The performance appraisal process ensures that the performance of each employee is evaluated at least annually, but does not imply that a pay increase is given each year. Individual pay decisions are based on performance, position in range, and salary increase budget.

Poor performance, lack of progress in skill development, or inability to master job requirements may result in an employee receiving a reduced increase, or no increase at the time of salary review.

**SALARY REVIEW**

Salaries are reviewed annually, this usually occurs during the summer, with the effective date of salary and classification changes scheduled for October 1.

Throughout the year, the Personnel Division participates in regional and national salary surveys in order to develop a proposal for salary increase fund for the next fiscal year and to determine movement of salary ranges. The salary increase fund and salary structure movement proposal must be approved by the Laboratory Director, the AUI Board of Trustees, and the Department of Energy.

When these proposals have been approved, or negotiated, review materials are prepared by Personnel and distributed to each of the departments. The review package includes salary increase and promotion guidelines, new salary schedules, and a listing of each departmental employee along with relevant salary information. Also included are salary increase allocations for each department and the recommended distribution of the salary increase funds.

**PROMOTIONS**

Employee promotions are of two types:

- in recognition of increased responsibilities, skills or expertise
- as a reclassification to a classification which more accurately reflects the duties and responsibilities assigned.

Some result from substantial change in job duties; for example, from a non-supervisory to a supervisory position. Others may be based on the ability to perform increasingly complex work rather than on the fact that the basic nature of the job itself has changed. Most of the latter promotions occur at the time of the annual review.

**TRANSFERS**

Transfers from one position to another may occur either at employee or department request; however, as discussed previously, employees are normally not eligible for transfer during the first year following being hired or transferred, unless the transfer is initiated by the Laboratory because of operational requirements.
Department heads have the right to reassign employees within the department, as dictated by work requirements. The employee maintains classification and pay levels.

TERMINATIONS

Termination usually occur upon voluntary resignation, but can be the result of reduction in force, unsatisfactory job performance or attendance, or "for such other reasons as the Laboratory deems appropriate." A minimum of two weeks' notice is expected.

TRAINING

On-Site

A variety of non technical training is offered in an effort to facilitate the development of administrative and managerial skills. Some sessions are specifically designed for supervisors and managers; others are more general, in areas such as productivity improvement, time management, problem solving, technical writing, and public presentations.

Tuition Refund

Regular full-time and eligible part-time employees who successfully complete formal study may be reimbursed for all or part of the tuition fee paid, subject to conditions, such as obtaining approval prior to registration and pertinence to job.

SECURITY

The Laboratory is not open to the public. Entrance is restricted to persons having official business and properly sponsored visitors. Each employee receives a photo identification card and vehicle identification stickers.

The speed limit on-site is 30m.p.h. Parking or speeding violations carry a $50.00 fine which is charged to the offender's department operating fund and put into a general Laboratory fund.

HEALTH & SAFETY PROGRAMS

Employee Assistance Program

This program helps employees who are experiencing mental health problems and provides employees and management with information and training on mental health and job-related issues. The Employee Assistance Program (EAP) addresses a broad spectrum of issues including: Family/Marital, Alcohol/Drug, Personal/Emotional, and Interpersonal/Social.

BENEFITS

The range of benefits includes health, dental, long term disability, travel accident and life, as well as retirement.
Health Care Plan options include the AUI group medical insurance plan, one of several Health Maintenance Organizations.

Dental Assistance Plan coverage is limited to one carrier.

Long-term Disability Insurance is optional.

Travel Accident Insurance is provided at no cost to employees; the policy provides twenty-four hour accident protection while personnel are on authorized business travel.

Life Insurance coverage of approximately the employee’s annual salary is provided at no cost.

Retirement Plan coverage is funded through the Teachers Insurance and Annuity Association and the College Retirement Equities Fund (TIAA-CREF), which offer fixed-rate and variable investment options, as well as a variety of annuity options at retirement.

TECHNICAL INFORMATION DIVISION

The Technical Information Division mission is to provide research library services, publications processing, and editing services. The staff includes 21 full-time employees and one part-time employee.

In addition to the Research Library, there are several satellite libraries on site. Some of these are small reading rooms, serviced by secretarial or administrative personnel within the department; others are more formidable, staffed by a professional librarian with clerical assistance. The Research Library provides all acquisitions, technical processing and the interlibrary loan services, and most on-line literature searching for the Laboratory. The systems specialist is resident in TID also.

The division Manager is assisted in making policy decisions by the Research Library Advisory Committee (RLAC). Each major department has a representative on the committee, most are scientists.

LIBRARY OPERATIONS WORKING GROUP

This group is composed of the library directors from DOE labs, who meet once a year. The programs and format vary according to the host, but at each meeting each director gives an annual activity report for their library.
A CAMPUS WIDE INFORMATION UTILITY AT THE NAVAL RESEARCH LABORATORY

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INTRODUCTION

The Ruth H. Hooker Research Library and Technical Information Center meets the information needs of Naval Research Laboratory's (NRL) research community, consisting of about 3,500 Federal staff and about 1,200 contractors. Since 1983, end users have been able to search the Library's online catalog both on site and remotely over the campus-wide network, known as NICENET. However, all other online searching continued to be performed by library reference staff, primarily using DIALOG, STN and DTIC. This situation began to change in 1988 when the Library introduced CD-ROM databases for end-user searching in both its reference area and its Microcomputer Software Support Center. Users responded favorably to the CD-ROM products, enjoying the freedom to explore that comes with performing their own searches.¹

In 1990, the Library conducted a user needs analysis to develop specifications for a replacement automated library system. This analysis was instrumental in establishing support for the development of a campus-wide information system for in-office access to library-based CD-ROMs and other in-library and external resources. As a result of interviews with 46 individuals representing a cross section of research interests, the Library was able to demonstrate that scientists throughout the laboratory wanted access to information resources from their own computers and workstations. Several key findings emerged, namely, that the Library should implement a system to:

- Provide subject and author access to journal articles as well as books;
- Allow users to request materials as part of an online search;
- Offer access to multiple databases, both bibliographic and informational;
- Store full text files, such as journal articles or handbooks, for downloading;
- Provide access to the catalogs of other libraries and to external databases.

While proceeding with plans to meet some of these objectives by identifying and procuring a state-of-the-art library system, the Library began to look at other approaches that could complement the capabilities of existing commercial library systems. Added support for these
efforts came from the involvement of the Library in the Working Group tasked with planning for a fiber optic upgrade to the existing campus network backbone. The Working Group endorsed the concept of a library-provided information utility to:

- Provide researchers with access to local computer systems;
- Act as a gateway to remote systems;
- Integrate these functions with library materials and services;
- Make all this information available to researchers at their computers or workstations.

DESIRED FUNCTIONALITY OF AN INFORMATION UTILITY

To demonstrate the benefits of such an information utility, it may help to describe how a scientist might use electronic information. The scenario underlying the information utility concept, which at NRL is named InfoNet, envisions a scientist working at her computer writing a research paper. She gets to a point where she needs more information about the work of a colleague. She sends an E-Mail message to one of her peers and gets an almost immediate response, citing two published papers mentioning Dr. X whose work is also of potential interest. The scientist is able to immediately query the InfoNet to find out if the cited articles are available. One is in the library collection in electronic format and is available for immediate downloading; the other is in the collection and will be faxed to her computer terminal within hours.

The scientist then decides to search one of several bibliographic databases available through InfoNet for papers by Dr. X. She finds only one and decides to learn more about Dr. X by searching a biographical database from a commercial information utility linked to the InfoNet, e.g., DIALOG. She finds Dr. X is affiliated with a major research institution. While she is on DIALOG, she also performs a citation search on Dr. X's paper and finds it has been cited by a colleague whose work she greatly respects. Satisfied that Dr. X is a highly regarded professional, she returns to the Library's online catalog through the InfoNet, where she finds that the journal in which Dr. X has most recently published is not one to which the Library subscribes. However, she sees on the InfoNet that individual articles reside on a remote server at a university accessible through InfoNet and are available for viewing.

It turns out that Dr. X has written about a related area, one which the NRL scientist is not terribly familiar. So at this point after printing out the Dr. X's article at her printer, she decides she would like to find out if there is anyone at NRL who can bring her up to speed. She performs a subject search on a database of NRL publications and searches the CD-ROM database of Work Unit Summaries. She finds two fellow NRL scientists who she thinks could help her. She consults the online personnel locator for their E-Mail addresses, sends them messages, and returns to work on her paper. All this took considerably less than one hour and was
accomplished without her leaving her computer. The information utility supported all her information-seeking activities with a menu-driven user interface and pre-programmed access to remote systems.

In 1990, when this concept was being developed, it was not easy to see how the Library would make much of this happen. While access to the existing or replacement library system was straightforward, end user access to other Laboratory databases and to remote computers as a part of a suite of library services did not appear easy. There seemed to be only three possibilities: the Lawrence Livermore model, with dedicated gateway software running on a local computer; the DTIC Search Maestro and CompuServe model, with gateway software running on a remote computer; and the library system model as exemplified by the STILAS (Scientific and Technical Information Library Automation System) Remote Interface Module.

However, several diverse developments were taking place in the early 1990's. Taken together, three of these provided the Library with a framework to move aggressively toward the information utility concept.

ADVANCES IN NETWORKING INFORMATION

One encouraging development was the in-library networking of CD-ROM databases at installations such as the Nimitz Library at the U.S. Naval Academy. This work showed it was possible to provide menu access to multiple CD-ROM products and allow multiple users to simultaneously search a single CD-ROM. If it is possible to do this on an in-library LAN, would it not be possible to provide the same capability over a campus-wide network?

Another encouraging development was the work going on at many universities to implement Campus-Wide Information Systems (CWIS). Institutions such as MIT, RPI, Dartmouth, Carnegie Mellon, and Case Western Reserve were providing students and faculty with access to a wide variety of informational material and databases over their campus networks. Offerings were wide ranging and varied from university to university. Typically the CWIS offered access to course descriptions, class schedules, event calendars, campus publications, and often one or more bibliographic databases. In many cases, the CWIS was operated by the computer center and developed independently of the Library. In other cases, such as the RPI InfoTrax and the Carnegie Mellon Mercury Project, it was being developed as an extension of existing library resources, showing that it was feasible to conceive of a library-operated information utility.

The final enabling development was the rapid expansion of the Internet. Suddenly it seemed everyone was on the Internet. Not only was the NRL NICENET tied into the Internet, but information providers, such as OCLC and DIALOG, had an Internet address. The sell-out sessions at meetings such as SLA and ALA were the sessions on using the Internet; journal articles about what was on the Internet abound. Not only was there more information available than most people had ever conceived of, now it was possible to quickly and easily get to it.
THE INFONET

ENVIRONMENT

To accomplish the goal of making a local information utility for use at NRL, the Library and its contractor, Kestrel Associates Incorporated, had to deal with three basic issues. The first of these was the MS-DOS operating system adopted by most commercial CD-ROM publishers. The second was the wide variety of equipment in use at NRL, including: hundreds of dumb terminals that provide access to the Laboratory's mainframe computers, a SMTP and DECNet E-Mail system and administrative files; a few thousand PC compatible and Macintosh computers, in heavy use in both research and administrative areas; and a large number of VAX, SUN and other UNIX workstations used by researchers. The third was the need to provide gateways to remote information utilities, both at NRL and throughout the world, running on a variety of systems.

IMPLEMENTATION PLAN

From a management perspective, a phased implementation to the InfoNet design appeared the most promising. This modular sort of approach allowed functions to be brought online and thoroughly tested before being integrated with the system as a whole. As a result, problems could be more easily isolated and identified and system-wide disruptions would be infrequent.

A problem often associated with the phased approach to system implementation is that it can lead to a myopic view of the system, i.e., each module might be seen as an end unto itself. The final product may function more as a number of small systems, each accessed independently and providing its own services rather than achieving the final objective of a fully integrated system. In developing the InfoNet, this myopic syndrome was avoided. Each phase was viewed from both a small systems perspective and from the broader viewpoint of how it would integrate with the InfoNet system. "While a detailed knowledge of LAN technology is an asset, it is far more important that a LAN administrator have a clear conceptual overview...." The ultimate goal for the InfoNet was clear: unify electronic information resources under a single menuing system, and make the system accessible to researchers in their offices and laboratories and independent of client computing platform.

The InfoNet was brought online in three distinct phases:

Phase I: implement a library LAN with networked CD-ROM databases and office productivity software, e.g., word processing, local E-Mail, database management, etc. for PCs and Macintosh microcomputers;

Phase II: integrate the library LAN with the campus-wide network to provide NRL with network access to CD-ROM databases independent of computing platform, provide staff with
Internet E-Mail, and make campus-wide and Internet information resources and database accessible from within the library under a single menu driven system;

Phase III: provide the campus-wide network with a menu driven system which includes: MS-DOS based CD-ROMs, library information databases running under SUN UNIX (i.e., the library's Online Public Access Catalog and a NPL Authors' Citations Database), DEC VMS based Management Information Databases run by NRL's MIS Branch, and information resources and databases accessed on the Internet.

The InfoNet can be accessed from anywhere on NRL's campus-wide network, regardless of computing workstation or dumb terminal. In brief, the InfoNet links to the FDDI/Ethernet campus backbone primarily using the TCP/IP suite of protocols. UNIX workstations and dumb terminals use native Telnet to access the InfoNet while computers which lack native TCP/IP support, e.g. MS-DOS users, use free Telnet software distributed by the library and modified for InfoNet usage. Macintosh users take advantage of native AppleTalk protocols to access the InfoNet and are supplied with software distributed by the library for AppleTalk connectivity. The InfoNet consists entirely of off-the-shelf PC hardware and software, with a few minor software modifications.

To provide enhanced client access to Internet information resources and databases, the InfoNet makes extensive use of state-of-the-art "Knowbot" (Knowledge Robot) prototypes, such as Gopher, NNTP, WAIS, and Archie. Knowbots are "programs that, once activated, wander through the [Internet] looking for information and [return] it to their electronic masters." The Knowbot prototypes query unrelated host systems and display the information to the end-user in a standard and familiar format. By separating the client search software from the database host, end-users are no longer required to learn the interfaces of unrelated systems. (Unfortunately, CD-ROM publishers do not support Knowbots at this time.) These programs are continuously updated and help to tame the Internet. In so doing, they have made world-wide information systems increasingly accessible. Recent statistics on InfoNet usage have shown that Internet search applications now represent half of all searching performed on the InfoNet.

CD-ROM DATABASES

DATABASE LICENSING

CD-ROMs are almost always licensed to the customer and usually restrict the use of data far beyond that of copyright law. Since CD-ROMs are licensed to the customer and not sold, the publisher is at liberty to restrict the use of the product in the license, assuming there is agreement from the customer. Unfortunately the publishing industry lacks any kind of standard licensing agreement and individual publishers vary greatly in how they license their products. Generally speaking, however, licenses usually restrict the copying of data from the CD-ROM onto other media and usually require that the product be returned or destroyed after either a new disk is sent
to the customer, or the subscription is canceled. Moreover, network licensing agreements often control the number of users, workstations, buildings, and/or sites connected to the network and restrict the use of modems for remote network access.

Publishers seldom understand how networks disseminate information or what possibilities exist for controlling information access. For example, the majority of the NRL research community is spread out over approximately 150 low-rise buildings, interconnected by a campus network. The actual number of computer workstations attached to the campus network exceeds the total number of employees. Although over ninety percent of employees are in a single site in Washington, D.C., NRL has facilities and employees in other states. Further, many researchers continue their work at home in the evenings and on week-ends and holidays. As a result, the common conditions applied in CD-ROM licensing agreements are not viable in such an environment. To compensate for this, licensing terms must usually be negotiated with each publisher individually with network access to CD-ROM databases limited usually to no more than five simultaneous users controlled through metering software. In addition, the InfoNet restricts network access to IP (Internet Protocol) addresses used at NRL. The cost for a concurrent license varies, but it is seldom more than twice the price of a stand-alone version and permits around five simultaneous users. For many vendors, multi-site and dial-in access licensing has yet to be developed and the InfoNet will be breaking new ground as we move into the next phase of implementation.

When discussing network licenses with CD-ROM vendors, it is important to emphasize the needs of the administrators and end-users and not to succumb to the wishes of the publishers who the two be inconsistent. It is in the best interest of both the library and the publisher that an equitable arrangement be negotiated. Few CD-ROM vendors understand either the possibilities or the limitations of networking CD-ROMs and therefore any network license agreement that does not conform to the library's needs should be negotiated. In almost every case CD-ROM publishers were receptive to the suggestions of the NRL library; licenses and pricing were altered to reflect the needs of the InfoNet.

CD-ROM SEARCH ENGINES AND NETWORKING

Most CD-ROM search engines are not well adapted for use on a campus-wide network because such networks commonly use the TCP/IP suite of protocols. These protocols follow standards which are often ignored the CD-ROM search software. The result is that end-users sometimes run into difficulties using the search software. Some of the problems which NRL has encountered include:

Most CD-ROM search software assume a stand-alone PC and send 25 lines of text. However, TCP/IP terminal emulation is limited to 24 lines, regardless of whether the end user is utilizing a PC or any other type of system; therefore, the commands the search software puts on the 25th line are invisible to the end user on a TCP/IP network.
Color codes are often used to indicate cursor position. Some search software generates highlighting via color code changes rather than standard inverse video control characters; the result is that end users cannot see changes in menu selections or even determine the position of the cursor.

The use of "alt" keys is also non-standard in TCP/IP networks. No TCP/IP networking packages support "alt" keys on PCs, and non-PC keyboards do not even possess "alt" keys. In addition, only Function keys "F1" through "F5" are fully supported by most TCP/IP networking packages. As a result, end users must learn complicated key combinations to execute even simple search commands.

The search software often restricts the end user to searching only one CD-ROM database at a time. While this is both acceptable and appropriate in a stand-alone environment, this is highly inefficient and cumbersome on a network.

Although most software conforms to both the ISO9660 and the Microsoft MSCDEX standards, a few search engines, like that of Online Software, Inc., circumvent the standards and communicate information directly to the CD-ROM drive. This precludes use on TCP/IP based networks.

To compensate for search software dependence on "alt" keys and non-standard function keys, the library distributes software for PC-compatible and Macintosh microcomputers, MS-Kermit is free MS DOS based TCP/IP software from Columbia University and has been modified by the NRL Library to emulate a PC keyboards. For Macintosh users, ONLAN MAC is distributed as part of the license agreement for Novell Access Servers and provides full PC keyboard and monitor capabilities on a Macintosh connected to the InfoNet. In addition, UNIX and dumb terminal users are provided surrogate keys which have been remapped at the host to provide keys not found on their native keyboards.

The use of these techniques on InfoNet make the CD-ROM search engines usable on all platforms. However, applying these techniques is not always intuitive for the use nor are the results fully satisfactory. The real solution to the problem is for CD-ROM publishers to conform to networking standards when designing CD-ROM search software.

**PLANS FOR THE INFONET**

The Library staff takes advantage of three primary tools for planning InfoNet development and improvements: usage statistics, end-user comments, and industry surveys. Statistics are recorded automatically on a per application basis every time any of the InfoNet's resources are accessed and serve as essential elements for focusing collection development efforts. Comments from InfoNet users about missing features and information are recorded for careful consideration. Library staff continuously monitors the networking and publishing community
for new products and directions. From these sources it has been determined that the InfoNet needs to concentrate efforts on the following areas:

- Dial-in and remote access to all the services of the InfoNet both from home and from NRL sites in Monterey, Orlando and Mississippi;
- Support for a X-Windows interface;
- "Electronic stacks" of journal images in full-page format;
- Additional sophisticated "Knowbots" to search the Internet.

CONCLUSION

Recent advances in technology have made it possible to bring information to the researcher where he or she needs it most: at the desktop and on the researcher's computing platform of choice. For NRL, the InfoNet serves as a networked information utility which unites information resources from a variety of computing hosts under a single menuing system, and which itself is accessible to all NRL computing platforms. The InfoNet itself is easily expanded and consists entirely of off-the-shelf PC and networking hardware and software. The InfoNet proves that CD-ROM databases can be integrated with campus-wide networks and made available to users independent of computing platform, although not all search features can be used by all varieties of computers. The InfoNet also proves that researchers have a need for facilitated access to the Internet and the InfoNet can meet those needs using state-of-the-art information-seeking software.

NOTES


11. In designing the InfoNet, extensive use was made of software found on the Internet. "Anonymous FTP" sites, that is host sites on the Internet which support public downloading of software, are noted where appropriate. InfoNet administrators use NCSA FTP (ftp.ncsa.uiuc.edu) to download up-to-date software.

12. Pegasus E-Mail for Novell v.2.34 for PCs and v.2.0 for Macintosh, Freeware, Dunedin, New Zealand. (Distributed by the University of Hawaii, 128.171.17.7).

13. Charon v.4.0, SMTP (Internet) E-Mail Gateway for Pegasus E-Mail, Freeware, Clarkson University. (128.153.4.2).


15. MS-Kermit v.3.12, from Columbia University, (watson.cc.columbia.edu), modified by the library with scripting and keyboard mapping appropriate for MS-DOS based software applications.

16. Gopher II v. 1.05b, from the University of Minnesota. (boombox.micro.umn.edu).

17. Trumpet v. 1.05g, USENET (Internet) News Reader, from the University of Tasmania, Australia (tasman.cc.utas.edu.au).

18. WAIS, University of North Carolina, (samba.oit.unc.edu).

19. Archie, McGill University, Canada (archie.mcgill.ca).

20. J. T. Johnson, NREN: Turning the Clock Ahead on Tomorrow's Networks, *Data Communications*, vol.21, no.12, p. 58 (September 1992).

THE NATIONAL TRANSLATIONS CENTER: PAST, PRESENT, ISSUES AND FUTURE

by Karl R. Green, National Translation Center

INTRODUCTION

In 1992, more than half of the world's scientific and technical information will be published in languages other than English, continuing an increasing trend. Historically, these foreign languages have been Russian, German, Japanese and French, but now include increasing representations of such languages as Chinese, Portuguese, Korean, Arabic, and Hungarian, Czech and other East European languages. The information contained in this research can be crucial for American scientists and policy-makers, and the only consistent method of access is through translations. Translations, however, present certain problems in the context of scientific and technical research. First, they are quite expensive. A translation of a Japanese patent of say 8 to 10 pages typically costs $400. The work of the talented translator who commands both the languages and the technology is deservedly compensated at a professional level. Second, as a practical matter, the translations typically take several weeks to produce, which can cause delays in the work of the engineer or medical researcher.

Today, I want to talk about the National Translations Center at the Library of Congress, describe its origins, current operations, the issues which we are facing today, and the future of the Center as we believe it can be.

THE NTC - WHAT IT IS AND WHAT IT DOES

The National Translations Center is the national clearinghouse for unpublished English-language translations of scientific and technical literature, gathered from both Federal government and industrial sources. The Center does not perform translating services itself but instead gathers existing translations, primarily from U.S. corporations and federal agencies, catalogs them in the MARC format, distributes machine-readable records to a wide variety of destinations including Dialog and OCLC, and provides full-sized copies on demand within 24 hours of receipt of the order. Most of the translations received at the Center are of journal articles and patents, but there are representations of technical reports, standards, and conference papers, among other types.
THE HISTORY OF THE CENTER

The Center originated during a time of great demand for translations. During and at the end of World War II, literally tens of tons of scientific and technical paper documentation were gathered from Nazi Germany and after being declassified were made available to American industry. Many survey documents and indexes were created by British and American industrial intelligence organizations in English to provide general information and overviews, but the detailed practical documents useful to scientists and engineers were distributed in German. Rivalry with the Soviet Union and intense interest in their industrial and military state of development intensified the demand for translated information on a timely and economical basis. The National Translations Center was formed under the auspices of the Special Libraries Association in 1952 at the John Crerar Library in Chicago in an effort to share unpublished translations of this flood of material on a systematic basis and thereby utilize the limited translating resources of the United States in a more efficient manner. The mission of the Center was to gather unpublished translations, identify further sources of existing translations, organize and index these documents, ensure that the bibliographic information was widely distributed, perform searching services, and provide copies on demand for a minimal fee. Through the ensuing years from 1952 until 1988 the Center remained in Chicago in association with the John Crerar Library in several different locations and faithfully performed this herculean task. Printed indexes were issued, announcing translations grouped by general subject, and cumulations allowed effective quick access to individual journal titles and authors. In 1969, the Special Libraries Association published Consolidated Index of Translations into English, a compilation of 17 different indexes covering information on more than 142,000 different translations made available from 1953 through 1966. A succeeding index, Consolidated Index of Translations - II, covered an additional 250,000 items from the years 1967 through 1984, cumulating the information covered by the center’s printed monthly index, Translations Register-Index. By 1989 more than 400,000 translations of journal articles, patents, conference papers, standards, and other forms of technical information had been gathered by the Center and locations for an additional 600,000 translations had been identified. A card catalog with more than 1,000,000 entries, by author, translation number, and journal citation had been created and was being used to locate translations. In an important step, the Center ceased publication of their index and joined with the International Translations Center in Delft for the years 1987 and 1988 to produce a combined product, World Translations Index, which lists translations into major Western European languages rather than only English. World Translations Index was made available online through Dialog in 1989 and continues to be produced as a printed product by the ITC.

In June 1988, support for the operations of the NTC was to be discontinued effective January 1989 on the basis that insufficient income was derived from the operations of the NTC to justify its continued operation within an academic framework. The operators of the NTC at this time sought a successor organization and contacted the Federal Library and Information Center Committee among a wide range of other organizations. Following staff communications at the Library of Congress, and also following an LC staff team visit to Chicago, analyses, and discussions, the assets of the NTC were offered to the Library as a gift. This offer was accepted
in January 1989 and the transfer was effected. The NTC began public operation as a fee-based service at the Library of Congress on May 15, 1989.

THE PRESENT - PRODUCTS, SERVICES, AND MARKETING EFFORTS

The Center operates the Library of Congress based on two fundamental principles. First, the presence of the NTC in the Library will not affect existing free services. Second, the NTC is a fee for service, cost recovery operation, paid for by the users of the NTC services.

The question of why the Library of Congress has chosen to support the activities of the National Translations Center has been raised in both public and private forums. The NTC is a valuable national resource which is important in assisting American industry to gain and maintain knowledge of international developments in technology. By sharing translations, the cost of re- translating is saved and the time of translating is eliminated. In addition, these translations are the most important current foreign language scientific and technical information. These are the patents and journal articles which individual American scientists and engineers have identified as critical in their current research and have been willing to commit substantial resources to translate. In effect, we have a board of review of thousands of working scientists and engineers.

The NTC provides service within 24 hours of receipt of the order, and has the capability of document delivery by fax and express mail. As a consequence, delivery of information is expedited, giving the requestor a critical advantage and assisting our national competitive position. While prepayment is required, we can establish deposit accounts and accept both Mastercard and VISA credit cards.

The items in the NTC collection are deposited under an assumption of confidentiality. Information which would identify the organization originating the translation is obliterated, thereby ensuring the privacy of the industrial concerns which are participating. In addition, the customers of the Center have the assurance that information concerning their transaction will not be disclosed. The general confidence in the Library of Congress as a fair and ethical organization makes it a particularly appropriate location for a joint government and industrial effort like the National Translations Center.

As a cooperative effort among corporations, federal agencies, universities, professional societies, and other interested parties, the National Translations Center has survived since 1952, despite at times facing exceedingly adverse situations. We regard the Center as underutilized and offering great potential for public benefit if properly developed and publicized.

The National Translations Center currently has six permanent staff members, the head, three technical information specialists who provide both cataloging and reference support, a program assistant who provides administrative support and product management and a clerk/typist who works with both acquisitions and document delivery.

Current products and services consist of fee-based searches of the NTC database and card files and providing copies of these translations on demand. Fax transmission, express mail, and
airmail for foreign deliveries are also available at additional cost. Copies of older printed indexes are still available dating from the earliest years of the Center.

In order to apply modern methods of scientific and technical communication to the treatment of unpublished translations, multiple steps for developing a fuller product line for the NTC, increasing the scope and responsiveness of distribution of the translations, and increasing the acquisitions of the Center have been pursued within the past fiscal year.

The Center, in coordination with other elements of the Cataloging Distribution Service of the Library of Congress, has developed a monthly distribution service of machine readable records in the MARC format. This service is designed to promote the widest possible distribution of the citations through other announcement sources such as abstract journals and commercial or non-commercial on-line services. Two products are now available, a retrospective tape of MARC records for materials cataloged since the Center moved to Washington (approximately 18,000 citations) and a monthly subscription service to supplement this base tape. We estimate that monthly tapes will include about 1,000 citations per issuance for the first year and increase to 2,000 monthly for the second year.

As a related and necessary activity, an intense marketing effort has been initiated to increase and extend acquisitions of unpublished translations, primarily focussing on the federal sector but also with significant attention to the traditional private sources of supply. A mailing of 50,000 pieces has already been executed and further efforts are continuing. Areas of specific subject interest and origin will be targeted for in depth exploration as the acquisitions effort evolves.

In coordination with the acquisitions effort, the Center is pursuing a direct mail campaign for encouraging utilization of the NTC, focussing first on, subject areas where we are particularly strong such as chemical engineering, aerospace, metallurgy, and electronics, and second on appropriate focussed groups such as DTIC and Dialog users.

We are supplementing the acquisitions and sales direct mail efforts with space ads in scientific magazines, exhibits at technical conferences, journal articles, press releases, and in general any possible way of communicating this important message to the widest possible audience.

THE ISSUES FOR THE NATIONAL TRANSLATIONS CENTER

While it seems clear that there are distinct possibilities of distributing a large number of translations and making a significant impact in the United States, there are two interrelated major barriers which must be addressed.

The first concern is compliance with the photocopying permissions requirements under the copyright law. The National Translations Center maintains a record of translations copied and reports this copying to the Copyright Clearance Center, Inc., tendering fees for items copied monthly. The CCC in turn distributes these royalties to the original publishers of the foreign
language publications. As a result of this action copying and distribution activities of the National Translations Center are in compliance with the provisions of the United States Code. We wished to accommodate the provisions of copyright law without ignoring opportunities to join together and to share our scarce linguistic resources. As we have recently witnessed, a large corporation in the U.S. was successfully sued for improper copying procedures. The Center, on the other hand, recently received a letter from the CCC congratulating us on our leadership in compliance.

Concern with this issue has generated a secondary impediment. While the federal government translates a very large number of scientific and technical papers in its routine work, many of the translations are not made available for further general distribution. Resolving the copyright issue and clarifying the rights and rewards of the copyright holders, translation producers, and translations users can increase effective use of these hidden resources of the federal government.

There are those who say that machine translation will rapidly make the function of the NTC obsolete. However, today and now, machine translation does not offer cheap, easy, accurate and reliable access to the many languages of science. MT is a valuable tool for specific applications and certainly offers great promise for the future.

Some questions have been raised about these translations offered by the National Translations Center. Does the Library of Congress guarantee them? We do not. However, what we offer are practical translations which have been done by professional translators, we do not accept class exercises. The translations have further been used by a scientist or engineer in their work and have been reviewed from a practical as well as linguistic standpoint.

THE FUTURE - DIRECTIONS IN SERVICES, PRODUCTS, AND ACQUISITIONS

In order to increase the capacity and speed of the Center’s document delivery operation, a sophisticated stand-alone, microcomputer-based optical disk storage, retrieval, and copy-on-demand facility including multiple fax ports is in the process of continuing study, but will not be pursued without a clear need and a detailed cost/benefit analysis.

We will be continuing to coordinate our efforts in increasing acquisitions within the United States, and from other sources of English language translations. We wish to continue to promote the use of the Center and will continue to refine our understanding of where translations are done and who can use them. We will emphasize gathering translations in high tech areas.

The National Translations Center has the potential for assisting American industry, for improving the resources of federal laboratories, and for making highly sophisticated technical information available to every college and university in the country. We can only carry out our mission if we have the full cooperation of federal agencies, universities and corporations. We welcome your contributions of translations and your advice.
OCLC FOR MANAGERS

by Robert Cunningham, Senior Manager, Library and Information Services, NELINET

The Online Computer Library Center (OCLC) in Dublin, Ohio, operates the world's largest bibliographic database. OCLC is used by catalogers to speed and simplify the cataloging process, by interlibrary loan librarians to find and retrieve books and materials not found in their local library, by reference librarians interested in searching through a collection of over 26 million items with keyword and Boolean logic, and by the library patron who is looking for information.

This presentation outlines the main features of OCLC's core products:

FirstSearch,
an on-line reference service with an end-user interface designed specifically for library patrons

EPIC,
a full-featured on-line reference system that provides subject access to a variety of databases for the expert searcher

PRISM,
providing the vast bibliographic resources of the OCLC On-line Union Catalog for cataloging and interlibrary loan

First,
enabling libraries to provide full holdings information to serials in the Union Listing component

NELINET provides information and support to all libraries in New England for products from OCLC and beyond.
OCLC for Managers

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Outline

A. FirstSearch
B. EPIC
C. PRISM
D. First

Objectives

1. To introduce the OCLC systems
2. To show who uses what OCLC system
3. To show how systems can be accessed
4. To understand costs
FirstSearch

What is it?

FirstSearch is an patron centered online reference system.

FirstSearch is made special by:

- WorldCat: The OCLC Online Union Catalog (over 26,000,000 bibliographic records)
- Popular online reference databases

Who uses it?

Library Patrons.

- It's so simple that training is not required.
- Simply walk up and use it to answer your questions.

Reference Librarians.

- It's a fast and easy way to do a reference search without regular practice or systematic reading of online searching documentation.
OCLC for Managers

How can I access it?

OCLC Dedicated Line. Same as PRISM.

OCLC Dial Access. Same as PRISM.

Internet. If your institution has an Internet connection, telecommunications charges can be eliminated.

How much does it cost? See the Price List.

From 50 to 90 cents per search depending on your initial order.

FirstSearch is sold:

1. In open blocks of 500 searches
2. In card blocks of 500 searches, 50 cards, 10 searches per card
3. In card blocks of 500 searches, 20 cards, 25 searches per card

Minimum order: $450 for 500 searches (90 cents each)
Best price order: $36,000 for 80,000 searches (50 cents each)

How do I sign up?

- Complete the FirstSearch Initial Order Form.
- Return the form to NELINET.
- Call Mary Ellen Heinen at NELINET for more information.
Searching Rules:

1. <enter> enters commands or backs you up

2. su:money
   gets you the word "money" from subjects, titles, and notes.

3. au:walt whitman
   gets you the author "Walt Whitman."

4. ti:life on the mississippi
   gets you the title "Life on the Mississippi."

5. + at the end of a word gets you that word and its plural or possessive form.

6. And or Not can be used as Boolean operators

7. n
   put this between 2 words to define how "near" you want 2 words to be--on either side of each other

8. w
   put this between 2 words to define how "with" you want 2 words to be--in the given order

9. w
   put this at the beginning of a search to get a word index.
   w sh=cars
   scan the word list for the subject heading "cars" in WorldCat.

   w au=bush, george
   gets you the right form of name
FirstSearch Example 1

Question: What books are there on the Navy in the Korean War.

Search WorldCat: korean and war and navy
(limited to English language and the years of 1990-)

ACCESSION: 22778882
AUTHOR: Connolly, John B. 4n
TITLE: Underway : tour of a tin can sailor /
PLACE: Baton Rouge, La. :
PUBLISHER: Connolly,
YEAR: 1990
PUB_TYPE: Book
FORMAT: iii, 291 p. : R19Z59 @
SUBJECT: Connolly, John B. -- 4n
United States. -- Navy -- Biography. -- 1n
Korean War, 1950-1953 -- Personal narratives,
American.
LIBRARIES: DC dlc
LA LEB LSL