SPECIAL LIBRARIES, PROBLEMS AND COOPERATIVE POTENTIALS; PREPARED FOR THE NATIONAL ADVISORY COMMISSION ON LIBRARIES. FINAL REPORT.

By Havlik, Robert J.; And Others


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A three part approach was taken in this situation report on the role of the special libraries in the United States. First, several background papers were prepared about the definition and state-of-the-art of the field of special librarianship. These papers are: (1) Shera, Jesse H., "Special Libraries--Why 'Special'?", (2) Ash, Lee, "Definition of Grouping of Special Libraries", (3) Aspnes, Greg, "The State of the Art of Special Librarianship", (4) Razihun, Loyd, "Highlights of Problems Facing Special Libraries", and (5) Woods, Bill M., "The Potential for Special Libraries in Cooperative Ventures for Sharing Library Resources". Second, a survey of 911 selected special libraries was conducted to determine the major problems and contributing potentials to cooperative schemes by these libraries. Last, an advisory panel of special librarians was convened to discuss the special problems and solutions facing special librarians in the future. From these three sources came the recommendations for more federal support in the areas of (1) training librarians and determining manpower needs, (2) gathering statistics and promoting surveys of libraries, (3) conducting research in information science, library automation, and the use of libraries and information, (4) building library facilities and resources, and (5) encouraging new methods of information sharing and the development of library networks. (CM)
SPECIAL LIBRARIES
PROBLEMS AND COOPERATIVE POTENTIALS

Prepared for the
National Advisory Commission on Libraries

by
Robert J. Havlik, Bill M. Woods, and Leona M. Vogt

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PART I

INTRODUCTION

The purpose of this study was to prepare a background or situation report on the role of special libraries in the United States. The objectives were to derive a definition of a "special library", determine the state of the art of special librarianship, highlight the main problems facing special libraries and offer possible solutions or directions of effort to resolve these problems. Special attention has been given to the extent to which special libraries can participate in the sharing of the nation's library resources. The resulting study, we hope, will supplement the knowledge of the Members of the National Advisory Commission on Libraries and be useful in the preparation of their final report and recommendations. Librarians and administrators of special libraries, we hope, should also benefit from the publication of this study as an appendix to the Commission's report. The statistical section of this report represents the first nation-wide survey of its kind of special libraries in the United States.

Recent studies have indicated the growing role of special libraries in the United States. Special library expenditures are now nearly as great as for college and university libraries, with about the same number of librarians employed as in colleges and universities.

Special libraries have not been recognized as a national resource partly because they have not had a tradition of collection and reporting statistical data. Several factors contribute to this:

1) The lack of directories or lists of special libraries upon which to base the universe.

2) The diversity of operational classification, subject-matter classification, and mission of special libraries upon which to base meaningful groupings of these libraries.

3) The diversity of the materials collected and serviced by these libraries.

4) The diversity and degree of service offered by these libraries.

5) The diversity of administration management and support of these libraries.

Each of these factors is a problem area which had to be considered to derive a comprehensive definition of a "special library", to determine the state of the art of special librarianship, to highlight the main problems facing special libraries, and to offer possible solutions or directions of effort to resolve these problems. Lack of studies in depth of collections have also prevented evaluation of the extent to which special libraries can participate in the sharing of their resources with the nation. Such data is necessary if we wish to get a total picture of library services in the nation.

It was first the objective of this study to have several experts in the special library field submit summarizing statements regarding:

1. What is different about special libraries from other libraries?
2. How may a special library be defined and how are they classified?
3. What is the state-of-the-art of special librarianship?
4. Highlights of the problems facing special libraries.
5. The potential for special libraries in cooperative ventures for sharing library resources.

Second, a survey of selected libraries was conducted by R. J. Havlik and Leona Vogt in the following manner to determine the present conditions:

1. Three major categories of special libraries were defined: Government, Commerce and Industry, and Associations and Non-profit Agencies.
2. Ten major subject-matter classifications of libraries were defined.
3. A list of 911 special libraries was compiled from the literature.
4. A rough statistical chart by category and subject-matter classification of the libraries was compiled to determine the approximate number of libraries in each classification.
5. A letter was sent to each library indicating the objectives of the survey, the questions to be asked and a notice that a telephone call would follow. The selected libraries were then called by telephone using the Western Union Telephone Survey Service.

Conclusions were drawn for each grouping of libraries and the results were studied to determine the major problems and contributing potentials grouped by size of library, category of library or subject-matter classification, etc.

Third, an Advisory Panel was convened to discuss the special problems and solutions facing special libraries in the future. The advisory panel was made up of experts in the following fields:

a. Governmental Libraries.
c. Association and Non-profit Organization Libraries.
d. Law Libraries.
e. Medical Libraries.
f. Documentation Centers.

This work was under the general administration of Bill M. Woods.

The conclusions of this study were derived from the above three approaches and written by Mr. Havlik and Mr. Woods, with the editorial assistance of Miss Vogt. We should also like to thank the staff of the American Documentation Institute for their support in sponsoring this study and the National Advisory Commission on Libraries for the opportunity to present the story of special libraries, their problems and cooperative potentials.
PART II

BACKGROUND PAPERS
SPECIAL LIBRARIES -- WHY "SPECIAL?"

Jesse H. Shera, Dean, School of Library Science, Western Reserve University

When, shortly after the turn of the present century, John Cotton Dana arrived at the conclusion that the public library was overlooking an important segment of its potential service by failing to respond to the growing information needs of commerce and industry, and established the Business Branch of the Newark, New Jersey, Public Library he inaugurated a form of librarianship the future promise of which probably even he did not then realize. Because no one knew what to call this new bibliographic breed, its members acquired the name of "special" librarian. The term was much less felicitous than the idea it represented for it is lacking in specificity and descriptive meaning, but it has persisted for more than half a century despite repeated attempts to define it satisfactorily, and librarians will probably be plagued with it for generations to come. Perhaps the easiest escape from the dilemma of definition is to say that "special" librarianship is what "special" librarians do, and let it go at that, for vague though the concept be, most librarians have crystalized in their own minds a fair notion of what special librarianship is all about.

Historical Background

An understanding of the unique characteristics that differentiate special librarianship from other forms of library practice may best be achieved from a backward glance over the historical development of the library as a social invention. No one knows when libraries first came into being, but surviving archaeological evidence indicates that they can be traced back as far as ancient Egypt, and probably they were known to the Sumerians. One can
say with reasonable assurance, however, that the library came into being as an essential agency in the evolution and development of the city state. As the nomadic and pastoral culture gave way to the urban, records were needed for the transactions of commerce, the perpetuation of belief, and the transmission of the culture from generation to generation, thus the importance of records necessitated an agency for their preservation. The archival function of the library, then, must have developed at an early stage of urban civilization, but with the curious circularity that history often gives to human phenomena and events, these libraries could be called special libraries too, for they ministered to the needs of commerce and trade, as well as to those of sovereign and the priesthood. Hence, the library exemplified a blending of functions because life itself was a closely woven fabric in which church, state, and school were essentially one, and belief, policy, and scholarship were virtually inseparable.

This generalized pattern persisted throughout the Classical world of Greece and Rome, though humanistic scholarship increased in importance, and the education of the youth became a paramount concern. In Athens and Rome the library was the fount of scholarship, and the librarian as scholar, philosopher, teacher, and priest became a figure of great importance and prestige in his society. With the collapse of Rome as a world power, and the subsequent rise of Christianity from the darkness of the Middle Ages, the library served almost exclusively the requirements of the Church, and in that role was the fountain-head of learning. Indeed, one could argue with considerable conviction, that Cassiodorus, when he set forth in his Divine and Human Readings, his rules for the ordering and administration of the
monestary and its scriptorum, that he was the father of documentation, the special library, and the information center. The little collection that the monks brought together in the monestaries and cathedral schools possessed most of the generic characteristics of the special library as it is understood today. In the East, where the concern with science was particularly strong, the library, though its collections were markedly different from those of the monestaries, served essentially the same scholarly function as in western Europe, the difference was in its intellectual orientation.

The secularization of culture and the return of scholarship to Classical models, that was the product of the Renaissance and Reformation, brought no important change in the responsibilities of the library, only an alteration in emphasis. The invention of printing greatly accelerated library growth, but basically did not alter purpose; the librarian-scholar remained a central participant in the world of learning from the dawn of modern scientific inquiry through the Enlightenment. The library was the laboratory of science so long as instrumentation was virtually non-existant or in its infancy. For the creative artist, the philosopher, and the historian it was his intellectual birthright. The eighteenth century brought the popularity of small, quasi-private library clubs or corporations which served the book needs of limited groups of the intelligensia. These modest little collections were the bridge from the great scholarly libraries to the popular library of the century that was to follow. So numerous were these association libraries that, for almost a century they formed a kind of public library system but in content and purpose they were still the private libraries of gentlemen scholars owned in common by the privileged members of an elite class.
The great library change that took place during the nineteenth century was the emergence of the modern public library. Born of the European concept of scholarship, imported to America by such writers and men in public life as George Ticknor, Edward Everett, and others typical of the first board of trustees of the Boston Public Library, the public library achieved its present state on the crest of the wave of enthusiasm for democracy, faith in the perfectability of man, and the boundless optimism of a new country propelled by circumstance into international prominence and national maturity. The ubiquitous generosity of Andrew Carnegie consummated the movement, though more than a half-century earlier it had become clear to many influential people that public library service was a proper concern of local government, a service that would be for all the people, and at one and the same time provide "a nest in which to hatch scholars," and "the crowning glory of the public school."

Whatever service or characteristic may be mentioned as an attribute of the special library can also be shown to exist in greater or less emphasis in the public or academic library. Indeed both the university and the large metropolitan public library are tending to become clusters of special libraries staffed by those who have distinctive competencies in a particular branch of knowledge. Only the absorption of the "traditional librarian" in the "educational" function of his office and his implicit denial of the social importance of information service can account for the schism that separated the "special librarian from his colleagues in other types of institutions."
The Emergence of the Special Library as a Distinctive Type

So sharply drawn were the lines of demarcation that separated the special librarians from the others that in 1909, the former, under Dana's leadership, seceded from the American Library Association to form their own professional group. A year later, at the Mackinac Island conference of the senior organization the librarian of Newark made a last heroic effort to secure the incorporation of his little band of renegades into the ALA, but his pleas were "definitely ignored" by the Executive Board, and subsequently the Special Libraries Association was incorporated as an independent entity.

But Dana's act of secession was only the American manifestation of a movement that had begun in Europe some years earlier. In 1892, Paul Otlet and Henri La Fontaine met at the former's home in the rue de Florence, Brussels, and formulated their now historic plans for the establishment of an international movement to create a world bibliographic center. Quite naturally, they turned to conventional librarianship for their procedures and techniques, and since classification lay at the heart of their undertaking, they chose, after much deliberation, the Dewey scheme. The notation and scheduling proved to be inadequate for their projected depth of analysis and the types of material which they planned to include, so they drastically modified Dewey's system to evolve what eventually became known as the UDC. Neither man knew what to call this new approach to librarianship, so they gave it the name of "documentation." Thus, on the Continent, and in England, documentation and special librarianship became inextricably related, e.g., the British association, Aslib, which represents both groups, as distinct from the Library Association and traditional librarianship. In the United
States, however, the documentalists dissociated themselves from the special librarians, and formed the American Documentation Institute, even though many of its members were also participants in the SLA.

At an even later date the information scientists and the specialists in microfilm and other forms of photographic reproduction asserted their own organizational independence, until today there are not only such national associations as the American Library Association, the Special Libraries Association, the American Documentation Institute, the National Microfilm Association, and the like, but also many of these have their own subdivisions relating to the work of the others. Thus the ALA has its Information Science and Automation Division, the SLA its Documentation Division, and the ADI a whole cluster of "specialized groups," while many conventional librarians also hold memberships in some or all of these associations. That such a hodgepodge is ridiculous would seem to be obvious. Small wonder that one has difficulty in differentiating among them, and relating their activities to librarianship as the generic form.

From this hurried glance down the long corridor of time during which the library as a social invention was being developed, it seems apparent that until the nineteenth century the dominant type of library was the general, scholarly, primarily humanistic collection, brought together to preserve the best of recorded knowledge and creative literature. The nineteenth century might well be characterized as the era of the public library, for certainly, from the 1870's on, at least, it was the major bibliothecal form. Similarly, one might categorize the twentieth century as the time of specialized service
which brought to importance the special library, the documentation center, and the burgeoning science of information storage and retrieval.

**The Situational Position of the Special Library**

A special library may be regarded as a bibliographic service developed around a particular idea and organized and staffed to meet the needs of a precisely defined clientele. The archetype is a bibliographic information service associated with a business or industrial corporation or a governmental agency. Unlike the general library, the special library is prone to ignore the conventional compartmentalizations of knowledge and to collect and organize its materials according to the requirements of a particular situation. The situation may call for materials, in a variety of physical forms, from many different subject fields, but each item must contribute in a significant way to the success of the enterprise that is served. Thus the orientation of the special library is situational as opposed to the subject principle that dominates the organization of the general library.

The situational characteristic of the special library is also reflected in the motivation of its use. In the general public library to a very great extent, and in the academic library to a somewhat lesser degree, the motivation for use comes from the patron, who seeks out the library as a source for the materials he requires, whatever his purpose. Though the patron of the special library also, often, seeks out its resources, the professional staff of the library, because they should have substantial familiarity with the interests of its limited and rather sharply defined clientele, are expected to bring their bibliographic resources to the attention of the users, to keep up with the areas of interests of the clientele, and to
anticipate, rather than follow, need. Thus, in the special library, especially one that has established itself, the librarian and the senior staff are important members of the research or operational complex. The very fact that the special librarian does occupy a position of such importance in his organization has, in large measure, given rise to protracted debate over the years as to whether the special librarian should be primarily a subject specialist or a librarian, and what should be the proportion of each in his professional education. To engage in this seemingly endless argument would be irrelevant to the present discussion; suffice it to say that there is substantial evidence to support both points of view, and the position that any discussant is likely to take will depend upon whether he himself was trained as a subject specialist or as a librarian. The fact is that the special librarian, if he is to fulfill his position most adequately, must be both familiar with the discipline in which he is working and competent in librarianship. The important fact here is that the special librarian does not "stand and wait" to perform his service, but constantly keeps in touch with the interests of his clientele and the recorded knowledge of the areas for which his library is charged, so that user and record can be brought together in the most effective and fruitful way. If it be true, as it would certainly seem to be, that the social role of the library as an institutional form is to maximize the utility of graphic records for the benefit of society, the special librarian is in a particularly enviable and advantageous position, for he is strategically situated to bring to bear upon his clients the greatest possible amount of power of the recorded word. One finds a curious paradox in the fact that the public librarians who for so long have found such satisfaction in helping the user to find a book that
would help him to build a better chicken-coop or make a boat, and who are so pleased when the circulation of non-fiction increased at the expense of fiction, for so many years have turned a deaf ear to the practical book and information needs of business, industry, and government.

The Contribution of the Special Library to Librarianship

The special librarians, and their colleagues the documentalists and information scientists, have, in large measure, been the library pioneers of the twentieth century. Conventional library methods and procedures stabilized quickly during the years following the work of Dewey, Cutter, and their contemporaries, and thenceforth responded but slowly to innovation and change, and it remained for the special librarians to experiment with new schemes of bibliographic classification, new techniques for the subject analysis of library materials, and new methods for alerting their patrons to the content of recorded information. Though the special librarians have, in general, been somewhat less responsive to the possibilities of automation and other forms of mechanized literature-searching than have the documentalists and the information scientists, nevertheless many of them have been engaged in a substantial amount of experimentation with various applications of electronic automata. Their years of close association with industrial research has been a constant stimulus to which their cousins in conventional librarianship have not been exposed.

The contribution of the special librarian to the profession at large could, however, be much greater than it has been. Because the special librarian stands at a peculiarly strategic point to observe the informational requirements of a well defined group of users in pursuit of a particular objective, he has a unique opportunity to study the "situational" use of
literature; perhaps only the children's librarian has a better opportunity than he to see the impact of graphic material upon human behavior. The special librarian, thus, has an opportunity to provide for the profession as a whole, a kind of clinical case record of particular situations in information use, not unlike the data the doctor or surgeon can provide for the annals of medicine. For one type of user, at least, the special librarian is in a position to supply some evidence that will help to answer the basic question of the effect of recorded knowledge upon the conduct of men.

Because the special librarian is required, to a greater extent than most of his associates in the library fraternity to make constant and daily use of existing bibliographic tools and mechanisms he is in a better position than the general librarian to identify with precision the needs and weaknesses of bibliographic organization and the subject analysis of library materials. He should set an example for the profession as a whole by constantly emphasizing the responsibility of all librarians to study their own bibliographic needs and to promote the most effective and efficient means possible for their fulfillment. The children's and school librarians have long been exerting pressure upon the publishing world for improved materials for their clients, the same collective effort should be expended in improving the sophisticated tools of bibliographic organization, and the special librarian is in a very strong position to exert leadership in such undertakings.

General libraries have established subject and other segregated departments in response to the increasing pressures from specific interest groups, or when the staff has encountered difficulties in answering technical inquiries or in organizing and servicing materials for which special competencies are
required. One may assume that this process of specialization will advance, even in general public libraries, in response to increasing specialization in society itself. The work of the special librarian, then, might well serve as a guide to future lines of specialized interest and activity that will have implications for the public and academic library. To observe and study such trends, and to plan intelligently for anticipated change should greatly facilitate adjustment to new needs and encourage policy making and planning in bibliothecal endeavor, an area which librarians generally have sadly neglected. The importance of the special library to future library policy is evident from the unhappy example of the Public Library Inquiry of two decades ago. This Inquiry, despite the intellectual potential of its highly qualified staff, was misled by its original false premise respecting the nature and objectives of the library as a generic social form. Hence, it ignored completely the significance of growing specialization, both in the larger metropolitan public libraries, and as exemplified by the special library, as possible indices of future alterations in the library pattern and organizational structure of the public library.

If one is correct in assuming that the special librarians, documentalists, and information specialists can describe in meaningful terms the kinds of information and its characteristics as exhibited in the structure and organization of the literature in relation to specific specialized situations, then it becomes the primary responsibility of all librarians, and of library educators in particular, to generalize this knowledge and to incorporate it into a unified body of theory and practice that will define the scholarship of the library profession.
One can scarcely argue that the special library, the documentation center, of the information agency, by whatever name the instrumentality is called, will set the pattern for the future of the library in the twenty-first century, if not before, just as a century ago the first Board of Trustees of the Boston Public Library wrote in their initial report to the city fathers a prognosis of the special library of today: "Strong intimations, therefore, are already given, that ampler means, and means better adapted to our peculiar conditions and wants, are demanded, in order to diffuse throughout our society that knowledge without which we have no right to hope, that the condition of those who are to come after us will be as happy and prosperous as our own. The old roads, so to speak, are admitted to be no longer sufficient. Even the more modern turnpikes do not satisfy our wants. We ask for rail cars and steamboats, in which many more persons -- even multitudes -- may advance together to the end of life, and go faster, farther and better, by the means thus furnished to them, than they have ever been able to do before." Quite rightly, Edward Everett, George Ticknor, and their associates on that famous Boston board, saw the library as an important vehicle for the transmission of ideas, and as they built an instrumentality appropriate to the age of steam, we must build one that will meet the demands of tomorrow's era of the S.S.T.
DEFINITION AND GROUPING OF SPECIAL LIBRARIES

Lee Ash, Library Consultant

The definition of a special library may be either simple or complex, depending upon the context of its use. I prefer to suggest the greater practicability of a simple definition in order that the variable factors and emphases which characterize a particular library can be judged better for what they are when one considers the library in terms of a minimal norm.

My instructions as to the scope of this report said that "we cannot cover special libraries in public and college and university libraries" because of lack of time. While it will not be necessary, perhaps, to refer to these groups generically, the reader will have to keep in mind the fact that a tremendous and rapidly increasing number of special libraries are components of these institutions and are ever-present in the considerations that follow.

What, then, is a special library? In its simplest terms it is a collection of books and other informational media of any and all kinds, related especially to a particular subject emphasis and, generally, accumulated, arranged, and serviced for the use of a clientele whose interests are more or less oriented to the subject fields of the collection. Thus the special library, it will be seen, can easily be the library of, or a collection servicing, a department of a public institution, college, or university. It can be a supporting arm of a government office (such as the library of a city's Health Department), or of a business, or of a bank, museum, newspaper, hospital, or of a private gentlemen's club, etc.
Hopefully, the special library will be staffed by one or more persons who are especially knowledgeable in the subject areas covered, and who will know pertinent informational resources beyond the walls of their own library in order that they may take fullest advantage of the magnificently sophisticated system of interlibrary loan that exists and is being developed so usefully in the United States and Canada. Through this free or at-cost system, the smallest library has as a part of its resources -- through actual loan or photo-reproduction -- the contents of almost all other libraries, including our various national collections at the Library of Congress, the National Agricultural Library, and the National Library of Medicine.

As in most other areas of American endeavor, the United States' special libraries may seem to have become fractionalized rather than integrated in their professional groupings as a result of the paring off of those libraries thought to have common interests or that can be discussed separately and otherwise related to one another through certain cooperative ventures. The matter is, of course, debatable, and without any doubt it can be shown that the special consideration of libraries by subject emphasis has brought great benefits to them just as it has sometimes isolated them from other groups and has, indeed, in some situations (within college or university or public library systems) cast them apart from the integrated and smooth operation of the parent organization as a whole, in a few cases even provoking staff and collection location situations that were wholly undesirable.

Neither can there be second thoughts about the values obtained by the mutually agreeable association of librarians who have similar interests, since the result of such meetings can easily be shown to have benefitted their
institutions considerably. For example, such association on national and local levels has provided for and stimulated personally useful intercommunication among individuals, spread the goodwill and use of interlibrary loan systems, produced union catalogues and helpful bibliographical and other literature guides through the cooperation of like-minded individuals. In brief, although there may be shortcomings in the existence and proliferation of special library organizations that seem to encourage and separate these collections by subject interest, there can be no doubt that this is a societal custom that has encouraged great advances in the collecting functions and administrative patterns of special libraries.

In order to describe the variety of special libraries in the United States one must recognize the diversity of the accommodations made for them in the professional associations related to their development, promotion, and cooperation. These are best exemplified by stating the objectives of the national associations devoted to special libraries as such, but in this case excluding special public, college, and university library interests represented by broadly inclusive associations such as the Council of National Library Associations, the ALA's Children's Services and Young Adult Services Divisions, the Society of American Archivists, the Bibliographical Society of America, etc. Once again I would remind readers that a great part of the actively participating membership in these and in the following organizations comes from special departmental or individuals' subject interests within public, college, and university libraries. The strength of their membership cannot be underestimated in any study of the organization and program activities of the following groups.
The Groupings

Most widely known of the membership organizations to be listed here is the Special Libraries Association, founded in 1909, and with headquarters in New York City. The objectives of the SLA are simply stated "To encourage and promote the utilization of knowledge through the collection, organization, and dissemination of information; to develop the usefulness and efficiency of special libraries or information centers; to stimulate research in the field of information services; to promote high professional standards; to facilitate communications among its members; and to cooperate with organizations that have similar or allied interests."

Over the years the SLA has been more or less successful, to a measurable degree, in all of these functions. It has been especially well known to library users through the publication of its Technical Book Review Index; and its national membership publication, Special Libraries, has often been useful through providing good articles on current activities, trends, or procedures among special libraries.

The SLA is one of those library organizations that appears to have begun to suffer from overspecialization of its Divisions and by the duplication and fractionalization of its interests, thus seeming to deflate the unified support of both its institutional and individual members now numbering near the 7,000 mark. At present there are twenty-one Divisions by type of library interest with some subsections of even greater specialization.

A listing of the various Divisions of SLA provides a convenient sense of the way many libraries with special subject collections or subject emphases tend to identify themselves: Advertising and Marketing; Aerospace;
Biological Sciences; Business and Finance; Chemistry; Documentation; Engineering; Geography and Map; Insurance; Metals/Materials; Military Librarians; Museum; Newspaper; Nuclear Science; Petroleum; Pharmaceutical; Picture; Publishing; Science-Technology (with Sections of Paper and Textiles and Public Utilities); Social Science (sectioned into Planning, Building and Housing and Social Welfare); and Transportation. The problems of overlapping interests is readily observable here and is further complicated by the role of other national library specialization organizations such as exist for law, medical, and theatre libraries, to say nothing of representation within the American Library Association.

A strong central office of the Association can help the various Association-wide Divisions and their geographically grouped Chapters to hold together through encouraging representative committees, sound fiscal policies, and a stimulating annual convention, in addition to meetings of the entire geographically grouped Chapter memberships or of the Division members of these Chapter areas. However, perusal of the Library Journal for July 1967, covering the SLA's Annual Convention in New York City last June, reveals several structural weaknesses of the organization. Especially confusing for the outsider is the duplication of interest and activity among the SLA, the American Documentation Institute (ADI), and ALA's relatively new Information Science and Automation Division. A useful function of the National Advisory Commission on Libraries would be a universal survey report of library associations' critical duplicating and duplicated activities.

To go on to more specific special library groupings (in alphabetical order now), there is the growing and lately dynamic American Association of
Law Libraries "To promote law librarianship, to develop and increase the usefulness of law libraries, to cultivate the science of law librarianship, and to foster a spirit of cooperation among members of the profession" - all valuable and attainable goals it would seem. The AALL now has approximately 1,500 members and conducts much of its business through some forty committees related to internal operations and library functions, such as the Committee on Automation and Scientific Development, and the Index to Legal Periodicals. The Association also sponsors its own publication, the Law Library Journal. In recent years serious study has been given to the problems of recruitment and education for law librarianship, as well as to matters of library science. One gets, from the law librarians - as from the medical librarians - a sense of unity of purpose and a high degree of devotion to a cause which is lacking in most divisions of the over-developed Special Libraries Association.

It is not my purpose to discuss the American Documentation Institute here beyond what I have already said about the duplication of interests between it and several of the activities of other library associations. Elsewhere, in another publication, Dean Shera has commented on the lack of coordination between these associations and the fact that there is "almost no organizational machinery for the promotion of effective liaison". In spite of the continuing truth of his statement that "Certainly there are many in America . . . who seem quite unaware that the librarian and the documentalist are working toward the solution of a common problem". The situation does appear to be a little better than ten and even five years ago when the literature was filled with acrimonious debate about
the rightful provinces of each group. Today the division does not seem to be quite so marked or differentiated and there are more documentalists talking to library groups and more librarians doing documentary work.

The American Theological Library Association hopes at all times "To bring its members into closer working relations with each other and with the American Association of Theological Schools; to study the distinctive problems of theological seminary libraries; to increase the professional competence of the membership; and to improve the quality of library service to theological education". Relatively recently organized in 1947, its membership falls well below 500 but is active and held together by an annual meeting and Proceedings volume, and a quarterly Newsletter. Along with art, music, and other libraries devoted to the social sciences and the humanities, these libraries have not tended to ride the high tide of automation to the same extent as science-related institutions (though they have not been neglectful of the possibility of this development). This is largely due to the traditional approach of students and scholars in these fields and the lack of money to finance costly experimentation, among other reasons. Closely related to the ATLA in religious orientation are the Association of Jewish Libraries, the Catholic Library Association, and the Lutheran Church Library Association, all devoted to the support and encouragement of a very special interest in particular literature and segregated religious institutions.

Back to the major special library associations, the Medical Library Association, founded in 1898 and maintaining headquarters in Chicago, has a membership of over 700 institutions and about 2,000 individuals.
Its objectives are "The fostering of medical and allied scientific libraries, and the exchange of medical literature among its members; to organize efforts and resources for the furtherance of the purposes and objects of the Association". It is open to anyone interested or working in medical libraries of any kind (but it does not consider as members of equal professional status the so-called "hospital records librarians"). Membership of the Association comes largely from libraries of medical societies, hospitals, medical and nursing schools, pharmaceutical and biological firms, and other paramedical and health sciences organizations. Annual meetings with stimulating programs and a dedicated membership have helped to make the MIA one of the most vibrant and productive of the special library associations. Its quarterly Bulletin and Vital Notes 3 times a year; notes on medical publications are among the most professionally edited, respected, and useful of all specialized library publications. Actually, one has the feeling that the medical library profession -- partly because of leadership and support from the National Library of Medicine -- is the most active and productive of all library specialities.

The MIA conducts a very active program for the exchange of suplicate or unwanted materials; it conducts surveys and research into problems of bibliographical control and indexing; sponsors an accrediting system for members, and studies related library school course offerings; prizes, scholarships, internships, and international personnel exchange are sponsored; so too are a variety of monograph publications; most unusual and effective are a number of "continuing education" courses conducted as a pre-annual conference activity of the Association and through some regional groups' interest.
The overlapping of interest of MLA and the ALA's division called the Association of Hospital and Institution Libraries presents no problems since the membership (not the objectives) of the latter relates less to professional medicine and the health sciences and more to the needs of patients, inmates, and residents of hospitals and institutions.

The Music Library Association was founded in 1931 "To promote the development of music libraries; to encourage studies in the organization and administration of music libraries and music in libraries". It is likely that the majority of its membership (as in some other of the special library groups) derives mostly from public, college, or university libraries. Its scholarly quarterly publication Notes is recognized around the world for the quality of its contents. The Association has long interested itself particularly in historical aspects of music and music librarianship and music bibliography. Useful committees on these and such subjects as surveys of instrument collections, thematic indexes, phonorecord collections, etc., have given substance to the profession of music librarianship.

In a like manner the Theatre Library Association founded six years later, in 1937, but with a membership of only about 200, has recently begun to take action and a leading position in examining professional collections and setting standards in anticipation of growth. Its annual meetings have stimulated an enthusiastic membership, and in 1967 the TIA served as host to a successful meeting of the International Theatre Library Association for the first time.

These brief descriptions of the principal library organizations that concern themselves with the activities of special libraries should serve
to give an overall view of what special librarianship is: a conglomerate of libraries giving special services to special patrons through the use of specialized materials.

The greatest amount of special library activity is in the metropolitan areas of New York, Chicago, and the Los Angeles-San Francisco megalopolis. Without any doubt the majority of so-called special libraries is to be grouped in the scientific-technological branches of knowledge and in the supporting areas of specialization such as advertising, business, economics, etc.

It would seem to this writer, in the light of current trends to help satisfy the needs of the nation's library services, that closer integration of library organizations' activities is a prime factor for their successful development. Librarians will soon begin to see the necessity for the total integration of the sources of knowledge; their readers already have need for such unified materials drawn from all phases of knowledge. Fewer organizations, better integration, and closer cooperation will need to be the theme for library group organization. This statement is not meant to deny the necessity for specialized training of librarians working with special subject materials. It calls, rather, for more broadly trained people with a greater degree of awareness of the total resources of American libraries and the relevance of such holdings to the needs of a specialized clientele.
"Librarianship cannot be fully comprehended until it is studied in relation to the total communication process by which society achieves and disseminates knowledge. We cannot accurately assess the value of the services which the librarian has to offer...until we understand the role of the library in the transmission of knowledge from individual to individual and from group to group."

...Dr. Jesse H. Shera
Keynote address at the Special Libraries Association Convention, June, 1956, Pittsburgh, Pennsylvania

Special libraries as we know them today are basically a product of the 20th century. The Medical Library Association was formed in 1898, and the American Association of Law Libraries in 1907. There are also the Music Library Association, the American Theological Library Association and others. In 1909 a group of 57 librarians, most of them serving the business community, organized the Special Libraries Association. That was the year when Henry Ford set up the first assembly line to produce his revolutionary model T. In the following 50 years were born and grew the equally revolutionary fields of aviation, radio, television, motion pictures and advertising, while the United States built an industrial machine that helped win two world wars, harnessed the energy of the atom, probed the limitless outer space, and pioneered in great medical and social advances. The present state of the art of special librarianship has been greatly affected by these developments and to some degree reflects them.

The first special libraries were set up to answer a need not then being satisfied by the conventional library services -- specialized information
services geared to meet the needs of specialized situations and specialized clientele. From those first 57 pioneers, the number of special libraries has steadily grown -- by 1940 there were an estimated 2,500, in 1962 more than 8,500 and by 1966 between 10,000 and 13,000 "special libraries and information centers", depending on your definition and source of data.

Through the years, as science, technology, and industry have become a dominant factor in American life, an increasing proportion of special libraries feature subject collections in these areas. Today, in the Special Libraries Association, more than 60 percent of all the members serve in libraries whose major interest is related to science and technology.

This emphasis began during World War II and has accelerated during the post-war years. One major and direct cause was the hundreds of thousands of technical reports which were captured by our armies overseas and shipped back to the U.S. to be read and evaluated, indexed, stored, and used to aid our own research and production efforts. For most public and college libraries, these reports were strange and unwelcome intruders -- neither books nor formal journals, often in crude or semi-finished form and in foreign languages. But for the special libraries serving government and industrial research, they were valuable sources of information.

Information the Commodity

For the special library, information is a commodity -- tangible, valuable, literally with a dollars-and-cents price tag on it -- as valuable in many ways as improved production machinery or new research equipment. Its value can often be measured in terms of new products it helps to develop, the new scientific or technical "breakthroughs" it helps to achieve, the time
(or lives) saved, the efficiency increased, the waste and duplication of effort prevented.

This was most dramatically illustrated when, in October, 1957, the Soviet Union launched its Sputnik I, the first successful man-made satellite. Because the U.S. scientists did not know the radio frequency on which it was broadcasting, they were not able to track the Sputnik in its orbits around our globe. Later, during Congressional hearings, it was revealed that this vital information had been available 4 months before October, 1957, in the pages of a Russian magazine which was on file in some U.S. libraries.

Two important questions emerged from this experience: 1) What was wrong with our information systems that our scientists did not learn what they needed to know until it was too late? 2) How much was it worth to the U.S. not to have this information?

Although not many experiences with information (or its lack) can be as dramatic as this one, for the scientists, the doctor, engineer, researcher, and for the lawyer, businessman, politician, and social scientist too, the latest information on new developments in their fields of interest are meat and drink. In today's furiously expanding and changing world, such information comes from the entire universe of recorded thought and experience, from the millions of facts, ideas, discoveries, and theories that are created each year in the world's many languages. To control this flood of graphic records, to sift it, weigh it, organize, store, retrieve, and disseminate it -- this has become the vital responsibility of the special library. In short, the special library must provide the kind of information service that

1) Gives all the information needed to answer any question, no matter how technical the subject matter may be.
2) Provides it quickly, as soon as possible after it is asked for, and in some cases even before it is asked for.

3) Provides it accurately, specifically, selectively, completely, but in the briefest, most easily usable form.

4) Provides it from a much greater variety of sources (not only from conventional printed media, but from near-print, microforms, preprints, government and other institutional reports, convention proceedings, symposia, foreign language publications, etc.)

5) Provides it with evaluative discrimination, precisely fitted to the needs of the patron.

On the basis of these criteria, what is the present state-of-the art of special librarianship?

The Index -- Magic Key

The first librarians were bibliographers -- indexers and guides to the material under their control. As libraries grew in size and became more public, more educational and custodial, librarians abdicated their responsibility as indexers, leaving this field to scholarly, technical or commercial organizations who lived outside the library field and had little direct contact with the user of the library and its indexes. The result was a waning control of and access to much of the information buried in books, journals, reports, theses and other parts of the library's collection.

Under the pressure of a great new flood of technical literature that threatened to engulf them after World War II, the special librarian had to re-examine both his responsibility as indexer and the efficiency of his indexing systems. Further pressure came from his patrons who needed systems that would pluck quickly the precise information "needle" from the giant and rapidly grown "haystack" of miscellaneous data being heaped all about them.
From this process of re-examination has come much of the research and progress in "Information Storage and Retrieval" (also called "Documentation") that for the past 15 years has dominated the thinking and literature of special librarians. In taking this new look at their job, special librarians have been aided by workers in many non-library disciplines, including such diverse fields as logic and linguistics, mathematics, physics, philosophy and psychology, electronics and computer technology. All are seeking answers to the basic questions of the special library profession -- How do we provide, from the great storehouse of the world's recorded experience, the right information to the right person at the right time in the right form?

Much work has been done, some progress has been made, most of it in the use of data processing equipment and computers to handle large volumes of data, to store it and to provide it quickly upon demand. For most special librarians, however, the day is still far distant when a computer will stand beside them, as handy as their card catalogs and published indexes (but much more speedy and efficient!). Only a handful of the larger governmental and industrial research libraries have so far found it technically and economically feasible to depend on such equipment for a major part of their information retrieval needs. And even these large, complex, expensive, and sophisticated systems have not solved the basic and vital part of the information retrieval problem, which is the index.

Indexing means identifying, analysing and "marking" each graphic record so that a user searching for a particular fact, idea, or concept can find it quickly and surely. Such indexing must serve not only today's users but also those of next year, the next generation, the next century. It must
anticipate the viewpoint of the user whose background cannot be predicted, whose approach and outlook cannot be imagined. It must "mark" not only that data which is explicitly stated but also that which lies implicitly buried within the context of the record. And it must do this rapidly and economically.

A great deal of experiments with and plans for using computers to provide this level of indexing have foundered on the fact that indexing is a complex part of the intricate and subtle process of human thought and communication. Swanson warned of this early when he said:

The fact that so much information can be found on any subject creates an illusion that little remains hidden. Although library searches probably seem often to be successful simply because a relatively satisfying amount of material is exhumed, such success may be illusory, since the requester cannot assess the quantity and value of relevant information which he fails to discover. He is the victim of what might be called 'the fallacy of abundance.'

In the Right Form

Until the perfect indexing system is devised, the special librarian must struggle with what he has, constantly aware that all indexes are imperfect, but also aware that no one yet knows how to evaluate one against the other. In this the library profession, aided by many other arts and sciences, has a great deal of research to do. But meanwhile, back at his reference desk, the special librarian has his patrons, needing information now, and needing, not an over-abundance of citations or references, but the precise information to answer their precise needs. In this respect, the special librarian has the best medium for evaluating his indexing systems, his searching techniques, his personal efficiency. All can be rated on "How well do they satisfy the needs of the patron?" The public, school or college library can usually turn down as unreasonable an urgent request for specific
information, selected and evaluated, perhaps even abstracted and packaged in a form most convenient to handle. But this has always been a normal function in most special libraries, a part of what Weinberg had in mind when he said:

The whole spirit and tradition of librarianship has been dominated by the notion that the librarian's primary task is to connect the user with documents that may contain the information he is seeking. Document retrieval is a prerequisite to information retrieval -- but it is only a prerequisite; an information system that stops short of transferring information from one human mind to another is inadequate.

With the growth in the size of the literature store to be handled, with the great increase in its complexity, breadth and depth, and with the new, intensive need by scientists, engineers, and researchers in all fields for faster service, better service, service more precisely tailored each to his specialty; many special libraries have found it difficult to stand up to this responsibility. Some organizations have set up "Information Centers" to provide this type of service. One definition pictures them as

...being concerned with an area of subject interest, broad or narrow, general or specific, providing a service to those concerned with this subject area of scientific endeavor. As the foundation of such service, each collects information related to its area of interest and maintains such information in varying organized states.

An information center is, in effect, a specialized library with scientific evaluation and review function added. Where it differs from a library is in its orientation to one research field. It is mission-oriented; it has a planned obsolescence; it lasts as long as the mission lasts, and may be disassembled in future time.

This seems a distinction in degree, not in kind. Most special library patrons need help when they search the literature; most will welcome a service that helps filter out to some degree the chaff from the kernels of information they need; but in the last analysis, only the patron can finally
determine if the information provided answers his need. Where the need or the economics can justify it, an information center or the services of "literature specialists", abstractors, and other means for sifting and evaluating may be provided. They still draw on the resources of the special library; it is still the special librarian's responsibility to provide what is needed and to make sure, as well as he can, that his patrons' needs are satisfied.

Keeping Up

Another distinction of special librarianship is the service variously called "Current Awareness", "Scouting and Routing", "Selective Dissemination of Information (SKI)". It is an attempt to help individuals in the parent organization keep up with what is new in their fields of interest. Most special libraries regularly route periodicals and other literature on a systematic basis and also try to watch for special items of interest which then are sent to the people who might find them of interest. In this area significant progress has been made toward automation. A number of libraries feed into a computer the "interest profile" of each individual, using subject terms or descriptors. New literature is then scanned and abstracts are also fed into the computer, along with subject terms or descriptors representing its content; the machine then compares the interest profiles with each stored item and prints out for each individual, those abstracts that match his interests. Practical working systems of SDI are now in operation with considerable success.

The User

If this brief summary seems to stress the subjective aspects of the special libraries picture, it is because the reviewer believes firmly that
any review of special librarianship must depend on 1) Defining its responsibilities; 2) Trying to gauge how well those responsibilities are being filled.

The special librarian is to Herbert S. White "that type of librarian who puts the needs of the user and the service requirements of meeting those needs above the principle of maintaining library service in accordance with any particular established traditions and techniques. Further, this service must be performed on the terms needed by the user, whether they conform to the library's own traditional pattern of operation".

We have tried to show that as the needs of his users have changed, the special librarian has tried to change, to modify, improve, expand the services he offers. In response to those changes he has also explored new methods, techniques, systems and machines that would make his service better and more efficient. In that respect, many special librarians have kept pace; unfortunately, however, it must be said that many have not.

Most special libraries are small (63 percent of those represented by members of the Special Libraries Association have three or fewer professional staff members); the problem of changing, adapting, improving becomes a very individual one, and it varies widely among the 10,000 or more individuals who consider themselves special librarians. Not all see themselves as vital links in the chain of communication -- as integral mediators between the individual who needs information and the possible source of that information, whether it be a book, a journal, a technical report, engineering drawing, x-ray film, computer tape or another individual. Not all of them see their service as unlimited in the extremes it should reach to satisfy their patrons' needs. And too few still understand the implications, and uses that the computer technology may bring to their work.
Finally, it must be said that too many are still burdened with the traditions of the past and feel that the most important part of their work is administrative -- selecting, acquiring, cataloging, and classifying their materials, and charging them out. They still have their eyes on the ways and means of special librarianship, rather than on the end -- which is "the right information to the right person at the right time in the right form."

This is the situation, in spite of the fact that the professional literature which the special librarian reads and the professional conferences he attends, all bristle with reports on new processes and procedures, new concepts, new horizons. The special library of today and tomorrow must become the super-market of information service, with a tailor-made facility added. To reach that goal, the special librarian must accept the fact that if information is a valuable commodity, then it is his responsibility to make sure that everyone in his organization who might possibly profit by using his services, takes optimum advantage of those services. Until he has reached that ultimate goal, the special librarian cannot rest easy, satisfied with his part in the professional picture. He must therefore combine the talents and enthusiasm of the salesman -- to bring his patrons in -- with a professional technique and pride that will devise the best possible means for satisfying his patrons' information needs promptly, completely, specifically, accurately.

This is a tall order, and the present state of the art leaves much room for improvement towards this ideal. The studies by Hanson and the Auerbach Corporation indicate that for a great many scientists and engineers, the library is one of the last places they consider using when they need information. Whose responsibility is it to change this picture?
In spite of the progress made so far, there is still much more to be made. In spite of any success special librarianship has enjoyed to date, the accomplishment is minor compared to what is needed and what will be needed as our economy continues to grow, as our scientific, medical, engineering, and research communities continue to expand and demand better information service.
References


White, Herbert S., "Special Librarianship--the Special One is the Customer!" Special Libraries Association John Cotton Dana Lecture in Special Librarianship, delivered at the University of Minnesota, Minneapolis, Minn., November 9, 1966.
The real problems for the sincere and capable special librarian are those situations which inhibit or impede the effective operation of the library. The special library exists to do a dynamic job, to make an active contribution to the work of its parent organization. When all conditions are favorable, its services are often of inestimable value. When conditions are less favorable, the nature of a library is such that its effectiveness is often neutralized by seemingly trivial factors. Things such as location, hours, and appropriate accommodations affect the use. Materials: possession, organization, and availability are important. The persons who administer the materials and provide the services are vital in attracting the clients. These are both symptoms and parts of larger basic problems.

The basic problems are common, in varying amounts, to all special libraries, whether in business, industry, science, or arts. They are problems to the extent that they adversely influence the accomplishment of the library, its staff, and its services. They will be treated here under the following headings: (1) Management Support (2) Materials (3) Automation (4) Manpower.

Management Support

The vital management support for a special library is not money alone. Equally important is backing for the physical aspects. And of only slightly less significance is a sincere and expressed attitude of recognition of the value of the library service.
This last point, the positive mental attitude, is probably the most difficult for the objective manager to achieve. In the minds of many, libraries are essential and great; librarians are necessary but insignificant. Management knows it must have a qualified librarian to run an effective library, but even when it hires an expert, it may identify him with the grey mousy little lady of public library tradition, to many an unfortunate symbol of all librarians.

Perhaps this then is the first and biggest problem: for management to recognize the worth of a modern special library and the dynamic service it can give, and to understand and appreciate the ability of the trained special librarian backed by the resources of a well-organized and cooperative profession. It does not naturally follow that when a problem is solved there will be instant achievement of all the good things originally inhibited by the problem. But management recognition of the library, with obvious expressed satisfaction and pride, can result in increased use by the clients, whose work may thereby benefit.

Obtaining satisfactory financial support for a special library is quite frequently a problem. Many a library begins as a small collection of books in an office.

No one really plans to have a library, but these books are needed for the group's work. As they multiply and someone is appointed to take charge, either a small amount of money is earmarked in the "overhead" for books, or it may be added to the account for miscellaneous equipment or janitor supplies. Seldom is any study of costs ever considered until the operation has been surviving on pennies so long that a realistic allotment has little chance of getting into the budget.
To stock and maintain an effective library, adequate financial support is essential. Problem: in a specific organization, what is an effective library? This the librarian often has to decide on his own as he writes his proposed annual budget request. If he is overly enthusiastic, he may be shot down. If he is cautiously conservative, perhaps he will get the requested money, but the too conservative library could hold back the whole organization. It is the responsibility of management to determine with the librarian the extent of library services to be provided. The librarian then can calculate the actual amount of financial support needed and which can be reasonably expected from management.

Of course, it is one thing to get management to define the parameters of library service it wants to provide; it is quite another thing to get it to understand some of the costs involved. Books are expensive in all fields, ranging from about $5.00 each for books in the humanities to an average of $12.00 each in the sciences. Journal subscriptions are staggering. "Miscellaneous" doesn't sound like much, but includes maps, films, charts, photocopies of materials otherwise unobtainable, government documents, pictures, records, magnetic tapes, microforms, and translations. Two common and necessary services, somewhat an extension of the above list, should be included: photocopying and translating, both expensive at their own levels. The problem is to make management aware of all of these elements and appreciative of their contribution to the organization.

Financial support for an adequate staff of qualified persons should be an obvious need. The problem at this point is a frequent lack of knowledge by management and the personnel department of what constitutes a qualified person. Standard job descriptions are lacking, special library requirements
vary with every library, and salary statistics are so few as to be meaningless. In the "professional" positions, the library will operate most effectively with librarians having Masters' degrees from accredited library schools. These persons will command larger salaries than non-graduates. (The talented non-graduate might achieve the same capability after ten years of experience.) Clerical positions in the library should be filled by persons with above-average capabilities for the variety of technical jobs they must perform with unfailing accuracy.

The aspects of Management Support involving the physical accommodations are also potential areas for problems for special libraries. (Again it should be emphasized that these are problems only insofar as they prevent fulfillment of the optimum goals.) One word, "space," would cover it all. But for a library the implications are varied. Location is primary. The farther away a library client's desk, the less frequently will he come in. Upstairs, downstairs, a regular traffic pattern -- all have their effect upon library use. A perfect location for every patron cannot exist, but the library, to be used, must be in a favorable location, not in just what is left over.

Size of the space, and a potential for expansion are vital. Knowledge is increasing and new books are being written. In our culture, no library can adequately acquire and discard on a one to one ratio. Even the most optimistic hopes of staying within bounds are being shattered as new ideas and discoveries, not merely rewritten material, join the collection. New journals are constantly being inaugurated, and all subscriptions continually bring more and larger issues.
Reading space is needed by library clients. While the loan system may be generous and accommodating, many persons wish to browse, to compare, to extract from a number of sources directly in the library. Usually, bound journals cannot be taken out. An adequate study area is essential. And some clients find the library atmosphere more conducive to efficient work than their own offices.

Additional space is needed for machinery such as microform readers and photocopying devices. Some libraries also have record and tape playing and listening equipment. The future will probably bring a computer console.

Under Management Support the one remaining item to be discussed is the position of the special library on the organization chart. The answers to two questions are significant here. (1) Will the librarian be in a position to learn and prepare for new and changed programs before requests for materials come to him? (2) Will the librarian's supervisor be at a decision-making level and will he be intellectually sympathetic to the library? To question #1, obviously the closer the librarian is to policy and program making the better will he be prepared to give forward looking library service. As for question #2, experience shows that supervisors for the library may range from plant managers (over maintenance men, plumbing, heating, lighting, carpentry, and the library) to company vice-presidents. The ideal would be a top administrative officer who personally uses the library as seriously as does the working staff. Such persons are very rare. The best compromise would be a high administrator who had previously been a heavy library user.

In order to supervise effectively, he should understand the needs and attitudes of the library clients, and he must know and be sympathetic to the policies and philosophies of the librarian in meeting those needs.
Materials

Today's culture has created perplexing questions concerning library materials. There is uncontrolled reproduction in writing and publishing things which must be added to special library collections. Although the "publish or perish" catch-phrase is less frequently heard today, its message is still ringing loud and clear. Books are authored or compiled, and journal articles are written. Broadening fields of knowledge have resulted in a proliferation of journals -- new ones for new and narrower specialties. In the scientific fields, a different type of publication has also appeared, just "Letters." Here are monthly or semi-monthly "Letters to the Editor" bringing informal ideas, theories, hypotheses, and some applications, all unproven, unedited, and published within a few weeks of their original conception.

What do all of these mean to the library? Their sheer volume brings increasing costs for acquiring, for processing, and for storing. Much of the writing is low in quality and content. There may be one original idea buried amidst many well-known old ones. It appears obvious that there is infrequent or inadequate editing. Selection itself may be casual and careless. But libraries must accept the bad to get the good.

This is undoubtedly the result of the world's increasing population. Where there were two authors there are now four. Where there were four there are now eight. The written expressions of their separate stores of knowledge is filling the libraries, even though much of it is not new. But who can be the arbiter, the judge, the censor?

Suggestions have been made that both publishers and professional organizations are the logical ones who must initiate steps for control. For libraries it appears to be a problem which belies solution.
The actual growth and proliferation of knowledge has put new demands upon special libraries for greater breadth and depth of materials than many can afford. For some time now nearby university research libraries have made their resources available. But with the growth of the universities and their expanding graduate programs, their facilities are becoming overtaxed. They find that they must discontinue library service to those outside the academic community.

The fine university research libraries are ideal support for the special libraries. As they withdraw their services, adequate substitutes must be found. Perhaps the most practical suggestion is for highly specialized information center libraries to be established regionally, and to be government supported. A disadvantage would be the small number of such centers as compared with convenient existing university collections. A possible solution to the distance from the user lies in the future, when information may be obtained through remote computer consoles.

**Automation**

Automation is coming to the special library, but it will not be here before you know it. Actually the problem it poses is one involving psychology and diplomacy -- how the librarian may respond to the blandishments, encouragement, suggestions, advice, warnings, and threats of computer buffs.

There are a few large successful automated library systems in the United States. There are a goodly number of computer based data-processing systems in operation, maintaining subscription records, producing book and report catalogs and circulation controls. But the glamorous and fantastic "information retrieval" is still a wild gleam in the eye. The fact is that
computerizing a library program is a very complex and expensive undertaking. It might be technically successful; it is doubtful that it will pay for itself or even save any time in a small library. The organization considering it should remember that compared with a library program, the complex computations being performed successfully are very simple and straightforward. A sophisticated library program will be experimental and it should in all honesty be supported by the research budget.

The good things said about computers are true: on the routine clerical chores to which they are readily adaptable they can operate quickly and accurately over and over without tiring. They can furnish many arrangements of materials with only one input. They can retrieve many different kinds of records or statistics, and they do it in miniseconds. There is promise of a great future for computers in libraries.

Special librarians look with anticipation to this computerized future. At present most of them know that a three day work week and a one hundred foot yacht would be as easy to get as a real library program and regular computer time. And yet all librarians are being constantly berated by a few fortunate colleagues, unrealistic computer buffs, and even government spokesmen, for not immediately and enthusiastically embracing this electronic DUZ. (Remember? DUZ does everything!)

**Manpower**

That there is a shortage of qualified librarians is common knowledge. For the persons concerned, what to do about it is the problem. Unfortunately the solution is not simply to interest more people in studying to be librarians. There are complex questions educationally, and there is controversy within the profession.
The library schools are overcrowded. Many applicants must be turned away.
There are not enough library schools. More schools are needed, distributed more widely.
There are not enough teachers, even for the few library schools.
A controversy rages over the curriculum: "It is too general." "It is too specific." "It is superficial."
A controversy in the profession says: "We need (or do not need) more expert subject specialists."
One more conflict: "A few courses should be given for library technicians," vs. "This would be a grave mistake. It would result in many unqualified and inadequate 'librarians'."

On the basis of the expressed requirement of many employers, a "qualified" librarian is one who holds a library degree from an accredited school. Although there are not enough schools to accept all applicants, there are many fine universities without library schools. More schools should be established. Salaries should be high enough to attract as teachers persons with experience in regular library positions.

As for the curriculum, it is this librarian's opinion that most of the presently required courses are essential. A fine teacher can, admittedly with difficulty, structure them to meet graduate level minimums. It would be better if these were presented as undergraduate courses preparatory to real graduate library study of a "professional" nature.

There is no argument against the desirability of a librarian being a specialist in the subjects of interest to his organization. If his background, his under-graduate work, gives him a thorough training in a subject area, he may qualify as a subject specialist. But a fine librarian is basically an information specialist, an expert in finding information on any subject.

There are several realistic and practical reasons for encouraging generalization rather than specialization. The good generalist readily
learns the vocabulary and the important concepts of the business of his employer as easily and completely as does a new executive. The library's clients are usually experts in the literature of their professions, but they need the help of a librarian who can find the literature in the many other areas where their interests often take them. The subject specialist, in "knowing more and more about less and less," is inadequate in just those subject areas where the clients can not help themselves.

By their very nature, librarians are interested in a wide segment of knowledge. They seldom want to restrict themselves subjectwise. Furthermore, they like to work in different types of libraries, and even a specialty will not necessarily hold them permanently. On the other hand, the person who has become a specialist in a subject rarely wants to leave the actual practice to become a librarian, even a "special" one.

The manpower problems so far discussed here have skirted around the basic one: How can eager young people be brought into this profession. It is truly a service vocation with real intellectual requirements. The person who is curious about a multitude of things has a made-to-order outlet for the information he acquires. And there is a special library for almost every interest; for example, advertising, aerospace, art, astronomy, biological science, chemistry, finance and banking, insurance, museums, publishing, science and technology, social science, transportation, etc. Any organization with a need for recorded information, may have a special library. Young people need to be told of these many stimulating and joyful opportunities.
Conclusion

This, then, highlights the problems faced in achieving effective operation in special libraries. Most libraries have developed partial solutions for some of the questions. The justification for this recitation lies in the facts that the questions are common to all special libraries, and the answers, the solutions, must come principally from outside of the libraries and the library profession.

Vice President Hubert Humphrey, Congress, and various governmental agencies have made studies and pronouncements recognizing the information problem and the manpower problem which accompanies it. These are valuable first steps. What is now needed is a strong concerted and continuing effort to impress the public with the significance and the future of special libraries. Young persons about to choose careers must be told of the variety of opportunities, the challenges, satisfactions, and even high drama, which employment in special libraries can give them. This word, and the stimulus to solve all of the problems, can most effectively come from respected people in high positions who have given the time and effort to learn these things for themselves and who have the genius to inspire action in others.
THE POTENTIAL FOR SPECIAL LIBRARIES

IN COOPERATIVE VENTURES FOR SHARING LIBRARY RESOURCES

Bill M. Woods
Library and Information Consultant
Formerly Executive Director, Special Libraries Association

Just as the Canadian Mountie by tradition always gets his man, the special librarian by tradition always gets his answer. To accomplish this he seeks his information both from books and from a wide variety of nonbook materials; he uses both published and unpublished sources; he depends both upon his knowledge of library management and his better than average knowledge of the subject involved; he uses both the traditional methods of library organization and the sophisticated techniques of photocopying, microreproduction, and machine retrieval and dissemination; he used both his own special library and libraries and information centers larger and/or more specialized than his own and supported by another organization. His answer is produced through the cooperation of many persons and institutions.

What is the basis for this present spirit of cooperation and what is the potential for cooperation in the future? The present climate for cooperation should be considered by studying first the past.

Early Cooperation

That the early twentieth century special librarians felt the need for cooperation there is no doubt. A report of the July 2, 1909 meeting at which the Special Libraries Association was formed indicated that the assembled group had "hopes to unite in cooperation all small libraries through the country; financial, commercial, scientific, industrial; and special departments
of state, college and general libraries; and, in fact, all libraries devoted to special purposes and serving a limited clientage."1

It was stressed that much can be accomplished if special libraries were to "unite along cooperative lines" and some of the ways were suggested -- interchange of ideas, publication of bibliographies, circulation of bulletins, and establishment within the new Association a clearinghouse for answering inquiries from the membership.

There existed, in fact, an obsession with the spirit of cooperation in this early period of organized special librarianship. Cooperation was recognized as a way of getting a job done. The journal, *Special Libraries*, was to be published "as a means of furthering effective cooperation." The first issue when it appeared in January 1910 included papers and committee reports presented and discussed at the November 5, 1909 New York meeting which was one of harmony and of agreement and of evidence that those in attendance were heartily in sympathy with the plans for greater cooperation among special libraries.

Papers in that first issue included "Cooperation in the Publication of Lists"2 and "Cooperation between Special Libraries."3 Committee reports suggested more than a dozen ways in which libraries of the same kind might cooperate with one another and with all other libraries in the Association. A directory of special libraries was planned for the second issue of the journal.

2Lee, George W. *Special Libraries*, 1:5-6, January 1910.
Brigham, the Rhode Island State Librarian, pointed out in his paper that a subdivision of labor was necessary to permit the hoped for achievement and to "furnish a means for the expenditure of cooperative energy, it will correlate the highly differentiated parts of our complex organization and it will place in reciprocal relation these unrelated and widely scattered institutions. We shall attain our object only by such harmonious cooperative energy, it will correlate the highly differentiated parts of our complex organization and it will place in reciprocal relation these unrelated and widely scattered institutions. We shall attain our object only by such harmonious coordination and we are apt to secure satisfactory results. Reciprocity must be our watchword and helpfulness to others our aim." He felt that true cooperation was characterized by a hearty, sincere enthusiasm in accepting a duty, and in spite of harping criticism, performing allotted tasks firm in the belief of work well-done.

Size

The size of special libraries is an important factor in any consideration of cooperation. Kruzas\(^5\) found that of the company or "for-profit" libraries 80.6 percent received less than 400 periodical subscriptions; 49.8 percent had fewer than 4,000 volumes; 79.7 percent had less than 10,600 volumes. 4.2 staff members serve the average company library (1.6 are professional). 87 percent of the libraries serving government agencies received fewer than 400 periodicals. Book collections were somewhat larger than in company libraries with 30.2

\(^4\)Brigham, p.6.
percent housing fewer than 4,000 volumes and 50.6 percent with fewer than 10,000 volumes. 4.1 professionals staff the average government library while the total staff is 10.1. Nonprofit organizations (trade associations, museums, hospitals) keep small libraries. 92.1 percent subscribe to less than 400 journals; 45 percent have fewer than 4,000 volumes; and 70.6 percent hold fewer than 10,000 volumes. 3.1 is the average staff size; 1.4 are professional librarians.

Havlik in his 1963-64 statistical survey\(^6\) of 389 special libraries serving State governments presents further evidence that most special libraries are small. The median number of volumes is 6,170, serials average 100; the median total annual operating expenditure is $10,250 with but $2,120 being spent annually to acquire library materials.

Present Cooperation

Active cooperation on the part of libraries has flourished and taken several forms -- storage centers, interlibrary loans, directories, cooperative cataloging, duplicate exchanges, union lists of serials and other materials, shared resources, and cooperative acquisitions. Special libraries have participated to some extent in all, but have been particularly active in the compilation of directories and union lists, often sponsored by the Special Libraries Association. Also through SLA a centralized center for translations was established and numerous bibliographic and reference publications issued. An active and effective duplicate exchange program is sponsored by the Medical Library Association.

There is scarcely any area of the country in which some kind of cooperative program of library service involving special libraries is not in existence or in some stage of planning -- Hartford, Kansas City, Kalamazoo, Houston, Buffalo, San Diego, Chicago, Akron, Wilmington -- to name a few. Several are of particular interest.

In the land of cooperatives, six company libraries in a complex of buildings called Northstar Center in downtown Minneapolis typify the possibilities of cooperation and of shared resources without sacrificing sovereignty, proprietary interests, or convenience. Each of the existing libraries of the "Insiders" -- advertising, finance, public utilities, paper banking, and food processing -- has retained the same physical appearance and user group. Initial accomplishment was adoption of a plan whereby the journal, serial, and reference services of any one of the libraries are available to all six libraries. Beyond compilation of a union list, decisions were made on short-term and long-term retention of journal holdings. The same idea has been extended to include services, directories, reference books, the general book collection, as well as in several other areas for "inside" and "outside" cooperation.7

Another recently formed library cooperative involving several types of libraries is The Library Group of Southwestern Connecticut, Inc. Informally organized in the Stamford and Norwalk area in 1963 and incorporated in 1964, the agency is attempting to meet the growing needs of lower Fairfield County. A directory of library resources, a union list of scientific serials,

joint purchase of equipment and research materials, and the acquisition of microfilm copies of journals are ongoing or planned projects. 8

Illustrative of leadership and the creative solution of common problems is the creation by medical librarians of the Medical Library Center of New York. 9 The Center is providing a storage center for little-used materials of the member libraries, a computerized Union Catalog of Medical Periodicals, cooperative acquisitions, a focus for studies of medical library problems, and the mechanism for other cooperative ventures. No member library sacrifices any of its autonomy and inherits the ability to be more efficient in providing ongoing services or in undertaking entirely new services.

The potential for cooperation by Federal libraries is extremely encouraging, a condition brought about during the past two years by efforts of the Federal Library Committee. It has been possible in two years to hurdle or minimize many obstacles of security, separation of powers, and administrative and professional jealousies.

For years Federal libraries emphasized their diversities of size, role, structure, and mission, and the impossibility and/or improbability for the common solution of problems and the coordination of programs. A recent accomplishment, on the other hand, was preparation in 1966 by the Federal Library Committee of a nine-page document, The Federal Library Mission: a

Statement of Principles and Guidelines  Already more than half of the 44 agencies receiving it have indicated their approval. Cooperation is indicated as a prerequisite in several areas and especially noted is that "each agency should define the extent of library service it is willing to provide to other agencies as part of a cooperative network of federal library resources."

Other Task Forces of the Committee have accomplished or are presently involved in an encouraging variety of coordinated and cooperative projects relating to automation, role of libraries and information systems, public relations, interlibrary loan, procurement of library materials, physical facilities, and recruitment of personnel.

A coordinated library automation effort by the three national libraries, (Library of Congress, National Library of Medicine, and the National Agricultural Library) was announced in June 1967, and is expected to contribute significantly toward providing faster and more efficient access to research information and toward assuring that existing libraries provide the data bank for a national network.

Indicative of the present level of participation by special libraries in cooperative programs in the several states was reported by Phyllis I. Dalton.10 State-wide plans are being discussed and implementation planned in New York, Indiana, Connecticut, South Carolina, New Jersey, Washington, Texas, Delaware, Ohio, and Wisconsin. Special libraries are prominent in many of these plans and are assured a meaningful participation in future planning.

The State Technical Services Act of 1965 and its intent to increase the flow of information to business and industry is not yet fully understood nor meaningfully implemented, nor is its relationship to special library service delineated. Coordination efforts are underway in several states such as California and Oregon. In New York where twenty STS programs have been announced and where many of these programs include an information service closely akin to special library service, the relationship with the New York State Library 3Rs (reference and research resources) program is also being investigated.

But Why Cooperate?

An admonition to special librarians was contained in the sharp remarks made in 1964 by a then Federal technical information administrator who wrote:

The ingrained cooperation among librarians, originally developed for the laudable purpose of facilitating the joint use of collections, has been misused -- probably inadvertently -- to unify their resistance to technical people's demands for new kinds of services. Under these conditions, library service in general has gravitated to its lowest common denominator, a familiar phenomenon of noncompetitive situations. Some readers understood these words to mean that librarians were being accused of cooperating themselves into oblivion, and in their stead would rise a new breed of information handler with a more useful and durable function.

Other observers of the information picture have written, "This continuing cooperation has given flexibility and viability to libraries, enabling them to survive inadequate support, increasing workloads, and an apathetic public" but warns that these same reasons are now, in their complexity and

numbers, the very reasons development of a national information network must be given serious attention.

More than one well-intentioned cooperative scheme has been aborted because possible participants have asked, and have not been satisfied with the answer to the question, "What's in it for me?" Such an attitude is indeed defensible and has been presented in a concise statement, "Self-Interest: the Test of the Virtue of Cooperation." The authors of the statement warn that it is irresponsible for a librarian to accept proposals for cooperative programs just for the sake of proving his readiness to cooperate. Cooperation is desirable and warranted only when it helps the participating institutions to be more effective! Daniels and Nelson conclude their statement, "Let the librarian be persuaded in each case that cooperation serves the interests of the institution he serves. Then cooperation becomes his "official duty" and not merely the expression of his or another's "personal wish." Nelson later expanded his statement and presented nine guidelines and four hypotheses which he believes to be realistic when weighing the merits of participation in cooperative ventures. They relate closely to what is imagined to be the process which most special librarians would follow as they determine their possible participation in cooperative programs.

2. Ibid., p.226.
1. Cooperation is desirable when it benefits the institutions individually or makes them more effective cooperatively.

2. Each participating institution in a cooperative venture must benefit.

3. Cooperation is a voluntary act.

4. Benefits cannot always be assured in advance.

5. Objective appraisal of the results of cooperation is as critical as advance planning and sound implementation.

6. Successful cooperation must take into account the legitimate ambitions as well as the present status of the individual cooperating institutions.

7. A degree of rivalry and competition is inevitable among similar institutions in the same locale.

8. Cooperation must not impose uniformities which tend to destroy the special character of the individual cooperating institutions.

9. Conversely, uniformities which produce economy or other benefits without damaging the special character of the institution are not to be feared.

The operating hypotheses which presume acceptance of the above principles are:

1. No institution is so rich in resources that it can be assumed to have nothing to gain by cooperation.

2. Cash transactions can be an appropriate element in cooperative efforts.

3. The support of top leaders in each institution is essential to successful cooperation.

4. The cooperative effort must be professionally staffed if permanent and significant results are to be achieved.
Potential for Cooperation

COSATI, EDUCOM, and other agencies and individuals have blueprinted national information, library, and communication networks. Title III of the Library Services and Construction Act Amendments of 1966 provides a mechanism for the development of State plans for establishing and maintaining local, regional, state or interstate cooperative networks of libraries. Under the Act special libraries and special information centers can participate along with other types of libraries.

What is the potential for participation by special libraries in such networks? Is it possible for company, association, and government libraries to participate in such cooperative ventures?

Special libraries, as pointed out earlier, have participated in a wide variety of cooperative plans, programs, schemes, and ventures. Many of these have been informal and have not had recognition or support of top managements. Participation of special libraries in more formal and comprehensive programs and networks requires extensive review and consideration.

In testimony in March 1967 before the National Advisory Commission on Libraries the President of the Special Libraries Association stated that "it will be important to remember that most special libraries cannot be full-time nodes in the national network. They will most often appear as a part-time node and as a part-time terminal."

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The special library may at the present time be a member of a smaller subnetwork within a corporation or another parent organization, within a geographical region, or within a subject field. This present participation has ample room for improvement and strengthening. It seems certain that improvement will be a natural result of participation. Government libraries, for example, might well improve their resources and services by creation of coordinated executive department or subject-oriented libraries and networks. Private medicine, law, and history interests might be served better by fewer and improved library systems, possibly in cooperation with academic, government and public libraries. Establishment of systems of libraries should be encouraged. Libraries with the same subject or activity interest and within the same geographical area should consider sharing a central coordinated resource.

Company, association, and government managements are seeking and demanding improved methods for providing a total and improved information service. Information as a marketable commodity is recognized; users are more sophisticated than ever before; specialists in all fields have made the information discovery and demand better service; more money is now available to buy the best information and the best-organized information system available in today's market. "You can't fight city hall!"

It is probably a correct observation that some libraries have felt it was safer to try and solve their problems with the least possible commotion and attention drawn to the effort, rather than to pool their strengths and weaknesses and to seek the kind of increased and formally recognized support necessary for the "ideal" information service. It may be that there has been
a natural fear of penalty by the withdrawal of present support and the substitution of a vague cooperative system for the present "go-it-alone system.

Many special libraries have seen the advantage of good neighborliness by opening and sharing portions of their library collections with qualified users; others have participated in the dollar support of nearby research or public libraries; still others have participated in information and library programs of trade and professional associations. It seems reasonable that managements will see the advantage in cooperating and be able to see "what's in it for me?" In other words, they will be willing to consider participation in a meaningful library and information network. They will be willing to consider support for the well-reasoned and efficient cooperative network essential and possible in 1967. The climate for participation seems to be excellent.

The special library can indeed participate in a network (or networks) of libraries. The special library has almost everything to gain and relatively little to lose by such participation. Its greatest contribution will be to supply users for the network, users who will make demands for accurate and up-to-date information conveniently provided. Special libraries will be willing to pay for the plug-in privilege in such a network in other ways -- resources, reference, analysis -- and in turn be reimbursed for such contributions. Library resources, library services, and library personnel will form the nucleus of the network. The give and take of cooperation will be possible, and special libraries will be participants.
PART III

STATISTICAL SURVEY
Summary

In order to supplement the information obtained from the background papers and the conclusions drawn by the Advisory Panel, it was decided to sample representative special libraries and to determine the main problems facing them and the extent to which they could participate and contribute to the sharing of the nation's library resources and services.

Nine hundred and eleven libraries were selected at random from the Directory of Special Libraries and Information Centers, edited by Anthony T. Kruzas. A letter explaining the purpose of the survey, accompanied by a copy of the questionnaire was sent to each library. Within a few days each library was called by a local Western Union operator who recorded the answers to the questionnaire. The answers were then forwarded to the study office for tabulation. Because the survey was conducted at the height of the vacation season, many librarians could not be reached. Some of the persons contacted would not take the responsibility for answering certain questions. Other libraries were considered outside the scope of the survey. As a result, the total number of forms used to establish the data was 589.

Attached are copies of the letter to the librarian (Attachment A), the questionnaire (Attachment B), a memo from a member of the U.S. Office of Education Statistical Analysis staff describing the universe, sample design and initial sample selection (Attachment C). Following this is
the presentation of the data in the following ten tables.

Table 1 - Percent of Special Libraries by major organizational affiliation and principal primary circumstance impeding the library: United States, 1967.

Table 2 - Percent of Special Libraries by most significant subject area of the library and by principal primary circumstance impeding the library: United States, 1967.

Table 3 - Percent of Special Libraries by size of collection and principal primary circumstance impeding the library: United States, 1967.

Table 4 - Percent of Special Libraries by size of staff in full-time equivalents and principal primary circumstance impeding the library: United States, 1967.

Table 5 - Percent of Special Libraries by position of library in the organizational structure and principal primary circumstance impeding the library: United States, 1967.

Table 6 - Percent of Special Libraries by major organizational affiliation and contribution potential to library network: United States, 1967.

Table 7 - Percent of Special Libraries by most significant subject area of the library and contribution potential to library network: United States, 1967.

Table 8 - Percent of Special Libraries by size of collection and contribution potential to library network: United States, 1967.

Table 9 - Percent of Special Libraries by size of staff in full time
Discussion of the Universe

During the period August, 1961 to February, 1963, a national census of special libraries and information centers was conducted and which was published under the title, *Directory of Special Libraries and Information Centers*, edited by Dr. Anthony T. Kruzas, Gale Research Company, Detroit, Michigan, 1963. This is the only directory of its type in existence.

In 1965 a study was supported by the Cooperative Research Program of the U. S. Office of Education under Contract No. OE-4-10-215 Cooperative Research Project S-078, entitled "Special Libraries and Information Centers; a statistical report on special library resources in the United States." The author was again Dr. Anthony T. Kruzas, Associate Professor of Library Science, Department of Library Science, The University of Michigan, Ann Arbor, Michigan. Included in this study were data on 8,533 libraries and information centers reported in his directory.

The arrangement of the directory was in alphabetical order by the name of the library. In 1965, in connection with a study of special libraries serving state governments by Robert J. Havlik,
then Research Library Specialist of the U. S. Office of Education, Library Services Branch, all the entries in the directory were clipped and entered on edge punched cards. These were punched by state and by organizational category for future use. It was the availability of this punched card collection that made the survey feasible in the short time allowed.

Discussion of the Organizational Categories Used in this Survey

Kruzas divided special libraries into five major organizational categories:

- Group I - Colleges and Universities
- Group II - Business and Industrial Firms
- Group III - Governmental Agencies
- Group IV - Public Libraries
- Group V - Other Organizations

Because of the lack of time to complete the survey and because of the possible conflict of interest with other studies for the National Advisory Commission on Libraries, it was decided to survey only Groups II, III, and V above.

The definitions of these three groups are as follows:

- **Governmental Libraries** - Libraries serving city departments, bureaus and boards; state and legislative reference libraries and those serving departments and agencies of state governments, including hospitals and museums, but excluding state universities, schools of the blind and deaf and penal institutions; and libraries serving federal agencies, departments, bureaus and hospitals of the armed services, but excluding schools for military personnel and divisions
of the Library of Congress.

Libraries in Business and Industrial Firms - These are company supported library facilities which function within the framework of a business operating to produce goods, services or ideas for profit. Included are libraries in advertising agencies, banks and investment companies, public utilities, manufacturing, processing, and distributing companies, insurance firms, merchandising firms, newspaper and publishing companies, and engineering, legal, and commercial consulting firms.

Libraries in Other Organizations and Libraries serving non-profit organizations, associations and institutions - Includes scientific, technical and learned societies, civic, social and religious organizations; historical societies; bar associations, private museums, hospitals; business and trade associations; and significant private collections available for research use.

Discussion of the Subject-Areas Used

The Kruzas directory divided the libraries into 21 subject classifications. These classifications were admitted to be pragmatic, and that some of the subjects chosen were not true subjects but special forms (audio-visual; geography-map) or specialized functions (publishing). Experience with the survey of special libraries serving state governments demonstrated that several of these categories could be condensed. A table showing the ten categories used in this survey as compared to the categories used by Dr. Kruzas is attached. (See Attachment D).
Discussion of Sample Design

By tradition it was felt that the most important comparison of special libraries should be based on the subject classifications. A table was made of the number of libraries identified in each of the ten given classifications.

Because of the great range of size and objectives of special libraries even within a given subject classification, it was decided to select a random sample from each. Based on the size of the project staff, the time available, and the number of questions in the questionnaire, and a desire for the precision of approximately ten percent at 95 percent confidence level for each subject classification, a sample of 911 libraries was selected. The method for selection of the sample is explained in the memo from Mr. Levy of the U. S. Office of Education. (Attachment C).

Discussion of Method of Survey

One week previous to the survey a letter describing its purpose and a copy of the questionnaire was sent to each selected library. This letter was followed up by a telephone call from the Western Union Telephone Survey Service requesting data on the questionnaire which was filled out by the Service on a copy in their possession. The data was then returned to the Study office for tabulation. The data was punched into edge-punched cards for ease of manipulation and the data was reported as shown in the analytical tables. (See tables 1-10).
Discussion of Results of the Survey

Due to the pressure of time no calls made by Western Union after August 15, 1967, were accepted, and no questionnaires received by mail postmarked later than August 15, 1967, were accepted. Forms were received back from Western Union whether or not they were able to contact the library. Many librarians returned the forms by mail. Many forms could not be used because the library was no longer in existence or the addressee or telephone number could not be found. In addition any questionnaires were subsequently eliminated because the libraries were out-of-scope of the survey, i.e., the library never employed a staff or had insufficient volumes to qualify as a library.

The large percentage of out-of-scope libraries especially in the subject classifications of fine and applied arts, law, and religion is directly related to standards for inclusion in the Directory by Dr. Kruzas. A new, revised edition of the Directory of Special Libraries and Information Centers is due shortly with well over 2,000 changes. This situation points up the need for a more definite definition of a "library" for inclusion in such a directory. One recommended definition that has been used in other special library surveys is: A special library should have an organized collection of informational materials and at least one full time staff member primarily assigned to its maintenance and use, and with a total expenditure of not less than $10,000 per year, including salaries.
It is true that such a definition would eliminate many of the so-called special collections or information centers now counted in the universe. The definition is sound, however. Facts have shown that the average starting salary for a librarian in first positions following graduation from an accredited library school in 1965 was $6,468. Studies have shown that 79 per cent of special library expenditures should be devoted to salaries. Thus, minimum expenditures for such a library would be at least $10,700. Others argue, however, that small information collections are part of the overall information gathering picture and should not be ignored. To meet this argument, for the purpose of this survey, however, no rigid definition as above was used at the start. It was felt of value to determine, once and for all, the magnitude of the problem of small collections, and if they had any characteristic problems, even though the main interest lies with the larger collections or "libraries" which have something of value to contribute.

The Principal Primary Circumstance Impeding the Library

When the Study team first was contacted by the National Advisory Commission on Libraries, they requested that the report "highlight the main problems facing special libraries and offer possible solutions or directions of effort to resolve these problems."

A common complaint voiced by librarians is the lack of recognition by their supporting agency of the importance of library service to their clientele and agency objectives. A continuous aggravation between
library educators is whether library training or subject training is the most important factor in the training of a special librarian. A continuous argument between librarians of different organizational classifications, i.e., special librarians vs. university librarians and special librarians vs. public librarians, is the lack of availability of needed library resources in the special library thus forcing them to rely heavily on inter-library loans. It was the objective of question nine in the questionnaire to pin-point these problems and to see if any were peculiar to the major organizational affiliation of the library, its subject classification, size of collection or staff, or its position in the organizational structure.

The returns for this question were rather disappointing in that many librarians refused to answer it. Twenty-seven per cent reported they felt nothing was impeding their library. A total of twenty-two per cent stated "lack of space" or "lack of funds", categories which were not listed on the questionnaire. "Lack of funds and lack of space" appeared to be a general problem since no one category of library stood out as more specifically in need.

The survey showed in almost 3-to-1 ratio lack of library trained staff vs. lack of subject trained staff as the primary circumstance impeding their library. Although the ratio varied slightly with the type of library in no case was the lack of subject trained personnel more important.

By subject area science and technology and business libraries seemed most concerned with their role in the organizational structure.
History and religious libraries are more concerned with the lack of library trained staff. This is reflected by the large number of part-time librarians or volunteers in these fields. Lack of library resources is fairly common to all. Law libraries appeared most satisfied with the status quo.

The second area of concern of the Commission was "the extent to which special libraries can participate in the sharing of the nation's library resources." Legislation for planning cooperation on a State-wide basis is already set up under Title III of the Library Services and Construction Act Amendments of 1966 (PL 89-511). Special libraries and information centers can cooperate in such plans. Arguments have abounded regarding what type of cooperation is needed, if the current directions of cooperation are best to meet the needs or if new types of cooperation are needed on the basis of organizational classification and subject classification. Other problems are the extent to which libraries of certain size can contribute and if the location of the library in the organizational structure is a contributing factor to the willingness to cooperate.

Whereas only one answer was expected to be given, many librarians checked more than one cooperative area where they felt that they could contribute. This proved that librarians are eager to cooperate "if they could benefit in return."

A few libraries such as religious libraries and small law offices or court libraries stated they could not cooperate with Title III
programs in any way but this may be because lack of information about the Act. This would not preclude, however, that they would not cooperate in some other cooperative venture set up in another form.

Table 6 shows that special libraries, regardless of their organizational affiliation are more willing to share their materials resources, and reference services than share in cooperative processing or acquisitions. This reaffirms the attitude that special librarians prefer to model their collections to their own individual needs.

Table 7 has shown that historical libraries and newspaper libraries, as expected, are more willing to share their reference services rather than to share their materials resources. Libraries in the categories of sciences and engineering, and medicine, both subjects with extensive laboratories, are more willing to share their materials.

Table 8 shows that size of the collection apparently did not have much to do with the willingness to share both material and reference resources. The same may be said for the size of the staff as indicated in Table 9.

Table 10 is very revealing for it shows much eagerness for cooperation. Apparently management and other groups administering libraries are eager for the librarians to gain in cooperative ventures. Only slight reluctance appeared with those libraries which were independent collections of a special nature.

In conclusion, the problems experienced with this survey pointed up the lack of good directories or listings of special libraries upon which to base a statistical universe.
The survey also showed that despite the diversity of operational classification, subject matter classification, size of collection and staff, and diversity of administrative management, the problems of special libraries were surprisingly similar, with nearly one-half reporting they had no problems or were satisfied with the status-quo.

It revealed that more library trained people were needed than subject trained people.

The survey also showed that special libraries are eager to share their materials and reference resources in a library network but were less eager to share in cooperative processing or acquisitions.

This may point to directions in the future when special libraries may serve as information switching stations to a centralized library or information center.
To the Librarian:

The National Advisory Commission on Libraries recently commissioned us to prepare "A Study of Special Libraries - Problems and Cooperative Potentials." This study will be used to supplement the knowledge of the Members of the National Advisory Commission and aid them in preparing their final report.

It is our intention to sample representative special libraries to determine the main problems facing them and to determine the extent to which special libraries can participate in and contribute to the sharing of the nation's library resources, and services.

Before July 31, 1967 you will receive a telephone call from the Western Union Telephone Survey Service requesting that you answer the enclosed questions. We shall appreciate your cooperation in supplying this information about your library. This information will remain confidential and will not be published by individual library.

If you feel that the questions are not clear or you wish to make additional comments please feel free to contact us directly. Your cooperation is deeply appreciated by all concerned.

Yours very truly,

Robert J. Havlik

Robert J. Havlik, Director
Study of Special Libraries for the
National Advisory Commission on Libraries
Rm. 5919 ROB
7 th and D Streets, S. W.
Washington, D. C. 20202
Phone: Area 202-962-5260
NATIONAL ADVISORY COMMISSION ON LIBRARIES

Study of Special Libraries Questionnaire on Problems and Cooperative Potentials

Name of your Library ____________________________________________

Location of the Library (City and State) __________________________

Telephone number _____________________________________________

Indicate the major organizational affiliation of your library

☐ Government (Federal, State, County or City)
☐ Business and Industrial Firms
☐ Non-Profit Organizations, associations and institutions
☐ Other ____________________________

Indicate the most significant subject area of this library

☐ Law
☐ History
☐ Sci-Tech (including Physical Sciences, Engineering, Biological Sciences and Agriculture)
☐ Business, Commerce and Administration
☐ Social Sciences/Education
☐ Fine and Applied Arts (including Humanities)
☐ Health Sciences
☐ Newspaper and Publishing
☐ Religion
☐ Other __________________________

Size of the Collection in number of volumes _________________________

(A volume is any printed, typewritten, mimeographed, or processed work, bound or unbound, that has been catalogued and/or fully prepared for use.)

Total staff positions in full-time equivalents ________________________

Indicate the position of this library in the organizational structure.

☐ responsible to the administrative or executive office
☐ responsible to the research or development department
☐ responsible to the educational or informational services department
☐ responsible to the general services and/or fiscal office
☐ other (describe) ____________________________________________
Indicate the principal primary circumstance which you feel is impeding the proper utilization and development of this library.

☐ The place or role of your library in the organization structure
☐ Lack of library trained staff to serve properly your clientele
☐ Lack of subject area trained staff to serve properly your clientele
☐ Lack of availability of library resources in your field of interest
☐ Other factors ____________________________________________

Title III of the Library Services and Construction Act Amendments of 1966 (PL 89-511) authorizes grants for establishing and maintaining local, regional, State, or inter-state cooperative networks of libraries (including special libraries and special information centers). Assuming you could benefit from such networks of libraries how could this library best contribute in such networks?

☐ Contribute through sharing of library materials resources
☐ Contribute through sharing of reference and/or information services
☐ Contribute through cooperative processing of library materials
☐ Contribute to cooperative acquisition of library materials
☐ Other (describe) __________________________________________

- 78 -
UNITED STATES GOVERNMENT

Memorandum

TO: Mr. Robert J. Havlik
FROM: Nathan Levy
Statistical Analysis

DATE: July 10, 1967


Purpose: The purpose of this survey is to obtain data on characteristics of special libraries.

Universe: The universe of inquiry is the 6119 Government, Company and Non-Profit Organizational Special Libraries in the 50 States, outlying parts and the District of Columbia that were listed in the Directory of Special Libraries and Information Centers, Gale Research, Detroit, Michigan.

Sample Design: Since the most important comparison to be made from the results of the survey is the similarities and differences of the subject areas, the universe of inquiry was stratified by ten (10) subject areas. Further stratification by size of collection was desirable; however, this data was not available. Within each stratum a random sample of special libraries was selected. The main considerations in determining the overall sample size was 1) the number of personnel available to process the returns, i.e., one clerk, 2) the timeliness, i.e., approximately one week to process the returns, and 3) the number of questions on the questionnaire, i.e., seven significant questions. Based on these constraints, the sample size is based on the precision of approximately 10 percent at 95 percent confidence level for each subject area. At the national level, the sample size of 911 special libraries will provide more precise estimates.

Sample Selection: Arrange the special libraries in each State by area in alphabetic order. Select the libraries in the manner shown below.
Attachment C - continued

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N = number of special libraries in the universe
n = number of special libraries in the sample

cc: A. Mood
S. Shtulman
M. Ullman
A. Frankel
Files
Attachment D

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Table 1. Percent of Special Libraries by major organizational affiliation and principal primary circumstance impeding the library: United States, 1967

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<th>MAJOR ORGANIZATIONAL AFFILIATION OF LIBRARY</th>
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<th>Business &amp; Industry</th>
<th>Non-Profit Organizations, Associations and Institutions</th>
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Table 2. Percent of Special Libraries by most significant subject area of the library and by principal primary circumstance impeding the library: United States, 1967

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Table 4. Percent of Special Libraries by size of staff in full time equivalents and principal primary circumstance impeding the library: United States, 1967

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<td>6.2</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
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<td>8</td>
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<td>9.5</td>
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<td>26</td>
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<td>27</td>
<td>22</td>
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<td>33</td>
<td>27</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>OTHER</td>
<td>8</td>
<td>9.4</td>
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Table 5. Percent of Special Libraries by position of library in organizational structure and principal primary circumstance impeding the library: United States, 1967

<table>
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<tr>
<th>PRINCIPAL PRIMARY CIRCUMSTANCE IMPEDING LIBRARY</th>
<th>TOTAL</th>
<th>Responsible to Administration</th>
<th>Responsible to Research</th>
<th>Responsible to Education</th>
<th>Responsible to Gen. Services or Fiscal Office</th>
<th>Indep.</th>
<th>Other</th>
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<td></td>
<td></td>
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<td>3</td>
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<td>14</td>
<td>10.6</td>
<td>9.7</td>
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<td>ROLE IN ORGANIZATIONAL STRUCTURE</td>
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<td>21</td>
<td>16.4</td>
<td>27</td>
<td>23</td>
<td>10</td>
<td>4</td>
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<td>8</td>
<td>5</td>
<td>10.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>LACK OF LIBRARY RESOURCES</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td>5</td>
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<td>7</td>
<td>-</td>
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<td>LACK OF SPACE</td>
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<td>8</td>
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</table>
Table 6. Percent of Special Libraries by major organizational affiliation and contribution potential to library network: United States, 1967 (Percentages are based on total responses since multiple responses were indicated by some libraries.)

<table>
<thead>
<tr>
<th>CONTRIBUTION POTENTIAL TO LIBRARY NETWORK</th>
<th>MAJOR ORGANIZATIONAL AFFILIATION OF LIBRARY</th>
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<tbody>
<tr>
<td></td>
<td>TOTAL</td>
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<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
<tr>
<td>SHARING OF LIBRARY MATERIALS RESOURCES</td>
<td>33.3</td>
</tr>
<tr>
<td>SHARING OF REFERENCE SERVICES</td>
<td>35.3</td>
</tr>
<tr>
<td>SHARING THROUGH COOPERATIVE PROCESSING</td>
<td>7</td>
</tr>
<tr>
<td>ACQUISITION</td>
<td>10</td>
</tr>
<tr>
<td>NONE</td>
<td>6.2</td>
</tr>
<tr>
<td>OTHER</td>
<td>8.2</td>
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</table>
Table 7: Percent of Special Libraries by most significant subject area of the library and contribution potential to library network; United States, 1967 (Percentages are based on total responses since multiple responses were indicated by some librarians.)

<table>
<thead>
<tr>
<th>CONTRIBUTION POTENTIAL TO LIBRARY NETWORK</th>
<th>MOST SIGNIFICANT SUBJECT AREA OF THE LIBRARY</th>
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<tbody>
<tr>
<td>TOTAL</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
<tr>
<td>SHARING OF MATERIAL RESOURCES</td>
<td>33.3</td>
</tr>
<tr>
<td>SHARING OF REFERENCE SERVICES</td>
<td>35.3</td>
</tr>
<tr>
<td>SHARING THROUGH COOPERATIVE PROCESSING</td>
<td>7</td>
</tr>
<tr>
<td>ACQUISITION</td>
<td>10</td>
</tr>
<tr>
<td>NONE</td>
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<tr>
<td>OTHER</td>
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Table 8. Percent of Special Libraries by size of collection and contribution potential to library network: United States, 1967 (Percentages are based on total responses since multiple responses were indicated by some librarians.)

<table>
<thead>
<tr>
<th>CONTRIBUTION POTENTIAL TO LIBRARY NETWORK</th>
<th>TOTAL</th>
<th>Below 5,000 Volumes</th>
<th>5,000-20,000 Volumes</th>
<th>Over 20,000 Volumes</th>
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<td>SIZE OF COLLECTION</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
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<td>TOTAL</td>
<td>100</td>
<td>37</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>SHARING OF MATERIALS RESOURCES</td>
<td>33.3</td>
<td>33</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>SHARING OF REFERENCE SERVICES</td>
<td>35.3</td>
<td>37.2</td>
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<td>39</td>
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<td>SHARING THROUGH COOPERATIVE PROCESSING</td>
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<td>6.2</td>
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<td>ACQUISITION</td>
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<td>8.2</td>
<td>7</td>
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<td>9</td>
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<tr>
<td>CONTRIBUTION POTENTIAL TO LIBRARY NETWORK</td>
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<td>1-2</td>
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<tr>
<td>SIZE OF STAFF</td>
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<td>TOTAL</td>
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<td>50</td>
<td>19</td>
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<td>28</td>
<td>35.5</td>
<td>34</td>
</tr>
<tr>
<td>SHARING OF REFERENCE SERVICES</td>
<td>35.3</td>
<td>33</td>
<td>34.5</td>
<td>36</td>
</tr>
<tr>
<td>SHARING THROUGH COOPERATIVE PROCESSING</td>
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<td>8</td>
<td>6</td>
<td>5</td>
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<tr>
<td>ACQUISITION</td>
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<td>OTHER</td>
<td>8.2</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Contribution Potential to Library Network</td>
<td>Total</td>
<td>Responsible to Administration</td>
<td>Responsible to Research</td>
<td>Responsible to Education</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------</td>
<td>------------------------------</td>
<td>------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
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<td>13</td>
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<tr>
<td>&lt;br&gt; Sharing of Materials Resources</td>
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<td>33</td>
<td>37</td>
<td>33</td>
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<tr>
<td>Sharing of Reference Services</td>
<td>35.3</td>
<td>37</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>Sharing through Cooperative Processing</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Acquisition</td>
<td>10.3</td>
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<td>17</td>
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<tr>
<td>None</td>
<td>6.2</td>
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<td>-</td>
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<td>Other</td>
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Part IV

PROBLEMS AND SOLUTIONS

Advisory Panel Meeting
What are the problems facing special libraries and how can they be solved?

Background

On July 27 a carefully chosen Advisory Panel was convened at the American Documentation Institute in Washington, D.C. to discuss the major problems facing special libraries and to determine how, in the context of comprehensive library and information services to the nation, these problems might be solved.

Members of the Panel and their areas of specialization were:

Associations and Non-Profit Organizations
Elizabeth Ferguson, Librarian, Institute of Life Insurance, New York, New York

Business and Industry
Eugene B. Jackson, Director of Information Retrieval and Library Services, I.B.M., Armonk, New York

Documentation Centers
Bernard M. Fry, Director, Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia

Government
Paul Howard, Executive Secretary, Federal Library Committee, Washington, D.C.

Law
Elizabeth Finley, formerly Librarian, Covington and Burling, Washington, D.C.

Medicine
Gertrude L. Annan, Librarian, New York Academy of Medicine
New York, New York

Also attending were Robert J. Havlik, Leona M. Vogt, and Bill M. Woods of the Study staff.

In advance of the meeting the Panel received a five-page memorandum suggesting some 40 of "the burning questions now facing special libraries" and some of "the problems during the next few years." Although there
may have been an over-emphasis on the problems, a number of the questions did suggest possible solutions. The role of professional associations and State libraries, existing or possible legislation, and present or still-to-be-created agencies of the Federal Government were suggested as possible sources of solutions. Other problems and possible solutions were also solicited.

The Meeting

Each Panel member was asked to present a brief, informal statement of problems in his special field of special librarianship and documentation as he saw them. It soon became apparent that there were more similarities than dissimilarities in the problems facing special libraries. The experts agreed to this.

Although much of what the Panel had to say had been said before, it made good sense, created lively discussion, and undoubtedly influenced the thinking of the Study team. Some of the ideas proposed were new; some were old ideas said in a new and hopeful way; some were controversial and sparked disagreement. There was not time to discuss fully still other ideas.

Although representation of special library interests within university and public libraries was intentionally omitted from the Panel, as these interests are included elsewhere in other studies being made for the National Advisory Commission on Libraries, more than once, the Panel members pointed out the similarities of interest between these special libraries and special libraries whose interests the Panel did represent. It was agreed that too little is known about the departmental
and professional libraries supported by academic institutions and by public libraries. Without hesitation, attention to these libraries was urged by the Panel members.

Nearly all Panelists mentioned the problem which special libraries have with administrative recognition, definition, support and the clear delineation of the role of the special library in its parent organization.

Perhaps the major attention of the meeting was devoted to the almost total lack of special library statistics. A few quantitative statistics have been collected, but qualitative data is particularly needed.

The manpower shortage received much attention, as might have been anticipated. It was agreed that there is a shortage of good people both at the top and at the bottom. Other problems were mentioned, and among them, misuse of the name library and what size collection qualifies as a library and who qualifies as a librarian; the small inefficient size of many of these so-called libraries, and the over-abundance of literature from which special librarians must select.

Most of the discussions could be summarized under nine headings: role; manpower; equipment, systems, and facilities; resources and services; statistics and standards; research; cooperation associations; and government. Discussions and conclusions are as follows:

Role

A "modern" special library is more than a warehouse; it is a vital part of a total information system. It must be the best source of information for and about its own parent organization. Managements and users frequently do not understand reasons for strong support of a
special library or how to make best use of it. Therefore, both the public and the management image of the library must be clarified. Although a clearer definition and concept of the role of special libraries must be researched and written, according to one Panel member "the only solution to many problems is that the librarians themselves have to pitch in and improve management relations."

**Manpower**

Special librarianship because of its special demands must conduct a continuous search for excellence in its personnel. Library schools must be equipped to educate persons for "modern" special libraries. Library education should train library managers. They should also show greater concern with the training of library technicians. Although a shortage of qualified library manpower probably exists, the lack of a real mass market in special librarianship prevents a mass recruiting effort. The use of more subject specialists in special libraries should be encouraged. One step toward recruiting such persons is to train more subject specialists in use of their own literature. A real plea was made for greater attention by the library schools and associations to continuing education, taking it to cells of special librarians wherever they work and live by what Eugene B. Jackson has called the "circuit rider."

**Equipment, Systems, and Facilities**

A concern of the Advisory Panel was the need for efficient and inexpensive systems and hardware for the small special library. The lag in the development of various technologies--photocopying, micro-reproduction,
communications, computing—and their library applications was discussed. Further research and development should be encouraged. An intriguing question was asked, "Is a person sitting in front of a terminal using a library?" One solution to part of the high cost of electronic equipment might be greater use by libraries of service bureaus or the organizations of consortiums to make more effective use of the same software and hardware for similar operations.

Resources and Services

It was noted that while the user is often supplied by the librarian with too much information, some users have too little access to information. It is likely that more commercial library and information services will be developed to alleviate the need. It was felt strongly that the Federal Government should not usurp the development of such services but should instead offer them encouragement.

Revision of the long-standing inter-library loan code was also suggested and mentioned was the recent preparation by the Federal Library Committee of an inter-library loan code for Federal libraries. The need for greater consistency of borrowing and lending regulations was the underlying cause for such revisions.

Statistics and Standards

Without question the Advisory Panel was most emphatic as to the need for good special library statistics on a national basis. Practically none exists. Most discouraging is the total lack of any current plan for their collection. The Federal Government must assume the responsibility for the collection and analysis of up-to-date national
statistics for all kinds of libraries! These statistics should be quantitative, but how, it was asked, can badly needed qualitative data also be assembled.

The evidence of the real worth of a special library can only be determined through information available from internally collected statistics. This is also an area in which special libraries are woefully inadequate. Cost benefit ratios must also be established. It was suggested that an operations research project for special libraries be initiated. Another need for basic statistical data is for identifying the library market.

Special libraries Association in 1964 issued general Objectives and Standards for Special Libraries. Additional guidelines are needed, especially for libraries serving legal, newspaper, medical, and other subject interests, plus guidelines for libraries housing maps, pictures and other special forms of materials. The need for case studies illustrating special library situations was also mentioned.

Research

For years there has been concern over the lack of research into special library problems. Although heartened by the recent program of library research support by the Federal Government under Title IIB of the Higher Education Act of 1965, as amended, the Advisory Panel noted that few of the grants for 1967 were specifically for special library research although a number of the projects will give attention to problems of concern in all types of libraries. The lack is not for topics for research since several dozen have been identified, but rather because of the lack of personnel interested in and capable to do the research into special
library problems.

Cooperation

The cost of information, and the personnel, materials, equipment, and buildings necessary to provide it, is expensive. More efficient ways must be found to collect and to disseminate information. Networks have been advocated as an efficient means of supplying information. This concept, although not yet clearly defined, might operate as a subject network (as MEDLARS in medicine), or geographically oriented networks as within a single state and including libraries of several types or of a single type. Such a network is developing in New York State. Sub-networks are envisaged - local, subject-local, regional, type of library, etc. An international network, too, is a distinct possibility.

The potential for participation by special libraries in such networks was explored. There seemed to be no question but that special libraries would be able to plug in and receive (probably at cost) the benefits of such a network. The root of the question is what the contribution of special libraries to a network or networks would be. It was agreed they would supply more than use. Many special libraries have unique resources which would add measurably to the effectiveness of the network. But how this would be accomplished is the real question in the opinion of the Panel.

The Advisory Panel agreed that participation by special libraries is possible. The designers of the system, however, must be cognizant that such cooperation must be of a "reasonable amount", as participation
cannot detract from the prime objective or mission of the special library's parent or host organization.

Inventories of existing resources, collections, and capabilities are badly needed and should be obtainable with a minimum of effort. In this effort the Panel again emphasized the need for special library statistics.

Suggested as worthy of further serious attention was the formation of consortium. The consortium is a partnership which seems to make particularly good sense. The expense of mechanization now prevents many libraries from automating those operations which are large enough in volume to meet the test of critical mass. Very few libraries have the full time need of a computer; however, they may need greater access to one than is often provided when they are sharing time with a diversity of higher priority interests in their parent organization. The library consortium operated computer could be programmed to perform realistically for library needs.

Also suggested were consortiums on the subject level. For example, libraries in trade associations in a single field, such as metals, might support a single major center. Establishment of small core libraries with the capability of an on-the-spot special library information service but with a centralized supervision, training, acquisition, processing, and information function were thought to be a possibility for the future. Without such cooperation there is the danger that there may develop too many libraries thereby resulting in the lowering of the overall level of service and performance of the available information.
Associations

Library associations have many accomplishments to their credit and will continue to be significant in the special library field. Library associations should strive to develop additional guidelines for measurement of their wards; they should participate in the collection and analysis of special library statistics; they should collect case studies and prepare cost-benefit ratios for special libraries.

Several of the special library associations, however, are ambitious beyond their present resources and could benefit from additional support. There must be increased dialogue and cooperation between these associations. They too, should communicate more conscientiously and effectively with other associations, such as those representing both their managements and their users.

Government

It was felt that the National Advisory Commission on Libraries was being asked to recommend ways in which the Federal Government can contribute to the improvement of the nation's libraries. The Advisory Panel agreed that the Government has a responsibility and can do much to improve all libraries; however, the Panel warned that Government should not do that which private interests might do just as well. Government though should support development of services and literature control in subject areas where costs inhibit development by another group. A fair balance between government and private agencies should be a goal.
The Panel developed the intriguing concept of information as a public utility. They felt that information is a national resource and must be easily available to all and at a reasonable cost. It is in the national interest for professional and technical persons to have access to information. It is the responsibility of Government to provide information when it cannot be supplied by other means. One suggestion was companion legislation to the Freedom of Information Bill (administrative) for publicly available technical information.

Revision of the copyright law was recognized as a problem needing resolution. No copyright law should impede the free flow of information. The Panel expressed need to permit the making of at least one photocopy of any copyrighted work - the position taken several years ago by the major library associations.

Also suggested but presented with some caution was the idea of information authorities as a mechanism to assure the free flow of information to all who need it and as a way to circumvent the artificial but restrictive political boundary. Authority is a suspect word to some but accomplishments of authorities concerned with power, transportation, pollution, housing, and other social problems suggest its possible applicability to information.

The responsibility of the Federal Government in the collection of statistics for all types of libraries has already been reviewed. The importance of special library statistics in the over-all program must not be overlooked!
Specific recommendations were also made for the improvement and expansion of the National Referral Center for Science and Technology. The Science Information Exchange of the Smithsonian Institution should be expanded and become generally available to the public and become better known through better promotion. The State Technical Services Program also needs to know more about special library resources, and the STS information services need to be better coordinated with those of existing library and information centers.

Conclusion

The Advisory Panel had many additional things to say and frequently restated and re-emphasized many of its positions. They saw the desirable and inevitably deeper involvement of the Federal Government in the library and information needs of the nation. They hope that the National Advisory Commission on Libraries agrees with these conclusions and is able to make meaningful recommendations which the Executive and the Congress will support.
Part V

CONCLUSION
Discussion

Many library experts believe that the only things special libraries have in common are their differences. This theory has some backing when one examines the diversity of operational classifications, subject-matter classifications, materials collected, services provided, and the variety of administrative management and support of these libraries. The authors of this Study, however, felt that there was a basic core of librarianship behind these libraries, and that "the social role of the library as an institutional form is to maximize the utility of graphic records for the benefit of society."¹ It was decided to take a three-pronged approach of (1) background papers, (2) a statistical survey, and (3) an Advisory Panel discussion to see if this core or common approach was evident.

The results were not disappointing. Through the papers and discussions ran the conviction of the active role of the special library in the information needs of twentieth century society, and that "for the special library, information is a commodity - tangible, valuable, literally with a dollars-and-cents price tag on it - as valuable in many ways as improved production machinery or new research equipment."²

Each of the background papers also mentioned, in some way, the tremendous growth in the number of special libraries and special library practices, especially since World War II. They also mentioned a trend,

¹See Shera, p. 12.
²See Aspnes, p. 28.
which was not considered initially in the study that of the rapidly increasing number of special libraries which are components of public and college and university libraries.3

And, third, they recognize the particularly enviable and advantageous position of special librarians as integral mediators between individuals who need information and the source of that information. "The special librarian, thus has an opportunity to provide for the profession as a whole, a kind of clinical case record of particular situations in information use, not unlike the data the doctor or surgeon can provide for the annals of medicine. For one type of user, at least, the special librarian is in a position to supply some evidence that will help to answer the basic question of the effect of recorded knowledge upon the conduct of men."4

As Plutarch once said, "Whoever tries for great objects must suffer something." There appeared to be several common problems which were cited by the Advisory Panel and demonstrated by the survey: "The basic problems are common, in varying amounts, to all special libraries, whether in business, industry, science, or arts. They are problems to the extent that they adversely influence the accomplishment of the library, its staff, and its services." They are "...(1) Management Support (2) Materials (3) Automation (4) Manpower."5

3 See Ash, p. 17.
5 See Rathbun, p. 40.
Although the direct question of management support was not asked in the survey, thirty-three percent of the libraries reported a lack of funds and space or dissatisfaction with their role in the organizational structure. These might be considered products of lack of management or administrative support. This problem was repeated at the Advisory Panel meeting. It was concluded there that in many cases, "the only solution to many problems is that the librarians themselves have to pitch in and improve management relations." Such a solution not only has implications of the need for more effective recruiting of quality people into the profession and the growing need to train more library or information managers, but points up the need for making available to the special library community statistics and standards upon which they can base their evaluation of services.

Since special librarians deal with information and most information is, and will be for a long time, stored as the printed word, the problem of library materials is inexorably tied to the information explosion or the information discovery. While the sheer volume of materials brings increasing costs for acquiring, processing, and storing information, the growing inter-disciplinary nature of special libraries increases their appetite for more and more materials at hand. This situation has on occasion caused undue pressure upon special libraries in public libraries and college and university libraries by special libraries in business, industry, and in non-profit organizations.

It has been suggested that automation of library house-keeping operations and formation of cooperative networks might point the direction to the solution to these problems. Dr. Shera observes "Though the special

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See p. 96.
librarians have, in general, been somewhat less responsive to the possibilities of automation and other forms of mechanized literature-searching than have the documentalists and the information scientists; nevertheless, many of them have been engaged in a substantial amount of experimentation with various applications of electronic automata. Their years of close association with industrial research have been a constant stimulus to which their cousins in conventional librarianship have not been exposed." That special libraries have in fact taken a lead among librarians in the use of automation was borne out in the recent SLA-LTB inventory. Mr. Woods makes the best case for the problems and needs for cooperative ventures in his statement: "Company, association, and government managements are seeking and demanding improved methods for providing a total and improved information service. Information as a marketable commodity is recognized; users are more sophisticated than ever before; specialists in all fields have made the information discovery and demand better service; more money is now available to buy the best information and the best organized information system available in today's market. 'You can't fight city hall!'" Further he says that "the special library has almost everything to gain and relatively little to lose by such participation."

7See Shera, p. 13.
9See Woods, p. 62.
As suggested before these solutions will bring new manpower problems on top of those that already exist in the special library field. Library education will have to make increased efforts to meet new needs of special libraries. Lack of library trained staff still outweighs the lack of subject trained staff in a special library by nearly three to one. The present trend in librarianship, however, dictates that the library trained person be a different product that was produced by library schools in the past. Mr. Ash best states this as follows: "Librarians will soon begin to see the necessity for the total integration of the sources of knowledge; their readers already have need for such unified materials drawn from all phases of knowledge. Fewer organizations, better integration, and closer cooperation will need to be the theme for library group organization. This statement is not to deny the necessity for specialized training of librarians working with special subject materials. It calls, rather, for more broadly trained people with a greater degree of awareness of the total resources of American libraries and the relevance of such holdings to the needs of a specialized clientele."\(^\text{10}\)

**Recommendations**

French scientist Jean Rostand once said "We oversimplify the theses of our forerunners in order to credit ourselves with putting in fine touches." Nevertheless we should like to make the following recommendations to the Commission for their consideration for

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\(^\text{10}\)See Ash, p. 26.
improving the role of special libraries in their service to the nation.

1. **Manpower Needs**

   There is a need for a hard core look at manpower needs and use. A mechanism to make better use of manpower needs to be developed with the qualities both of an inventory and of a placement service. The use of persons in minority groups and of married women should be explored. Library education must be concerned with the training of "modern" special librarians, persons who are library managers in the most professional sense of the word. There must be continuing education of special librarians provided by universities, association, and government agencies. The use and education of library technicians needs further attention. Support of training of subject information specialists as needed by special libraries should be developed.

   It is recommended that:

   a) Additional studies such as the Program of Research Into the Identification of Manpower Requirements, the Educational Preparation and the Utilization of Manpower in the Library and Information Profession now being conducted by the University of Maryland School of Library and Information Service should be supported.

   b) Additional support and encouragement should be given to the United States Employment Service National Registry for Librarians to make it an effective inventory and placement service for the library training and employment of minority and underprivileged groups in special libraries.
d) Additional funds and support should be given to Title IIB (training) of the Higher Education Act of 1965, as amended, to encourage more qualified persons to enter the library profession, to encourage library schools to expand their programs and staff to meet the need for training of modern special librarians, to provide basic training in library and information science skills (non-degree programs), and to help organize continuing education programs for all personnel.

2. **Statistics and Standards**

   Special library statistics including libraries serving business and industry, associations, hospitals, museums, and other nonprofit groups, government agencies, professional and departmental units of university libraries, and specialized departments of public libraries should be collected. There is a need for such statistics for management, user, and market purposes.

   The Division of Library Services and Educational Facilities of the U. S. Office of Education is no longer responsible for such programs. This responsibility for library statistics has been deferred to the National Center for Educational Statistics. Due to pressures of other educational programs NCES has not exercised its responsibilities to libraries. Funds, though, are available for statistical studies by outside agents under the small contracts section of the National Defense Education Act to support necessary studies.

   Both quantitative and qualitative standards for special libraries
should be developed to provide a guide for a modicum of special library service.

It is recommended that:

a) A National Center for Library Statistics should be established within the National Center for Educational Statistics as soon as possible and should be supported in its efforts to become the reference, data gathering, and analysis center for library statistics of all types.

b) Additional funds and support be given under the Small Contracts section of the National Defense Education Act to encourage outside library surveys until the National Center for Educational Statistics is sufficiently organized and staffed to handle their responsibility in regard to library statistics.

3. Research

Research in special library problems is practically nonexistent. Research projects and appropriate levels-of-effort must be established. Project selection and level-of-effort are not independent qualities. Some research work is not worth doing with a "sub-critical" effort. Like an atomic reactor, it will not produce heat if it is too small. To be avoided, however, is the tendency to fall in the trap of supporting library research on the basis of terms which include more attention to the worthiness of research methods, than to the use to be made of the results. Research in information science is competitive, and library research is a key element in this competitive system where leadership
can be translated into lead time of consequence to libraries. Hence, being foremost is more than a matter of prestige; it may be a vital component in the survival of libraries.

It is recommended that:

a) Additional funding and support be given to Title IIB (Research) of the Higher Education Act to support:

1. research in the way information is used and administered in total library-education-research concept.
2. research in true information retrieval rather than document retrieval.
3. research in the location and capabilities of data-processing equipment, its use and capability for adaption to library work.
4. research on costs and work procedures to be applied in library systems planning and design.
5. research which would result in the revitalization of library education.

b) Efforts should be made to coordinate other library-information support programs such as undertaken by the National Science Foundation and the like. Any agency assigned an informational responsibility should have built into it the capacity for planning evaluation studies of library research to assist them in assisting progress toward the goals of future library service.

4. Resources, Services, Equipment, and Facilities

Existing library resources must be identified and improved. There should be expanded support of research libraries (national,
university, public, and private) which are presently serving many needs of special librarians.

The small special library of today has the immediate need for efficient and inexpensive systems and hardware. Attention must be given to the development and adaptation of systems and electronic equipment which is particularly suited to special library needs. Because of lack of monetary support most librarians continue to use their present methods and services. What librarians need to do is redefine the conventional library functions, collections, and services, and to re-think the entire library concept in terms of what society and education will need. Such realignment will be difficult because it will encounter many boundaries of traditional service and ideas. Librarians must abandon the idea that each library is a self-sufficient unit. Libraries must become integral parts of informational and educational service networks at all levels. New technology will aid this development.

It is recommended that:

a) Further support should be given to extend such acts as the Library Services and Construction Act (PL 89-511), Elementary and Secondary Education Act (PL 89-10), Title IIA of the Higher Education Act (PL 89-329), Medical Library Assistance Act (PL 89-291), and State Technical Services Act (PL 89-182) to expand facilities and services for libraries and allow the purchase and adoption of new media.

b) Title IIC of the Higher Education Act of 1965 (PL 89-329) should be strengthened and broadened to support the development of programs for strengthening and sharing college, research, special, and public library
5. Cooperation

The growing realization by forward-looking librarians is that without cooperation between the libraries themselves, libraries will be unable to take advantage of modern technologies and trends. Recognition of the need for cooperation is exemplified by the recent spate of programs and papers on cooperation presented at library meetings. The trend here is the development of interlibrary cooperative service plans at all levels of operations. Such cooperative plans are called library networks. Many of the problems of and created by special libraries exist because of their small size. The development of consortiums should be encouraged to provide greater viability and capability for resources, bibliographic control, processing, and information service. Consortiums might be developed on a subject, trade, activity, geographical or other basis.

Other examples of library cooperation offering prospects for library improvement are:

(1) Time sharing of computers, whereby, separate libraries can have their own input and output equipment but will have access to a central cooperative computer through communications lines.

(2) Sharing of standard computer programs and library processing systems design which can be adapted for use by several libraries. This is called software-sharing.

(3) Information sharing through the cooperative use of data resources and bibliographic services.
banks, computer tape exchanges, and regional information centers. No longer would a reader have to think in terms of a special library versus a university or another type of research library but of a library system when seeking information.

It is recommended that:

a) An agency in the Federal Government be assigned to take leadership in the design of an information network and services system for libraries of all types and to formulate policies to insure the proper administration of such a network for the benefit of all libraries and society.

6. The Role of Government and Associations

The Federal Government must recognize that information is a public resource and should be made available at a low cost to all. Information is a public utility and should be so considered. The idea of information authorities to permit different governmental units to work together for better library service needs to be studied. The position of State libraries must be strengthened to permit them to deal more effectively with special libraries. Hospital, institutional, correctional, and court libraries must be strengthened to allow them to provide an improved library service. The programs of the three National libraries must be strengthened and the possible need for other National libraries explored. The bibliographic control of subject literature by Government must be improved and where adequate control of a body of literature does not exist the Federal Government
must provide support, preferably to private sources. More effective attention also must be given by library and information associations to the problems of libraries and information centers. The associations must have closer liaison with subject, user, and management associations. Associations must increase their efforts especially in the area of standards, statistics, and continuing education, and, if necessary be supported in such efforts.

It is recommended that:

a) A single agency in the Federal Government must eventually be established to provide a focus for library statistical collection and analysis, research support and development, as well as grant review of library operations in the United States.

b) The National Referral Center for Science and Technology must be improved and expanded. The Science Information Exchange of the Smithsonian Institution must be expanded to encompass both government and non-government interests.

Conclusion

When any new special library program or information service is initiated its ultimate success depends in large measure on the extent to which the user population is willing to accept and utilize the services provided. As in any service-oriented activity, an enthusiastic clientele is essential for the activity to survive. In short, there must be clear evidence that a significant body of users is willing and anxious to use the services. The clientele is there and waiting. Special librarians now have a chance to demonstrate their worth and
meet the needs. The authors of this paper feel that special librarians with the needed support can meet the challenge.

In conclusion, it is the feeling that a public policy is essential to provide guidance on transitional and future developments to replace the present uncharted and uncoordinated situation in librarianship. Utilization of the special library as a model for the common quality of library service in the next 20 years is sound.

It is the hope that this report will aid the Commission in arriving at a meaningful conclusion regarding the role of special libraries in the future of library service in the United States. Where the report does not convince, it is hoped it was persuasive; for small things done are better than great deeds planned. We know we could not do everything but we hope we were able to do something.
A study of Special Libraries was undertaken to provide a background for the National Advisory Commission on Libraries in the preparation of their final report and recommendations.

A three-pronged approach was used to derive conclusions and recommendations.

1) Five background papers attempted to answer the questions: What is different about special libraries; how are they grouped; the state of the art and problems of special librarianship; and their potential in cooperative ventures for sharing library resources.

2) A survey of 911 special libraries was undertaken to determine the principal primary circumstance impeding special libraries and their contribution potential to a library network.

3) An advisory panel was convened to discuss the characteristic problems facing special libraries and possible directions for their solution in the future. The evidence proved that there is a basic core of librarianship behind special libraries, that information is a public resource and should be made available at low cost to all, and that, "the social role of the library as an institutional form is to maximize the utility of graphic records for the benefit of society."

In conclusion it was felt that a public policy is essential to provide guidance on transitional and future developments to replace the present uncharted and uncoordinated situation in librarianship.