A History of the Georgia Tech Library

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The Early Years

The Georgia School of Technology was chartered as a state school in 1885 and held its first classes three years later for 85 students. In its early years, Tech was primarily a trade school with only a few degrees in mechanical, civil and electrical engineering, followed closely by the addition of a textiles department. The curriculum was based on the shop culture tradition, which combined extensive shop experience with academic classes. By 1948, the newly named Georgia Institute of Technology had evolved into an important college of engineering and science with an emphasis on theory, principle and research. Today, the curriculum includes some 26 undergraduate degrees and over 30 different graduate programs, with a teaching faculty of 526 and fall 1984 enrollment of 8,730 undergraduate and 2,228 graduate students.1

The development of the Georgia Tech Library parallels that of the Institute. The school's first "library" was a collection assembled by English professor Kenneth G. Matheson in his classroom, for want of a better location. In April 1899, the fledgling library was moved to a room in the Administration Building. Students were encouraged to donate materials, and the library became one of the most popular departments on campus.

The first librarian was hired in 1901, and by 1905 the library collection numbered over 2,500 volumes and consisted entirely of gifts from faculty, students and friends of Tech. President Lyman Hall recognized the importance of the library and tried, though unsuccessfully, to secure funds for a separate library building. Matheson, who became President of the Institute in 1906, was able to build on Hall's efforts and was instrumental in obtaining a \$20,000 grant from Andrew Carnegie.2 The new library building opened its doors to the public in 1907 with a "Book Shower."

The Carnegie grant included a stipulation that the Board of Trustees appropriate at least \$2,000 per year to the library. This amount included the salaries of the librarian and her assistant and gradually increased over the years. However, the portion used for purchase of materials remained at approximately \$1,000 from 1910 to 1924. When two-thirds of the Julius L. Brown estate was left to the school, the library received a generous gift of some 3,000 volumes of general fiction, history, biography, literature, and art. These books were added to the collection on a regular basis over the next decade, along with new purchases and gifts, bringing the library collection up to a total of over 16,000 volumes. By 1924, the annual appropriation had reached \$4,600, and the library had become less dependent on gifts and donations.

The Crosland Era

Dorothy Murray Crosland came to the Tech Library in 1925 as the assistant librarian. She was appointed

The authors are on the staff of the Georgia Tech Library.

Librarian in 1927 and continued as Director of Libraries until her retirement in 1971. Because of her outstanding leadership, this period has become known as the Crosland era. Her influence and personality permeate the years under her direction, especially the period after World War II when the Institute's reputation began to grow. She was ahead of her time in many ways, including being one of the few female head librarians in academic libraries from the 1930s through the 1960s. As noted in the January/February 1970 issue of The Georgia Tech Alumnus, Dorothy Crosland's "clarion call of 'for Tech and the library' and the campus-wide respect for her ability made her the one indispensible woman on the campus for over 40 years."3

The Georgia Tech Library's goal has always been to fulfill the research needs of students, faculty, industry, and the community.4 During her first years as library director, Crosland concentrated on raising the reputation of the library and cultivating monetary donations from alumni groups and the community. Growth and change were slow but steady, laying the foundation for the library's post-war boom. In the 1940s and 1950s Mrs. Crosland played an important role in the public relations efforts of the Institute as a whole. Her commitment was to the Institute, not just to the Library. Frequent reports of library and campus activities also appeared in local and state publications and heightened community

awareness of the library's services.

The library endeavored to meet the ever-changing research needs of the Institute, and the results were mutually beneficial. An excellent example of this teamwork followed the Institute's receipt of the prestigious Guggenheim award in 1930. Georgia Tech had been trying to build its curriculum in aeronautical engineering and used the award to construct a building for the Aeronautical Engineering Department. The library's expanding collection of aeronautical literature greatly contributed to the success of the Daniel Guggenheim School of Aeronautics. The strength of the collection in this area, as in others, helped meet the research requirements of the campus and the Southeast.

After World War II, it became more and more difficult to maintain the quality of materials and service offered by the library as in previous years. Lack of staff, shelving, and space for students and employees made it clear that the library would have to expand in order to support research on campus and in the region. Construction began in 1951 on a new library building to replace the thirty-year-old Carnegie Library, and dedication ceremonies were held in November 1953. The building was named for its chief benefactor, Georgia Supreme Court Justice S. Price Gilbert, whose family continues to provide generous support for the library.

For several years, the new library was cited in many publications, including International Lighting Review and Architectural Forum, as an outstanding example of the use of space and materials. Two of these articles by Mrs. Crosland, which discussed all aspects of textiles used in the building, were often requested by others. These publications and the many visitors to the new building greatly increased the library's visibility.

Many special events took place in the early years of the Price Gilbert Memorial Library. Among these were a major exhibit of handwoven special fabrics of natural raw materials by the Weavers of Rabun, and a loan exhibition of valuable contemporary paintings and drawings from the Guggenheim Museum. The library also served as the cultural and educational center for the campus, due to a lack of other suitable facilities and because of Mrs. Crosland's determination to involve the library in the Institute's activities.

A new architecture building, which included space for a library, was dedicated in 1952. The Price Gilbert Library and the architecture building formed part of the new central campus, evidence of an increasing emphasis on the significant role of libraries in the development of the Institute.

The next major phase in the expansion of the library was the construction of the Graduate Addition. By the early 1960s, space had begun to be a problem again. Graduate student enrollment had grown from 120 to more than 1,000. A new building with adequate space for increased numbers of books and journals was also needed if the library were to continue with its vital role of contributing to the industrial development of the Southeast. Funds were provided by the U.S. Department of Health, Education and Welfare and the Board of Regents. 5 A conference room was included in the plans for the top floor of the new addition. Mrs. Monie A. Ferst donated beautiful Italian furniture for the room in memory of her husband, a 1911 graduate of Georgia Tech. The conference room was later named the Ferst Room.⁶ Mr. Frank Neely's collection of almost 2,000 commemorative medals was housed in a special collections room on the first floor of the west wing. Mrs. Neely's generosity provided the funding for the new room and its furnishings.

There were many delays after the October 1966 groundbreaking, but the new building, one and a half times the size of the Price Gilbert Memorial Library, was finally completed in November 1968 at a cost of \$3.5 million. After the new wing was completed, all volumes were shifted and rearranged. This was done in such an efficient manner that the Library remained open throughout the move and service was uninterrupted.

The completion of the Graduate Addition was a landmark in the history of the library. "In a real sense these two buildings are a memorial to Dorothy M. Crosland, Director of Libraries. Through her industry, her persistence and perseverance, her foresightedness, both structures have been conceived and brought to completion." This statement, from the "Dedication of the Graduate Addition to the Price Gilbert Memorial Library," is an accurate summary of the accomplishment of a woman whose life was dedicated to Georgia Tech and to the Library. In 1985, the Graduate Addition was named the Crosland Tower.

The total acquisitions budget increased over the years, although never enough to keep up with inflation,

greater research demands by the Institute, new degree programs, and the increasing number of new publications available in science and technology. The library was challenged to find additional means of acquiring materials. A Carnegie grant was awarded to the library in 1946 to enable Mrs. Crosland to travel to Europe on an extensive buying trip for the library. She traveled 13,000 miles looking for back runs and missing issues of the transactions of scientific and engineering societies, and other important journals. The buying trip was successful, not only in terms of actual purchases made, but also because of the foresight exhibited in anticipating the research needs of the campus and the region.

Beginning in the early 1950s, donations, depository items, grants, and the U.S. Book Exchange all became important aspects of collection development. The library was able to procure a large number of gifts from various outside sources. The library became involved in several major depository programs. Among the most significant were U.S. Patent Specifications (at this time, 1946, there were no other patent collections in the South) and the Farmington Plan (1948) for the acquisition of all foreign materials in the field of textile industries. Of equal significance were publications in all areas of science and technology from the "Fiat (Field Information Agency) review of German science, 1939-46." The importance of these documents, seized from German companies, was to inform scientists of German research done during the war years. Georgia Tech was fortunate to be one of 250 libraries in the world to have this information source.

Publication Board reports and English translations of Russian materials from the Office of Technical Services, U.S. Department of Commerce, also began to be added to the collection. In 1961/62, Tech was selected as one of the twelve research libraries to be designated a Federal Technical Report Center for government unclassified research and development reports, and in 1963 the library became a depository for federal government documents.

Grants to purchase materials came from sources such as the General Education Board of the Rockefeller Foundation, the National Science Foundation, the Price Gilbert, Jr. Fund, the Carnegie Foundation, and various Georgia Tech alumni clubs. The library also participated in a cooperative exchange plan with the U.S. Book Exchange (USBE).

Another noteworthy exchange program involved a successful bid by the library on a large collection of Russian books and periodicals from the duplicate holdings of the Library of Congress. With the publicity concerning the Russian space program and the increased awareness of Russian scientific developments, acquiring these materials had become an essential part of maintaining a first-rate research library.

The role of the library varied during the first three decades of the Crosland era. A major event occurred in September 1961, when the library received a National Science Foundation grant entitled "Programs for Training Personnel for Scientific and Technical Libraries." Scientists, engineers, information specialists and librarians from all over the United States and Europe participated in two conferences conducted by Mrs. Crosland and other faculty members from Tech. The end

result of these investigations was the formation of the School of Information Science in 1963.

During the 1960s the library benefited from the new campus-wide commitment to technology. The beginning of the "space age" showed an improvement in library budgets as increased emphasis was placed on research. In the Institute's 1968 self-study,9 it was noted that Georgia Tech recognized the importance of having an excellent library in order to meet the university's objectives. One indication of the status achieved by the library was the role it played in the NASA space programs. Because the Georgia Tech Library was the largest scientific and engineering library close to Cape Canaveral, NASA librarians relied heavily on Tech's resources. When astronauts Grissom, White, and Chaffee burned to death on the launching pad in 1967. Tech librarians sent to NASA boxes of materials which they felt would be valuable in determining the cause of the accident.

The theme of the later years of the Crosland era seems to have been one of constant need: the budget could not keep up with increased costs of monographs, serials, and binding, or the changing demands of users. A technical school, as compared to a liberal arts school, has to stay abreast of current research, such as the "space age" technology of the 1960s and the emphasis on computer technology today. In spite of the obstacles facing most libraries at that time, the Georgia Tech Library gained a reputation as one of the nation's leading scientific and technical libraries. Mrs. Crosland's emphasis on service, her unflagging efforts on behalf of the Institute, and her unique position on the campus largely off-set the budgetary and staffing problems of the times.

The Age of Technology

The age of technology had its beginnings in the 1960s but began to flourish in the decade of the seventies. Georgia Tech's experience with machine-readable bibliographic records started in 1963 when the library put its serials holdings into the local computer and produced a printed list. More significantly, in 1966 Georgia Tech was chosen as one of sixteen libraries to participate in the MARC I Pilot Project of the Library of Congress. The library had been given the task of working out, in cooperation with the School of Information Science and the Rich Computer Center, a program for data storage on Burroughs computers. This was the beginning of the conversion of catalog records into machine-readable form. Also at this time, the library began to classify all new materials using Library of Congress Classification, replacing the Dewey Classification System.

The library continued to make great strides in automation under the leadership of its new director, Dr. E. Graham Roberts, who assumed this role in 1971. The first microfiche catalog was produced that same year and was a manually filmed copy of the card catalog. The present COM (Computer Output Microfiche) catalog began as a supplement to the original manually produced microfiche catalog. The COM catalog, together with the filmed version, allowed the library to distribute a record of its holdings to every floor of the library and to all departments on campus. This alternate means of

providing convenient access to the library's holdings resulted in a new service known as LENDS (Library Extends Catalog Access and New Delivery Service) in March 1972. By consulting one of the microfiche catalogs and telephoning the library, a faculty member could request delivery of books on a morning or afternoon schedule. This service is still available and is also used for returning books and for obtaining copies of journal articles and other materials.

A significant achievement in 1978 came when the library discontinued filing cards in the card catalog and simultaneously provided improved access to the COM catalog through more regular updating and increased distribution. The closing of the traditional card catalog established Georgia Tech's position as a "pioneer in facing the challenges of automated catalog management"10 at a time when, according to David Remington at the Library of Congress, librarians generally were just beginning to consider alternatives to traditional card catalogs. Georgia Tech's alternative was the COM catalog, which at that time included 85% of the monographic collection, a serials holdings list, and separate sections for maps and government documents. The COM was also the only place that reflected the library's current acquisitions. By 1979 all records for books were in machine-readable form. The serials phase of the conversion project, which started in 1980, is nearing completion.

The Georgia Tech Library has rapidly increased the pace of automating its operations in the last five years. In spring 1982, an automated circulation system became operational. The Unicorn system, designed by the Sirsi Corporation specifically for Georgia Tech, uses up to a dozen workstations, thus allowing staff access at all reference points and circulation desks. Sirsi developed Unicorn around the Texas Instruments 990 minicomputer so that it could be available for use by other libraries in the University System, which supports the TI equipment.

Georgia Tech continues to be among the first in various aspects of automation. The serials check-in procedures were brought online in January 1981 when the F. W. Faxon Company's Linx System was installed. In November 1982, the library became a formal participant in the Georgia State Data Census Program and was the first in the nation to provide online census data.

By 1984, the library staff was using the campus electronic mail and electronic bulletin board capabilities. The in-house development of an online holdings list of NTIS reports was completed in 1985. The online catalog has been operational since fall of 1985. Public terminals in the library have been in use, and faculty have had the ability to access the system from terminals in their offices, classrooms, or homes. GTNET, Georgia Tech's state-of-the-art network, has made campus-wide connections to the system a relatively uncomplicated task. Plans for an online automated acquisitions system are still in progress.

The addition of 18 microcomputers over the last three years is indicative of the library's high level of distributed computing. Individual staff members use microcomputers for word processing, for access to the library's and external online databases, report functions, and other applications. The micros, along with over 50

other terminals in the library provide a total of 72 computer access points for a full-time staff of 100.

The Georgia Tech Library originally provided batch, off-line computer search services beginning in 1971 through the Georgia Information Dissemination Center (GIDC) at the University of Georgia in Athens. The library continued doing some batch searches through GIDC until its dissolution ten years later. By 1976, Tech librarians were using on-site terminals for online searching of almost 100 databases supported by three different vendors — SDC (System Development Corporation), Dialog and DOE/Recon. Other databases and systems were added as they became available, bringing the present total to 18 systems and over 400 databases. Over 3,000 online reference and literature searches were performed for the Tech community in 1984.

The Georgia Tech Library's ongoing commitment to regional cooperation has been evident in several different areas. In the early 1970s, there was increasing concern among libraries about rising operating costs, the need for an effective online union catalog to record the holdings of the nation's libraries, the need to encourage resource sharing, and the desire to avoid duplication of cataloging effort. When OCLC, Inc., an online bibliographic network, was established, it focused on many of these concerns.

The success of OCLC prompted many libraries to consider replication of an OCLC-type shared cataloging system. The Association of Southeastern Research Libraries sponsored a study, prepared primarily by a Tech librarian, to determine the feasibility of replicating OCLC in the Southeast. The rationale was that regional networks would be better able to provide services because of greater awareness of local conditions. Although an independent utility did not become a reality, this study was a contributing factor in the formation of the Southeastern Library Network (SOLINET), one of many regional networks affiliated with OCLC. In addition to using OCLC for cataloging, it is also being used for verifying book orders, handling interlibrary loan transactions, and reference.

A cooperative program for library school students to alternate study with full-time employment at Tech was first initiated by the library in 1974. Emory and Florida State Universities were the original participants, with Atlanta University joining later. The cooperative program provided the library with temporary manpower and an excellent recruiting opportunity. Several interns

accepted positions at Tech upon graduation.

Resource sharing on the local level includes complete reciprocity in the use of the collections of Georgia State University and Georgia Tech by students and faculties. Georgia Tech has long been an active participant in resource sharing through the University Center. It helps support daily truck delivery of interlibrary loan and other materials to member libraries and was instrumental in the decision to film and close the Atlanta-Athens Union Catalog in 1980.

The Georgia Tech Library's most recent cooperative endeavors include participation in the Southeastern Association of Research Libraries' online union list of serials. SOLINET is the coordinating agency for the 13 southeastern research libraries in this project.

Another facet of the Georgia Tech Library's commitment to cooperation is seen in its history of service to business and industrial users. When the State Technical Services Program was instituted in 1968, the library organized its own Technical Information Service (TIS), which offered research services on a fee basis to any off-campus organization or individual. When the Information Exchange Center, now Research Information Services, was formed in 1971 by the merger of TIS and the library's interlibrary loan services, the library continued its efforts to publicize the resources and services it could offer to industry in the state and Southeast. By 1974, the total number of business and industry users of IEC's services had reached 428.

Today, Research Information Services (RIS) serves as an information broker to sponsored research projects at Tech and to corporate and business clients throughout the state and nation. Information services include online searching, full reference service, interlibrary loan, document delivery, and preparation of summary reports. During 1985, the Georgia Tech Library became the first academic library in the nation to offer access to the Wharton Econometrics Database. Wharton is the first of many numeric and fact databases to be used by the library.

One measure of the value of the Georgia Tech Library's resources to other academic and business institutions is the high volume of interlibrary loan and photocopy services. The library has consistently provided to other institutions more materials than it has requested. Approximately 80% to 90% of the annual interlibrary transactions handled by RIS since its formation are for Georgia Tech resources supplied to other libraries or businesses.

From its modest beginning of less than 2,000 volumes and one librarian, the Georgia Tech Library has grown to over 1.9 million volumes, more than two million microtexts, and 28,000 periodical and serial titles. It is now recognized as one of the largest scientific and technical collections in the United States.

Growth was slow but steady until World War II, as both the Institute and the library were beginning to establish their place and reputation in the scientific and technical world. The greatest single period of growth was the twenty-year span from 1950 to 1970, as evidenced in the addition of two new buildings and in the accompanying statistics. Since 1970, the Georgia Tech Library has focused on technology and automation in order to better fulfill its primary aim of providing the services essential to support the Institute's instructional and research programs. The library has also been able to play an active role in meeting local and regional research and development needs.

The challenge of the eighties will be to continue to provide the same high quality of service and materials which has always been a distinguishing mark of the Georgia Tech Library. Miriam A. Drake, who became Director in 1984, has been charged by the Institute administration with making the Georgia Tech Library a "showcase" of the state-of-the-art in the application of information technology. The long-range plan of the Institute now under discussion calls for an increase in graduate enrollment and a thrust in various disciplines

which will make them among the top ten in the United States. The library plans to keep up with, if not stay ahead of, the rest of the campus. GLA

References 1. Robert C. McMath, Jr. et al., Engineering, the New South: Georgia

- Tech, 1885-1985 (Athens: University of Georgia Press, 1985), pp. 8-9.
- 2. Ibid., pp. 109-110.

43-53.

- 3. "Women," The Georgia Tech Alumnus 48 (January/February 1970): 6.
- 4. Dorothy M. Crosland, "Report from the Library," Research
- Engineer, September 1948, p. 13. 5. "Tech Gets \$1.4 Million for Library, Space Unit," Atlanta
- Constitution, 10 April 1965, p. 1. 6. "Tech Gets Library Addition," Atlanta Constitution, 21 November
- 1969, p. 15-B.
- 7. Dedication of the Graduate Addition to the Price Gilbert Memorial Library (Atlanta: Georgia Institute of Technology, 1969), p. 1.
- 8. Dorothy M. Crosland, "Report from the Library," Research
- Engineer, March 1947, p. 15. 9. Institute Self-Study Program, Fifth Year Interim Report to the

Southern Association of Colleges and Schools, Commission on

- Colleges (Atlanta: Georgia Institute of Technology, 1968), p. 34. 10. Annual report [of the library], 1978/79 (Atlanta: Georgia Institute
- of Technology, 1979), p. 3.

Sources Consulted

Annual report [of the library]. Atlanta: Georgia Institute of Technology, 1901-1983.

Bailey, Dorothy C., and Citron, Helen C. "Automated Serials Control: One Library's Perspective." Serials Librarian 8 (Spring 1984):

"Correspondence from the Crosland Files." Atlanta: Georgia Institute of Technology, 1927-71.

Engineer, March 1947, pp. 15-17. Crosland, Dorothy M. "Report from the Library." Research Engineer, September 1948, pp. 13-14.

Crosland, Dorothy M. "Report from the Library." Research

Library. Atlanta: Georgia Institute of Technology, 1969. Greene, Robert J. "Microform Attitude and Frequency of Microform Use." Journal of Micrographics 8 (January 1975): 131-134.

Dedication of the Graduate Addition to the Price Gilbert Memorial

Greene, Robert J. "Microform Library Catalogs and the LENDS

Hornbeck, Julia W. "Academic Library's Experience with Feebased Services [to Business and Industrial Clients]." Drexel Library Quarterly 19 (Fall 1983): 23-36.

Institute Self-Study Program, Fifth Year Interim Report to the

Microfiche Catalog." Microform Review 4 (January 1975): 30-34.

Southern Association of Colleges and Schools, Commission on Colleges. Atlanta: Georgia Institute of Technology, 1968. Kennedy, John P. Clinic on Library Applications of Data Processing.

Chicago: University of Illinois, 1969. McMath, Robert C., Jr.; Bayor, Ronald H.; Brittain, James E.; Foster, Lawrence; Giebelhaus, August W.; and Reed, Germaine M. Engineering, the New South: Georgia Tech, 1885-1985. Athens: University of Georgia Press, 1985.

President's report. Atlanta: Georgia Institute of Technology, 1899-1970.

"Tech Gets \$1.4 Million for Library Space Unit." Atlanta Constitution, 10 April 1965, p. 1.

"Tech Gets Library Addition." Atlanta Constitution, 21 November

1969, p. 15-B. Wallace, Robert B., Jr. Dress Her in White and Gold: a Biography of

Georgia Tech. Atlanta: Georgia Tech Foundation, 1963.

"Women." The Georgia Tech Alumnus 48 (January/February 1970):

6-9.

Young, Jacky and Zimmerman, Julia. "Unicorn: A Unique On-line Circulation System." Southeastern Librarian 32 (Winter 1982): 85-86.