Scores are to Notre Dame's Department of Music what laboratory materials are to the Department of Chemistry and novels are to the Department of English. They are the texts on which the study of and research in music is based.

In recent years, a concerted effort has been made by members of the teaching faculty in the Department of Music and members of the library faculty to strengthen in a significant way the Memorial Library's collection of scores which is housed in the Music Seminar Room on the second floor.

Collected editions of composers' works and historical sets are the foundation of this source material. The corpuses of important composers other than such famous ones as Beethoven, Brahms, Haydn and Mozart have been added. These include editions of Orazio Benevoli (Italian, 1605-1672), Franz Berwald (Swedish, 1796-1868), Johann Joseph Fux (Austrian, 1660-1741), Claud Goudimel (French, 1514/20-1572), and Johann Herman Schein (German, 1586-1630).

The fact that some critical editions have gone out-of-print posed a problem in obtaining the works of the Romantic composers Antonín Dvořák, Felix Mendelssohn-Bartholdy and Robert Schumann. This was solved by securing the reprints of the Dvořák complete works and the Mendelssohn and the Schumann Gesamtausgabe in miniature score format.

The titles of the historical sets which have been acquired indicate their importance to the scholar of music: Antiquitates Musicae in Polonia, Denkmäler Norddeutscher Musik, The Old English Edition and Paleographie Musicale.

Collected editions may not yet exist for composers of the Modern period and so, in order to provide material for study and research, scores of individual works were selected. The collection was materially augmented with compositions by: Samuel Barber (American, 1910- ), Bela Bartok (Hungarian, 1881-1945), Alban Berg (Austrian, 1885-1935), Pierre Boulez (French, 1925- ), Elliot Carter (American, 1908- ), Aaron Copland (American, 1900- ), Luigi Dallapiccola (Italian, 1904- ), Hans Werner Henze (German, 1926- ), Krzysztof Penderecki (Polish, 1933- ) and William Schuman (American, 1910- ).

In the case of composers of such note as Benjamin Britten (English, 1913-1976), Frederick Delius (English, 1862-1934) and Igor Stravinsky (Russian, later of French and American nationalities, 1882-1971), an attempt was made to secure a comprehensive collection of everything they wrote.

Although there is much work yet to be done in building the collection of scores, this outline does suggest the richness of the material that is now available. The time span of the composers mentioned above covers a period of three centuries -- three hundred years in the continuum of life that has produced such a varicolored tapestry of sound that we call music.

Joseph H. Huebner
The work of the University requires recorded information to support its varied functions, including undergraduate teaching, graduate instruction and faculty research. The role of the University Libraries is to provide access to this information in a reasonably expeditious and convenient manner. This past year in the University Libraries has been characterized by substantial accomplishments in a number of areas, all aimed at improving the overall quality of access to information for the University.

The heart of library service is the collection. Characteristic of the past several years, the steady growth of funding for acquisitions continued, highlighted by the receipt of special funds from the Provost for the development of the art history collection, and the inauguration of a major special endowment for Catholic theology and philosophy in the Catholic tradition.

The processing of new incoming material continued to be handled in a reasonably expeditious manner by the Cataloging and Acquisitions Departments. Major accomplishments for these units were the completion of the cataloging of the Woodruff and Stevens Collections, and major progress on several long backlogged smaller collections, including Catholic newspapers on microfilm.

The careful marshaling of staff resources has made possible the establishment of two new bibliographer positions, one for theology/philosophy, and the other for English and romance languages and literatures. This will facilitate systematic assessment and development of the collection in these areas.

Over the long run, preserving existing collections is as important as acquiring new material. To aid this effort, a half-time Preservation Officer was appointed in November. In addition, the Libraries' binding of incoming material increased; a program for the regular repair of damaged volumes began; equipment to clean microfilm and improved shelving for oversize materials were budgeted; and plans were laid for a regular brittle books microfilming program. The stacks are also being systematically, if slowly, reviewed to identify serial titles that should be bound. It is anticipated that an expanded review of existing collections for preservation-related problems and action will be incorporated in the regular collection assessment program. An important aspect of the overall preservation effort is the just-beginning educational program aimed at increasing awareness of library faculty, staff and users to the problems in this area and the appropriate methods of dealing with them.

The physical facilities and arrangement of materials are important elements in the overall effectiveness of library services. To resolve problems involving both the branch libraries and science materials on the 13th floor, the Libraries initiated a major project to review collections in both areas, resulting in the withdrawal of a large number of older textbooks, duplicates and outdated titles, the elimination of the "temporary storage" category, the updating of cataloging records and a shift of the entire floor. In addition, the Chemistry/Physics and Engineering Libraries narrowed the scope of their local holdings of journals and transferred a large volume of older material to the 13th floor. This project, which is expected to be completed by January 1983, will result in more accurate library records, improved patron access to materials, and allow for more orderly maintenance of the branch libraries.

In the direct public service area, traditional services such as general and reserve circulation and the use of microtext and audio materials, all experienced significant increases. New coin operated photocopy equipment was installed in the Chemistry/Physics and Engineering Libraries and the machines in the Memorial Library were rearranged to improve user access to the service.

Library instruction received greater attention on all levels. Especially noteworthy were the increased use of media resources in this program, and the 60% increase in the number of students reached in freshmen orientation tours, resulting largely
from the impetus of the PACE discussions. The possible effectiveness of these efforts is suggested by a perceived rise in the level of sophistication of questions posed at the reference desk, accompanied by a decline in routine directional inquiries.

To consolidate and improve general reference service, a new enclosed Reference Center was established providing both enhanced work space and security for heavily used materials. In addition, an OCLC terminal was moved to the Center to permit immediate online access by reference personnel to the major national bibliographic data base. Interlibrary loan service is an important component in the Libraries' efforts to increase the accessibility of materials. In recent years the volume of both lending and borrowing have increased significantly. As a result of an intensive review of those operations, greater professional attention will be devoted to this area and efforts made to increase the speed, responsiveness and equity of service.

Database searching, providing online access to computer held subject oriented bibliographic files, is an area of growing importance and use in the libraries. During 1981-82, its first full year of regular service in Memorial Library and several of its branches, use increased steadily, if modestly.

In addition, the range of service available expanded.

In the long run, the ability of the University Libraries to provide quality service in an efficient and effective manner will depend on a considerable degree upon the utilization of technology, particularly as this relates to processing operations and bibliographic access to the collection. A program has been laid out, calling for the completion of local specifications for automation by June 1983 and the acquisition of both hardware and software during 1983-84. This process will be overseen by Lawrence Woods, the newly appointed Assistant Director for Automation/Coordinator of Technical Services.

The 1981-82 academic year has been one of significant achievement in a number of areas. These and the continuing successful day-to-day work in the Libraries in processing and servicing materials and assisting patrons are the results of the individual and collective efforts of the many members of the library faculty and staff. All in the Libraries look forward to the coming year with great expectations for continued improvement in collections and services, and especially to the planning effort for automation.

Robert C. Miller

DATA BASE SERVICES: PART III

ENGINEERING AND TECHNOLOGY

With the tremendous increase in public and private applied research which took place after World War II, the Engineering profession has expanded into interdisciplinary specialties unknown in the past. Although departments in engineering colleges still maintain the traditional labels of Civil, Mechanical, Electrical, Chemical and Metallurgical Engineering, each is now supplemented by a vast array of specialties sometimes closely related to the sciences. For example, at Notre Dame our Civil Engineering Department is very much involved in water resources use and environmental studies; Mechanical Engineering is involved in aeronautics research including fluid dynamics and heat transfer; Electrical Engineering is involved in semi-conductor, networking and computer research, Chemical Engineering is involved in coal and alternative energy utilization; and metallurgical Engineering is involved in new materials research. Within these subjects, too, a change in attitude has occurred, for no longer is the objective of engineering merely to produce new technologies, but to consider the impact of the new technologies on mankind.

These new requirements of engineering have put a great strain on engineering librarians who must not only supply immediate information requests, but must provide literature surveys on new topics or combinations of ideas from which the engineer can begin to plan new research. The advent of computerized data-base services has gone a long way to aid both the librarian and the engineer.
The DIALOG Information Retrieval Service, which is the primary system used in the Engineering Library, has available over 150 data bases providing access to over 55,000 records. In the fields of science and technology, materials sciences, energy and environment, patents and business, all of interest to today’s engineering, there are over 50 data bases offered. Two indexes, COMPENDEX and NTIS, cover all fields of engineering and are the data bases of choice. These deserve special attention in this review.

The COMPENDEX data base is the machine-readable version of Engineering Index. Like its printed counterpart, it is up-dated monthly and provides world-wide coverage of over 3,500 journals, publications of engineering societies and organizations, papers from proceedings of conferences and selected government publications in all fields of engineering. COMPENDEX covers the engineering literature from 1970 to present. It contains over 1 million records and is up-dated monthly as is Engineering Index.

The NTIS (National Technical Information Service) data base contains information on government-sponsored research, development and engineering plus analyses prepared by federal agencies, their contractors and grantees. All items are unclassified and publically available from such government agencies as NASA, DDC, DOE, HEW, HUD and DOT, as well as from the NTIS center in Springfield, Va. The data included is particularly of value in areas of technological applications, business procedures and regulatory matters in all engineering and related fields. The file dates from 1964 to date, and is up-dated bi-weekly. The published paper equivalent to the NTIS data base is the Government Reports Announcements and Index.

In each of the parent engineering disciplines there are several data bases that are used more than others. In metallurgical and materials engineering, METADEX is indispensable. In civil engineering Water Resources Abstracts and Pollution Abstracts are heavily used. In addition to the Chemical Abstracts data bases, described in an earlier article, DOE Energy is of growing value to chemical engineering, as is BHRA Fluid Engineering Abstracts to mechanical engineering and INSPEC to electrical engineering.

METADEX (Metals Abstracts/Alloy Index) covers the international literature on the science and practice of metallurgy and materials science. It is the computer based equivalent to Review of Metal Literature, Metals Abstracts and Alloys Index. It includes data from 1966 to date and is updated monthly.

Water Resources Abstracts consists of literature collected from over 50 water research centers and institutes in the U.S. and is particularly strong in reports on water quality, pollution and waste treatment. Pollution Abstracts, however, is the leading resource on all aspects of pollution sources and control including air, environment, noise, waste and radiation pollution. The references are drawn from approximately 2,500 primary sources from around the world.

BHRA Fluid Engineering Abstracts (FLUIDEX) provides bibliographic access to every aspect of fluid engineering from theoretical research through the latest technology and its applications. Produced by the British Hydromechanics Research Association, it is the computer equivalent of 10 of the Association’s abstract publications covering aerodynamics, fluid dynamics, multi-phase flow, flow measurement and instrumentation, and fluid power and fluidics to name a few areas. It is up-dated quarterly and includes data from 1974 to date.

DOE Energy is the data base of the U.S. Department of Energy and is one of the world’s largest sources of literature references of all aspects of energy and energy conversion. Energy topics include nuclear, wind, fossil, geothermal, tidal and solar. Dating from 1974 to date, it is up-dated semi-monthly.

INSPEC (Information Services in Physics, Electrotechnology, Computers and Control), which was discussed in an earlier issue of Access, is also of much value to engineers. In addition to including material from the printed version of Physics Abstracts it includes Electrical and Electronics Abstracts and Computer and Control Abstracts which contain much information of direct interest to electrical engineering. The data base covers 1969 to date and is up-dated monthly.

As stated earlier there are over 50 additional data bases in the DIALOG system that contain literature of interest to the more specialized or inter-disciplinary fields of engineering. These range from GEOREF (Geology), ISMEC (Information Service in
Mechanical Engineering), Standards and Specifications, Non-Ferrous Metals Abstracts, and RAPRA Abstracts (rubber and plastics) to name just a few.

Since it is difficult for both librarians and engineers to remember all of these data bases, their coverage and possible overlap, the DIALOG system provides a service called DIALINDEX to help determine which of the data bases available are best to search on a given topic. Search statements based upon Boolean logic can scan a full range of these data bases and report the number of records in each data base that meet the requested data, whether it be author, journal title, publication year, or any combination of subjects. This service then allows you to select those data bases which you decide are most important for the greatest coverage at least cost.

In the past much of the information explosion was caused by and had effect on the engineering profession since most of the new literature was generated as the result of new applied technology. With the new information retrieval services now available and the systems designed to search the specialized data bases, the engineer now not only has a means to control the flood of new literature being produced, but is able to manipulate engineering concepts in new creative ways to seek literature on innovative applications of technology.

Robert J. Havlik

COLLECTION ANALYSIS PROJECT

TASK FORCE ON PRESERVATION: SUMMARY OF FINAL REPORT

Books get torn, mutilated, turn brittle, wear out; microfilm gets scratches; audio and video recordings deteriorate from use; these are some of the unhappy facts which lead librarians to an urgent concern for preservation of library materials.

Preservation is increasingly recognized as an essential component of the collection development program of an academic library. Traditional emphasis on acquisition of library materials and the management of large collections is steadily yielding to a growth model for the library that acknowledges the importance of protecting, for the future, this substantial investment in scholarly resources.

The attention of librarians has been focused on preservation by both the conspicuous deterioration of collections and the serious erosion of the purchasing power of the library budget. This growing concern among librarians has been matched by a significant increase, over the last decade, in library preservation activities on the national, regional and local level. Such progress has demonstrated that there are substantial actions a library can undertake to prolong the life of its collections which do not require prohibitive expenditures or highly specialized knowledge.

The Collection Analysis Project in the University Libraries has provided a valuable opportunity for the library faculty to carry out a detailed and systematic review of preservation activities and problems at Notre Dame. The Task Force on Preservation has looked carefully at a wide spectrum of problems including: damaged materials; unbound materials and rebinding needs; mutilation; environmental conditions leading to deterioration; handling of library materials in use; disaster and emergency planning; the preservation of special collections and non-book materials; the inclusion, in an acquisitions policy, of considerations relating to preservation; and the organization of staffing for preservation.

In its final report, the Task Force outlined a broad-based and ambitious preservation program comprising a complex of policy recommendations, procedures, assignments, resource allocations and investigations. The highlights of that program are:

(1) - The appointment of a Preservation Officer to work with a Standing Committee on Preservation.

(2) - The carrying out of a five-year collection review project focusing on damaged materials, paperbound volumes, unbound pamphlets and leaflets, and unbound serials.
(3) - The implementation of a centralized, in-house mending and repair capability.

(4) - A significant increase in funds available for current and preservation binding activities.

(5) - The monitoring and improvement of environmental conditions, in particular temperature, humidity, light and dust in all library areas.

(6) - The formulation of an acquisitions policy which includes preservation concerns.

(7) - The organization of methods for dealing with potential preservation problems with newly acquired materials before they are added to the collection.

(8) - The promotion of proper handling of library materials by staff and patrons.

(9) - The preparation of a disaster plan and emergency manual for dealing with conditions or events which threaten the collections.

(10) - The development of a plan for the routine transfer of materials from the branch libraries to Memorial Library.

Based on this report the Director appointed a Preservation Officer in November of 1981. A few weeks later a preservation committee was formed to assist the Preservation Officer and the formidable task of planning for preservation of the library’s holdings was begun. The Committee meets monthly to discuss specific problems and encourages the participation of the library faculty and staff. The time and location of the next meeting is always found in the minutes.

Since no funds had been allocated for preservation during the 1981-82 academic year, little could be done immediately to improve substantially the serious deficiencies within the collection. However, much time has been spent analyzing the problems and investigating possible remedies. A budget was submitted for fiscal year 1982-83 and subsequently approved for the following items: a microfilm cleaning machine, a hygrothermograph to measure temperature and humidity, some shelving for oversized volumes, and materials to begin a brittle book program.

During the winter and spring of 1981-82 an extensive report was compiled concerning emergency action necessary for the salvage of water damaged library materials. In the event of a fire or flood prompt implementation of this plan could save major portions of the collection. A staff education program was initiated with lectures and handouts from the Preservation Officer on the proper handling of books. In conjunction with the education program the preservation officer also keeps a file of current literature available to anyone desiring to learn more about preservation of library materials.

During the coming year we shall implement the policies for the items approved in our budget and shall continue discussion of topics for future action. In the next few years, we plan to consider the problems of temperature and humidity control, air circulation, light filtration, deacidification, user education, and the establishment of a book repair station. The proper preservation of all library materials is our ultimate goal and this will involve the cooperation and participation of everyone using the library.

Louis E. Jordan