materials. Henriette Avram noted that distribution of cataloguing responsibility is being explored, particularly by a new National Coordinated Cataloging Program. The Council on Library Resources has recently provided funds to support an evaluation of this program.

Ms. Hahn commented that a consistent theme, so far, in all the input—whether through the forums or from scholars or librarians directly—was the notion that access is the most important issue that LC must address.

James Wyatt asked about the status of LC's interest in operating the National Technical Information Service (NTIS). Ms. Hahn commented that Mr. Billington has a strong commitment to strengthen and deepen LC's resources in science and technology, and to make available the millions of unique pieces the Library already has in its collections. Mr. Welsh added that LC is interested in the proposal and has made known its interest to appropriate staff members on Capitol Hill. Another director commented that should NTIS be privatized, LC should continue to make available technical reports from foreign countries that might not then be available through NTIS.

One director suggested making LC's cataloging rules available online through OCLC. Dorothy Gregor (*University of California, San Diego*) suggested discontinuing the *National Union Catalog*.

Mr. Lucker commented that LC is expecting the National Advisory Committee to advise on whether there are activities LC is now doing that could be done better by others, and asked directors to give some thought to this. Ms. Hahn added a corollary: Is LC the appropriate place for some of the things that have been suggested (e.g. developing campaigns in support of libraries).   Mr. Lucker reiterated the difficulties in weighing the variety of suggestions for changes, the needs LC fulfills, and the resource available to the Library.   He closed by acknowledging the importance of having LC staff working with the National Advisory Committee to investigate these questions.

Association of Research Libraries

REPORT ON ASSOCIATION ACTIVITIES

November 1987 - May 1988

This activity report to the membership follows a new format that conforms to a recently constructed framework of ARL capabilities. This framework serves to acquaint members with the range of activities currently accomplished by staff and members in pursuit of ARL objectives. The framework of ARL capabilities will be reviewed during the program session on Friday, May 6 from the perspective of current distribution of resources. An outline of the framework follows:

I   INTERNAL OPERATIONS AND MEMBERSHIP RELATIONS
   1. Statistics
   2. Communication
   3. Membership Meetings
   4. Governance of the Association
   5. ARL Committees and Task Forces
   6. Operations

II   EXTERNAL RELATIONS AND PROJECT SUPPORT
   1. Federal Relations and Information Policy Development
   2. Relations with Scholarly and Professional Communities
   3. Access to Scholarly Information Projects
   4. International Relations

III   OFFICE OF MANAGEMENT STUDIES
   1. Separately funded projects
   2. Research and Development (OMS)
   3. Institutional Studies and Consultation (ALP)
   4. Information Clearinghouse (SPEC)
   5. Organizational Training

Capability may be defined as the state of being able intellectually and organizationally to make something happen.

Activity Highlights for the Period

   -   Distribution of ARL statistics - p. 2

   -   Plans for strengthening communications efforts - p. 2, 3

   -   Plans for ARL membership meeting in York, England - p. 3

   -   Committee goals for 1988 - p. 4

   -   1987 financial reports indicate a deficit - p. 5

   -   Federal Development in Preservation of Library Resources - p. 5

   -   FBI Library Awareness Program - p. 6

I. Internal Operations and Membership Relations

I.1   Statistics

The collection and distribution of quantifiable information describing the characteristics of research libraries is a priority capability of the Association. The 1987 ARL Annual Salary Survey was distributed to members on March 2, 1988. The 1986-87 ARL Statistics was distributed on April 14, 1988. The production and monitoring of these publications involves ARL staff, the Committee on ARL Statistics, and two consultants, Gordon Fretwell and Kendon Stubbs. At its meeting on April 4, 1988, the Statistics Committee reviewed the schedule and procedures involved with producing statistics. The committee focused on the goal of distributing these publications to members early in January, and is instituting several changes to meet this goal next year, including distribution of preliminary tables on December 15, 1988.

I.2   Communication

This capability acquaints ARL members with current developments of importance to research libraries, informs the library profession at large of ARL's position on issues of importance to research libraries, and educates academic and scholarly communities concerning issuer ـlated to research libraries.

Five issues of the ARL Newsletter are planned for 1988; the first was published in March. In addition, there are plans to develop a new format for the Newsletter during the year.

Normally, two issues of the Minutes of the Meeting are published each year, the Minutes from the previous year's October meeting, and the Minutes of the May meeting. The minutes of the program session from the October 1987 meeting are being

edited by Jan Merrill-Oldham, consultant to the Preservation
publication is due this spring.

The following three projects have been identified as desirable for future
development. Actual scheduling of these projects will depend on the resources
available. The first is an ARL information packet containing a series of brief
summaries of current issues ARL is addressing, as well as the history and current
structure of ARL. The format is expected to be one that can be updated easily and
geared toward particular audiences. A consultant has completed the first draft of the
packet and work will continue on the project following the May Meeting.

A second project is an orientation package for ARL directors. This package would
be designed to give directors new to the Association information on the background,
governance, and operations of ARL, based on the information currently provided (much
of it orally) at the Orientation for New Directors given in the fall. An additional focus
would be to encourage support of and participation in ARL programs and activities.

Finally, a descriptive booklet covering member libraries is being considered. The
office is frequently asked for information about member libraries. This booklet would
pull together information about ARL members, possibly including special collection
strengths or facilities, that would be useful in describing member libraries to
individuals, groups, and agencies.

I.3 ARL Membership Meetings

This capability is aimed at developing programs on topics of interest to ARL
membership, scheduling and managing meetings and activities, coordinating on-site
arrangements, and evaluation of meetings.

Plans for the May 1988 ARL membership meeting in Berkeley were completed.
The design of the ARL Agenda building discussions drew on the advice and assistance of
the ARL Task Force on Review of the Five Year Plan chaired by Kaye Gapen.

Plans for the Fall 1988 ARL membership meeting in York, England were advanced
with the assistance of a Joint ARL/SCONUL Program Committee chaired by Penny
Abell. The schedule for the meeting was revised to accommodate the observance of
Yom Kippur. The opening session is scheduled for 3:00 p.m. September 19, 1988 and the
closing session will end at 12:30 p.m. on September 22. Optional tours are scheduled on
September 21 and 22. A survey of ARL Directors in March indicate that to-date 66
directors are planning to attend the meeting and 15 plan not to attend.

I.4. Governance of the Association

This capability encompasses identifying issues and context for member
consideration, and supporting member involvement in governing ARL.

The ARL Board of Directors met January 31 - February 3, 1988. Minutes from this
session were distributed to members on March 11, 1988. The ARL Executive
Committee met on December 17, 1988 and on January 30, 1988.

The ARL Planning Process was advanced. The report from the ARL Task F Association Responsiveness, chaired by Kenneth Peterson, was accepted by the Board and an implementation strategy was adopted. A new Task Force on Review of the ARL Five Year Plan was established. Members include James Govan, Marilyn Sharrow, Elaine Sloan, Duane Webster (ex officio), and Kaye Gapen, Chair.

I.5   ARL Committees and Task Forces

This capability concerns staff work for the process of identifying issues and context for member consideration, and supporting ARL committee structure and operation.

There are six standing committees, three task forces, two project advisory committees, and fourteen liaisons supported by ARL staff. Status reports on committee activities follow:

Committee on Government Policies: Chair, James Wyatt; Staff, Jaia Barrett
1988 Agenda of issues: adoption of Statement on Principles, government information policies and practices, FBI library awareness program, funding for preservation action, and federal funding for library programs.

Committee on the Management of Research Library Resources:
Chair, Sul Lee; Staff, Jeffrey Gardner
1988 Agenda of issues: development of a technical services study, design of a strategy for future office services, review of training needs of research libraries, and consideration of library education initiatives.

Committee on ARL Statistics: Chair, Tom Shaughnessy; Staff, Nicola Daval
1988 Agenda issues: collecting and displaying comparable data on government documents collections, guidelines for dealing with material in shared storage facilities, and developing access measures.

ARL Committee on Bibliographic Control:
Chair, David Bishop; Staff, Jutta Reed-Scott
1988 Agenda of issues: program on Linked Systems at May meeting, development of policy statement on bibliographic control of preservation microform masters, and monitoring of the National Coordinated Cataloging Project.

ARL Committee on Collection Development:
Chair, Peter Freeman; Staff: Jeff Gardner
1988 Agenda of issues: serials prices initiative, disposition of the NCIP, and initial examination of the larger question of the future of scholarly communication.

ARL Committee on Preservation of Research Library Materials:
Chair, David Weber; Staff, Jutta Reed-Scott
1988 Agenda of issues: extension of the NRMM project to include serials, a project to develop a national preservation database, and review of minimum guidelines for preservation in ARL libraries.

I.6   Operations

This capability is quite broad, encompassing overall coordination and management of the Association, program planning and strategy development, financial p'anning and strategy, fiscal control, and secretarial support and office operations.

A major development occurred during the routine annual audit conducted by Canto, Metro, Meyer and Co. on March 14-18, 1988. Financial operating deficiencies were identified which led to the resignation of the ARL accountant and the start of a review of the organization and staffing of the financial function at ARL. This review will culminate with a special meeting of the Board on July 25-26, which will result in a future financial strategy and a reorganization of ARL's fiscal operation.

The audited financial report for 1987 reports a $63,000 deficit. This deficit follows a $44,000 shortfall in 1986 and has led to a reduction in ARL's operating reserve to $150,000 which is roughly equal to one month's operating expenditures. The causes for the 1987 deficit include elimination of the Center for Chinese Research Materials (overhead paid in 1986 was $9,000 and in previous years ranged to $28,000), recognizing depreciation as an accountable cost ($16,000), ARL committee and membership activities ($34,000), and executive director transition and search expenses.

Responses to this deficit are also reported in the Board minutes and include suspension of the visiting program officer initiative, reduction of staff salary expenditure, increase in ARL dues of 7%, reduction in committee travel expense by asking committees not to meet separately from the Fall membership meeting, and reduction of ARL's financial commitment to the Office of Management Studies by foregoing a cost of living increase.

II.   External Relations and Project Support

1.   Federal Relations and Information Policy Development

This capability covers monitoring legislative and governmental activities on matters of concern to research libraries, preparing analysis of and response to federal information policies, influencing federal action on research libraries related issues, orchestrating examination of issues of importance to the future development of research libraries (including Canadian oriented issues), and developing ARL positions on issues that reflect needs and interests of members.

The major issues and actions taken are noted below:

Federal Developments in Preservation of Library Resources

NEH: On April 21, Rep. Sidney Yates (D-ILL), chair of the House funding subcommittee for NEH, convened a meeting to consider significantly increased funding for preservation of research materials. Building on March 17 testimony on behalf of ARL and the National Humanities Alliance (NHA) by Patricia Battin, President of the Commission on Preservation and Access, Rep. Yates encouraged NEH Chair Lynne Cheney to address funding for preservation microfilming of brittle books. Rep. Yates also made public an NEH Office of Preservation capabilities budget that describes how additional funds could be spent. The current level of funding for the Office is $4.5 million; the capabilities budget describes activity if funding were increased to $12.5 million in 1989 and $20.3 million in 1993. It is clear that this influential Member of

Congress wants to increase funds toward this purpose. ARL will continue to collaborate with NHA, ALA, and the Commission on Preservation and Access to support increased funding for the NEH Office of Preservation.

LC: In March, Librarian of Congress James Billington urged Congressional funding committees to provide LC with funding to double the number of volumes the Library now films (from 11,000 to 22,000) as part of its preservation effort. At the same time the Librarian announced a new LC approach to speed availability of a mass deacidification facility by awarding a contract for exclusive use of the DEZ process to a chemical company that would in turn construct and manage the facility. Prices for treatment of each volume, established as part of the contract, would be applicable for LC as well as other libraries or organizations using the service. It is anticipated that such a plant would be constructed in Delaware. ARL was represented at the House LC funding committee hearing by Susan Brynteson, University of Delaware. Her testimony addressed the importance of LC activities for other research libraries and urged committee support for the LC budget request, including the funds for increased preservation microfilming. ARL will monitor and report on the progress of LC in development of a deacidification facility.

FBI Library Awareness Program

This program, aimed at enlisting the assistance of library staff to identify and monitor agents of nations hostile to the U.S., has generated considerable publicity and controversy even within the library profession. On April 19, ARL Executive Director Duane Webster participated in an ACLU-convened meeting about the program in the Rayburn House Office Building. Rep. Don Edwards (D-CA) and Chairman of the House Subcommittee on Civil and Constitutional Rights played an active role in the meeting at which staff from at least four other concerned Congressional committees attended. Also participating were representatives of AAU, ALA, SLA and other library organizations. ARL has filed a letter of protest about the FBI program with the Senate Select Committee on Intelligence; the Board and Government Policies Committee will consider further action on the matter at the May 1988 meeting.

U.S. Government Information

GPO: In March, GPO announced that Depository Libraries would soon receive a CD-ROM product developed by the Census Bureau. The disk, Census Test Disk No. 2, contains data collected from the recent Census of Retail Trade and Census of Agriculture. In the meantime, the GPO-JCP plan for electronic dissemination projects "appropriate within existing funds" has not been released. ARL and ALA were both represented before the House GPO funding committee by Katherine Mawdsley, AUL 'or Public Services at UC-Davis. Her statement emphasized ARL and ALA endorsement of depository distribution of the Census compact disk and the development of a plan for further dissemination of electronic products. Ms. Mawdsley also spoke of serious problems that have developed regarding distribution of microfiche to depository libraries. Last November ARL published the report of the Task Force on Government Information in Electronic Format and in January convened a Forum during ALA Midwinter on the implications of an electronic depository library program. ARL was joined in sponsorship of the Forum by the ALA Legislation Committee, ALA GODORT, SLA, AALL, and COSLA. ARL will continue to monitor funding for the Depository Program and news of the GPO-JCP Plan for electronic dissemination.

OTA: The work of the Congressional Office of Technology Assessment to develop a report on Federal Information Dissemination has generated considerable interest in Congress not only in government information policies but also in more general terms in the future role of libraries. A draft of the OTA report is available for review. It includes consideration of the future vision for the Depository Library Program as described by ARL in the report Technology & U.S. Government Information Policies. Directors interested in participating in the review process of the OTA report should alert the ARL Office.

NTIS: Congressional opposition has thwarted but not stopped OMB efforts to operate the Commerce Department's NTIS in the private sector under contract. The most recent approach taken is to pursue 9 or 10 smaller contracts to operate individual functions instead of a single large contract. Simultaneous with this is Congressional action to establish the clearinghouse as a Government Corporation, (See Title II of H.R. 4417 expected soon to be reported out of the House Science and Technology Committee) and with interest from both GPO and the Library of Congress in taking over the NTIS operation. In March, Rep. Doug Walgren, (D-PA), a key Member of Congress concerning the future of NTIS, contacted James Wyatt, University of Rochester and Chair of ARL's Government Policies Committee, for an assessment of an OMB proposal to operate NTIS under contract. Mr. Wyatt filed a statement strongly reiterating ARL's continued opposition to efforts to privatize NTIS. The office will continue to monitor developments.

Library Improvement Act of 1988

The Department of Education has proposed new legislation to replace the Higher Education Act Title II and LSCA. The proposal is not expected to be acted upon by Congress this year. There are tentative plans for a summer meeting of ARL representatives with Education Department officials to discuss the proposal.

Telecommunications

The Federal Communications Commission has announced that "it would not be appropriate at this time to eliminate the exemption from interstate access charges currently permitted enhanced service providers." The charges, if approved would have added about $4.50 per hour to the cost of a computer used to link with online databases. The FCC received approximately 20,000 negative comments on the proposal and House Telecommunications Subcommittee Chairman Rep. Edward Markey (D-MA) has announced plans to introduce legislation to prohibit such access charges.

2. Relations with Scholarly, Higher Education, and Library Communities

This capability includes monitoring activities, analyzing developments, providing responses, and initiating action on selected issues. There is a major interest in expanding and enhancing activities in this area.

Activities during this period included ARL Executive Director attendance at the annual meetings of the National Humanities Alliance and ACLS, attending the National Net 1988 conference on telecommunications, reporting on the ARL serial prices initiative at the AAU meeting of the President's Committee on Research Libraries, meeting with a representative of the American Association of University Presses on the serials pricing initiative, and meeting with EDUCOM representatives to review current efforts with the EDUCOM Software Initiative, and the Networking and Telecommunications Task Force.

The activities of the Task Force on Government Information in Electronic Format have brought frequent formal and informal contacts between between members of the Task Force, ARL staff, and a variety of library, academic, government, and industry organizations.

3.   Access to Scholarly Information Projects

This capability is related to establishing, funding, and managing selected projects to achieve the ARL mission of enhancing access to scholarly information resources. There are three major access projects underway.

1.   National Register of Microform Masters (NRMM) Recon Project:

ARL in cooperation with the Library of Congress has established a project for the conversion of the approximately 460,000 monographic reports in the NRMM Master File.   ARL received the necessary funding from the Office of Preservation of the National Endowment for the Humanities ($500,000 and $328,755 in matching funds) and $290,000 from the Andrew W. Mellon Foundation.

The contractor for the conversion is The Computer Company (TCC). TCC will search NRMM reports against its database and derive or create records that meet detailed project guidelines. Staff at LC are responsible for the quality control of records produced by TCC. As the project proceeds, LC's Cataloging Distribution Service will make the records available on tapes, at cost, and without restrictions. The production schedule has been adjusted from the targeted completion date of February 1989 to December 1989. When completed, the project will increase access to NRMM records and facilitate searching from existing microforms.

TCC has been producing records since November 1987. Production has gradually increased, although at a slower pace than anticipated. To-date, TCC has converted 22,257 records. However, with the exception of the first batch, these records have not yet passed LC quality control. ARL has also agreed to a revised pricing structure tied to a performance scale for converted records.

2.   Serials Prices Project:

Analysis of serial title holdings and expenditure data from the ARL Statistics provides quantitative evidence of a crisis that has been long recognized by librarians. For the last ten years average median serial expenditures increased 11.6% each year while the number of current serial titles received increased only 1.2%. In 1986-87, the median expenditure for serials by ARL's university library members was 18.2% higher than the previous year while the number of titles received grew by only 2%. In 1988, the average cost increase for journal titles from international publishers is expected to be in the 25-30% range. The study is expected to shed light on the causes of price increases and identify options that ARL may pursue to counteract these trends. ARL staff continue to bring this trend and its implications for the future to the attention of scholars (ACLS), publishers (AAUP), University Presidents (AAU), Congressional committees (House Education and Labor, House Science, Research and Technology), and OTA.

The ARL Committee on Collection Development began considering the issue of rising serials prices during 1987. In early 1988, they recommended to the ARL Board that the membership be polled as to their willingness to contribute a one-time assessment to provide a fund which ARL could use to further understanding of the

dimension and impact of rising serials prices, and to develop and implement strategies for dealing with the problem. The membership approved a special assessment of $200 to support work in this area, and invoices were mailed to the members in late March.

Two major initiatives are underway. The first is the development of a Briefing Package on Serials Prices which is scheduled to be available to members by June 1. The package will include descriptive and analytical information, as well as sample written discussions of the problem that can be adapted for use by ARL directors in informing and educating their communities as to the nature and dimension of the issue and its impact on research libraries and the scholarly community. It is also expected that the briefing package will be used to describe the situation to scholarly associations. The package is being developed by a professional writer, working with ARL staff. It is expected that a draft of the package will be reviewed by the Committee on Collection Development at its May 4, 1988 meeting.

The second initiative is the development of an analytical project intended to produce a report which would include a statistical analysis of serials prices aimed at determining causes, such as currency fluctuation, production and distribution costs, and profit motivation. The report will then move to a consideration of the impact of cost increases on research libraries and their users, and finally, to a consideration of various possible responses to the problem. Office staff have contacted three economic analysts in the Washington area to consider working on the initial statistical analysis.

3. North American Collections Inventory Project:

This project is administered by the Office of Management Studies. See p. 10 for status report.

4. **International Relations**

This capability covers monitoring activities, maintaining selected contacts, identifying developments on issues of importance to American research libaries, and sharing experience of North American research libraries that may contribute to development of research libraries internationally.

ARL plans to meet with SCONUL as part of a joint meeting. In addition, OMS staff conducted three management institutes in Australia, NCIP Workshop in Scotland and France, and an NCIP presentation at a conference in Florence, Italy. ARL continues to be active in IFLA although ARL staff will not attend this year's summer conference in Sydney, Australia.

0871H

9

OMS) OFFICE OF MANAGEMENT STUDIES

April 20, 1988

To: ARL Board of Directors

From: Office of Management Studies (OMS)

Re: Status of OMS Programs
         October 1987 - April 1988

This report is organized around OMS activities in three areas:
(1) operation of separately funded projects, (2) core programs
supported with ARL dues and revenue from sale of services and
publications and (3) Office assistance provided to ARL committees.

1. SEPARATELY FUNDED PROJECTS

A. National and Regional Cooperative Collection Development
Program: In June 1984 the Andrew W. Mellon Foundation funded a three
year project to continue the work of Phases I and II of the North
American Collections Inventory Project (NCIP). The $220,000 grant
supports the development of training resources, a materials
distribution center, and the support system needed to coordinate the
participation of ARL libraries in NCIP.

During the past 6 months training has been provided to several
libraries and groups of libraries by NCIP trainers drawn from the group
of collection development staff trained for that role by the OMS.
European interest in the Conspectus methodology led to a panel
discussion at the Western European Studies Section of ACRL meeting in
Florence. Panelists included representatives of the North American
Collections Inventory Project, the National Library of Scotland, the
French Ministry of Education and LIBER. In addition, two issues of
NCIP NEWS were published and distributed and an NCIP User's Group
meeting was held during ALA Midwinter in San Antonio.

David Farrell, Associate Dean of Libraries at Indiana University
continues to represent ARL on the RLG Subcommittee on the Conspectus,
the group with ongoing responsibility for the development and revision
of Conspectus materials. The Subcommittee met once during this period.

Software for application of D-Base III to local library uses of
the Conspectus has been developed at the University of North Carolina
and is currently being tested at several ARL libraries. It is expected
that the software will be available for distribution by the summer.

Finally, as NCIP moves toward operation on a cost recovery basis, the Advisory role for the project will shift from the NCIP Advisory Committee to the ARL Committee on Collection Development.

B.   Third Institute on Research Libraries for Library and Information Science Faculty: The Council on Library Resources announced in July 1987 the award of a grant to the Association of Research Libraries to conduct a third Institute on Research Libraries for Library and Information Science Faculty.

The purpose of the Institute is to continue the process of strengthening relationships and understanding among research library staff and the teaching faculty in library schools. The 1988 Institute will also examine the question of library school curricula as they relate to research libraries.

The grant of $45,000 will support the conduct of a two week series of seminars, discussions and briefings in research libraries for 12 faculty. The Institute will be hosted jointly by the University of Chicago Library and the University of Chicago Graduate Library School.

The initial draft design of the Institute has been accomplished, publicity was distributed, and presentations on the Project were made at the January meeting of ALISE. The Advisory Committee met in March and selected the following 12 library educators to participate in the Institute:

Michael Carpenter, Louisiana State University
Arthur C. Gunn, Wayne State University
Diana McAfee Hopkins, University of Wisconsin - Madison
Julie M. Hurd, University of Chicago
Joanne G. Marshall, University of Toronto
Ronald R. Powell, University of Missouri
William C. Robinson, University of Tennessee
Loriene Roy, University of Texas at Austin
Margaret F. Stieg, University of Alabama
Raymond F. Vondran, North Texas State University
Terry L. Weech, University of Illinois
Howard D. White, Drexel University

The Committee also advised project staff on possible speakers for the seminar sessions on collection management. Finally, site arrangements have been made for the Institute in Chicago and participants are beginning to arrange for 2-5 day field visits to representative ARL libraries to study their collection management programs. OMS staff are assisting with those arrangements.

2. CORE OMS PROGRAMS

There are four ongoing programs comprising the core of the OMS services and resources for ARL members. These core programs are supported with fees from the sale of services and an annual allotment from ARL membership dues.

A. Research and Development Program (Activities aimed at developing funding proposals and new OMS services or supporting study of special issues)

1. A proposal for a Preservation Administrator Training Program: With the encouragement of the National Endowment for the Humanities, a proposal for helping research libraries establish a preservation program was prepared by OMS staff, reviewed by the Management and Preservation Committees and approved by the ARL Board. After the proposal was submitted in May 1986, the Endowment asked the OMS to resubmit the proposal after building in added options for securing academic training. A revised draft has been reviewed and approved by the Management and Preservation Committees, and was submitted to NEH December 1, 1987. The proposal seeks funding for the training of 5 preservation specialists in consulting skills, and for the conduct of the Preservation Planning Program in another 10 ARL member libraries. A response from NEH is expected in late May.

2. A proposal for Managing Technology Transition in Research Libraries: Upon the advice of the ARL Committee on Management of Research Libraries, OMS staff reworked the earlier developed proposal on designing a technical services program to address the need to manage technology transition more effectively. The proposal was submitted in June 1987 for funding under Title II-B o' the Higher Education Act (a Research and Development Project). The proposal was not funded and the ARL management committee recommended at its January 1988 meeting that the proposal be considered for submission to a private foundation after another revision.

3. Participation in the Tufts Data-Sharing Project: This 2-year test project has ended. The project's goal was to identify the most useful trend indicators, peer comparisons, and other management ratios that can be derived from available information on library and institutional characteristics. The project produced two reports solely for its 25 participants, the most recent including 1986-87 ARL and HEGIS data.

4. Financial Management Skills Institute: This Institute is currently in the design phase. It will be offered for the first time in October 1988. The program will follow the budget cycle of a library to explore the process of monitoring, analyzing, and managing financial resources. Forecasting, presentation techniques and budget development will also be covered. Publicity for the new Institute including location information should appear in early June.

5. A Management Information Service: OMS staff is examining the possibility of establishing a process for interested libraries to use in examining critical issues by gathering data on operations and applying that information in an analytical fashion to management decision-making. The service would provide assistance in targeting issues, designing data gathering methodologies, establishing normative benchmarks, analyzing information, and determining appropriate action. The ARL Management Committee recommended at its January meeting that this project continue to have a low priority.

6. A Study of Professional Staff Turnover in Research Libraries: This study was conducted in response to the ARL Management Committee's desire to improve understanding of the demographic characteristics of research library staff. Of 106 libraries receiving the survey, 98 responded. A preliminary report was mailed to all directors, and a final report will be published in mid-1988 as an OMS Occasional Paper. This paper will address turnover rates as they relate to size of staff, geographic regions, and population density, and will help libraries assess employee retention conditions and project staff recruitment and replacement requirements.

7. Inhouse Training Program: OMS staff have been working with the National Library of Canada in the development of an ongoing, inhouse training capability. The Project has built on OMS experience with its Consultant Training Program and includes several components. These include: an assessment process for selecting library staff with skills and competencies required to be effective trainers; a one week training the trainers workshop for selected staff; a training practicum experience for the selected staff; and a series of basic management and supervisory skills workshops for all supervisors in the National Library, as well as a series of one-day orientation workshops for non-supervisory staff. The program is being conducted in a bilingual environment, in both English and French. Office staff plan to develop a generalizable program for development of training capabilities, based on their experience at the National Library of Canada.

B. Academic Library Program (activities related to conducting developmental studies at ARL member libraries)

During this period, eleven projects were in various stages of operation by ARL members:

* Preservation Planning Program Studies: University of Pittsburgh, University of Wisconsin, University of Southern California, National Agricultural Library

* Public Services Studies: Dartmouth College, York University, McGill University, and University of Pittsburgh

* Leadership Development Programs: Wayne State University, University of Nebraska, University of Toronto

C. Systems and Procedures Exchange Center

RESEARCH AND PUBLICATIONS COMPLETED

The OMS Occasional Paper Selection of the University Librarian (OP13) was published, with complimentary copies mailed to all ARL libraries in January 1988. Based on interviews with key participants in searches for library directors at five large universities, the paper provides observations, conclusions, and common themes for a successful search. This paper was done as a Collaborative Research Writing Project by Ruth J. Person, Dean of the College of Library Science at Clarion University, and George C. Newman, Director of the Edward H. Butler Library at the State University College of New York, Buffalo.

A complimentary copy of the 1987 Automation Inventory of Research Libraries was mailed to all SPEC Liaisons in late October. Information for the 1988 edition is being gathered from a simplified Update Reporting Form mailed to the Automation Inventory Contacts in all libraries. The Inventory's database remains available for searching on an individual basis.

An informal report on Library Advisory Committees was made available to interested ARL members. The report was the product of an on-demand survey conducted in October-November 1987 at the request of an ARL member. The report includes results selected from 23 respondents that deal with the role and composition of library advisory committees.

Copies of the 1982 Preservation Planning Program Resource Notebook were offered to ARL members for $10.00, after a revised 1987 edition of the notebook was completed. These first-edition notebooks are still highly useful for library preservation planning and education.

RESEARCH AND PUBLICATIONS IN PROGRESS

The Collaborative Research Writing (CRW) Program, which offers librarians within ARL institutions an opportunity to work with the OMS on projects of interest to ARL members, has been particularly active over the past six months.

Three CRW participants have been selected to present Poster Sessions at the ALA Conference in July, 1988 on the topics of: Fundraising and Library Development Strategies; Remote Access to Online Catalogs; and User Surveys.

Several substantive OMS Occasional Papers are underway, on the topics of:

Software and Copyright at ARL Universities. The focus is on analyzing the content of library policies regarding permitted and non-permitted software uses, to detail how libraries are meeting copyright challenges in this area. STATUS: IN PRESS

Telecommunications in Research Libraries: Local area networks;
integration with parent-institution networks; alternatives to
telecommunications-based remote database access (CD-ROM, BRS/Onsite);
and links between library systems. The focus is on management and
planning issues. STATUS: IN DRAFT

Turnover Rates. STATUS: IN DRAFT

Library Fundraising and Development. STATUS: IN DRAFT

SPEC KITS PRODUCED

Between October 1987 and May 5, 1988, SPEC Kits were published on
schedule on the following areas of interest:

SEARCH PROCEDURES FOR SENIOR LIBRARY ADMINISTRATORS (#143). Survey
results from 58 libraries reporting on 60 director searches and 176 AD-
  vel searches shows that procedures have changed in the past ten
ᵧears, with increasing participation by the parent institution in
director searches. April 1988.

REMOTE ACCESS TO ONLINE CATALOGS (#142). ḃased on a Fall 1987 SPEC
survey of 57 ARL institutions, this flyer discusses current issues
related to technology, users, services, and management. March 1988.

APPROVAL PLANS (#141). Survey responses from 94 ARL members indicate
that the percent of libraries using plans has increased somewhat since
1982, but the most striking change has been in the diversity of
practices and types of plans. February 1988.

PERFORMANCE APPRAISAL (#140). The Kit contains tabulated results from
a 1987 survey, seven overviews of performance appraisal systems, three
documents related to peer review, and three documents related to merit
systems. January 1988.

PERFORMANCE EVALUATION IN REFERENCE SERVICES (#139). Research shows
that measuring performance at the reference desk is the most
controversial aspect of evaluation, and that instructional services are
the only activities where qualitative data are collected as frequently
as quantitative data. November-December 1987.

UNIVERSITY COPYRIGHT POLICIES (#138). This kit approaches copyright
use and ownership policies from the viewpoint of university
administrations, as well as libraries. It supplements SPEC Kit #102.
October 1987.

SPEC KIT
SCHEDULE FOR REMAINDER OF 1988

TOPIC	PUBL.DATE	SURVEY	AUTHOR
Library Publications Programs	May88	SPEC-1988	M.Knudsen,Oklahoma
OR			
Building Use Policies	May88	On-demand-1986	P.Coyle, UCLA
Fundraising Strategies	Jun88	SPEC-1988	D.Jenkins/R.Person Southern Illinois
User Surveys	JuAg88	SPEC-1988	M.Westerman, Penn.St.
Electronic Mail	Sep88	SPEC-1988	H.Wiltse, G.I.T.
OR			
Remote Storage	Sep88	SPEC-1988	G.Stockton/Calif. System
Brittle Books	No-Dc88	SPEC-1988	J.Merrill-Oldham U.Conn.
Ana'ysis and Use of Management Statistics	1988	None	J.Vasi,S.Barbara

SPEC DEVELOPMENTAL ACTIVITIES

ARL/OMS CONFERENCE SHOWCASE BOOTHS

SPEC coordinated an ARL/OMS cooperative booth at the ALA
Midwinter Conference in San Antonio in January 1988. The
University of Michigan displayed information about its residents
program and Rice University demonstrated CD-ROM searches of
CASSIS. With the successful implementation of this booth, ARL/OMS
is planning another cooperative effort -- the ARL/OMS Library
Showcase -- for the ALA Conference in New Orleans in July 1988.
Nine libraries have been selected to participate: Kent State
University, Johns Hopkins University, University of Michigan, New
York State Library, Pennsylvania State University, Rutgers University,
Tulane University, Washington State University, and Wayne State
University.

ARL MANAGEMENT COMMITTEE COMPUTER CONFERENCING TEST
PROJECT

OMS and SPEC have been working with the ARL Management
Committee since January 1988 to test and evaluate computer
conferencing as a communication and planning mechanism for ARL
business and activities. The University of Guelph is supporting the
six-month test of the CoSy computer system.   All committee
members expressed support of this test; at the end of four months,
two have experimented with the system.

    D.   The Training and Staff Development Program

    During this period the following training events were conducted:

    -    A public Basic Management Skills Institute was held
         October 13-16, in Chicago, Illinois.

    -    A public Advanced Management Skills Institute was held
         November 9-13, in Philadelphia, Pennsylvania.

    -    A public Analytical Skills Institute was held December 1-4,
         in Honolulu, Hawaii.

    -    A sponsored Basic Management Skills Institute was held
         February 2-5, at Emory University.

    -    A sponsored Analytical Skills Institute was held February
         9-12, in Athens, Georgia.

    -    A Training the Trainers Workshop was held February 21-
         26, at the National Library of Canada.

- A Training the Trainers Workshop was held March 6-11, at the National Library of Canada (in French).

- A Basic Management Skills Institute was held March 21-24, National Library of Canada.

- A Basic Management Skills Institute was held April 11-14, National Library of Canada (in French).

- A Basic Management Skills Institute was held April 17-21, National Library of Canada.

The Management Institute for Assistant/Associate University Librarians in ARL Libraries was held April 26-29, 1988 at the Saugatuck Woman's Club in Saugatuck, Michigan.

The Managing the Learning Process Institute: Designed in 1986/87, this new training program has already been presented four times. It was offered publicly for the first time during August 1987 in Baltimore. Johns Hopkins served as a host site for training projects designed and presented by the participants. It was also offered as a sponsored program by A.I.M.A. in Australia. In 1988, it was incorporated into the National Library of Canada's Training the Trainers program and presented both in English and in French. It will be held this year at Notre Dame University, August 2-5.

The Developing Creative Potential in Libraries: Design work has been completed for a two-day workshop on creativity. It will be offered in December 1988. It will focus on understanding, developing and using personal creativity, as well as models, techniques and processes which promote organizational creativity. Publicity including location information will appear in early June.

The 1988 schedule of public Management Skills Institutes includes:

Basic Management Skills Institutes

| May 17-20, 1988 | Boston, MA |
| September 6-9, 1988 | St. Louis, MO |

Advanced Management Skills Institute

| November 6-11, 1988 | Charleston, SC |

Analytical Skills Institutes

| May 31 - June 3, 1988 | Detroit, MI |

| November 29 - December 2, 1988 | Austin, TX |

Managing the Learning Process Institute
| August 2-5, 1988 | Notre Dame, IN |

3.   OMS STAFF WORK WITH ARL COMMITTEES

    A.   ARL Committee on Management of Research Library
Resources: The committee reviewed the status of OMS programs at a
meeting held January, 1988.   The computer conferencing test is
continuing.   Members are being assisted in electronic mail use, as
well.

    B.   ARL Collection Management Committee: The committee
reviewed progress on the North American Collections Inventory
Project which is operated in cooperation with this Committee and is
working on the serials price issue.

    C.   ARL Statistics Committee: A kit on use of Management
Statistics will be published in 1988.   This kit will explore comparable
statistics, as well as inhouse statistics.

    D.   ARL Preservation Committee: The Committee advised on
the development of the NEH proposal concerning preservation self-
study.   A Kit on Brittle Books is being developed with Jan Merrill-
Oldham, to respond to the Committee's need.

    E.   ARL Task Force on Association Responsiveness: Staff
assistance was provided this group in setting up small group
discussions at the Fall 1987 ARL membership meeting.

OMS

1 9 8 7

A N N U A L

R E P O R T

[EXCERPTS]

Duane E. Webster
Deputy Executive Director, Association of Research
Libraries and Director, Office of Management Studies;
and Interim Executive Director, ARL,
November–December 1987

Jeffrey J. Gardner
Associate Director; and Interim Director,
November–December 1987.

Susan R. Jurow
Program Officer for Training

Jutta Reed-Scott
Part-time Collection Development Specialist

Maxine K. Sitts
Information Services Specialist

Marianne Seales
Office Manager

Karen Welter
Editorial Assistant and Meeting Planner

I N T R O D U C T I O N

F or academic research libraries to prosper in the scholarly information environment of the 1990s and beyond, several fundamental changes have to occur. Among these, libraries will need to redefine their vision, create new organizational and program strategies, and build a dynamic and performance-based culture for 'heir staffs. These shifts are being driven by the information technology revolution and its effects on information, the raw material of scholarship. Access to the resources of scholarship will continue to be managed within the context of technical advances and technology-based user expectations.

Access to information is improving to the benefit of both libraries and users. Already hundreds of new sources of information and formats for the storage and retrieval of information are in the marketplace. Satellite based data sources, computer-manager models of environmental, economic, historical, and social data; and computer-manipulated indexes and concordances to literary texts are already common to researchers. Computer-output microforms as well as optical, audio, video, and magnetic disks and tapes make new and old data sources more accessible to users. Documents previously inaccessible to local users are now readily available. Data that was previously difficult to compile and sort can be assemble ˆ .tilizing cheaper forms of storage and more powerful, yet more ˙ .ordable data processing routines.

That the power to create, access, manipulate, and exchange information exists for individual scholars is transforming many of the academic research library's users into sophisticated information processors. And while this places pressure on the human, financial, and organizational aspects of the academic library, it also sets the stage for a very different future.

This future will include an expanded view of libraries' value to the university community. Libraries will need to redefine and broaden their vision. Well developed access and an emphasis on how information is used to solve problems is likely to replace location of information as the primary mission of the library. This will inevitably call for librarians working as members of research and teaching teams. Academic libraries will avoid becoming simply warehouses for in print materials by remaining relevant to the changing teaching and research needs of their users and by grasping the opportunities presented by technology.

New organizational and program strategies will be n :essary to manage the information resources available through advanced technology. Libraries will need to establish new alliances and new ways to provide services. On-campus delivery systems for documents and information will be supplemented by advisory or consultant

7

2 INTRODUCTION

responsibilities to the campus researcher. Networks, developed to expedite the processing of libraries, will expand to provide a wide range of interlibrary support services. And cooperative collection management, including preservation, will be an increasingly important part of library operations.

New performance-based cultures within academic libraries which encourage innovative and change-oriented postures among staff will develop. These new cultures will support staff in their search for fresh approaches to providing service within a dynamic environment. In this environment, the library must be viewed as a vital, interesting place to work where services are at the cutting edge of information exchange.

North American research libraries are among the largest and best managed libraries in the world. Typically, they make effective use of limited resources. Their programs are responsive to diverse constituencies, and local services are maintained with high quality bibliographic records. New information formats and means of retrieval are being rapidly introduced, and the automation of operations and services is already commonplace. The seeds of change are planted. The question never has been whether libraries will change, but rather, how much change is needed, how fast can it be introduced, and how effectively can it be managed in an academic environment. As the scholarly information environment changes and as technology is applied, the management challenges facing research libraries will continue to demand concerted attention from the leaders of the institutions.

—*Duane E. Webster*

THE OFFICE OF MANAGEMENT STUDIES

The Office of Management Studies (OMS) was established in 1970 to help research and academic libraries develop better ways of managing their human and material resources, and to work with libraries in determining the best way to meet their needs in a dramatically changing information age. To achieve these ends, OMS trains library managers and staff members; offers consultation and assisted self-study services; and publishes a wide range of materials on management techniques, the introduction of new technology, and staff development.

Founded with support from the Council on Library Resources, OMS has received funding from a variety of sources since 1970. These include The Association of Research Libraries, Council on Library Resources, Andrew W. Mellon Foundation, General Electric Foundation, National Endowment for the Humanities, Lilly Endowment, Inc. and H.W. Wilson Foundation. Ongoing services and publications are supported by user fees. Guidance is provided by the A·   ·iation of Research Libraries' Committee on the Management of Research Library Resources and other project-related advisory groups.

Current, practical issues relating to library operations and management are the foundation of ongoing OMS activities. Collection management, preservation planning, technology application, and public services development are among the areas where OMS has developed special expertise to assist libraries in maintaining their roles as information centers and as preservers of their nations' heritage.

4 OFFICE OF MANAGEMENT STUDIES

ARL COMMITTEE ON THE MANAGEMENT OF RESEARCH LIBRARY RESOURCES, 1987

Sul H. Lee (CHAIR), Dean, University Libraries, University of Oklahoma (1987-89)

Ellen Hoffman, Director, York University (Term ended 1987)

Philip E. Leinbach, Librarian, Tulane University (1986-1988)

Jay K. Lucker, Library Director, Massachusetts Institute of Technology (Term ended 1987)

Susan Martin, Librarian, Johns Hopkins University (Term ended 1987)

Carlton C. Rochell, Dean, University Libraries, New York University (1986-1988)

Maureen Pastine, Director, Washington State University Library (1987-1989)

Thomas W. Shaughnessy (ex officio as Chair of Committee on ARL Statistics) Director, University of Missouri Library

Peter Spyers-Duran, Director, Wayne State University Libraries (1987-1989)

Joining the Committee at the End of 1987

John Black, Chief Librarian, University of Guelph Library (1988-1990)

Sheila Creth, Director, University of Iowa Libraries (1988-1990)

ARL COMMITTEE ON THE MANAGEMENT OF RESEARCH LIBRARY RESOURCES

The Association of Research Libraries' Committee on the Management of Research Library Resources oversees the planning and implementation of personnel, staffing and management directives of the ARL Plan of Action. It coordinates ARL's efforts to enhance the analytical capabilities of member libraries seeking effective resource management. The Chair of the Committee on ARL Statistics serves as an ex-officio member of the committee. In particular, the Committee on Management:

● monitors research in management-related areas and identifies problems, issues, and opportunities facing research libraries that should be addressed through the application of management methods and/or quantitative analyses, and makes recommendations to the ARL Board on policies, programs and positions;

● relates the work of ARL standing committees and task forces in the areas of statistical information and organizational and staff development to the overall needs in management, and keeps the committees and task forces informed of each other's work;

● oversees and advises on the work of the ARL Office of Management Studies; specifically assists in the development of management programs and activities to meet the needs of ARL member libraries, and in securing the financial resources needed to support these activities; assesses OMS performance in achieving its goals and the effectiveness of its programs; and recommends OMS policy and program priorities to the ARL Board;

● coordinates, where appropriate, ARL's work in the area of management with that of other national organizations and ensures, with the approval of the Board, that necessary liaisons between these organizations and ARL standing committees are in place.

SUMMARY OF ACTIVITIES IN 1987

D uring 1987, the Office of Management Studies was fully staffed and programs operated at a high level. The following is a brief summary of the highlights of OMS activities for the year.

Applied Research and Development

- OMS received a $45,000 grant from the Council on Library Resources to conduct a third Institute on Research Libraries for Library and Information Science Faculty. Twelve faculty will participate in the Institute which will be held in the Summer of 1988.
- Throughout the year, numerous new Conspectus materials and resources were released through the North American Collections Inventory Project, including more than a dozen revisions, guidelines and worksheets.
- Revision of the Manual for the North American Inventory of Research Library Collections was begun this year, reflecting the experience of project participants since it was first issued in 1985.
- The Council on Library Resources approved a $3,000 grant for the modification of worksheets and supplemental guidelines for the Conspectus. Librarians at several libraries produced the modifications and the grant helped defray the libraries' costs related to their work.

Academic Library Program

- During the year, 23 self-studies were underway in libraries in the United States and Canada, including nine Leadership Development Programs, five Public Services Studies, and three Preservation Planning Programs.
- Expanded and updated versions of the Preservation Planning Program Manual and Resource Notebook were issued this year with support from the National Endowment for the Humanities (NEH).
- The tenth and final NEH demonstration site, Iowa State University, issued its Preservation Planning Program Report.

6 *SUMMARY OF ACTIVITIES IN 1987*

Systems and Procedures Exchange Center
- OMS laid additional groundwork this year for its information clearinghouse to offer electronic alternatives to traditional print-oriented information services. As part of its efforts, the Automation Inventory was refined and the third report was issued in October.
- The center handled an average of 20 queries per month; served as liaison for 68 ARL members on ALANET, the electronic mail network, and completed two on-demand surveys. SPEC also conducted three mail and three phone surveys., and cooperated in other surveys with the Office of Scholarly Communication, the UCLA Graduate School of Library Science, and ARL's Preservation and Management Committees.

Training and Staff Development
- The training staff conducted seven public and six sponsored management institutes this year. Eleven special focus workshops and presentations were completed and a new program, "Managing the Learning Process" was initiated. Nearly 800 library staff participated in OMS training programs throughout 1987.
- A new series, Organizational Effectiveness Workshops, was inaugurated in 1987 for ARL member libraries, and two series were held. This series is designed for a specific library situation with the overall goal of enhancing organizational skills among professional and support staff.

Additional OMS Activities
The OMS staff worked with five ARL committees and task forces year round, contributing to the design and conduct of the Fall ARL membership meeting, and assisting in the updating of the ARL Strategic Plan.

In the Fall, OMS Director and ARL Deputy Executive Director, Duane E. Webster, assumed the role of Interim Executive Director of the Association of Research Libraries. OMS Associate Director Jeffrey J. Gardner assumed the role of OMS Interim Director.

P R I O R I T I E S   F O R   1 9 8 8

D uring 1988, OMS will consider initiatives in the following
areas:
 • planning an ARL Directors' Institute on a specific topic
in 1989
 • testing an electronic conferencing system for committee operations
 • designing a financial management skills institute
 • developing a process for designing and operating a campus-wide
information system

OMS will be seeking external funding support for a technical services
study; a training program for preservation administrators; and a dem-
onstration project using the North American Collections Inventory for
cooperative activities.

In collaboration the ARL Committee on Collection Development,
OMS will focus on the impact of the increased cost of serials, develop-
ing a clearinghouse ᴄ pability for information. The Office wili seek to
establish a working relationship with AAU and ACLS on this issue.

As in the past, OMS will continue to work with other ARL commit-
tees on projects of special interest and importance, most notably in the
areas of preservation and statistics.

*The priorities for the OMS
are established by the
Committee on the
Management of Research
Library Resources after
careful deliberation of the
needs and challenges of ARL
libraries. Research and
development priorities of the
office for 1988 will focus on
technology, financial skills,
and preservation training.*

*—Sul H. Lee, Dean,
 University Libraries
University of Oklahoma*

■ RESEARCH AND DEVELOPMENT

● Phase III of the North American Collections Inventory Project will
be completed. Under this program, conspectus tools and resources will
continue to be developed in cooperation with RLG. Public Service
Conspectus tools will be developed and tested at Dartmouth College,
and Conspectus software for microcomputers will be distributed.
Cooperative activities with C.A.R.L. and the National Library of Can-
ada will also continue.
● Plans will be finalized to assure the ongoing operation of the North
American Collections Inventory beyond June 1988. Procedures and a
cost recovery plan will be designed to maintain basic support activities,
and projects for using the Conspectus to support cooperative programs
in collection development and/or preservation will be considered for
funding.
● OMS staff will prepare a proposal to develop a process for designing
and operating an integrated ᴄ ampus information system, building on
existing and emerging library systems. Up to three cooperating libraries
ᴡ¹ ᴣ identified for development and testing.

● An ongoing in-house training program will be designed and operated at the National Library of Canada. This will include a six-day training-the-trainers workshop for selected staff, as well as a Basic Management Skills Institute for all library staff.

● A Financial Skills Institute will be planned for October 1988. This new institute will be designed and conducted by OMS staff.

■ ACADEMIC LIBRARY PROGRAM

OMS expects to start up to ten new library studies in the areas of collection, preservation, public service, and leadership development. Self-study resources will be maintained in the following eight areas, with emphasis on the first five:

● Leadership Development Program
● Preservation Planning Program
● Public Services Study
● Collection Analysis Project
● Organizational Screening
● Planning Program for Small Academic Libraries
● Academic Library Development Program
● Management Review and Analysis Program

■ SYSTEMS AND PROCEDURES EXCHANGE CENTER

The SPEC clearinghouse will continue to develop on-demand services tailored to individual library needs using a variety of databases and communication technologies. It will also seek to work with other professional groups and ARL committees to design surveys and research projects. Operational issues under consideration for monthly kits during 1988 include the following:

● performance appraisal
● approval plans
● building use policies
● remote access to the online catalog
● search procedures for administrators
● analysis and use of management statistics
● electronic mail
● library publication programs
● remote storage
● brittle books
● user surveys

Collaborative research-writers will be selected to work on these issues as well as occasional papers. The subjects for papers have been identified as:

● Alternative Strategies for Library Fundraising and Development
● University Copyright Practices and Policies

7ô

- Selection of the University Librarian
- Final Report on Staff Turnover
- Telecommunications Technology in Large Research Libraries

The Automation Inventory will continue. In the Spring, a call will be issued for new information, and an updated publication will be released in late Summer.

◼ ORGANIZATIONAL TRAINING AND STAFF DEVELOPMENT

In 1988, OMS will be offering two Basic Library Management Skills Institutes, one Advanced Library Management Skills Institute, and two Library Analytical Skills Institutes. The new institute, Managing the Learning Process in Libraries: How to Make Training Work, will be offered again in August, 1988 at Notre Dame, Indiana.

OMS will be also be conducting up to eight additional Management Skills Institutes on a sponsored basis, and up to 15 Special Focus Workshops. The training staff will redesign and plan two Institutes for Directors in 1989, and update bibliographies as well as the Advanced Institute Notebook.

◼ OTHER ACTIVITIES

OMS also will work with ARL committees on collection development, bibliographic control, preservation and statistics projects.

APPENDIX D

ATTENDANCE AT 112th MEMBERSHIP MEETING

Oakland, California
May 4-6, 1988

University of Alabama Libraries
    Not Represented

University of Alberta Library
    Peter Freeman

University of Arizona Library
    Shelly Phipps

Arizona State University Library
    Donald Riggs

Boston Public Library
    Not Represented

Boston University Library
    John Laucus

Brigham Young University Library
    Sterling J. Albrecht

University of British Columbia Library
    Douglas N. McInnes

Brown University Library
    Merrily Taylor

University of California, Berkeley Library
    Joseph Rosenthal

University of California, Davis Library
    Marilyn Sharrow

University of California, Irvine Library
    Calvin J. Boyer

University of California, Los Angeles Library
    Russell Shank

University of California, Riverside Library
    James Thompson

University of California, San Diego Library
    Dorothy Gregor

University of California, Santa Barbara Library
    Cecily Johns

Canada Inst. for Scientific & Technical Info.
    Margaret Y. Walshe

Case Western Reserve University Libraries
    Susan J. Coté

Center for Research Libraries
    Donald B. Simpson

University of Chicago Library
    Martin D. Runkle

University of Cincinnati Libraries
    Linda B. Cain

University of Colorado Library
    James F. Williams II

Colorado State University Library
    Joan Chambers

Columbia University Libraries
    Paula T. Kaufmann

University of Connecticut Library
    Norman D. Stevens

Cornell University Libraries
    Catherine Murray-Rust

Dartmouth College Libraries
Margaret A. Otto

University of Delaware Library
Susan Brynteson

Duke University Libraries
John Lubans

Emory University Library
Herbert F. Johnson

University of Florida Libraries
Dale Canelas

Florida State University Library
Charles E. Miller

Georgetown University Library
Joseph E. Jeffs

University of Georgia Libraries
Bonnie J. Clemens

Georgia Institute of Technology Library
Miriam Drake

University of Guelph Library
John Black

Harvard University Library
Sidney Verba

University of Hawaii Library
John R. Haak

University of Houston Libraries
Robin Downes

Howard University Libraries
Dorothy M. Haith

University of Illinois Library
David F. Bishop

Indiana University Libraries
Elaine F. Sloan

University of Iowa Libraries
Sheila Creth

Iowa State University Library
Warren B. Kuhn

Johns Hopkins University Library
Johanna Hershey

University of Kansas Library
Clinton Howard

University of Kentucky Libraries
Not Represented

Kent State University Libraries
Don Tolliver

Laval University Library
Claude Bonnelly

Library of Congress
William J. Welsh

Linda Hall Library
Louis E. Martin

Louisiana State University Library
Shaion Hogan

McGill University Library
Not Represented

McMaster University Library
Graham R. Hill

University of Manitoba Libraries
Judy Head

University of Maryland Library
H. Joanne Harrar

University of Massachusetts Libraries
Richard J. Talbot

Massachusetts Inst. of Technology Librs.
Jay K. Lucker

University of Miami Library
Frank D. Rodgers

University of Michigan Library
Richard M. Dougherty

Michigan State University Library
Richard E. Chapin

University of Minnesota Libraries
Not Represented

University of Missouri Library
Thomas W. Shaughnessy

National Agricultural Library
Not Represented

National Library of Canada
Marianne Scott

National Library of Medicine
Loi: Ann Colaianni

University of Nebraska-Lincoln Libraries
Kent Hendrickson

Newberry Library
Charles T. Cullen

University of New Mexico Library
Not Represented

New York Public Library
Paul Fasana

New York State Library
Not Represented

New York University Libraries
Carlton C. Rochell

University of North Carolina Libraries
James F. Govan

North Carolina State University Library
Susan K. Nutter

Northwestern University Libraries
John P. McGowan

University of Notre Dame Libraries
Robert C. Miller

Ohio State University Libraries
William J. Studer

University of Oklahoma Library
Sul H. Lee

Oklahoma State University Library
Edward R. Johnson

University of Oregon Library
George W. Shipman

University of Pennsylva iia Libraries
Not Represented

Pennsylvania State University Library
Stuart Forth

University ui Pittsburgh Libraries
Anne Woodsworth

Princeton University Library
Donald Koepp

Purdue University Library
Not Represented

Queen's University Library
Margot B. McBurney

Rice University Library
Samuel Carrington

University of Rochester Libraries
James F. Wyatt

Rutgers University Library
Joanne R. Euster

University of Saskatchewan Library
Paul Wiens

Smithsonian Institution Libraries
Vija Karklins

University of South Carolina Library
Kenneth E. Toombs

University of Southern California Library
Philip Tompkins

Southern Illinois University Library
Kenneth G. Peterson

Stanford University Libraries
  David C. Weber

State Univ. of New York at Albany Libraries
  Joseph Z. Nitecki

State Univ. of New York at Buffalo Libraries
  Barbara Von Wahlde

State Univ. of New York at Stony Brook Libs.
  John B. Smith

Syracuse University Libraries
  David H. Stam

Temple University Library
  James Myers

University of Tennessee Libraries
  Donald R. Hunt

University of Texas Libraries
  Harold W. Billings

Texas A & M University Library
  Irene B. Hoadley

University of Toronto Libraries
  Carole Moore

Tulane University Library
  Philip E. Leinbach

University of Utah Libraries
  Roger K. Hanson

Vanderbilt University Library
  Shirley Hallblade

Virginia Polytechnic Inst. & State Univ.
  Paul Gherman

University of Virginia Libraries
  Carol Pfeiffer

University of Washington Library
  Charles E. Chamberlin

Washington State University Library
  Maureen Pastine

Washington University Libraries
  Bernard D. Reams, Jr.

University of Waterloo Library
  Not Represented

Wayne State University Libraries
  Peter Spyers-Duran

University of Western Ontario Library
  Not Represented

University of Wisconsin Libraries
  D. Kaye Gapen

Yale University Libraries
  Millicent D. Abell

York University Libraries
  Ellen Hoffmann

NAME INDEX

Abell, Millicent D.	Yale University Libraries
Albrecht, Sterling J.	Brigham Young University Library
Billings, Harold W.	University of Texas Libraries
Bishop, David	University of Illinois Library
Black, John	University of Guelph Library
Bonnelly, Claude	Laval University Library
Boyer, Calvin J.	University of California, Irvine Library
Brynteson, Susan	University of Delaware Library
Cain, Linda	University of Cincinnati Libraries
Canelas, Dale	University of Florida Libraries
Carrington, Samuel	Rice University Library
Chamberlin, Charles E.	University of Washington Library
Chambers, Joan	Colorado State University Library
Chapin, Richard E.	Michigan State University Library
Clemens, Bonnie J.	University of Georgia Libraries
Colaianni, Lois Ann	National Library of Medicine
Cote, Susan J.	Case Western Reserve Libraries
Creth, Sheila D.	University of Iowa Libraries
Cullen, Charles T.	Newberry Library
Dougherty, Richard M.	University of Michigan Library
Downes, Robin N.	University of Houston Libraries
Drake, Miriam	Georgia Institute of Technology Library
Euster, Joanne	Rutgers University Library
Fasana, Paul	New York Public Library
Forth, Stuart	Pennsylvania State University Library
Freeman, Peter	University of Alberta Library
Gapen, D. Kaye	University of Wisconsin Libraries
Gherman, Paul M.	Virginia Polytechnic Inst. and State University
Govan, James F.	University of North Carolina Libraries
Gregor, Dorothy	University of California, San Diego Library
Haak, John R.	University of Hawaii Library
Haith, Dorothy M.	Howard University Libraries
Hallblade, Shirley	Vanderbilt University Library
Hanson, Roger K.	University of Utah Libraries
Harrar, H. Joanne	University of Maryland Library
Head, Judy	University of Manitoba Libraries
Hendrickson, Kent	University of Nebraska, Lincoln Libraries
Hershey, Johanna	Johns Hopkins University Library
Hill, Graham R.	McMaster University Library

Hoadley, Irene B.	Texas A & M University Library
Hoffmann, Ellen	York University Libraries
Hogan, Sharon A.	Louisiana State University Library
Howard, Clinton	University of Kansas Library
Hunt, Donald R.	University of Tennessee Libraries
Jeffs, Joseph E.	Georgetown University Library
Johns, Cecily	University of California, Santa Barbara Library
Johnson, Edward R.	Oklahoma State University Libraries
Johnson, Herbert F	Emory University Library
Karklins, Vija	Smithsonian Institution Libraries
Kaufman, Paula	Columbia University Libraries
Koepp, Donald	Princeton University Library
Kuhn, Warren B.	Iowa State University Library
Laucus, John	Boston University Libraries
Lee, Robert	University of Western Ontario
Lee, Sul H.	University of Oklahoma Library
Leinbach, Philip E.	Tulane University Library
Lubans, John	Duke University Libraries
Lucker, Jay K.	Massachusetts Inst. of Technology Libraries
Martin, Louis E.	Linda Hall Library
McBurney, Margot B.	Queen's University Library
McGowan, John P.	Northwestern University Libraries
McInnes, Douglas	University of British Columbia Library
Miller, Charles E.	Florida State University Library
Miller, Robert C.	University of Notre Dame Libraries
Moore, Carole	University of Toronto Libraries
Murrary-Rust, Catherine	Cornell University Libraries
Myers, James	Temple University Library
Nitecki, Joseph Z.	State University of New York at Albany Libraries
Nutter, Susan K.	North Carolina State University
Otto, Margaret	Dartmouth College Libraries
Pastine, Maureen	Washington State University Library
Peterson, Kenneth G.	Southern Illinois University Library
Pfeiffer, Carol	University of Virginia Libraries
Phipps, Shelley	University of Arizona Library
Reams, Bernard D.	Washington University Libraries
Riggs, Donald	Arizona State University Library
Rochell, Carlton C.	New York University Libraries
Rodgers, Frank	University of Miami Library
Rosenthal, Joseph A.	University of California, Berkeley Library
Runkle, Martin D.	University of Chicago Library

Scott, Marianne	National Library of Canada
Shank, Russell	University of California, Los Angeles Library
Sharrow, Marilyn J.	University of California, Davis Library
Shaughnessy, Thomas	University of Missouri Library
Shipman, George W.	University of Oregon Library
Simpson, Donald B.	Center for Research Libraries
Sloan, Elaine	Indiana University Libraries
Smith, John B.	State University of New York at Stony Brook Libraries
Spyers-Duran, Peter	Wayne State University Libraries
Stam, David H.	Syracuse University Libraries
Stevens, Norman D.	University of Connecticut Libraries
Studer, William J.	Ohio State University Libraries
Talbot, Richard J.	University of Massachusetts Libraries
Taylor, Merrily E.	Brown University Library
Tolliver, Don	Kent State University Libraries
Tompkins, Philip	University of Southern California Library
Toombs, Kenneth E.	University of South Carolina Libraries
Verba, Sidney	Harvard University Libraries
von Wahlde, Barbara	State University of New York at Buffalo Libraries
Walshe, Margaret Y.	Canada Institute for Scientific and Technical
Information	
Weber, David C.	Stanford University Libraries
Welsh, William	Library of Congress
Wiens, Paul	University of Saskatchewan Library
Williams, James F.	University of Colorado Libraries
Woodsworth, Anne	University of Pittsburgh Libraries
Wyatt, James F.	University of Rochester Libraries

ARL STAFF

Webster, Duane E.	Executive Director
Barrett, Jaia	Program Officer
Daval, Nicola	Program Officer
Gardner, Jeffrey J.	Director, Office of Management Services
Jurow, Susan	Program Officer, Office of Management Services
McConnell, Margaret	Administrative Assistant
Reed-Scott, Jutta	Program Officer
Sitts, Maxine K.	Program Officer, Office of Management Services

GUESTS

Armstrong, Scott	National Security Archive
Avram, Henriette, D.	Library of Congress
Battin, Patricia	Commission on Preservation and Access
Brown, Rowland C.W.	OCLC, Inc.
Chisholm, Margaret	American Library Association
Hahn, Ellen	Library of Congress
Mathews, Anne	U.S. Department of Education
Merrill-Oldham, Jan	University of Connecticut Library
Segal, JoAn	Association of College and Research Libraries
Sittig, William J.	Library of Congress
Smith, Dennis	University of California
Sparks, Peter	Library of Congress

APPENDIX E

OFFICERS, BOARD OF DIRECTORS, COMMITTEES AND TASK FORCES

MAY 1988

ARL OFFICERS AND BOARD FOR 1987-88

Elaine F. Sloan, President
Charles E. Miller, Vice President & President-Elect
Herbert F. Johnson, Past-President

David F. Bishop	(Oct. 1986-Oct. 1989)
Peter Freeman	(Oct. 1986-Oct. 1989)
D. Kaye Gapen	(Oct. 1987-Oct. 1990)
Carlton Rochell	(Oct. 1987-Oct. 1990)
Martin D. Runkle	(Oct. 1985-Oct. 1988)
Marilyn Sharrow	(Oct. 1987-Oct. 1990)
Merrily Taylor	(Oct. 1986-Oct. 1989)

STANDING COMMITTEES AND TASK FORCES

Committee on Government Policies

Susan Brynteson (1986-88)
James Myers (1987-89)
Joseph Rosenthal (1987-89)
Paul Gherman (1988-90)
James F. Wyatt (1986-89), Chair (1986-88)

Staff: Jaia Barrett

Committee on Nominations

Irene B. Hoadley (1988)
Joseph Rosenthal (1988)
Charles E. Miller, ARL Vice President, Chair (1988)

Committee on ARL Membership

Irene B. Hoadley (1988)
Donald Koepp (1988)
Merrily Taylor (1988)
Herbert F. Johnson, ARL Past President, Chair (1988)

Committee on the Management of Research Library Resources

John Black (1988-90)
Sheila Creth (1988-90)
Philip E. Leinbach (1986-88)
Carlton C. Rochell (1986-88)
Maureen Pastine (1987-89)
Thomas W. Shaughnessy (ex officio as Chair of Committee on ARL Statistics)
Peter Spyers-Duran (1987-89)
Sul H. Lee (1987-89), Chair (1987-88))

Staff: Duane Webster

Committee on ARL Statistics

Dale Canelas (1987-89)
Gordon Fretwell, University of Massachusetts (Consultant)
Robert Lee (1986-88)
Susan K. Martin (1988-90)
Kendon Stubbs, University of Virginia (Consultant)
Don Tolliver (1986-88)
Thomas W. Shaughnessy (1986-88), Chair (1987-88)

Staff: Nicola Daval

Committee on Bibliographic Control

Sterling J. Albrecht (1986-88)
Henriette Avram, Library of Congress Liaison
Paul Fasana (1988-90)
Dorothy Gregor (1987-89)
Jay K. Lucker (1988-90)
Marianne Scott (1986-88)
David Bishop (1986-88), Chair (1987-88)

Staff· Jutta Reed-Scott

Committee on Collection Development

    Millicent D. Abell   (1986-88)
    Joseph Boissé   (1987-89)
    Susan Coté (1986-88)
    Kent Hendrickson   (1987-89)
    Susan K. Nutter (1988-90)
    William Sittig, Library of Congress Liaison
    Mary Jane Starr, National Library of Canada Liaison
    Peter Freeman   (1986-88), Chair (1987-88)

    Staff: Jeffrey Gardner

Committee on Preservation of Research Library Materials

    James F. Govan (1987-89)
    Donald Koepp (1988-90)
    Carole Moore   (1987-89)
    John P. McGowan   (1987-89)
    Peter Winterble, Council on Library Resources (observer)
    Jan Merrill-Oldham   (Consultant)
    John B. Smith   (1986-88)
    Peter Sparks, Library of Congress Liaison
    David C. Weber,   (1986-88), Chair (1987-88)

    Staff: Jutta Reed-Scott

Program Committee for Fall 1988 Meeting - ARL Members

    Millicent D. Abell
    Martin D. Runkle
    David C. Weber

    Staff: Nicola Daval

Task Force on Review of the ARL Five-Year Plan (1988)

James F. Govan
Marilyn Sharrow
Elaine F. Sloan
Duane E.Webster (ex-officio)
D. Kaye Gapen, Chair

ADVISORY COMMITTEES

North American Collections Inventory Project

David Farrell, Indiana University
Leslie Hume, Research Libraries Group
Paul Mosher, Stanford University
Susan Nutter, Massachusetts Institute of Technology
Elaine F. Sloan
David H. Stam

Staff: Jeffrey Gardner

REPRESENTATIVES

National Information Standards Organization (NISO)	Joanne Harrar
NISO Standards Voting Representative	Duane E. Webster
CONSER Advisory Group	Susan Brynteson
Eighteenth-Century Short Title Catalogue	Ray Frantz
LC Cataloging-in-Publication Advisory Group	George Gibbs, UCLA
LC Network Advisory Committee	William Studer
Society of American Archivists	Herbert Finch, Cornell
Universal Serials & Book Exchange	Joanne Harrar
National Institute of Conservators	David Stam
IFLA Voting Representative	Duane E. Webster
RLG Conspectus Development Task Force	David Farrell, Indiana
Advisory Committee, Commission On Preservation and Access	David Weber
Advisory Committee to the Library/Book Fellows program	Duane E. Webster

MEMBERSHIP OF THE ASSOCIATION

MAY 1988

University of **Alabama** Libraries
P.O. Box S
Tuscaloosa, Alabama   35487-9784
    Charles B. Osburn, Director
    (205) 348-7561

University of **Alberta** Library
Edmonton, Alberta, Canada T6G 2J8
    Peter Freeman, Librarian
    (403) 432-3790

University of **Arizona** Library
Tucson, Arizona   85721
    W. David Laird, Librarian
    (602) 621-2101

Arizona State University Library
Tempe, Arizona   85281
    Donald Riggs, Librarian
    (602) 965-3417

Boston Public Library
Copley Square
Boston, Massachusetts 02117
    Arthur Curley, Librarian
    (617) 536-5400

Boston University Library
Boston, Massachusetts   02215
    John Laucus, Director
    (617) 353-3710

Brigham Young University Library
324 Lee Library
Provo, Utah   84602
    Sterling J. Albrecht, Univ. Libn.
    (801) 378-2905

University of **British Columbia** Library
Vancouver, B.C., Canada V6T 1W5
    Douglas McInnes, Librarian
    (604) 228-2298

Brown University Library
Providence, Rhode Island 02912
    Merrily Taylor, Librarian
    (401) 863-2162

University of **California** Library, **Berkeley**
Berkeley, California   94720
    Joseph Rosenthal, Univ. Librarian
    (415) 642-3773

University of **California** Library, **Davis**
Davis, California   95616
    Marilyn Sharrow, Univ. Librarian
    (916) 752-2110

University of **California, Irvine**
The University Library
P.O. Box 19557
Irvine, California 92713
    Calvin J. Boyer, University Librarian
    (714) 856-5212

University of **California** Library, **Los Angeles**
Los Angeles, California   90024
    Russell Shank, Librarian
    (213) 825-1201

University of **California** Library, **Riverside**
P.O. Box 5900
Riverside, California   92517
    James Thompson, Univ. Librarian
    (714) 787-3221

University of **California, San Diego**
The University Library
La Jolla, California   92037
    Dorothy Gregor, Univ. Librarian
    (619) 534-3061

University of **California, Santa Barbara**
The University Library
Santa Barbara, California 93106
    Joseph A. Boissé, Librarian
    (805) 961-3256

**Canada Institute for Scientific
& Technical Information**
National Research Council of Canada
Ottawa, Canada K1A OS2
    Elmer V. Smith, Director
    (613) 993-2341

Case Western Reserve University Libraries
Cleveland, Ohio   44106
    Susan Coté, Director
    (216) 368-2990

Center for Research Libraries
6050 South Kenwood Avenue
Chicago, Illinois   60637
    Donald B. Simpson, President
    (312) 955-4545

University of **Chicago** Library
Chicago, Illinois   60637
    Martin D Runkle, Director
    (312) 702-8744

University of **Cincinnati** Libraries
Cincinnati, Ohio   45221
    Linda B. Cain, Dean and
      University Librarian
    (513) 475-2218

University of **Colorado** Library
Boulder, Colorado   80309
    James F. Williams II, Director
    (303) 492-7511

Colorado State University Library
Fort Collins, Colorado   80523
    Joan Chambers, Director
    (303) 491-1833

Columbia University Libraries
New York, New York   10027
    Paula T. Kaufmar, Acting Vice President
    for Infor. Services & Univ. Libn.
    (212) 280-2247

University of **Connecticut** Library
Storrs, Connecticut   06268
    Norman D. Stevens, Director
    (203) 486-2219

Cornell University Libraries
Ithaca, New York   14850
    Alain Seznec, Univ. Libn.
    (607) 255-3689

Dartmouth College Libraries
Hanover, New Hampshire   03755
    Margaret A. Otto, Librarian
    (603) 646-2235

University of **Delaware** Library
Newark, Delaware   19717-5267
    Susan Brynteson, Director
    (302) 451-2231

Duke University Libraries
Durham, North Carolina   27706
    Jerry Campbell, Univ. Libn.
    (919) 684-2034

Emory University Library
Atlanta, Georgia   30322
    Lawrence J. Kipp, Interim
      Director of Libraries
    (404) 727-6861

University of **Florida** Libraries
Gainesville, Florida   32603
    Dale Canelas, Director
    (904) 392-0342

Florida State University Library
Tallahassee, Florida   32306
    Charles E. Miller, Director
    (904) 644-5211

Georgetown University Library
Washington, D.C.   20007
    Joseph E. Jeffs, Director
    (202) 625-4095

University of **Georgia** Libraries
Athens, Georgia   30601
    Bonnie I. Clemens, Acting Director
    (404) 542-2715

Georgia Institute of Technology
Price Gilbert Memorial Library
Atlanta, Georgia 30332
    Miriam Drake, Director
    (404) 894-4510

University of **Guelph** Library
Guelph, Ontario, Canada N1G 2W1
    John Black, Chief Librarian
    (519) 824-4120

Harvard University Library
Wadsworth House
Cambridge, Massachusetts 02138
    Sidney Verba, Director
    (617) 495-3650

University of **Hawaii** Library
2550 The Mall
Honolulu, Hawaii 96822
    John R. Haak, Director
    (808) 948-7205

University of **Houston** Libraries
Houston, Texas 77004
    Robin Downes, Director
    (713) 749-4241

Howard University Libraries
500 Harvard Place, N.W.
Box 1059
Washington, D.C. 20059
    Dorothy M. Haith, Director
    (202) 636-7234

University of **Illinois** Library
1408 West Gregory Drive
Urbana, Illinois 61801
    David Bishop, University Libn.
    (217) 333-0790

Indiana University Libraries
Bloomington, Indiana 47405
    Elaine F. Sloan, Dean of Univ. Librs.
    (812) 335-3404

University of **Iowa** Libraries
Iowa City, Iowa 52242
    Sheila Creth, Director
    (319) 335-5868

Iowa State University Library
Ames, Iowa 50011
    Warren B. Kuhn, Dean of Lib. Services
    (515) 294-1442

Johns Hopkins University Library
The Milton S. Eisenhower Library
Baltimore, Maryland 21218
    Susan K. Martin, Librarian
    (301) 338-8325

University of **Kansas** Library
Lawrence, Kansas 66044
    James Ranz, Dean of Libraries
    (913) 864-3601

University of **Kentucky** Libraries
Lexington, Kentucky 40506
    Paul A. Willis, Director
    (606) 257-3801

Kent State University Libraries
Room 300
Kent, Ohio 44242
    Don Tolliver, Director
    (216) 672-2962

Laval University Library
Cité Universitaire
Québec, Canada G1K 7P4
    Céline R. Cartier, Director
    (418) 656-2008

Library of Congress
Washington, D.C. 20540
    James H. Billington, Librarian
    (202) 287-5205

Linda Hall Library
Kansas City, Missouri 64110
    Louis E. Martin, Director
    (816) 363-4600

Louisiana State University Library
Baton Rouge, Louisiana 70803
    Sharon Hogan, Director
    (504) 388-2217

McGill University Library
3459 McTavish Street
Montreal, Canada H3A 1Y1
 Eric Ormsby, Director
 (514) 398-4677

McMaster University Library
1280 Main Street West
Hamilton, Ontario, Canada L8S 4L6
 Graham R. Hill, University Librarian
 (416) 525-9140 Local 4359

University of Manitoba Libraries
Winnipeg, Manitoba R3T 2N2
Canada
 Earl Ferguson, Director
 (204) 474-9881

University of Maryland Library
College Park, Maryland 20742
 H. Joanne Iarrar, Librarian
 (301) 454-3011

University of Massachusetts Libraries
Amherst, Massachusetts 01003
 Richard J. Talbot, Director
 (413) 545-0284

Massachusetts Inst. of Technology Libs.
Cambridge, Massachusetts 02139
 Jay K. Lucker, Director
 (617) 253-5651

University of Miami Library
P.O. Box 248214
Coral Gables, Florida 33124
 Frank Rodgers, Director
 (305) 284-3551

University of Michigan Library
Ann Arbor, Michigan 48109
 Richard M. Dougherty, Director
 (313) 764-9356

Michigan State University Library
East Lansing, Michigan 48823
 Richard E. Chapin, Director
 (517) 355-2341

University of Minnesota Libraries
Minneapolis, Minnesota 55455
 John Howe, Interim Director
 (612) 624-4520

University of Missouri Library
Ellis Library - Room 104
Columbia, Missouri 65201
 Thomas W. Shaughnessy, Director
 (314) 882-4701

National Agricultural Library
Beltsville, Maryland 20705
 Joseph H. Howard, Director
 (301) 344-4248

National Library of Canada
395 Wellington Street
Ottawa, Ont., Canada K1A 0N4
 Marianne Scott, National Librarian
 (613) 996-1623

National Library of Medicine
Bethesda, Maryland 20894
 Donald A. Lindberg, Director
 (301) 496-6221

University of Nebraska-Lincoln
The University Libraries
Lincoln, Nebraska 68588-0410
 Kent Hendrickson, Dean of Librs.
 (402) 472-2526

The Newberry Library
60 West Walton Street
Chicago, Illinois 60610
 Charles Cullen, President
 (312) 943-9090

The University of New Mexico
Zimmerman Library
Albuquerque, New Mexico 87131
 Robert L. Migneault, Dean of
  Library Services
 (505) 277-4241

New York Public Library
Fifth Avenue at 42nd Street
New York, New York 10018
    Paul Fasana, Director of
        the Research Libraries
    (212) 930-0708

New York State Library
Cultural Education Center
Empire State Plaza
Albany, New York 12234
    Jerome Yavarkovsky, Director
    (518) 474-5930

New York University Libraries
70 Washington Square South
New York, New York 10012
    Carlton C. Rochell, Dean of Libraries
    (212) 998-2444

University of North Carolina Libraries
Chapel Hill, North Carolina 27515
    James F. Govan, University Librarian
    (919) 962-1301

North Carolina State University
D.H. Hill Library
Box 7111
Raleigh, North Carolina 27695-7111
    Susan K. Nutter, Director
    (919) 737-2843

Northwestern University Libraries
Evanston, Illinois 60201
    John P. McGowan, Librarian
    (312) 491-7640

University of Notre Dame Libraries
Notre Dame, Indiana 46556
    Robert C. Miller, Director
    (219) 239-5252

Ohio State University Libraries
Columbus, Ohio 43210
    William J. Studer, Director
    (614) 292-4241

University of Oklahoma Library
Norman, Oklahoma 73069
    Sul H. Lee, Dean, University Librs.
    (405) 325-2611

Oklahoma State University Library
Stillwater, Oklahoma 74078
    Edward R. Johnson
    Dean of Library Services
    (405) 624-6321

University of Oregon Library
Eugene, Oregon 97403-1299
    George W. Shipman, Univ. Libn.
    (503) 686-3056

University of Pennsylvania Libraries
Philadelphia, Pennsylvania 19104
    Joan I. Gotwals, Acting Director
    (215) 898-7091

Pennsylvania State University Library
University Park, Pennsylvania 16802
    Stuart Forth, Dean of Univ. Libraries
    (814) 865-0401

University of Pittsburgh Libraries
271 Hillman Library
Pittsburgh, Pennsylvania 15260
    Anne Woodsworth, Assoc. Provost
        for Libraries
    (412) 648-7710

Princeton University Library
Princeton, New Jersey 08540
    Donald Koepp, University Librarian
    (609) 452-3170

Purdue University Library
Lafayette, Indiana 47907
    Joseph M. Dagnese, Director
    (317) 494-2900

Queen's University
Douglas Library
Kingston, Canada K7L 5C4
    Margot B. McBurney, Chief Libn.
    (613) 545-2519

Rice University Library
6100 S. Main, Box 1892
Houston, Texas 77251-1892
    Samuel Carrington, Director
    (713) 527-4022

University of **Rochester** Libraries
Rochester, New York 14627
  James F. Wyatt, Director
  (716) 275-4463

Rutgers University Library
New Brunswick, New Jersey 08901
  Joanne R. Euster
  University Librarian
  (201) 932-7505

University of **Saskatchewan Library**
Saskatoon, Canada S7N OWO
  Paul Wiens, University Libn.
   and Director of Libraries
  (306) 966-5927

Smithsonian Institution Libraries
Constitution Avenue at 10th St., N.W.
Washington, D.C. 20560
  Vija Karklins, Acting Director
  (202) 357-2240

University of **South Carolina** Libraries
Columbia, South Carolina 29208
  Kenneth E. Toombs, Director of Libs.
  (803) 777-3142

University of **Southern California** Library
Los Angeles, California 90089-0182
  Charles R. Ritcheson, Librarian
  (213) 743-2543

Southern Illinois University Library
Carbondale, Illinois 62901
  Kenneth G. Peterson, Dean of
   Library Affairs
  (618) 453-2522

Stanford University Libr. ries
Green Library
Stanford, California 94305
  David C. Weber, Director
  (415) 723-2015

State University of New York at Albany
  Libraries
1400 Washington Avenue
Albany, New York 12222
  Joseph Z. Nitecki, Director
  (518) 442-3568

State University of New York at Buffalo
Libraries
432 Capen Hall
Buffalo, New York 14260
  Barbara von Wahlde, Assoc. Vice
  President for Univ. Libraries
  (716) 636-2967

**State University of New York at Stony
Brook** Library
Stony Brook, New York 11794
  John B. Smith, Director & Dean of
  Lib.
  (516) 632-7100

Syracuse University Libraries
Syracuse, New York 13244-2010
  David H. Stam, University Librarian
  (315) 423-2574

Temple University Library
Paley Library
Philadelphia, Pennsylvania 19122
  James Myers, Director
  (215) 787-8231

University of **Tennessee** Libraries
Knoxville, Tennessee 37996-1000
  Donald R. Hunt, Director
  (615) 974-4127

University of **Texas** Libraries
Austin, Texas 78713-7330
  Harold W. Billings, Director
  (512) 471-3811

Texas A&M University Library
Sterling C. Evans Library
College Station, Texas 77843
  Irene B. Hoadley, Director
  (409) 845-8111

University of **Toronto** Libraries
Toronto, Ont., Canada M5S 1A5
  Carole Moore, Chief Librarian
  (416) 978-2292

Tulane University Library
New Orleans, Louisiana 70118
  Philip E. Leinbach, Librarian
  (504) 865-5131

University of **Utah** Libraries
Salt Lake City, Utah   84112
    Roger K. Hanson, Director
    (801) 581-8558

Vanderbilt University Library
419 21st Avenue South
Nashville, Tennessee   37203
    Malcolm Getz, Assoc. Provost
      for Infor. Services
    (615) 322-7100

University of **Virginia**
Alderman Library
Charlottesville, Virginia   22901
    Ray Frantz, Jr., Librarian
    (804) 924-3026 or 7849

Virginia Polytechnic Inst. and State Univ.
Blacksburg, Virginia   24061
    Paul Gherman, Director of Librs.
    (703) 961-5593

University of **Washington** Library
Seattle, Washington   98194-5610
    Merle N. Boylan, Director
    (206) 543-1760

Washington State University Library
Pullman, Washington   99163
    Maureen Pastine, Director
      of Libraries
    (509) 335-4557

Washington University Libraries
St. Louis, Missouri   63130
    Bernard Reams, Acting Director
      of Libraries
    (314) 889-5400

University of **Waterloo**
Waterloo, Ontario, Canada N2L 3G1
    Murray C. Shepherd, Univ. Libn.
    (519) 885-1211)

Wayne State University Libraries
Detroit, Michigan   48202
    Peter Spyers-Duran, Director
    (313) 577-4020

University of **Western Ontario**
DB Weldon Library
London, Ontario, Canada   M6A 3K7
    Robert Lee, Director of Libs.
    (519) 661-3165

University of **Wisconsin** Libraries
728 State Street
Madison, Wisconsin   53706
    D. Kaye Gapen, Director
    (608) 262-2600

Yale University Libraries
New Haven, Connecticut   06520
    Millicent D. Abell, Librarian
    (203) 432-1818

York University Libraries
4700 Keele Street
Downsview, Ontario, Canada M3J 1P3
    Ellen Hoffmann, Director
    (416) 667-2235

APPENDIX G

ASSOCIATION OF RESEARCH LIBRARIES

REPORT ON FINANCIAL STATEMENTS

(with supplementary information)
(Modified Cash Basis)

YEARS ENDED DECEMBER 31, 1987 AND 1986

Our reports are issued with the under-
standing that, without our consent, they may
be produced only in their entirety. Should
it be desired to issue or publish a conden-
sation or a portion of this report and our
name is to be used in connection therewith,
our approval must first be secured.

CANTO, METRO, MEYER & COMPANY
A Professional Corporation
Certified Public Accountants
Bethesda, Maryland

This report consists of 17 pages.

ASSOCIATION OF RESEARCH LIBRARIES
YEARS ENDED DECEMBER 31, 1987 AND 1986

TABLE OF CONTENTS

101

CAMM

Board of Directors
Association of Research Libraries
Washington, D.C.

We have examined the statement of assets and liabilities arising from cash
transactions of Association of Research Libraries as of December 31, 1987 and
1986, and the related statement of revenue collected and expenses paid for the
years then ended. Our examination was made in accordance with generally
accepted auditing standards and, accordingly, included such tests of the
accounting records and such other auditing procedures as we considered
necessary in the circumstances.

As described in note 1, the Association of Research Libraries' policy is to
prepare its financial statements on the basis of cash receipts and disburse-
ments; consequently, certain revenue and the related assets are recognized when
received rather than when earned, and certain expenses are recognized when paid
rather than when the obligation is incurred. Accordingly, the accompanying
financial statements are not intended to present financial position and results
of operations in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the
assets and liabilities arising from the cash transactions of Association of
Research Libraries as of December 31, 1987, and the revenue collected and
expenses paid during the year then ended, on the basis of accounting described
in note 1, which has been applied in a manner consistent with that of the
preceding year.

CANTO, METRO, MEYER & COMPANY
A Professional Corporation
Certified Public Accountants

April 7, 1988

JCM/spf

-1-

ASSOCIATION OF RESEARCH LIBRARIES
STATEMENTS OF ASSETS, LIABILITIES AND FUND BALANCE
(MODIFIED CASH BASIS)

A S S E T S

	GENERAL OPERATING FUND	OFFICE OF MANAGEMENT STUDIES	YEAR ENDED DECEMBER 31, 1987	1986
Cash	$ 300	$ ---	$ 300	$ 20,335
Investments, short-term at cost (notes 2 & 3)	497,967	30,979	528,946	552,861
Accounts receivable	33,861	58,132	91,993	46,812
Prepaid expenses	8,419	--	8,419	2,177
Deposits	2,516	--	2,516	2,392
Furniture & equipment	120,892	53,914	174,806	133,561
Less: accumulated depreciation	(78,086)	(35,344)	(113,430)	(77,275)
Total	$ 585,869	$ 107,681	$ 693,550	$ 680,863

LIABILITIES AND FUND BALANCES

Unapplied grant income (schedule)	$ 301,721	$ 63,475	$ 365,196	$ 415,676
Obligation under capital lease (note 4)	555	554	1,109	4,619
Dues paid in advance	6,584	--	6,584	--
Accounts payable	91,099	--	91,099	12,021
Payroll taxes withheld	35,679	--	35,679	10,591
Total liabilities	435,638	64,029	499,667	442,907
Fund balances	150,231	43,652	193,883	237,956
Total	$ 585,869	$ 107,681	$ 693,550	$ 680,863

The accompanying letter and notes are an integral part of these financial statements.

-2-

103

104

ASSOCIATION OF RESEARCH LIBRARIES
GENERAL OPERATING FUND
STATEMENTS OF REVENUE COLLECTED AND
EXPENSES PAID AND CHANGES IN FUND BALANCE
(MODIFIED CASH BASIS)

	BUDGET 1987	YEAR ENDED DECEMBER 31, 1987	1986
REVENUE			
Dues	$ 680,860	$ 680,860	$ 647,820
Interest	30,000	28,628	22,750
Publications	30,000	18,946	19,925
Miscellaneous	3,094	5	--
Cost recovery	--	5,171	3,188
	743,954	733,610	693,683
EXPENSES (Schedule - page 10)	$ 743,954	797,245	746,536
Less: administrative expenses charged to special programs		--	(9,184)
Net expenses		--	737,352
Excess (deficiency) of revenue collected over expenses paid		(63,635)	(43,669)
Fund balance, beginning of year		192,336	230,017
Adjustments to fund balance			
Balance in special programs - current year		21,530	4,361
- prior year		--	1,627
Fund balance, end of year		$ 150,231	$ 192,336

The accompanying letter and notes are an integral part of these financial statements.

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT STUDIES
STATEMENTS OF REVENUES COLLECTED AND
EXPENSES PAID AND CHANGES IN FUND BALANCE
(MODIFIED CASH BASIS)

	BUSINESS PLAN 1987	YEAR ENDED DECEMBER 31, 1987	1986
REVENUE			
Cost recovery	$ 40,000	$ 38,716	$ 29,502
Sales of publications	150,000	134,104	150,431
ARL support - transferred from general operating fund	121,500	121,716	119,800
Management institutes/training	140,000	166,667	134,680
Consultation	50,000	70,770	30,263
Interest income	10,000	4,442	6,382
Total revenue	511,500	536,415	471,058
EXPENSES (Schedule - page 12)	$ 511,500	534,058	445,395
Excess (deficiency) of revenues collected over expenses paid		2,357	25,663
Balance - special programs		(4,325)	(22,256)
Fund balance, beginning of year		45,620	42,213
Fund balance, end of year		$ 43,652	$ 45,620

The accompanying letter and notes are an integral part of these financial statements.

-4-   106

ASSOCIATION OF RESEARCH LIBRARIES
STATEMENTS OF CHANGES IN CASH
(MODIFIED CASH BASIS)

	YEAR ENDED DECEMBER 31,	
	1987	1986
SOURCES OF CASH		
Excess (deficiency) of revenue collected over expenses paid		
General operating fund	$ (63,635)	$ (43,669)
Office of Management Studies	2,357	25,663
Chinese Center revolving fund	--	(88,634)
Special programs - ARL	21,530	4,361
- OMS	(4,325)	(22,256)
Total	(44,073)	(124,535)
Add item not requiring the outlay of cash - depreciation	24,244	19,795
Cash provided by operations	(19,829)	(104,740)
Dues collected in advance	6,584	--
Increase in deposits	(124)	(249)
Increase in payroll taxes withheld	25,088	7,362
Increase in accounts payable	79,078	2,427
Total	90,797	(95,200)
USES OF CASH		
Prepaid expenses	6,242	2,177
Funding of accounts receivable	45,181	18,080
Reduction in lease obligation	3,510	3,627
Increase in unapplied grant income	50,480	(174,738)
Purchase of equipment	29,334	24,339
Payout CCRM Reserve	--	29,450
Total	134,747	(97,065)
Increase (decrease) in cash	(43,950)	1,865
Cash, beginning of year	573,196	571,331
Cash, end of year	$ 529,246	$ 573,196

The accompanying letter and notes are an integral part of these financial statements.

-5-   10,

ASSOCIATION OF RESEARCH LIBRARIES
NOTES TO THE FINANCIAL STATEMENTS

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization
The Association of Research Libraries is a non-profit education organization comprised of 118 of the major research libraries in the United States and Canada. The purpose of the Association is to initiate and develop plans for strengthening research library resources and services in support of 'higher education and research.   As part of its activities, the Association also operates the Office of Management Studies.

The Office of Management Studies was established by the Association in 1970. The Office conducts research into organizational problems of research libraries, develops new management techniques, and   offers information services and training.

Basis of accounting
The Association's policy is to prepare its financial statements on a modified cash basis. This includes recording depreciation   and amortization on capitalized assets, accruing liabilities related to special programs and payroll withholding taxes.   Under this basis, revenues are generally recognized when collected rather than when earned and expenditures are recognized when paid rather than when incurred.

Furniture, equipment and depreciation
Furniture and equipment are recorded at cost. Depreciation of furniture and equipment is provided on the straight-line method over the estimated useful lives of the assets.

Income taxes
The Association is exempted from income taxes under Internal Revenue Code Section 501(c)(3) and applicable District of Columbia law.

Retirement plan
The Association has a retirement plan that covers substantially all full-time employees. Contributions to the plan are based on a percentage of salary for enrolled staff members.   Total amounts paid in by the Association were $69,325 and $87,452 for 1987 and 1986, respectively.

-6-

ASSOCIATION OF RESEARCH LIBRARIES
NOTES TO THE FINANCIAL STATEMENTS
(CONTINUED)

NOTE 2 - CASH

The Board of Directors has authorized restriction of $14,000 of the Association's funds and designated this amount as a program reserve fund.

NOTE 3 - INVESTMENTS

The Association's investments are managed by Dean Witter Reynolds, Inc., Fidelity Investments and Northeast Investors. The investments are held as follows:

Dean Witter/Sears		
Liquid Asset Fund, Inc.	$ 985	- Current yield 7.10%
Dean Witter U.S. Government		
Securities Trust	476,603	- Current yield 9.50%
Fidelity Investments	1,358	- Curren d 6.95%
Northeast Investors	50,000	- Current yield 12.5%
	$ 528,946	

All accounts managed by Dean Witter Reynolds, Inc may be liquidated on any business day with proceeds payable within two to five business days.

ASSOCIATION OF RESEARCH LIBRARIES
NOTES TO THE FINANCIAL STATEMENTS
(CONTINUED)

NOTE 4 - LEASES

The Association leases its office space under an operating lease that expires on December 31, 1991, and leases telephone equipment under a capital lease that expires on February 15, 1988.

The future minimum lease payments as of December 31, 1987 are as follows:

	Capital Lease	Operating Lease
1988	$ 1,109	$ 88,710
1989	--	93,134
1990	--	97,782
1991	--	102,653
Total minimum lease payments	$ 1,109	$ 382,279

Total rent and storage charges for the operating lease were $85,664 for 1987 and $86,802 for 1986.

SUPPLEMENTARY INFORMATION

Our examinations of the financial statements included in the preceding section of this report were directed to an expression of our opinion on those financial statements taken as a whole. The supplementary information included on pages 10 through 17 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examination of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

CANTO, METRO, MEYER & COMPANY
A Professional Corporation
Certified Public Accountants

April 7, 1988

111

ASSOCIATION OF RESEARCH LIBRARIES
GENERAL OPERATING FUND
SCHEDULES OF EXPENSES
(MODIFIED CASH BASIS)

	BUDGET 1987	YEAR ENDED DECEMBER 31, 1987	YEAR ENDED DECEMBER 31, 1986
Staff expenses			
Salaries	$ 305,386	$ 305,755	$ 294,274
Benefits	86,730	71,205	68,969
Part-time help	600	478	--
Professional development	500	460	500
Total staff	393,216	377,898	363,743
Administrative expenses			
Travel	11,000	17,373	18,129
Member testimony	2,000	175	1,363
Professional services	20,000	37,149	27,943
Data processing	--	2,227	1,397
Insurance	8,800	5,686	11,987
Interest	160	--	310
Rent	46,118	46,852	39,685
Telephone	9,000	7,772	7,328
Postage/communications	9,000	10,606	10,174
Messenger service	3,000	4,627	2,569
Office supplies	11,000	9,575	9,828
Printing & duplication	6,000	9,950	7,109
Equipment rental/maintenance	14,000	13,235	12,368
Books & subscriptions	2,000	4,269	2,622
Corporation memberships	6,500	7,561	8,386
Furniture & equipment/depreciation	--	16,243	12,135
Miscellaneous	444	6,910	3,298
Investment withdrawal	2,000	--	--
Total administrative	151,022	200,210	176,631
Services			
Publication	28,000	10,480	28,672
OMS support	121,716	121,716	119,800
Support to projects	6,000	1,505	6,505
Total services	155,716	133,701	154,977
Meeting expense			
Board meetings	8,000	12,885	10,959
Executive committee	3,000	6,000	2,512
Staff travel	3,000	6,504	8,640
Committee & task force	9,000	35,981	19,991
Other conference related	21,000	24,066	9,083
Total meetings	44,000	85,436	51,185
Total expenses	$ 743,954	$ 797,245	$ 746,536

The accompanying letter and notes are an integral part of these financial statements.

-10-   112

ASSOCIATION OF RESEARCH LIBRARIES
GENERAL OPERATING FUND
SCHEDULES OF EXPENSES BY FUNCTION

Function	YEAR ENDED DECEMBER 31,	
	1987	1986
Management and general (includes transfers to OMS)	$ 563,319	$ 573,420
Board and executive committee	37,434	30,312
Information/publication	11,266	8,466
Member meetings	49,748	36,969
Scholarship communication committee	3,147	--
Access	4,483	--
Preservation committee	10,323	11,338
Information policy	66,811	35,986
Management improvement	15,189	12,301
Salary survey	7,542	3,308
Bibliographic control committee	--	10,683
Statistical committee	18,025	16,188
Statistics	7,771	5,193
Preservation microfilming guide	2,187	2,372
Total expenses	$ 797,245	$ 746,536

The accompanying letter and notes are an integral part of these financial statements.

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT STUDIES
SCHEDULES OF EXPENSES
(MODIFIED CASH BASIS)

	BUSINESS PLAN 1987	YEAR ENDED DECEMBER 31, 1987	1986
Employee Costs			
Salaries	200,000	$ 192,439	144,777
Benefits	48,000	41,990	33,872
Part time help	500	3,557	--
Professional development	1,000	3,086	689
	249,500	241,072	179,338
Direct Costs			
Travel	77,000	87,844	87,120
Printing	50,000	50,238	53,941
Professional services	20,000	24,077	20,502
Workshop materials	10,700	28,711	8,642
Refunds	2,000	--	1,828
Exhibit costs	3,000	2,700	2,947
	162,700	193,570	174,980
Indirect Costs			
Rent	36,300	37,612	32,177
Telephone	10,000	12,054	13,672
Postage/communications	17,000	15,750	23,047
Messenger service	5,000	6,907	(1)
Depreciation	6,000	8,001	1,809
Books and subscriptions	7,500	5,940	5,920
Office supplies	6,500	6,133	3,815
Equipment repair/maintenance	10,500	6,658	9,873
Miscellaneous	500	361	764
	99,300	99,416	91,077
Total	$ 511,500	$ 534,058	$ 445,395

Note (1): Included in postage/communication in 1986.

The accompanying letter and notes are an integral part of these financial statements.

-12-   114

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT STUDIES
SCHEDULES OF EXPENSES BY FUNCTION

	YEAR ENDED DECEMBER 31,	
	1987	1986
Function		
Research and development	$ 11,527	$ 11,455
Academic library program	60,178	47,122
SPEC	112,859	103,272
Training - MSI	220,718	172,180
Grants management	128,776	111,366
Total	$ 534,058	$ 445,395

The accompanying letter and notes are an integral part of these financial statements.

	Z39	CLR PLANNING	PECON. MEMBERSHIP ASSESSMENT	NRMM	YEAR ENDED DECEMBER 31, 1987	1986
REVENUES						
Grants	$ 3,102	$ 12,279	$ 39,767	$ 21,525	$ 76,673	88,251
Interest	--	--	--	20,335	20,335	13,050
Total revenues	3,102	12,279	$ 39,767	41,860	97,008	101,301
EXPENSES						
Professional services	--	8,969	--	21,525	30,494	6,043
Employee benefits	229	--	3,269	2,893	6,391	16,864
Office expense/supplies	--	--	71	--	71	281
Communications	--	--	97	122	219	739
Printing & duplication	--	--	94	--	94	217
Rent & storage	--	--	600	--	600	750
Salaries	2,873	--	18,636	10,893	32,402	74,412
Telephone	--	--	862	--	862	701
Travel	--	3,310	1,019	16	4,345	3,438
Support from ARL	--	--	--	--	--	(6,505)
Total expenses	3,102	12,279	24,648	35,449	75,478	96,940
BALANCE	$ --	$ --	$ 15,119	$ 6,411	$ 21,530	$ 4,361

The accompanying letter and notes are an integral part of these financial statements.

-14-

116

117

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT STUDIES
SPECIAL PROGRAMS
SCHEDULES OF OPERATIONS
(WITH COMPARATIVE TOTALS FOR 1986)
(MODIFIED CASH BASIS)

	INSTITUTE OF LIBRARY SCHOOL EDUCATORS	PRESERVATION PLANNING (NEH GRANT)	NATIONAL COLLECTION INVENTORY III	YEAR ENDED DECEMBER 31, 1987	YEAR ENDED DECEMBER 31, 1986
REVENUES					
Grants	$ 4,753	$ --	$ 63,447	$ 68,200	$ 134,520
Interest	--	--	7,404	7,404	7,282
Total revenue	4,753	--	70,851	75,604	141,802
EXPENSES					
Professional services	--	5,000	140	5,140	14,515
Employee benefits	645	260	8,608	9,513	17,639
Miscellaneous	--	--	17	17	--
Office expense, supplies	--	--	227	227	8,990
Periodicals & subscriptions	--	--	--	--	130
Communications	17	49	1,289	1,355	747
Printing & duplication	--	5,677	3,109	8,786	7,814
Rent & storage	499	--	600	1,099	750
Salaries	2,703	678	37,549	40,930	75,914
Equipment rental/maintenance	--	--	2,392	2,392	--
Telephone	--	65	3,367	3,432	2,855
Travel	889	--	6,020	6,909	24,534
Workshop materials	--	--	129	129	10,170
Total expenses	4,753	11,729	63,447	79,929	164,058
BALANCE	$ -0-	$ (11,729)*	$ 7,404	$ (4,325)	$ (22,256)

* Represents an inkind contribution from OMS.

The accompanying letter and notes are an integral part of these financial statements.

-15-

ASSOCIATION OF RESEARCH LIBRARIES
STATEMENTS OF CHANGES IN UNAPPLIED GRANT INCOME
FOR THE YEAR ENDED DECEMBER 31, 1987
(WITH COMPARATIVE TOTALS FOR 1986)
(MODIFIED CASH BASIS)

	NRMM	CLR PLANNING	PROGRAM RESERVE FUND	YEAR ENDED DECEMBER 31, 1987	1986
Unapplied balance, beginning of year	$ 290,000	$ --	$ 14,000	$ 304,000	$ 23,940
Write-off to fund balance	--	--	--	--	(1,627)
Current year's receipts	21,525	10,000	--	31,525	300,383
Applied: To revenues	(21,525)	(10,000)	(2,279)	(33,804)	(18,696)
Unapplied balance, end of year	$ 290,000	$ --	$ 11,721*	$ 301,721	$ 304,000

* Applied to CLR Planning.

The accompanying letter and notes are an integral part of these financial statements.

-16-

120

121

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT STUDIES
STATEMENTS OF CHANGES IN UNAPPLIED GRANT INCOME
FOR THE YEAR ENDED DECEMBER 31, 1987
(WITH COMPARATIVE TOTALS FOR 1986)
(MODIFIED CASH BASIS)

	NATIONAL COLLECTION INVENTORY III	INSTITUTE OF LIBRARY SCHOOL EDUCATORS	YEAR ENDED DECEMBER 31, 1987	1986
Unapplied balance, beginning of year	$ 111,672	--	$ 111,676	$ 216,998
Current year's receipt	--	20,000	20,000	39,794
Applied: To revenues	(63,447)	(4,753)	(68,200)	(145,116)
Unapplied balance, end of year	$ 48,225	$ 15,247	$ 63,476	$ 111,676
	=========	=========	=========	==========

The accompanying letter and notes are an integral part of these financial
statements.

-17-
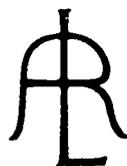
Association of Research Libraries
1527 New Hampshire Avenue, N.W.
Washington, D.C. 20036
(202) 232-2466

123