THE LIBRARY OF CONGRESS
WASHINGTON, D.C. 20540

GENERAL READING ROOMS DIVISION

February 27, 1990

Dear Mr. Lowood:

Enclosed please find copies of articles and brochures which explain what we are doing at the Library of Congress with machine-readable materials.

I look forward to meeting you at the Symposium on Preservation of Microcomputer Software and discussing this important topic with folks from outside LC.

Anytime you are in Washington, please come visit us in the Machine-Readable Collections Reading Room.

Sincerely,

John Kimball

John W. Kimball, Jr.
Head, Automation and
Reference Collections
Section

Enclosure:

Henry Lowood
Editor, Annual Bibliography of the History of Technology
Department of Physics
Stanford University
Stanford, CA 94305-4060

Library of Congress

# MACHINE-READABLE COLLECTIONS READING ROOM

The Machine-Readable Collections Reading Room (MRCRR) is an **EXPERIMENTAL PILOT** project to last for one year. The purposes of the project are five:

- determine the best methods for acquiring machine-readable materials for the Library's Collections
- develop procedures for cataloging machine-readable materials
- provide access for research purposes to the Library's collection of machine-readable materials
- develop policies and procedures for servicing machine-readable materials
- suggest service locations for machine-readable materials

Machine-readable materials are:

- executable microcomputer programs on floppy or CD-ROM disks
- data on microcomputer floppy or CD-ROM disks

During the pilot year, only IBM, IBM compatible, and Macintosh titles will be available for use in the MRCRR.

Additional titles and documentation for other hardware are being collected and will be available for manual review only.

Staff from the Library's General Reading Rooms Division will provide services in the MRCRR. Researchers wishing to study these materials are welcome to use these facilities. Staff will:

- consult with researchers to determine their interest and skill in using machine-readable materials
- advise researchers as to what is available
- install or retrieve the desired titles for use

**All materials will be handled only by Library staff.**

**LOCATION** Thomas Jefferson Building, First Floor, Room LJ-140G

**HOURS** Monday through Friday, 12:00 noon - 4:00 p.m.

**TELEPHONE** 202-287-5278

The current collection consists of over 400 titles. A core group of representative titles in major software applications and compact discs is available in the reading room. These titles include:

**ACCOUNTING**
- Harmony

**BIBLIOGRAPHY PREPARATION**
- Procite/Bibliolinks
- Scimate
- Infobase

**COMMUNICATIONS**
- Crosstalk
- MS Access

**DATABASE MANAGEMENT**
- dBASE III +
- Knowledgeman
- R:Base
- Revelation
- DayFlo

**DESKTOP PUBLISHING**
- Pagemaker
- Ready Set Go 3
- MacPublisher
- Ventura Publisher

**EDUCATION**
- Flight Simulator

**GRAPHICS**
- MacPaint
- GraphWriter
- PC Paintbrush
- MS Chart
- Freelance Plus

**INTEGRATED SOFTWARE**
- Framework II
- Symphony
- Corporate MBA
- Enable

**PROJECT MANAGEMENT**
- MS Project
- Harvard Total Project Manager

**REFERENCE**
- Grammatik II
- Reference Set

**SPREADSHEETS**
- Lotus 123
- MS Multiplan
- SuperCalc 4
- MS Excel
- Sideways

**STATISTICS**
- SPSS

**UTILITIES**
- Wordperfect Library
- Norton Utilities

**WINDOWING/MULTI-TASKING**
- MS Windows
- Topview

**WORD PROCESSING**
- Wordstar 2000
- DisplayWrite
- WordPerfect
- MS Word
- Multimate Advantage II

**CD-ROM**
- Oxford English Dictionary
- PC-Sig
- Library Literature
- Electronic Encyclopedia
- Books in Print Plus
- Ulrich's Plus
- Dissertation Abstracts
- Software Plus
- Business Periodicals Index

July 7, 1988

The MRCRR also collects and maintains a print reference collection, including some general reference works, third-party manuals for specific titles, industry directories, over twenty journals about the microcomputer and software industry, and a file of articles, reviews, and trend studies.

## BIBLIOGRAPHIC CONTROL

The Library's Special Materials Cataloging Division, with assistance from MRCRR staff, creates catalog records for the machine-readable titles in the collection. The descriptive cataloging rules being followed are found in the revised Chapter 9 (Computer Files) of the second edition of the Anglo-American Cataloging Rules (AACR 2). For subject access, catalogers use terms from the Library's subject authority file. Catalog records are created through a microcomputer database management program, and researchers may consult the catalog online or in a printed version. Catalog records for machine-readable titles will be entered into the Library's mainframe online catalog as soon as the format for these materials is available. These records will then be searchable on terminals throughout the Library and will be distributed to organizations that routinely purchase LC's catalog products.

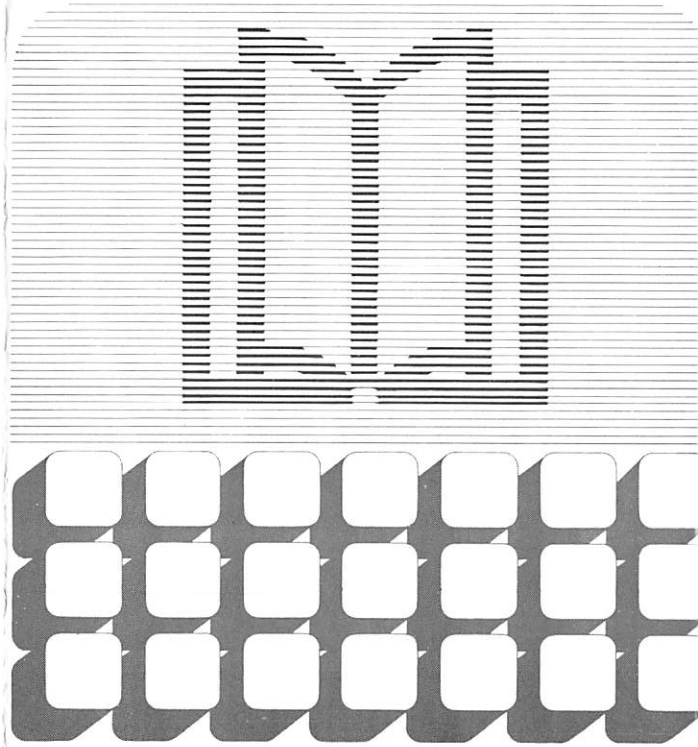

**MACHINE-READABLE COLLECTIONS READING ROOM**

*Library of Congress*
*General Reading Rooms Division*
*Washington, DC 20540*

*Thomas Jefferson Building*
*Room LJ-140G*
*Monday through Friday*
*12:00 noon to 4:00 p.m.*
*(202) 707-5278, 707-5279*


THE LIBRARY OF CONGRESS

# Machine-Readable Collections Reading Room



*The Library of Tomorrow*

# MACHINE-READABLE COLLECTIONS READING ROOM

## INTRODUCTION

The Machine-Readable Collections Reading Room (MRCRR), established in July 1988 as a one-year pilot project, is part of the Library of Congress' comprehensive program to acquire, organize, and service materials in machine-readable formats, including microcomputer software programs and information or data files issued on microcomputer, compact, or video discs.

For the purpose of the pilot project, machine-readable titles are defined as data or programs that require a microcomputer for retrieval and display. As the microcomputer industry expanded during the past ten years, there has been an increasing demand to store large reference and data files on video discs and compact discs which had previously been used for motion picture and sound recordings. Recently, the demands of the library and information communities have begun to be addressed with the development and marketing of data and graphics products and systems. As a result, some resources which were available only in print editions are now also available in machine-readable formats; in other instances the machine format is the only medium for publication.

Although the Library of Congress has been acquiring machine-readable materials since the early 1980's, it is only now, with the establishment of this reading room, that these materials are being made available to researchers. The MRCRR reference staff, in addition to providing reference assistance in the reading room, are helping to establish collection development guidelines, assisting in establishing bibliographic control of machine-readable materials, and developing effective service policies and security procedures.

A Machine-Readable Collections Review Committee reporting directly to the Librarian of Congress has been established to keep the microcomputer, information, and publishing industries apprised of developments and issues concerning the reading room and its collections. Donations of new as well as superseded programs and data files are sought so that the Library can build an archival collection of these materials.

## SERVICES

The MRCRR, like the Library's other general reading rooms, is open to researchers over high school age. Hours of service are 12:00 noon–4:00 p.m., Monday through Friday. The MRCRR is designed to provide access to materials on microcomputer disks, optical CD-ROM's, and informational videodiscs. These materials may be executable programs, such as those for word processing or database management, or data, such as encyclopedias or periodical indexes. Access to mainframe or minicomputer programs or data is not provided nor is access to commercial and other online systems.

Reference staff will assist researchers in identifying machine-readable titles, as well as other resources such as articles, reviews, manuals, and industry studies. Library users may view and work with microcomputer software only for research purposes, including comparison of titles for similar applications, reviewing the different versions of a title, and examining help screens and tutorials. Personal use of microcomputer software and hardware, such as for creating one's own catalog or writing reports, is not permitted. Reference sources on CD-ROM, such as encyclopedias, are available for consultation in the same manner one would use printed materials, to locate information. Only staff handle and install machine-readable titles.

The MRCRR has five workstations: four Compaq stations (IBM-compatible) and one Macintosh with a Sony videodisc player and monitor attached. Two of the Compaq stations also have Hitachi CD-ROM drives. Printers include Epson, Hewlett-Packard, and Apple LaserWriter.

During the pilot project, only IBM-compatible and Macintosh titles are being installed and reviewed on the machines. Titles for other machines are being collected, and researchers may consult the manuals or other printed sources that accompany them.

## ACQUISITIONS and COLLECTIONS

The Library of Congress collects machine-readable titles by purchase and, in addition, copyright regulations are in the process of being changed to bring machine-readable formats into conformance with print materials for deposit. In the future, machine-readable titles published with a copyright notice will be required to be deposited in the Copyright Office and will be available for addition to the Library's collections.

To create a core collection of microcomputer programs for the MRCRR, copies of more than four dozen items identified as industry leaders and expected to receive frequent use were purchased. These titles represent a variety of subjects and applications including: bibliography preparation, communications, database management, desktop publishing, education, graphics, integrated systems, project management, reference, spreadsheets, statistics, utilities, windowing, and word processing. A selection of CD-ROM format encyclopedias, dictionaries, directories, and periodical indexes are also being acquired. Nearly 600 additional titles covering a range of applications and including formats compatible with IBM and Macintosh, as well as other hardware systems, are stored in book stacks near the reading room.

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Since 1958, the Journal of the National Federation of Abstracting and Information Services

# newsletter

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## Copyright Policy and Machine-Readable Materials: A Pilot Program Raises Questions

From the outside, it looks like just another reading room, tucked away on the fourth floor of the Library of Congress next to the Children's Literature Center. But this one small room has raised issues and controversy that belie its size. Known as the Machine-Readable Collections Reading Room (MRCRR), this area is the depository, voluntary for the moment, for CD-ROMs, videodiscs, and software products.

The Library wants to create an archive, one it expects will become the "major archive of software programs in the U.S. and in the world." It sees the collection as providing a means for users to examine machine-readable material for "research purposes." To database and software producers and the industries they represent, however, the MRCCR poses several major issues.

On August 9, 1988, a notice of proposed rulemaking appeared in the *Federal Register* . It stated that the Library of Congress was "considering adoption of new regulations for deposit of certain machine--readable copies." This ruling would override the existing exemption of machine-readable materials and establish the new storage space, the MRCRR, as the depository. According to the proposed ruling, CD-ROM and software would be subject to mandatory deposit, with the stipulation that "published databases that are available only online" would not be demanded.

The proposed ruling raised an outcry among members of the information industry. Seven organizations responded formally with their concerns. Most of the comments focused on the proposed regulation's lack of clarity regarding the ultimate intention of how the collection is used and the security of its materials. It was pointed out that the regulation did not successfully address the proprietary rights issues of the producers. Nor did it take into account that access is commonly provided only via license agreements containing the essential provisions.

Consens. among responding groups was that the agreement should be voluntary and not mandatory, as stated in the proposed ruling.

On November 10, these issues found a forum at the Copyright Office of the Library of Congress. Led by MaryBeth Peters, Policy Planning Advisor, Copyright Office, the meeting was attended by twelve representatives from organizations that included IBM, Apple, The Computer Software and Services Industry Association (ADAPSO), and the Computer Business Equipment Manufacturers Association (CBEMA). Many of the attendees had been present at a prior meeting held in May, six weeks before the MRCRR opened.

The morning's discussion began with an update on the MRCRR. The room has been in operation now for five months. It holds 1,000 software and CD-ROM pro-

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ducts, ranging from *de Italia, Videodisc Encyclopedia of Italian Civilization*, to Lotus 1-2-3. Patrons access these products via five workstations (one Macintosh, and four Compaq computers). Also available are two Hitachi CD-ROM players, as well as a videodisc player and monitor. Products are grouped, for the most part, by subject category, with the word processing packages on one machine and the spreadsheet software on another. All packages are loaded onto the hard drives of these units, and their access paths are hidden to the user. Only one package can be examined by the user at a time.

*Deposit of machine-readable materials, although voluntary now, is expected to become mandatory as of July 1989--the end of the year-long pilot program.*

If deposit under Code 407 of the Copyright Law is not mandatory, where do these 1,000 copies of machine-readable material come from? Even though the introduction of the ruling is recent, the deposit of machine-readable materials is hardly new. Although exempt from the copyright ruling established in 1976, machine-readable materials have been arriving at the Library for years. Many represent gifts, exchange, or library purchases, with the Copyright Office supplying the largest number: 450 titles.

## Security Issues

Most of the concerns raised during the remainder of the November 10 session dealt with security and the fact that providing effective security for machine-readable copies is difficult, if not impossible. The Library of Congress feels that it has taken measures to allay these doubts. Existing security precautions include "hiding" the programs existing on a workstation and prohibiting users from bringing their own materials--like diskettes--into the room. As Linda Arret, MRCRR automated references services specialist explained, a prototype floppy drive guard will be installed in the workstations to remove all chance of copying files. Two of the Compaqs are equipped with modems, but these are disabled when not in use by the staff. All users are interviewed when they sign in, and a record is maintained of the materials they review.

*It is still unclear exactly what type of materials must be deposited at that point and in what format (print-outs of "code alone? the actual CD-ROM or software package?)*

While the MRCRR has tightened its security and its policies, some areas of its program remain vague. Deposit of machine-readable materials, although voluntary now, is expected to become mandatory as of July 1989--the end of the year-long pilot program. It is still unclear exactly what type of materials must be deposited at that point and in what format (print-outs of "code alone? the actual CD-ROM or software package?). Furthermore, within the Reading Room itself, will security measures such as those listed here suffice?

Other doubts remain as well. For example, are users really aware of their responsibilities when examining a software product, since the access method effectively removes even a "shrinkwrap" agreement? Right

NFAIS Newsletter

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now, the user is told the agreement is available for examination but is not required to sign or even read a product-specific agreement. There are also no formal controls over the amount of material that can be printed by a user.

What happens in the meantime? The attendees of the November 10 meeting will reconvene, probably in February, 1989. By then, the MRCRR will have issued a report detailing its first six months of operation.

Until July 1989, material will be solicited on a voluntary basis. The Copyright Office will be sending letters to database and software producers requesting materials, under the auspices of trade and professional organizations. These works are defined primarily as those which are "made available to the general public and institutions" and exclude "databases made available...only online."

It seems doubtful that any software or database producer would challenge the merit of building a "national archive" for their products. Nevertheless, the policy, its intent, and even the wording are unclear. While the deadline for submitting formal comments has passed, communication can be sent to: MaryBeth Peters, Policy Planning Advisor, Copyright Office, Library of Congress, Washington, D.C., 20559.

## Informing the Nation

The Office of Technology Assessment (OTA) recently issued its study on Federal information dissemination. The report, *Informing the Nation: Federal Information Dissemination in an Electronic Age* examines two major issues: the role of Federal agencies in the dissemination process and public access to Federal information available in electronic format. Produced in response to an initial request of the Joint Committee on Printing, the report makes it clear that there is a need for a government electronic information policy under the Freedom of Information Act (FOIA).

*...there is a need for a government electronic information policy under the Freedom of Information Act (FOIA).*

*Informing the Nation* discusses the technical trends affecting the U.S. government and its major information dissemination institutions: the Government Printing Office (GPO), the National Technical Information Service (NTIS) and the Depository Library Program (DLP). The electronic dissemination of congressional information, NTIS/Superintendent of Documents Cooperation, and dissemination standards are also discussed in the report.

FOIA is a perfect example of existing legislation that hasn't quite caught up with the new technology. FOIA was passed in 1966, before the advent of computer record storage. The rules governing the dissemination of records on paper state that agencies are not required to "create new records in fulfilling requests." The programming necessary to access records has, in some cases, been considered "record creation."

*FOIA was passed in 1966, before the advent of computer record storage.*

Access to electronic information under FOIA raises other issues. The Act states that government agencies must make a "reasonable effort" in supplying

# Mac software recognized as a U.S. resource

BY EMILY BROWER

WASHINGTON, D.C. — Macintosh software has become a national intellectual resource.

In recognition of software development's contribution to the intellectual achievements of the United States, the Library of Congress has announced plans to open an experimental reading room for machine-readable materials that will include Mac software in its collection.

"Software is an intellectual and creative resource that the country should be proud of. It's like jazz, more ours than anyone else's," explained Mary Beth Peters, policy adviser to the Register of Copyrights.

The new reading room will start with a core of 40 best-selling MS-DOS and Macintosh programs. For reading the collection, the reading room will provide three Compaq Deskpros, a Hitachi CD-ROM drive, two Epson printers and one Macintosh with a printer.

Peters said she hopes that the reading room will serve as a general model for other libraries that would like to establish machine-readable collections. Part of the project's stated purpose, for example, is to establish guidelines that protect machine-readable collections from piracy and vandalism. Under the current policy, "readers" can explore a piece of software but will not be able to create personal documents with it.

Under the proposed registration changes, publishers will be required to deposit a best edition with copyright registration of software. ■

# Library Creates a Home for Old Software

By Vanessa Jo Grimm
GCN Staff

The Library of Congress recently began a pilot program to collect and store outdated software packages for posterity.

Manufacturers of both software and hardware have shown little interest in the history of the microcomputer and its accompanying software applications, said John W. Kimball Jr., head of the library's Automation and Reference Collections Section. "We're trying to document an area where America has been the leader in microcomputers and software," he said.

To achieve this goal, the library opened a reading room where researchers can study software programs and research machine-readable materials. So far, the library has amassed more than 1,000 titles and has cataloged on floppy disk and compact disk/read-only memory storage about one-third of the collection.

The software ranges from the simplest word processing packages to the most advanced video display and HyperCard applications. The majority of the collection was obtained through copyright deposit and donation.

Kimball said the collection is the only one of its kind in the United States. The National Archives, however, has undertaken a similar project, in conjunction with the University of Maryland, to collect machine-readable government documents.

***We're documenting an area where America has led in microcomputers and software.***

The reading room, dubbed the Library of Tomorrow and known officially as the Machine-Readable Collections Reading Room, opened this summer in a small partitioned space on the back side of the Thomas Jefferson building.

Initially, it is being called a pilot project, but even if the reading room is not continued, the library plans to continue amassing software products and machine-readable documents, said Suzanne Thorin, acting chief of the library's General Reading Rooms Division.

"One of our goals in the pilot project is to figure out where in the library hierarchy we should be," she said.

Though the new program's quarters are cramped now and there are only five workstations, Thorin said that unless the library closes the project and opts to collect the materials through its other departments, the program will be relocated to a roomier and newly renovated location in the John Adams building. That renovation is not expected to be completed for another year.

"Although it's small now, it's what we think will be the largest collection of its kind for machine-readable information in the next 25 years," Thorin said. The two reference librarians who staff the room receive about 30 reference inquiries each week, she said.

The library would like to obtain copies of all American software products as well as a substantial representation of foreign products, she said. The library also plans to acquire older equipment to run outdated packages and programs before the hardware becomes unavailable.

Thorin likened the collection to film libraries where the items are collected for their research value rather than their entertainment value. Also like film libraries, the users will not handle the materials in the reading room. Instead, the reference librarians will prepare the machine-readable items for the user, she said.

The library also is using the room to gauge user interest in the materials, Kimball said. "We're trying to determine the public's acceptance of information in these formats," he said.

The collection is split between program software and application software used to relay documents or resource information in a machine-readable format, Kimball said. Many of the machine-readable materials are available in other sections of the library, but library officials decided to include both software and machine-readable resources, he said.

The Italian Agnelli Foundation donated an $8,000 to $10,000 collection of hardware, including an Apple Macintosh and a 12-inch videodisk machine with high-resolution Sony monitor, to run de Italia, a machine-readable encyclopedia of Italian civilization and art. De Italia is indexed using Apple's HyperCard software package and was developed at a cost of $4 million by Voyager Developmental Inc. of Santa Ana, Calif. It is one of 20 similar donations the Agnelli Foundation made to U.S. libraries and art museums.

*Library Technology*

*by Nancy Melin Nelson*

# Library of Tomorrow Project: Deja Vu, KRC?

According to John Kimball, Jr., the explosive growth of both the microcomputer software and CD-ROM publishing industries absolutely mandated the creation of Machine-Readable Collections Reading Room (MRCRR) at the Library of Congress (LC). Kimball, head of the Automation and Reference Collections Section at LC which directs the operations of the newly established center, is bullish about U.S. dominance of both industries and plans for the day, maybe 50 years from now, when researchers will want to study the products of their 'early days.'

The MRCRR is but one aspect of a year long project, dubbed The Library of Tomorrow and begun in July of 1988, to study how these machine readable materials can best be used in libraries. These media, under the terms of the project, may be defined as 1) executable programs on microcomputer or CD-ROM discs, and 2) data on microcomputer, CD-ROM, or videodiscs. Kimball's group is in charge of providing workable answers to such questions as:

*"The center keeps careful records of patron use."*

- What are the best methods for acquiring machine-readable materials for LC;
- How should LC provide access for research purposes to these materials;
- What policies and procedures should be developed for accessing and servicing the media;
- What are the best service locations within the Library of Congress;
- What procedures should be developed for cataloging these materials.

### Deja Vu, KRC

This is all Deja Vu to me. Read on for more about the KRC's role. To help LC find the answers it seeks, the MRCRR has been set up in a far distant corner of LC's Jefferson Building, across from the U.S. Capitol. Patrons with special reference needs are referred to the center by LC staff members with public services assignments. The room, bounded by makeshift walls that LC expects to tear down as part of its remodelling project, is jammed with hardware, software, manuals, CD-ROMs, and two librarians whose jobs are simply too demanding.

These staffers must consult with researchers to determine their interest and skill in using the media and advise them as to what is available. A special rule established for the use of materials in the MRCRR is that the media may be handled only by library staff. This means that MRCRR employees must retrieve and install any materials requested by patrons.

### Patron Usage/Librarian Overload

The center keeps careful record of patron use. Since it was first opened, Kimball reports that there have been an average of 30 users per week and about five to eight telephone inquiries. The center is only available from noon to 4:00 p.m. weekdays, but even that restriction does not allow the librarians enough time.

Staffer Linda Arret, for example, regrets that she's "so busy installing, processing, and cataloging new systems, that there isn't enough time to learn how to actually use them." For this reason, MRCRR librarians are "not billing ourselves as trainers." They expect patrons to come to the center with some previous microcomputer software and CD-ROM expefience.

As with many of its pilot projects, LC depends to a large extent on gifts and copyright deposit items to cut down on expenses. Kimball acknowledges the generosity of Apple Computer, Inc., Gale Research Co., the Agnelli Foundation, Oxford University Press, and Datatrek in donating equipment and systems, and he is actively seeking other software and CD-ROM publishers to donate archival products and equipment.

At this time, there are five work-

*(continued on page 8)*

*Library Technology* *by Nancy Melin Nelson*

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*(continued on page 8)*

## Library Technology

*(continued from page 7)*

stations and a collection of more than 600 titles, and only IBM compatible and Macintosh microcomputers are available. Many of the titles are widely popular, including dBase III+, Lotus 1-2-3, WordPerfect, MacPaint, Pagemaker, and Smartcom software packages.

Optical information system products are few in number. In many instances, current issues (a CD-ROM monthly or quarterly update) are routed first to subject reading rooms. Thus, patrons may have to access the complete file of any particular title in two different places.

There are three Wilsondiscs (Applied Science and Technology Index (ASTI), Business Periodicals Index (BP), and Library Literature), two Bowker CD-ROMs (Ulrich's Plus (UP) and Books in Print Plus (BIPP)), UMI's Dissertation Abstracts (DA), Cambridge Scientific's Acquatic Sciences and Fisheries Abstracts (ASFA), Grolier's Electronic Encyclopedia, the McGraw-Hill Science and Technology Reference Library (STRL), the Oxford English Dictionary, PC-Sig (a public domain software collection), and LC's own CDMARC Subjects. ASTI, ASFA, and STRL are current in LC's Science Reading Room; BIPP, BPI, and UP, in the Social Science Reading Room; and DA, in LC's Microform Reading Room.

(One other optically-based product deserves special mention, de Italia. A $4.5 million project, de Italia is a laser-videodisc system that offers a machine searchable tour of Italian 'art.' Funded by the Agnelli Foundation, the videodisc may be used to access a specific work of art (da Vinci's Last Supper, for example) or a thematic collection (such as Humanism in Florence). The system, front ended by a Hypercard software package developed by Voyager software of California, was donated to LC by Agnelli. Kimball explains that it has only been requested for use once by a person who was planning a trip to Italy.)

### The Copyright Issue

As noted earlier, LC depends to a large extent on enriching its collection under the terms of the copyright law of 1976. That law provides that every publisher in the U.S. deposit two copies of any work (including phonorecords) in LC's Copyright Office within three months of publication. But that's an old law relative to the newness of machine readable media.

When the policies related to the terms of that law were first implemented in 1978, LC decided to exempt all works published solely in machine readable formats from mandatory deposit. Its reasoning then was that the media were not widely marketed to the public at large.

But now LC has turned 180 degrees and believes that it should be routinely adding copies of publications in these media to its collections. And to that end, it has proposed a rule to mandate publishers to deposit such materials just as they do traditional media (books, periodicals, films, etc.). (Incidentally, LC is specifically exempting published databases that are available only online.)

The full text of the proposed rule, "Registration of claims to Copyright Mandatory Deposit of Machine-Readable Copies; Proposed Rulemaking," is printed in Volume 53, Number 153 of the *Federal Register* for Tuesday, August 9, 1988, on pages 29923-29925. Comments were due no later than October 11.

### Publishers' Point of View

Software and CD-ROM publishers have traditionally, and rightfully so, sought to establish licensing arrangements with product users to protect potential revenues that would ensue from the purchase of added copies. Thus, for example, a software publisher can justifiably require that the purchased copy of the program may only be used by a single user on a single microcomputer and that it not be 'copied' for use by additional persons.

In many instances, where heavy use of a particular software package in an office environment would result in prohibitive expense for the purchase of additional copies, software publishers have agreed to multi-user, so-called 'site,' licenses.

Obviously, the MRCRR would benefit extensively and its collection would be greatly enriched if it were able to obtain software and CD-ROM systems on a no-cost basis as a result of copyright deposit laws. It is straightforward about that.

The text of the proposed rule states: "The Library desires to provide patrons access to computer software in IBM or Macintosh formats for the purpose of study and evaluation and to obtain information. One of the primary purposes of this software collection is to allow scholars in the future to study the computer revolution going on today."

But to appease publishers, with whom it has personally met on a number

*(continued on page 9)*

## Library Technology

*(continued from page 8)*

of occasions in this regard, LC specifically agrees that it will maintain total control over all materials in the collection. Hence the rule that MRCRR staff members must physically handle all materials.

"The Library is well aware of the significant value of the machine-readable copies that will be available in the reading room. For this reason, use of the terminals will be monitored in order to prevent copying. Library staff rather than patrons will maintain physical control of the disks and other machine-readable copies. No lending of copies to patrons or other institutions is contemplated" (my emphasis throughout).

### Why Not Elsewhere?

LC has a proud history of innovation. But it doesn't always share the results of its studies. And while LC will undoubtedly learn a great deal from its pilot project, what it learns will probably be applicable tangentially to libraries other than itself.

What's really needed is a pilot project that could offer direct information to public libraries, school libraries, academic libraries, and corporate libraries—all types, and all sizes. I've called for this here and elsewhere. Remember the Alexandria Project? I wrote at length about that possibility in the September 1987 issue of *Information Today*.

Refresher here if you can't find that issue. We (Robert Kerry of the Alexandra Institute) "are working as facilitators to determine how the problems associated with implementing optical information systems may be anticipated and how solutions may be provided." To that end, Kerr and I met with librarians during the 1987 annual meeting of the American Library Association. He and I proposed the development of prototype Knowledge Resoure Centers (KRCs) as a means to provide opportunities to test solutions to problems.

In the proposed project, "a consortium of libraries representing a cross-section of the library community would implement prototype KRCs of varying sizes and with differing goals." We established several objectives of the project including the following:

- Initiate the integration of various existing optical disc products into a single system.
- Place a representative sample of currently available optical disc products in a variety of libraries and study the ways in which these materials are used.
- Experiment with different usage-based approaches to paying for information in order to reduce the initial cost of information for libraries.
- Provide an environment in which the participating libraries can work with each other and with vendors on an information-sharing basis; address and resolve many of these issues well in advance of the anticipated acceptance and introduction of systems by librarians in the next few years.

### Hot Air and No Action

The upshot of the meeting was a lot of hot air and no action. While attendees were enthusiastic about the proposed KRCs, only a single person agreed to put some money up front (in the form of financing some necessary travel) to get the project off the ground.

### What a sorry outcome

Nor did we get much in the way of support from publishers. The single vendor representative of many who were invited, Parke Lightbown, VP of UTLAS, Inc., was himself enthusiastic. But he opined that while "vendors would be willing to cooperate in the effort, they would be unlikely to give anything away for free." Lightbown goes way back in this neophyte industry and has a particularly strong interest in the success of projects like this one.

### Play It Again, Sam

In light of the LC project and copyright mandate which will definitely get the ball rolling in DC, does any one out there want to try it again?

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*Nancy Melin Nelson is editor* CD-ROM Librarian, Small Computers In Libraries, *and chair of annual SCIL conferences.*

## CLSI To Sponsor Forum

CLSI, Inc. is sponsoring a panel discussion at the Midwinter ALA Conference in Washington, entitled "Open Systems: The Future of Library Automation." The forum will feature representatives from AT&T, the computer industry, the library and computer press, and the library community and will take place on Tuesday, January 10 from 11:30 a.m.–2:00 p.m. at the Sheraton Washington Hotel.

This roundtable discussion is one of a series of forums sponsored by CLSI, with the purpose of addressing key systems for industries such as libraries automation, and will be followed by a moderator-led question and discussion period. The forum will conclude with an audience question and answer session.

In conjunction with the Library Information and Technology Association (LITA) conference in October, CLSI hosted "Open Systems for Library Automation" at the Computer Museum in Boston. Moderated by CLSI president Gene Robinson, the forum featured information technology experts from AT&T, Sequent Computer Systems.

# ANNUAL REPORT OF THE LIBRARIAN OF CONGRESS

FOR THE FISCAL YEAR ENDING

SEPTEMBER 30, 1988

## MACHINE-READABLE COLLECTIONS READING ROOM

In July the Library opened a new reading room, the first of its kind in the nation, as a one-year pilot project. The Machine-Readable Collections Reading Room is intended to be a facility for the study of the design, history, and documentation of software and information data files. It focuses attention on the Library's continuing program to acquire, catalog, and make available to researchers materials in this format. It brings these items together physically and serves to underscore the significance of traditional library materials formatted in new technologies to contemporary society. The reading room houses five microcomputer work stations, a core collection of over sixty major computer software packages that are considered industry leaders, a dozen reference titles on CD-ROM, and over five hundred software and data files available from the stacks. Readers can access bibliographic information through an online catalog available on-site. Typical works available are *Grolier's Electronic Encyclopedia,* the *Oxford English Dictionary,* and *Books in Print.* In addition, this new facility benefited from a major gift from the Agnelli Foundation of Milan, Italy, of *De Italia,* an encyclopedia of Italian culture and civilization in video disk format with retrieval software, text, and indexes accessible on a microcomputer, which the foundation also donated to the Library.

In support of this effort to pursue its collections of machine-readable materials, the Library proposed revisions in the Copyright Office mandatory deposit regulation to cover this material. The mandatory deposit regulation exempted deposit requirements for works published solely in machine-readable formats. To help build collections for the new reading room, the Library's proposal would eliminate this broad regulatory exception and require the deposit of one copy; it would continue to exempt data bases that are only available online.

Library of Congress

# MACHINE-READABLE COLLECTIONS READING ROOM

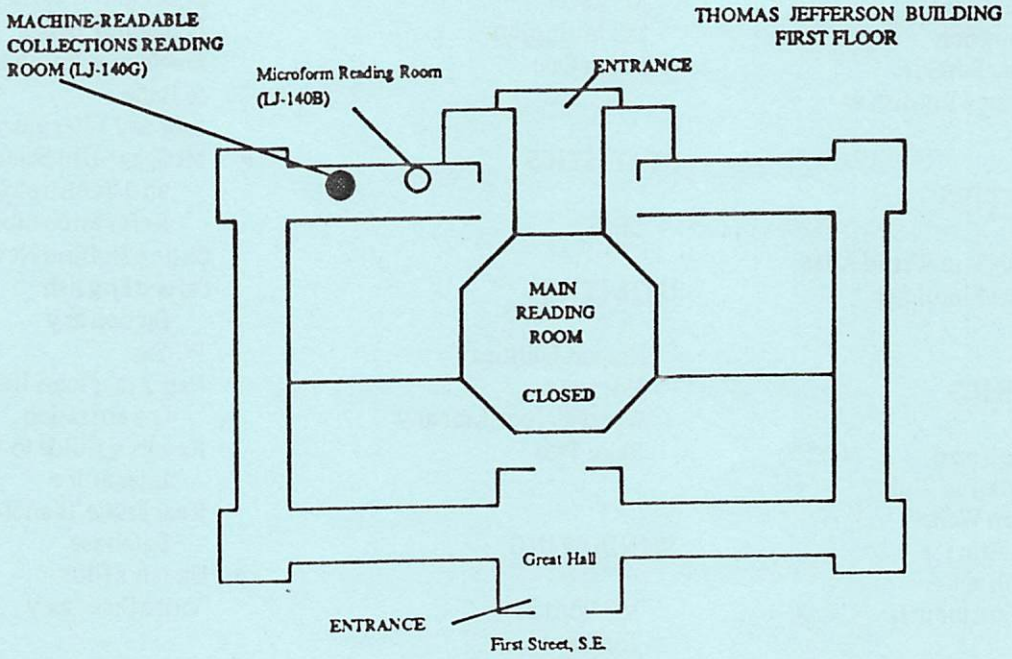
The Machine-Readable Collections Reading Room (MRCRR) opened in July 1988. The room maintains custody of and provides access to a growing collection of titles that require microcomputers for viewing.

The machine-readable collections include:

- executable programs on microcomputer or CD-ROM discs
- data on microcomputer, CD-ROM, or video discs

Reference staff from the Library's General Reading Rooms Division provide services in the MRCRR. Researchers wishing to study machine-readable materials are welcome to use the facilities. Staff will:

- consult with researchers to determine their interest and skill in using machine-readable materials
- advise researchers as to what is available
- install or retrieve the desired titles for use




| | |
|---|---|
| LOCATION | Thomas Jefferson Building, First Floor, Room LJ-140G |
| HOURS | Monday through Friday, 12:00 noon - 4:00 p.m. |
| TELEPHONE | 202-707-5278/9 |

A core group of representative titles in major software applications and compact/video discs is available in the reading room. These titles include:

### BIBLIOGRAPHY PREPARATION

Procite/Bibliolinks
Scimate

### COMMUNICATIONS

Crosstalk
Procomm Plus
Smartcom

### DATABASE MANAGEMENT

dBASE MAC
dBASE III+
Infobase
Knowledgeman
Revelation

### DESKTOP PUBLISHING

Pagemaker
Persuasion
Ready Set Go!
Ventura Publisher

### EDUCATION

Electronic World Atlas
Flight Simulator

### GRAPHICS

Freehand
Freelance Plus
Graph Writer
MacPaint
MS Chart
PC Paintbrush

### INTEGRATED SOFTWARE

Corporate MBA
Enable OA
Framework II
Symphony

### PROJECT MANAGEMENT

Harvard Project Manager
MS Project

### REFERENCE

Grammatik II
Reference Set

### SPREADSHEETS

Lotus 123
MS Excel
MS Multiplan
SuperCalc

### STATISTICS

SPSS

### UTILITIES

Norton Utilities
Sideways
WordPerfect Library
Take Two

### WINDOWING

MS Windows
Topview

### WORD PROCESSING

DisplayWrite
MS Word
WordPerfect
Wordstar Professional
XyWrite

### CD-ROM AND VIDEODISCS

Δ ABI Inform
• Applied Science and Technology Index
• Aquatic Sciences and Fisheries Abstracts
Biography Index
Δ Books in Print Plus
Δ Business Periodicals Index
CDMARC Names
CDMARC Subjects
Computer Library
Cumulative Book Index
† Dissertation Abstracts
Education Index
Electronic Encyclopedia
de Italia
Library Literature
• McGraw-Hill Science and Technology Reference Library
Online Hotline News
Oxford English Dictionary
PC-Sig
Pan American Health Organization
Readers' Guide to Periodical Literature
Real Estate Transfer Database
Δ Ulrich's Plus
Video Directory

Current issues available in: Δ Social Science Reading Room
† Microform Reading Room • Science Reading Room

All machine-readalbe materials are handled only by Library staff.

# CAPITAL CIRCUITS

*By Stacey Peterson*

## Open To The Public

The U.S. Library of Congress is as all-American as you can get. What could be more symbolic of a democratic and open society than free access to the information stored in the 83 million books, records, films and other creative works on the library's shelves?

But when it comes to information stored in software programs and databases, the computer industry gets a bit edgy about free and open access. This became evident recently when the Library of Congress proposed a historical archive of machine-readable copy.

Under U.S. law, a copyright owner is required to deposit two copies of a work with the Copyright Office for the Library of Congress' use. In 1978, when the deposit provision went into effect, machine-readable copy was exempt because it wasn't widely marketed to the public. But computer software and databases are now in wide public demand, the Copyright Office said in the *Federal Register* notice of the proposed rule. As a result, the library opened a machine-readable collection reading room last July to house software it already owned and last fall proposed mandatory deposits of machine-readable copy.

The proposed deposit rule would cover all data traditionally available in print form. It also would require deposits of all IBM- and Macintosh-compatible software programs—the only programs it currently has hardware to accommodate.

Several industry associations responded to the proposed rule with a firm "no." Some questions were raised as to why the deposit requirement would be limited to PC programs and databases. But most of the industry attention focused on the potential for illegal copying.

"It is difficult to provide effective security for machine-readable copies," said Ted Heydinger, vice president of the Computer and Business Equipment Manufacturers Association (CBEMA), in a written statement. "We want security issues addressed to protect the intellectual property of the software creator."

The Library of Congress has responded to many of the industry's concerns, said Linda Arret, an automated reference services specialist in the machine-readable copy reading room. There are "limitations on the use of software programs," she explained. "We don't allow people to do their taxes here or write papers."

People are allowed to use the software archive for reference and research purposes and to get a basic understanding of programs they are considering buying, Arret said.

Popular programs are kept in a core collection on hard disks, eliminating the need for floppies to change hands. No lending is allowed. Blank diskettes are banned from the room, and modems are disconnected in the reading room's four **Compaq Computer Corp.** machines and one **Apple Computer Inc.** Macintosh II.

The librarians spend a lot of time looking over patrons' shoulders, making sure the rules aren't broken. Nevertheless, Arret said, if someone really wanted to, they could smuggle in a diskette, distract her somehow and make illegal copies. The library is looking into locking disk drives to solve the problem.

While it's questionable whether tax dollars should be spent to provide a consumer testing lab for software programs, access to data published on disks is just as valuable for a free and open society as data on paper. In addition, according to Arret, no other historical software archive exists in this country for researchers' use.

For the moment, the industry has won the first round of the dispute. The Library of Congress agreed to hold off on mandatory deposits during the reading room's first year. But the victory will be brief, because the library "will have a demand deposit provision by July 1, 1989," said Marybeth Peters, a Copyright Office policy planning adviser.

The industry, for its part, ought to realize that objections to establishing a national software archive could be interpreted as an indication that databases and software are somehow not as important as books, records and films.

If software developers want the same copyright protection granted to other types of creative works, they must abide by the tradition of public access to information. Instead of continuing to demand exceptions for machine-readable copy, software companies should help identify and develop technologies for a secure system of public access.

for which premiums are being paid. Under § 2610.23(b)(1) of the premium regulation, this value is determined by reference to 30-year Treasury constant maturities as reported in Federal Reserve Statistical Releases G.13 and H.15. The PBGC publishes these rates in Appendix B to the regulation.

For the reasons set forth in the preamble to the final payment of premiums regulation (54 FR 28944 (July 10, 1989)), the PBGC is publishing these monthly interest rates in Appendix B on a quarterly basis to coincide with the publication of the late payment interest rate set forth in Appendix A. (PBGC will henceforth publish the Appendix A rates every quarter, regardless of whether the rate has changed.) Unlike the Appendix A rate, which is determined prospectively, the Appendix B rate is not known until a short time after the first of the month for which it applies. Accordingly, the PBGC is hereby amending Appendix B to part 2610 to add the vested benefits valuation rates for plan years beginning in August, September and October of 1989.

The appendices to 29 CFR parts 2610 and 2622 do not prescribe the interest rates under these regulations. Under both regulations, the Appendix A rates are the rates determined under section 6601(a) of the Code. The interest rates in Appendix B to Part 2610 are prescribed by ERISA section 4006(a)(3)(E)(iii)(II) and § 2610.23(b)(1) of the regulation. These appendices merely collect and republish the interest rates in a convenient place. Thus, the interest rates in the appendices are informational only. Accordingly, the PBGC finds that notice of and public comment on these amendments would be unnecessary and contrary to the public interest. For the above reasons, the PBGC also believes that good cause exists for making these amendments effective immediately.

The PBGC has determined that none of these amendments is a "major rule" within the meaning of Executive Order 12291, because they will not have an annual effect on the economy of $100 million or more; nor create a major increase in costs or prices for consumers, individual industries, or geographic regions, nor have significant adverse effects on competition, employment, investment, innovation or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Because no general notice of proposed rulemaking is required for these amendments, the Regulatory Flexibility Act of 1980 does not apply. See 5 U.S.C. 601(2).

**List of Subjects**

*29 CFR Part 2610*

Employee benefit plans, Penalties, Pension insurance, Pensions, Reporting and recordkeeping requirements.

*29 CFR Part 2622*

Business and industry, Employee benefit plans, Pension insurance, Pensions, Reporting and recordkeeping requirements, Small businesses.

In consideration of the foregoing, Appendix A and Appendix B to part 2610 and Appendix A to part 2622 of chapter XXVI of Title 29, Code of Federal Regulations, are hereby amended as follows:

## PART 2610—PAYMENT OF PREMIUMS

1. The authority citation for part 2610 is continued to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1306, 1307, as amended by sec. 9331, Pub. L. 100-203, 101 Stat. 1330.

2. Appendix A to part 2610 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix A—Late Payment Interest Rates**

The following table lists the late payment interest rates under § 2610.7(a) for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

3. Appendix B to part 2610 is amended by adding to the table of interest rates therein new entries for premium payment years beginning in August–October 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix B—Interest Rate for Valuing Vested Benefits**

The following table lists the required interest rates to be used in valuing a plan's vested benefits under § 2610.23(b) and in calculating a plan's adjusted vested benefits under § 2610.23(c)(1):

| For premium payment years beginning in— | Required interest rate [1] |
|---|---|
| • | • |
| August | 6.46 |
| September | 6.50 |
| October | 6.52 |

[1] The required interest rate listed above is equal to 80% of the annual yield for 30-year Treasury constant maturities, as reported in Federal Reserve Statistical Release G.13 and H.15 for the calendar month preceding the calendar month in which the premium payment year begins.

## PART 2622—EMPLOYER LIABILITY FOR WITHDRAWALS FROM AND TERMINATIONS OF SINGLE-EMPLOYER PLANS

4. The authority citation for part 2622 continues to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1362–1364, 1367–68, as amended by secs. 9312, 9313, Pub. L. 100-203, 101 Stat. 1330.

5. Appendix A to part 2622 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix A—Late Payment and Overpayment Interest Rates**

The following table lists the late payment and overpayment interest rates under § 2622.7 for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

Issued in Washington, DC, the 6th day of October 1989.

**James B. Lockhart III,**

*Executive Director Pension Benefit Guaranty Corporation.*

[FR Doc. 89-24234 Filed 10-13-89; 8:45 am]

BILLING CODE 7708-01-M

## COPYRIGHT OFFICE

## Library of Congress

## 37 CFR Part 202

**[Docket No. RM 89-6A]**

## Registration of Claims to Copyright; Mandatory Deposit of Machine-Readable Copies

**AGENCY:** Library of Congress, Copyright Office.

**ACTION:** Final Regulations.

**SUMMARY:** The Copyright Office of the Library of Congress is adopting final

*II. Photographs*

A. Size and finish, in descending order of preference:
1. The most widely distributed edition.
2. 8 x 10-inch glossy print.
3. Other size or finish.
B. Unmounted rather than mounted.
C. Archival-quality rather than less-permanent paper stock or printing process.

*III. Motion Pictures*

A. Film rather than another medium. Film editions are listed below in descending order of preference.
1. Preprint material, by special arrangement.
2. Film gauge in which most widely distributed.
3. 35 mm rather than 16 mm.
4. 16 mm rather than 8 mm.
5. Special formats (e.g., 65 mm) only in exceptional cases.
6. Open reel rather than cartridge or cassette.
B. Videotape rather than videodisc. Videotape editions are listed below in descending order of preference.
1. Tape gauge in which most widely distributed.
2. Two-inch tape.
3. One-inch tape.
4. Three-quarter-inch tape cassette.
5. One-half-inch tape cassette.

*IV. Other Graphic Matter*

A. Paper and Printing:
1. Archival quality rather than less-permanent paper.
2. Color rather than black and white.
B. Size and Content:
1. Larger rather than smaller size.
2. In the case of cartographic works, editions with the greatest amount of information rather than those with less detail.
C. Rarity:
1. The most widely distributed edition rather than one of limited distribution.
2. In the case of a work published only in a limited, numbered edition, one copy outside the numbered series but otherwise identical.
3. A photographic reproduction of the original, by special arrangement only.
D. Text and Other Materials:
1. Works with annotations, accompanying tabular or textual matter, or other interpretative aids rather than those without them.
E. Binding and Packaging:
1. Bound rather than unbound.
2. If editions have different binding, apply the criteria in I.A.2–I.A.7, above.
3. Rolled rather than folded.
4. With protective coatings rather than without.

*V. Phonorecords*

A. Compact digital disc rather than a vinyl disc.
B. Vinyl disc rather than tape.
C. With special enclosures rather than without.
D. Open-reel rather than cartridge.
E. Cartridge rather than cassette.
F. Quadraphonic rather than stereophonic.
G. True stereophonic rather than monaural.
H. Monaural rather than electronically rechanneled stereo.

*VI. Musical Compositions*

A. Fullness of Score:
1. *Vocal music:*
a. With orchestral accompaniment—
i. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
ii. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
b. Unaccompanied: Open score (each part on separate staff) rather than closed score (all parts condensed to two staves).
2. *Instrumental music:*
a. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
b. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
B. Printing and Paper:
1. Archival-quality rather than less-permanent paper.
C. Binding and Packaging:
1. Special limited editions rather than trade editions.
2. Bound rather than unbound.
3. If editions have different binding, apply the criteria in I.A.2–I.A.12, above.
4. With protective folders rather than without.

*VII. Microforms*

A. Related Materials:
1. With indexes, study guides, or other printed matter rather than without.
B. Permanence and Appearance:
1. Silver halide rather than any other emulsion.
2. Positive rather than negative.
3. Color rather than black and white.
C. Format (newspapers and newspaper-formatted serials):
1. Reel microfilm rather than any other microform.
D. Format (all other materials):
1. Microfiche rather than reel microfilm.
2. Reel microfilm rather than microform cassettes.
3. Microfilm cassettes rather than micro-opaque prints.
E. Size:
1. 35 mm rather than 16 mm.

*VIII. Machine-Readable Copies*

A. Computer Programs
1. With documents and other accompanying material rather than without.
2. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
3. *Format:*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) 5¼" Diskette(s).
(ii) 3½" Diskette(s).
(iii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
b. Apple Macintosh:
(i) 3½" Diskette(s).
(ii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
B. Computerized Information Works, Including Statistical Compendia, Serials, or Reference Works:
1. With documentation and other accompanying material rather than without.
2. With best edition of accompanying program rather than without.
3. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
4. *Format*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 5¼" Diskette(s).
(iii) 3½" Diskette(s).
b. Apple Macintosh:
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 3½" Diskette(s).

*IX. Works Existing in More Than One Medium*

Editions are listed below in descending order of preference.
A. Newspapers, dissertations and theses, newspaper-formatted serials:
1. Microform.
2. Printed matter.
B. All other materials:
1. Printed matter.
2. Microform.
3. Phonorecord.

Dated: August 31, 1989.

Ralph Oman,

*Register of Copyrights.*

Approved by:

James H. Billington,

*The Librarian of Congress.*

[FR Doc. 89-23765 Filed 10-13-89; 8:45 am]

BILLING CODE 1410-07-M

## POSTAL SERVICE

### 39 CFR Parts 3, 4, 5, 6, and 8

### Conforming the Bylaws of the Board of Governors With the Inspector General Act Amendments of 1988, and Other Miscellaneous Amendments

**AGENCY:** Postal Service.

**ACTION:** Final rule.

**SUMMARY:** The primary purpose of this final rule is to conform the bylaws of the Board of Governors with the Inspector General Act Amendments of 1988, which, among other things, require (1) that the Postmaster General's appointment of the Chief Postal Inspector must be made "in consultation with the Governors", and (2) that the

for which premiums are being paid. Under § 2610.23(b)(1) of the premium regulation, this value is determined by reference to 30-year Treasury constant maturities as reported in Federal Reserve Statistical Releases G.13 and H.15. The PBGC publishes these rates in Appendix B to the regulation.

For the reasons set forth in the preamble to the final payment of premiums regulation (54 FR 28944 (July 10, 1989)), the PBGC is publishing these monthly interest rates in Appendix B on a quarterly basis to coincide with the publication of the late payment interest rate set forth in Appendix A. (PBGC will henceforth publish the Appendix A rates every quarter, regardless of whether the rate has changed.) Unlike the Appendix A rate, which is determined prospectively, the Appendix B rate is not known until a short time after the first of the month for which it applies. Accordingly, the PBGC is hereby amending Appendix B to part 2610 to add the vested benefits valuation rates for plan years beginning in August, September and October of 1989.

The appendices to 29 CFR parts 2610 and 2622 do not prescribe the interest rates under these regulations. Under both regulations, the Appendix A rates are the rates determined under section 6601(a) of the Code. The interest rates in Appendix B to Part 2610 are prescribed by ERISA section 4006(a)(3)(E)(iii)(II) and § 2610.23(b)(1) of the regulation. These appendices merely collect and republish the interest rates in a convenient place. Thus, the interest rates in the appendices are informational only. Accordingly, the PBGC finds that notice of and public comment on these amendments would be unnecessary and contrary to the public interest. For the above reasons, the PBGC also believes that good cause exists for making these amendments effective immediately.

The PBGC has determined that none of these amendments is a "major rule" within the meaning of Executive Order 12291, because they will not have an annual effect on the economy of $100 million or more; nor create a major increase in costs or prices for consumers, individual industries, or geographic regions, nor have significant adverse effects on competition, employment, investment, innovation or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Because no general notice of proposed rulemaking is required for these amendments, the Regulatory Flexibility Act of 1980 does not apply. See 5 U.S.C. 601(2).

**List of Subjects**

*29 CFR Part 2610*

Employee benefit plans, Penalties, Pension insurance, Pensions, Reporting and recordkeeping requirements.

*29 CFR Part 2622*

Business and industry, Employee benefit plans, Pension insurance, Pensions, Reporting and recordkeeping requirements, Small businesses.

In consideration of the foregoing, Appendix A and Appendix B to part 2610 and Appendix A to part 2622 of chapter XXVI of Title 29, Code of Federal Regulations, are hereby amended as follows:

## PART 2610—PAYMENT OF PREMIUMS

1. The authority citation for part 2610 is continued to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1306, 1307, as amended by sec. 9331, Pub. L. 100-203, 101 Stat. 1330.

2. Appendix A to part 2610 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix A—Late Payment Interest Rates**

The following table lists the late payment interest rates under § 2610.7(a) for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

3. Appendix B to part 2610 is amended by adding to the table of interest rates therein new entries for premium payment years beginning in August–October 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix B—Interest Rate for Valuing Vested Benefits**

The following table lists the required interest rates to be used in valuing a plan's vested benefits under § 2610.23(b) and in calculating a plan's adjusted vested benefits under § 2610.23(c)(1):

| For premium payment years beginning in— | Required interest rate [1] |
|---|---|
| • | • |
| August | 6.46 |
| September | 6.50 |
| October | 6.52 |

[1] The required interest rate listed above is equal to 80% of the annual yield for 30-year Treasury constant maturities, as reported in Federal Reserve Statistical Release G.13 and H.15 for the calendar month preceding the calendar month in which the premium payment year begins.

## PART 2622—EMPLOYER LIABILITY FOR WITHDRAWALS FROM AND TERMINATIONS OF SINGLE-EMPLOYER PLANS

4. The authority citation for part 2622 continues to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1362–1364, 1367–68, as amended by secs. 9312, 9313, Pub. L. 100-203, 101 Stat. 1330.

5. Appendix A to part 2622 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

**Appendix A—Late Payment and Overpayment Interest Rates**

The following table lists the late payment and overpayment interest rates under § 2622.7 for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

Issued in Washington, DC, the 6th day of October 1989.

James B. Lockhart III,

*Executive Director Pension Benefit Guaranty Corporation.*

[FR Doc. 89-24234 Filed 10-13-89; 8:45 am]

BILLING CODE 7708-01-M

## COPYRIGHT OFFICE

## Library of Congress

## 37 CFR Part 202

[Docket No. RM 88-6A]

## Registration of Claims to Copyright; Mandatory Deposit of Machine-Readable Copies

**AGENCY:** Library of Congress, Copyright Office.

**ACTION:** Final Regulations.

**SUMMARY:** The Copyright Office of the Library of Congress is adopting final

regulations for deposit of certain machine-readable copies. The amendments revoke the exemption from mandatory deposit, pursuant to section 407 of the Copyright Act of 1976, of machine-readable copies and require deposit of data and software published in IBM or Macintosh formats for use in the collections of the Library.

**EFFECTIVE DATE:** October 16, 1989.

**FOR FURTHER INFORMATION CONTACT:** Dorothy Schrader, General Counsel, U.S. Copyright Office, Library of Congress, Washington, DC 20559 (202) 707-8380.

**SUPPLEMENTARY INFORMATION:** On August 9, 1988 (53 FR 29923), the Copyright Office published a notice of proposed rulemaking regarding the adoption of new regulations for deposit of certain machine-readable copies. The Office proposed the repeal of the exemption for works published solely in machine-readable formats from mandatory deposit. Copies secured through mandatory deposit under section 407 of the Copyright Act would be added to the collections of the Machine-Readable Collections Reading Room.

The Copyright Office received seven comments on the proposed regulation. While some of the comments praised the broad goals of the Machine-Readable Collections Reading Room, all expressed reservations with the proposed regulation as published in the Federal Register.

The Copyright Office has studied carefully the comments that were submitted. For reasons detailed in this announcement, the Copyright Office has adopted as final, the proposed regulation without change. We are republishing as Appendix B the entire Best Edition Statement, including the additonal material regarding deposit of machine-readable copies.

## 1. Background

Under section 407 of the Copyright Act of 1976, title 17 of the United States Code, as originally enacted, the owner of copyright, or of the exclusive right of publication, in a work published with notice of copyright in the United States was required to deposit two copies (or, in the case of sound recordings, two phonorecords) of the work in the Copyright Office for the use or disposition of the Library of Congress. Effective March 1, 1989, the requirement that a work subject to mandatory deposit contain a copyright notice was eliminated. This change was made in Public Law 100-568, the Berne Convention Implementation Act of 1988.

The deposit is to be made within three months after publication in the United States. Failure to make the required deposit does not affect copyright in the work, but may subject the copyright owner to fines and other monetary liability if the failure is continued after a demand for deposit is made by the Register of Copyrights. As a qualification of these general provisions, section 407 also provides that the Register of Copyrights "may by regulation exempt any categories of material from the deposit requirements of this section, or require deposit of only one copy or phonorecord with respect to any categories."

Relying on this authorization, the Copyright Office, with the approval of the Librarian of Congress, established regulations governing mandatory deposit at 37 CFR Chap. II, §§ 202.19, 202.20, and 202.21. Section 202.19 establishes the standards governing mandatory deposit of published copies and phonorecords for the Library of Congress. Section 202.20 concerns the required deposit when application is made for registration of a copyright claim with the Copyright Office under section 408 of title 17, U.S.C. § 202.21 allows deposit of identifying material in lieu of copies or phonorecords in certain cases. In addition, the Library of Congress published its Best Edition Statement specifying the required deposit in instances where two or more different editions were published.

When these regulations were first promulgated in 1978, machine-readable copies were not widely marketed to the public at large. For this reason, the Library of Congress decided to exempt all works published solely in machine-readable formats from mandatory deposit. For purposes of copyright registration deposit, for such works generally can be satisfied by submitting identifying material comprising the equivalent of the first and last 25 pages of the source code in the case of a computer program or the first 25 and last 25 pages of a database.

Since the time these policies were adopted, great changes have occurred. As a result of the popularity of the personal computer, computer software and databases are in wide public demand. In response to these public needs, the Library has established a Machine-Readable Collections Reading Room. The Reading Room provides public access to two categories of important machine-readable copies.

The first category is standard data in microcomputer machine-readable form that traditionally has only been available in print form (encyclopedias, census figures, standard reference publications, etc.). With the development of computer technology, many standard reference materials have become available in whole or in part in machine-readable form. The Library desires to provide patrons access to these machine-readable reference sources.

The second category is computer software in microcomputer machine-readable form. The Library makes software available in the Reading Room for purposes of review and study. The software is not acquired to perform the specific tasks for which the software was created. For this reason, utilizing the software collections of the Reading Room will not serve as a substitute for the purchase of a software package. Preview and study of the software in the Reading Room, however, may influence a researcher's selection of a package for purchase.

The Library is interested additionally in developing its software collections for archival purposes. As a general rule, a software package has a relatively short life. Therefore, acquisition and retention of software in a centralized location is vital for the use of future scholars who wish to study the computer revolution from an historical perspective.

Under the proposed regulation published in the Federal Register on August 9, 1988, § 202.19 governing mandatory deposit would be changed in two places. Section 202.19(c)(5) would limit the exemption for machine-readable copies to automated databases available only online. Section 202.19(d) would be modified by adding a new subparagraph (vii) allowing for deposit of only one machine-readable copy, except where a copy-guard system is used. In the latter case, two copies would be required.

In addition to changes in the deposit requirements, the Copyright Office proposed a new section in the Best Edition Statement covering machine-readable copies. IBM and Macintosh formats would be designated as the formats desired by the Library of Congress. In implementing mandatory deposit for machine-readable copies, the Register would demand only copies of works appearing in the formats designated in the Best Edition Statement.

## 2. Summary of Public Comments

Seven comments were received on the proposed regulation. Four comments were submitted from trade associations, two comments were received from major computer manufacturers, and one comment was received from a law firm.[1]

[1] The law firm held the mistaken belief that the proposed regulation would repeal present

Continued

The Information Industry Association (IIA) criticized the proposed regulation as overbroad, and endorsed, in its place, reliance on a voluntary system. IIA urged that the regulations provide restrictions on the uses patrons could make of machine-readable copies, and asked whether applicable licensing restrictions would be respected. Questions were raised concerning the scope of the exemption for databases available "only online." Finally, IIA asserted that differing deposit requirements for mandatory deposit and copyright registration posed a problem for the industry.

The American Association of Publishers (AAP) criticized the proposed regulation for failing to restrict copying, lending, or electronic dissemination. The AAP suggested that the extent licensing terms commonly applicable to machine-readable works would be respected was also unclear. We were also asked to clarify the applicability of the "online" exemption to works "principally" distributed online. Finally, AAP suggested recasting of the Best Edition Statement.

The Computer Software and Services Industry Association (ADAPSO) doubted that the Library's proposal to prohibit patrons from bringing in diskettes for purposes of downloading would be workable. ADAPSO also questioned whether the support services made available by publishers to licensees would be provided in the Reading Room. ADAPSO contended that the proposed regulation should be tabled in favor of a voluntary program.

The Computer and Business Equipment Manufacturers Association (CBEMA) urged that the proposed regulation be recast to exempt all machine-readable works except IBM and Macintosh formatted material. CBEMA further believed the criteria in the Best Edition Statement should be clarified. Finally, CBEMA suggested a sunset provision in order to permit a Library-industry review of developments concerning the Reading Room.

A major manufacturer of personal computers expressed support for the broad goals of the Reading Room. It urged, however, that the limitations to IBM and Macintosh formats be placed in the regulations. It additionally believed that the criteria specified in the Best Edition Statement were misleading.

Another large manufacturer of computer equipment urged that a voluntary system be established instead of implementing mandatory deposit. It urged the following steps be taken: (1) The regulations provide an exemption for works requiring the utilization of a password; (2) stringent security measures be adopted; (3) the regulation be narrowed to exclude material which can not be used by the Library; and (4) the regulations be simplified as regarding revisions, and harmonized with deposit for registration purposes.

### 3. Final Regulation on Mandatory Deposit of Machine Readable Copies

a. *Basic decision.* For the first eleven years of the current Copyright Act, the Library of Congress has not exercised the authority to compel deposit of works published only in machine-readable formats.

In order to advance the services of the Machine-Readable Collections Reading Room, however, the Library has determined that it is necessary to implement mandatory deposit at this time. While the commentators have uniformly expressed support for a voluntary system, the Library has attempted through meetings and letters to create a voluntary system and these attempts have not succeeded.

Before publication of the proposed regulation, the Library sponsored a meeting with industry leaders to discuss the activities of the Reading Room. At that meeting industry spokesmen endorsed establishment of a voluntary system. Unfortunately, follow-up letters sent by the Library produced no donations.

Mandatory deposit serves as an important source of acquisition for the Library of Congress. In order to provide effective public service, the Machine-Readable Collection Reading Room must have available copies of significant works. Exercise of the mandatory deposit authority is a logical and reasonable means for securing these materials. In passing the Copyright Act of 1976, Congress clearly intended the Library to exercise its mandatory deposit authority in a reasonable way to enhance the collections of the Library for the good of the public.

Since 1870, copies secured through copyright deposit have augmented the collections of the Library of Congress. While under the present copyright law mandatory deposit is not a condition of copyright protection, compliance with demands for mandatory deposit remains an obligation of those who benefit from the copyright system.

Commentators expressed criticisms that the proposed regulations were "overbroad" or "beyond what the Library could use." Commentators also expressed support for greater restrictions on the materials that could be demanded by the Library.

The Copyright Office issues demands only for works desired to be added to the collections of the Library. Demands are not issued for works which are of no use to the Library. As a result, the universe of published works subject to mandatory deposit has always been far greater than the works actually demanded. These policies will be applied to machine-readable copies.

Determination of materials appropriate for acquisition has always been the sole responsibility of the Library. In the fast changing environment of works available in machine-readable formats, narrow-based policies would quickly become obsolete. The Library needs the flexibility to adjust the kinds of formats subject to mandatory deposit in response to changing acquisitions needs. For these reasons the Copyright Office declines to exempt broad categories of machine-readable works from mandatory deposit. Nevertheless, as discussed below, the Library and the Copyright Office reiterate that for the forseeable future, only IBM and Macintosh formats will be demanded.

By this basic decision to remove the present exemption for works in machine-readable formats, the public receives notice that these formats—except for on-line database not available in disk or other hard-copy formats—are potentially subject to mandatory deposit.

b. *Restriction to IBM and Macintosh Formats.* The major restriction in the demand policies of the Library with respect to deposit of machine-readable copies is the limitation to IBM and Macintosh formats. This limitation is not expressed in the regulation, however, but rather in the format designations of the Best Edition Statement.

At present, hardware available in the Reading Room limits access to IBM and Macintosh formats. For this reason alone the Library will not proceed with demands for material which can not be utilized by the Reading Room. The Library contemplates securing additional hardware to expand the formats usable by the collections. When this occurs, the Library will amend the Best Edition Statement to expand the designated formats, and the Copyright Office will publish notice of the change in the Federal Register. This policy is far more favorable to the depositors than an unqualified regulation.

Commentators expressed support for designating formats in the regulation, but this policy would unduly hamper the Library's ability to acquire copies in the

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registration practices with respect to computer programs. This is not the case.

fast-changing environment of machine-readable works. We decline to establish narrow-based regulations which will quickly become obsolete as a result of changes in the computer industry. The alternative would be to remove the present exemption and specify a general deposit standard, such as "disks" as the preferred medium, followed by tape formats, etc. The Library elects, instead, to limit its demands to the narrow formats described in the Best Edition Statement.

c. *Restrictions on Uses by Researchers.* The Machine-Readable Collections Reading Room has been established by the Library: (1) To provide access for research purposes to data and program software in microcomputer machine-readable form; and (2) to build and maintain a national archive of data and program software in microcomputer machine-readable form.

In order to utilize the collections of the Machine-Readable Collections Reading Room, all potential researchers must register and be interviewed. All machine-readable materials are stored in a secured area, and only staff members handle disks.

In order to protect materials in the collections from copying, the Library does not permit researchers to insert their own disks into the disk drives of the computer. Researchers' use of the machines is closely monitored by staff to ensure that downloading does not occur. The Library has on order special disks that can lock disk drive slots. The securing of these special disks will simplify the monitoring task. Additionally, the Library does not permit the photocopying of computer manuals that accompany deposited copies.

The Machine-Readable Collections Reading Room does not lend machine-readable works, nor participate in interlibrary loans of such material. There is no capability for researchers to transmit materials electronically outside of the Reading Room. All applicable licenses are available for review to inform researchers of user restrictions.

Several commentators urged that restrictions on copying be placed in Copyright Office regulations. Due to the ease of copying, machine-readable works are often the subject of abusive reproduction practices. For this reason, the Library has adopted the aforementioned security measures to ensure that such abuses do not occur within the Library of Congress.

The Library concedes that no system is foolproof. It is important to remember, however, that most machine-readable works are sold without any security against copying other than legal prohibitions. Of machine-readable copies distributed by copyright owners, the copies maintained within the collections of the Library of Congress will be among the most secure. The Library is confident that the security measures undertaken in the Reading Room will prevent the collections from becoming a source of access for illegal reproduction activities.

d. *The "Only Online" Exemption.* Several commentators questioned the scope of the "only online" exemption. Specifically they questioned the status of "hybrid" databases where the database is made available on CD-ROM with software included that provides access to the more up-to-date online version of the database. Additionally, we were asked to clarify whether databases distributed to a small number of vendors for purposes of offering online service would be entitled to claim the exemption.

The Library intends to secure through mandatory deposit machine-readable works which are publicly offered for sale or lease. In the case of "hybrid" databases, the Library will seek deposit of the CD-ROM. Clearly, this is a work which is not "only online." The Library will not demand deposit of the updates available online. However, once the updates are incorporated into a revised CD-ROM, the Library will seek deposit of the revised CD-ROM.

As to databases distributed to a small number of vendors for purposes of offering online service, several considerations are raised. The Library does not anticipate pressing demands where distribution of copies is genuinely restricted to special clients. However, the leasing of copies does constitute publication within the meaning of the copyright law, and works with a high price will naturally have relatively few sales. Decisions in these instances will be made on a case-by-case basis.

e. *Machine-Readable Copies Requiring Special Authorization.* In the preamble to the proposed regulation, we stated that "the Library does not intend to demand software that requires the utilization of a password or other special authorization." The comment letters revealed that this statement was unclear.

In utilizing the mandatory deposit procedures, the Library intends to acquire copies of material generally offered for sale or lease to the public. Copies that are genuinely restricted to special clients will not be sought. Factors revealing whether a distribution is genuinely restricted are face-to-face dealings and contractual provisions specifically tailored to the requirements of both parties. In instances of restricted distributions, the utilization of secret passwords might be one means for providing security for the software.

The existence or nonexistence of passwords will not be a conclusive factor in determining whether a distribution is genuinely restricted. Many mass marketed machine-readable works contain passwords. These passwords are often disclosed in the written documentation accompanying the work. The Library will determine whether a distribution is genuinely restricted on a case-by-case basis.

f. *Harmonization of the Deposit Requirements.* Under the mandatory deposit procedures adopted by the Library, deposit of machine-readable works for registration purposes differs from the deposit required for mandatory deposit. Some of the commentators urged that the Examining Division of the Copyright Office accept machine-readable copies.

The variation stems from the disparate purposes of deposit for registration and for enrichment of the Library's collections. The Examining Division is required to examine for copyrightable authorship. Machine-readable copies are generally unsuitable for this task. The computer code may not be viewable on a computer screen or printed out without utilization of expensive, and often different, hardware. The Examining Division requires human-readable deposits for examination, generally portions of source code. The Machine-Readable Collections Reading Room, on the other hand, can only utilize works in those machine-readable formats for which it has acquired hardware.

The Library has no interest in accessioning many of the computer programs in which claims to copyright have been registered in the Copyright Office. Clearly, unpublished computer programs and those of formats not designated in the Best Edition Statement could not be demanded. Additionally, certain restricted computer programs and software would not be desired by the Reading Room, and the Library will demand deposit of only those selected formats that are compatible with the limited hardware in the Reading Room. As a result, many copyright owners of computer software will never be asked to deposit machine-readable copies.

For those relatively few works that are demanded, the variation in deposit requirements is slight. It is likely, moreover, that any harmonization of the mandatory deposit and registration deposit requirements would result in deposit of both machine-readable and

human-readable copies for registration purposes.

Regulatory Flexibility Act

With respect to the Regulatory Flexibility Act, the Copyright Office takes the position that this Act does not apply to Copyright Office rulemaking. The Copyright Office is a department of the Library of Congress, and is a part of the legislative branch. Neither the Library of Congress nor the Copyright Office is an "agency" within the meaning of the Administrative Procedure Act of June 11, 1946, as amended (Title 5, chapter 5 of the U.S. Code, subchapter II and chapter 7). The Regulatory Flexibility Act consequently does not apply to the Copyright Office since that Act affects only those entities of the Federal Government that are agencies as defined in the Administrative Procedure Act.[2]

List of Subjects in 37 CFR Part 202

Copyright, Computer programs, Mandatory deposit under copyright.

Final Regulations

In consideration of the foregoing, Part 202 of 37 CFR, Chapter II, is amended in the manner set forth below.

## PART 202—REGISTRATION OF CLAIMS TO COPYRIGHT

1. The authority citation for part 202 continues to read as follows:

Authority: Copyright Act, Pub. L. 94-553, 90 Stat. 2541 (17 U.S.C. 702).

2. Section 202.19 is amended by revising paragraph (c)(5) and adding a new paragraph (d)(2)(vii) to read as follows:

**§ 202.19 Deposit of published copies or phonorecords for the Library of Congress.**

* * * * *

(c) * * *

(5) Automated databases available only online in the United States but not including automated databases distributed only in the form of machine-readable copies (such as magnetic tape or disks, punch cards, or the like) from which the work cannot ordinarily be visually perceived except with the aid of a machine or device, and computerized information works in the nature of statistical compendia, serials, and reference works. Also works published in a form requiring the use of a machine or device for purposes of optical enlargement (such as film, filmstrips, slide films and works published in any variety or microform), and works published in visually perceptible form but used in connection with optical scanning devices, are not within this category and are subject to the applicable deposit requirements.

* * * * *

(d) * * *

(2) * * *

(vii) In the case of published computer programs and published computerized information works, such as statistical compendia, serials, and reference works that are not copy-protected, the deposit of one complete copy of the best edition as specified in the current Library of Congress Best Edition Statement will suffice in lieu of the two copies required by paragraph (d)(1) of this section. If the works are copy-protected, two copies of the best edition are required.

* * * * *

3. By adding Appendix B to part 202 as follows:

**Appendix B to Part 202—"Best Edition" of Published Copyrighted Works for the Collections of the Library of Congress**

The copyright law (title 17, United States Code) requires that copies or phonorecords deposited in the Copyright Office be of the "best edition" of the work. The law states that "The 'best edition' of a work is the edition, published in the United States at any time before the date of deposit, that the Library of Congress determines to be most suitable for its purposes." (For works first published only in a country other than the United States, the law requires the deposit of the best edition as first published.)

When two or more editions of the same version of a work have been published, the one of the highest quality is generally considered to be the best edition. In judging quality, the Library of Congress will adhere to the criteria set forth below in all but exceptional circumstances.

Where differences between editions represent variations in copyrightable content, each edition is a separate version and "best edition" standards based on such differences do not apply. Each such version is a separate work for the purpose of the copyright law.

The criteria to be applied in determining the best edition of each of several types of material are listed below in descending order of importance. In deciding between two editions, a criterion-by-criterion comparison should be made. The edition which first fails to satisfy a criterion is to be considered of inferior quality and will not be an acceptable deposit. Example: If a comparison is made between two hardbound editions of a book, one a trade edition printed on acid-free paper, and the other a specially bound edition printed on average paper, the former will be the best edition because the type of paper is a more important criterion than the binding.

Under regulations of the Copyright Office, potential depositors may request authorization to deposit copies or phonorecords of other than the best edition of a specific work (e.g., a microform rather than a printed edition of a serial), by requesting "special relief" from the deposit requirements. All requests for special relief should be in writing and should state the reason(s) why the applicant cannot send the required deposit and what the applicant wishes to submit instead of the required deposit.

*I. Printed Textual Matter*

A. Paper, Binding, and Packaging:

1. Archival-quality rather than less-permanent paper.

2. Hard cover rather than soft cover.

3. Library binding rather than commercial binding.

4. Trade edition rather than book club edition.

5. Sewn rather than glue-only binding.

6. Sewn or glued rather than stapled or spiral-bound.

7. Stapled rather than spiral-bound or plastic-bound.

8. Bound rather than looseleaf, except when future looseleaf insertions are to be issued. In the case of looseleaf materials, this includes the submission of all binders and indexes when they are part of the unit as published and offered for sale or distribution. Additionally, the regular and timely receipt of all appropriate looseleaf updates, supplements, and releases including supplemental binders issued to handle these expanded versions, is part of the requirement to properly maintain these publications.

9. Slip-cased rather than nonslip-cased.

10. With protective folders rather than without (for broadsides).

11. Rolled rather than folded (for broadsides).

12. With protective coatings rather than without (except broadsides, which should not be coated).

B. Rarity:

1. Special limited edition having the greatest number of special features.

2. Other limited edition rather than trade edition.

3. Special binding rather than trade binding.

C. Illustrations:

1. Illustrated rather than unillustrated.

2. Illustrations in color rather than black and white.

D. Special Features:

1. With thumb notches or index tabs rather than without.

2. With aids to use such as overlays and magnifiers rather than without.

E. Size:

1. Larger rather than smaller sizes. (Except that large-type editions for the partially-sighted are not required in place of editions employing type of more conventional size.)

[2] The Copyright Office was not subject to the Administrative Procedure Act before 1978, and it is now subject to it only in areas specified by section 701(d) of the Copyright Act (i.e. "all actions taken by the Register of Copyrights under this title (17)," except with respect to the making of copies of copyright deposits). (17 U.S.C. 706(b)). The Copyright Act does not make the Office an "agency" as defined in the Administrative Procedure Act. For example, personnel actions taken by the Office are not subject to APA-FOIA requirements

*II. Photographs*

A. Size and finish, in descending order of preference:
1. The most widely distributed edition.
2. 8 x 10-inch glossy print.
3. Other size or finish.
B. Unmounted rather than mounted.
C. Archival-quality rather than less-permanent paper stock or printing process.

*III. Motion Pictures*

A. Film rather than another medium. Film editions are listed below in descending order of preference.
1. Preprint material, by special arrangement.
2. Film gauge in which most widely distributed.
3. 35 mm rather than 16 mm.
4. 16 mm rather than 8 mm.
5. Special formats (e.g., 65 mm) only in exceptional cases.
6. Open reel rather than cartridge or cassette.
B. Videotape rather than videodisc. Videotape editions are listed below in descending order of preference.
1. Tape gauge in which most widely distributed.
2. Two-inch tape.
3. One-inch tape.
4. Three-quarter-inch tape cassette.
5. One-half-inch tape cassette.

*IV. Other Graphic Matter*

A. Paper and Printing:
1. Archival quality rather than less-permanent paper.
2. Color rather than black and white.
B. Size and Content:
1. Larger rather than smaller size.
2. In the case of cartographic works, editions with the greatest amount of information rather than those with less detail.
C. Rarity:
1. The most widely distributed edition rather than one of limited distribution.
2. In the case of a work published only in a limited, numbered edition, one copy outside the numbered series but otherwise identical.
3. A photographic reproduction of the original, by special arrangement only.
D. Text and Other Materials:
1. Works with annotations, accompanying tabular or textual matter, or other interpretative aids rather than those without them.
E. Binding and Packaging:
1. Bound rather than unbound.
2. If editions have different binding, apply the criteria in I.A.2–I.A.7, above.
3. Rolled rather than folded.
4. With protective coatings rather than without.

*V. Phonorecords*

A. Compact digital disc rather than a vinyl disc.
B. Vinyl disc rather than tape.
C. With special enclosures rather than without.
D. Open-reel rather than cartridge.
E. Cartridge rather than cassette.
F. Quadraphonic rather than stereophonic.
G. True stereophonic rather than monaural.
H. Monaural rather than electronically rechanneled stereo.

*VI. Musical Compositions*

A. Fullness of Score:
1. *Vocal music:*
a. With orchestral accompaniment—
i. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
ii. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
b. Unaccompanied: Open score (each part on separate staff) rather than closed score (all parts condensed to two staves).
2. *Instrumental music:*
a. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
b. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
B. Printing and Paper:
1. Archival-quality rather than less-permanent paper.
C. Binding and Packaging:
1. Special limited editions rather than trade editions.
2. Bound rather than unbound.
3. If editions have different binding, apply the criteria in I.A.2–I.A.12, above.
4. With protective folders rather than without.

*VII. Microforms*

A. Related Materials:
1. With indexes, study guides, or other printed matter rather than without.
B. Permanence and Appearance:
1. Silver halide rather than any other emulsion.
2. Positive rather than negative.
3. Color rather than black and white.
C. Format (newspapers and newspaper-formatted serials):
1. Reel microfilm rather than any other microform.
D. Format (all other materials):
1. Microfiche rather than reel microfilm.
2. Reel microfilm rather than microform cassetes.
3. Microfilm cassettes rather than micro-opaque prints.
E. Size:
1. 35 mm rather than 16 mm.

*VIII. Machine-Readable Copies*

A. Computer Programs
1. With documents and other accompanying material rather than without.
2. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
3. *Format:*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) 5¼" Diskette(s).
(ii) 3½" Diskette(s).
(iii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
b. Apple Macintosh:
(i) 3½" Diskette(s).
(ii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
B. Computerized Information Works, Including Statistical Compendia, Serials, or Reference Works:
1. With documentation and other accompanying material rather than without.
2. With best edition of accompanying program rather than without.
3. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
4. *Format*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 5¼" Diskette(s).
(iii) 3½" Diskette(s).
b. Apple Macintosh:
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 3½" Diskette(s).

*IX. Works Existing in More Than One Medium*

Editions are listed below in descending order of preference.
A. Newspapers, dissertations and theses, newspaper-formatted serials:
1. Microform.
2. Printed matter.
B. All other materials:
1. Printed matter.
2. Microform.
3. Phonorecord.

Dated: August 31, 1989.

Ralph Oman,

*Register of Copyrights.*

Approved by:

James H. Billington,

*The Librarian of Congress.*

[FR Doc. 89-23765 Filed 10-13-89; 8:45 am]
BILLING CODE 1410-07-M

## POSTAL SERVICE

### 39 CFR Parts 3, 4, 5, 6, and 8

### Conforming the Bylaws of the Board of Governors With the Inspector General Act Amendments of 1988, and Other Miscellaneous Amendments

**AGENCY:** Postal Service.

**ACTION:** Final rule.

**SUMMARY:** The primary purpose of this final rule is to conform the bylaws of the Board of Governors with the Inspector General Act Amendments of 1988, which, among other things, require (1) that the Postmaster General's appointment of the Chief Postal Inspector must be made "in consultation with the Governors", and (2) that the

# STAFF NEWS

## Online Users Group Hears About Project For New Reading Room

Linda Arret, automated reference services specialist in the General Reading Rooms Division, discussed the Machine-Readable Collections Reading Room pilot project at a recent meeting of the Online Users Group. This reading room will be located in Room LJ 140G of the Thomas Jefferson Building. Ms. Arret stressed that her remarks should be taken as a status report, since the reading room is not yet open but probably will be in the spring.

The purpose of the pilot project, which is to last one year, is fivefold: (1) to help establish collection guidelines for machine-readable materials; (2) to assist in maintaining bibliographic control over these materials; (3) to provide access to machine-readable materials; (4) to develop appropriate service policies and procedures for machine-readable materials; and (5) to help determine whether the Library's collections of machine-readable materials should eventually be handled in one reading room or dispersed to appropriate reading rooms throughout the Library.

This pilot project, according to Ms. Arret, is the result of recommendations contained in three committee reports: the May 1987 report of the Machine-Readable Collection Committee, the August 1985 report of the Task Force on Computer Collection Management, and the February 1983 report of the Ad Hoc Committee on Selection Policy for Machine-Readable Publications. These committees recommended: (1) placing the pilot project under the General Reading Rooms Division because of the broad scope of material received; (2) interviewing users to assess their general familiarity with software products and hardware; (3) starting the reading room with materials already in the Library as well as purchasing several non-copyrighted items; and (4) establishing criteria for the selection of materials and formats.

Current regulations of the Copyright Office exempt machine-readable works from the mandatory requirement to deposit works published with a copyright notice. Currently under discussion is a proposal to change the Copyright regulations to make it

*(Cont. on p. 206)*

# STAFF NEWS

**Online Users** *(Cont. from p. 205)*
possible to demand computer software through the copyright law's Section 407 mandatory deposit provision after the work has been registered. If this change takes place, acquisitions of machine-readable materials will still be selective and still based on the Library's general collection guidelines. Also under consideration in the Copyright Office is amendment of the best edition regulation to include machine-readable formats. To build a collection for the reading room, machine-readable materials have been received from the Exchange and Gift Division, the Copyright Office, and the National Serials Data Program. To be transferred to the custody of the Machine-Readable Collections Reading Room are cataloged machine-readable materials already in the Rare Book and Special Collections Division, the Music Division, and the Microform Reading Room, as well as uncataloged material in the Science and Technology Division and selected items from the Federal Library and Information Center Committee (FLICC). Policies are being worked out with the Collections Development Office for future acquisitions. During the pilot project, no changes will be made in selection criteria.

Ms. Arret emphasized that during the pilot project no new policies will be initiated to bring machine-readable materials under bibliographic control; rather standard Library practices will be followed. Machine-readable materials accepted for registration by the Copyright Office will go to the Cataloging Division where, by working with accompanying documentation and the source or object code, the material will be cataloged as nondramatic literary works, copyright registration class TX. Copyright catalog records of machine-readable materials are retrievable through COHM in SCORPIO, and within that file it is possible to use a SCORPIO LIMT command to distinguish copyrighted machine-readable files from other TX materials.

Machine-readable materials receive full descriptive cataloging under AACR 2, and the subdivision SOFTWARE will appear as part of the subject heading on catalog records for software programs. By the end of the year a format for inputting MARC records is scheduled to be available for machine-readable materials. New searchable fields on these records will include technical details, such as the operating system, the programming language, and the machine required to use the program. Until MUMS records are available, PROCITE or some other bibliographic software will be used to create minimal catalog records for the pilot project reading room.

***Library of Congress builds machine-readable collections for upcoming pilot project in new reading room.***

When this reading room opens, it will have four work stations for users. Equipment will include three COMPAQ DESKPROs, one Hitachi CD-ROM drive, one Macintosh with a printer, two Epson printers, plus one Comterm with a printer for access to Library files. A core collection, including 40 best-selling IBM or IBM-compatible programs and Macintosh programs, with data and accompanying manuals, will be kept in the reading room. This collection will include word processing, database management, spreadsheets, graphics, desktop publishing, and other applications. The remainder of the collection, which will be broader in scope and not limited to IBM and Macintosh programs and data, will be housed on a nearby deck. The reading room will also contain a print reference collection of related monographs and serials, third-party manuals, and general reference works.

During the initial phase of the pilot project, the reading room will be staffed by Ms. Arret as well as by Ricky Erway of the Office of Planning and Development. John Kimball, head of the Automation and Reference Collections, General Reading Rooms Division, will supervise the operation. Other General Reading Rooms Division staff members will assist after they are trained and have acquired the necessary technical skills.

The reading room will be open to regular Library users and staff on a walk-in basis and by appointment. Users will register and be interviewed as to their level of skills and purpose in using the collections. Users can conduct research about machine-readable materials, but they cannot create their own documents, except as it is necessary to learn about or explore a particular program. Users will not handle the disks themselves; these will be loaded and unloaded by the staff. Staff in the room will provide some assistance using the files, but the room will not serve as a training center.

In response to questions, Ms. Arret added that the reading room will have simulator packages and communication software if these are received by the Library, but will not have fee-based data services.

The Machine-Readable Collections Reading Room will be open from 12 noon to 4 p.m. during the pilot project Monday through Friday. The official date of opening will be announced.

—Ronald Bluestone

# Agnelli Foundation Donates Videodisk Encyclopedia of Italian Civilization

The Giovanni Agnelli Foundation of Turin, Italy, has selected the Library of Congress as one of 17 institutions in the United States to receive *de Italia, Videodisc Encyclopedia of Italian Civilization*, and a videodisk/computer system. Presented by Senator Susanna Agnelli, Italian under-secretary of state for foreign affairs, and Marcello Pacini, director of the Agnelli Foundation, at a ceremony at the Metropolitan Museum of Art in New York City on June 27, *de Italia* provides a comprehensive visual presentation of Italy using advanced videodisk technology. Ronald A. Morse, Library of Congress development officer, accepted *de Italia* on behalf of Librarian of Congress James H. Billington. Carol Armbruster, French/Italian area specialist of the Library's European Division, also attended the ceremony.

*De Italia* took three years to produce. It contains 20,000 photographs, 15,000 texts, and 500 computer graphics tables. The videodisk covers the period from pre-Etruscan civilization to modern Italy and includes chapters on history and society, humanities and science, art, cities, and architecture. The software allows a user to preprogram sequences of images and texts, for example, to supplement an art exhibit, or to design an educational program.

The *de Italia* software runs on a Macintosh computer and is based on Apple Computer, Inc.'s Hypercard technology. The videodisk/computer system also includes a laser video player and a television monitor. An index book accompanies the system.

*De Italia* will be available for public use in the Library's recently established pilot Machine-Readable Collections Reading Room, which is located in Room LJ 140 of the Jefferson Building.

# Machine-Readable Collections Reading Room Pilot

## Report

January 1990

Prepared and submited by:

Suzanne Thorin, Acting Chief, General Reading Rooms Division
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# I. Executive Summary

This report describes and evaluates the Machine-Readable Collections Reading Room (MRCRR) pilot, which took place from July 1988 through June 1989 in the General Reading Rooms Division, and offers recommendations from information gained during the pilot. The report addresses the following objectives, all of which were met successfully:

* Determine acquisition methods
* Develop materials preparation policies and procedures
* Develop cataloging policies and procedures
* Provide research access and reference assistance
* Recommend additional service locations

During the pilot, the first efforts to build a comprehensive library collection of machine-readable files for research use took place. Existing Library collections were brought together and cataloged. New materials were purchased, regular acquisitions procedures were initiated, and donations were solicited. A copyright regulation requiring the deposit of some machine-readable materials was proposed and later implemented, an action that will ultimately enrich the collections. Cataloging policies and procedures were developed, and records eventually were entered into MUMS. Hundreds of researchers, including individuals from academic institutions, private industry, U.S. government agencies, and LC staff, used the collections and consulted the reference staff.

If this collection is to become a major Library of Congress--and world class--resource, it needs to be nurtured by the Library through enhanced funding for acquisitions and equipment and staff support across the Library and in the reading room itself. It is with this goal in mind that the following recommendations are made:

1. Establish the MRCRR as a permanent research facility in the Library of Congress and rename it the Microcomputer Research Center and Reading Room.

2. Increase the MRCRR staff to include two additional full-time automation specialists, one full-time acquisitions librarian, and one full-time technician.

3. Expand the reading room hours to 8:30 a.m. to 5:00 p.m., Monday through Friday, once additional staff have been added.

4. Increase the number of staff in Collections Services who catalog computer files.

5. Improve the acquisition and processing of machine-readable materials to ensure they are handled in a more timely, economical, and secure manner.

6. Expand the scope of the collections to include more sophisticated titles and acquire the necessary hardware to operate them.

7. Investigate modifying the copyright regulations so that the same work published in two different formats (e.g., print and CR-ROM) is considered two different items.

8. Investigate the requirements for networking some computer files between various LC reading rooms.

## II. Introduction

The Machine-Readable Collections Reading Room (MRCRR) in the General Reading Rooms Division (GRR) has been the setting for the Library's efforts to collect and provide access to materials in machine-readable form, i.e., computer files. During the one-year pilot (July 1988 - June 1989) and since July 1989, staff from GRR and the Special Materials Cataloging Division (SPEC MAT) have identified, acquired, organized, cataloged, and provided research access to materials that require microcomputer technology for their use.

These computer files include current and superseded microcomputer software programs and informational/data files, which are published on magnetic or optical disks, either floppy, compact discs (CD-ROM), or videodiscs. The contents include executable programs, such as those for word processing or database management, and information, such as is found in encyclopedias, directories, or periodical abstracting services. Access to mainframe or minicomputer programs or data or to commercial or other outside online systems has not been provided in the MRCRR. In addition to the MRCRR, other LC reading rooms in the Collections and Constituent Services departments provide staff and researcher access to selected reference materials on CD-ROM. The MRCRR, however, serves as the official archive for most of these materials when superseded by more current issues.

The MRCRR is currently equipped with six workstations, five Compaqs (IBM-compatible) and one Macintosh. Consequently, only IBM, IBM-compatible, and Macintosh titles have been available for research use; programs and documentation for other microcomputer systems, however, have been collected and made available for review but have not been available for use because of the hardware limitations.

For machine-readable items, the objectives of the pilot were to:

1. Determine acquisition methods
2. Develop materials preparation policies and procedures
3. Develop cataloging policies and procedures
4. Provide research access and reference assistance
5. Recommend additional service locations

The MRCRR, located in the Thomas Jefferson Building, room LJ140G, and open Monday through Friday from 12:00 noon to 4:00 p.m., has been staffed by two reference specialists in

library automation and a technician, all from the Automation and Reference Collections Section (ARC) in the General Reading Rooms Division. Prior to adding the second automation specialist near the end of the pilot year, three GRR reference librarians with significant automation experience and expertise served in the MRCRR for three consecutive 120-day details, as the second specialist.

This report includes a summary of the background developments that led to opening the MRCRR and a discussion of each of the five objectives as they relate to the pilot project.

## III. Background

Between 1981 and 1987, three LC committees convened and reported on various aspects of collecting and servicing machine-readable materials. These committees, whose reports are included as Appendix A, were:

* Ad Hoc Committee on Selection Policy for Machine-Readable Publications (report issued February 1983)
* Machine-Readable Collections Task Force (report issued August 1985)
* Machine-Readable Collection Committee (report issued May 1987)

Membership on these committees included staff and management representing all aspects of Library operations, from finance and acquisitions to public service. Among the issues addressed by these groups were:

* scope of acquisitions, both subject and format
* internal costs for equipment and maintenance
* CIP procedures
* staffing needs
* scope of service provided
* bibliographic control and retrieval

The 1987 report recommended that a public machine-readable collections reading room be administered as a one-year pilot project by the General Reading Rooms Division. A memorandum of October 28, 1987 (Appendix B) from then Deputy Librarian William J. Welsh announced the Library's commitment "to providing access to information regardless of format," which would be accomplished by bringing together machine-readable materials already in LC and establishing the pilot reading room.

Detailed planning began immediately and took nine months; the MRCRR opened on July 6, 1988. Staff assigned to the planning phase, all on a part-time basis, included one automation specialist, one library technician, one supervisor, from the General Reading Rooms Division, and one planning assistant from the Office of Planning and Development. The acting chief of GRR provided management oversight during the planning process, and the head of the GRR Automation and Reference Collections Section has managed the MRCRR during and beyond the pilot year.

During the planning period, staff concentrated on three major tasks: designing reading room procedures, establishing working relationships within the Library to acquire and process materials, and establishing relationships with organizations outside LC that would have an interest in the MRCRR facilities and services. Hardware had already been ordered, based on recommendations in the 1987 report of the Machine-Readable Collection Committee. Procedures for acquisitions, cataloging, collections maintenance, and public service needed to be structured within the limited pilot environment and to provide a measure on which to base future plans. Staff had to establish and maintain relationships with other LC units in order to create an efficient processing workflow, and with organizations outside LC to build cooperative arrangements with publishers, producers, and copyright claimants of machine-readable titles. Staff accomplished these tasks through a series of internal discussions and one meeting with interested parties outside LC.

Building the machine-readable and print reference collections involved discussions with representatives from all acquisitions units, including the Copyright Office, the National Serials Data Program (NSDP), and the Order, Cataloging in Publication, and Exchange & Gift divisions. Discussions focused on procedures for routing materials from these units to the MRCRR and on some policy questions, such as to how to coordinate the different acquisitions methods. In addition, staff located and gathered together for the MRCRR's collection the numerous titles that had already been received and routed to various locations within LC.

In order to catalog materials already in LC, MRCRR staff worked closely with the Special Materials Cataloging Division in applying the Anglo-American Cataloging Rules for computer files. This work was coordinated with the plans for including computer files catalog records in the Library's online cataloging system (MUMS), where they would be searchable by all researchers in LC and available to subscribers to LC's MARC Distribution Service.

Of particular importance were the plans for operating the MRCRR on a daily basis. MRCRR staff had extensive discussions about the types and levels of public service, staffing, and security to be found in the reading room. The Library Environment Resources Office (LERO) was especially helpful in designing, in a very small space, a useful physical environment to maximize public service without diminishing security.

Establishing and maintaining relationships with organizations outside LC has been a goal throughout the pilot. The centerpiece of this task was a meeting on May 24, 1988 between the

Library (including the Librarian of Congress) and representatives of microcomputer manufacturers and computer files publishers. In addition to LC staff, participants included:

Apple Computer Company
The Association of American Publishers
The Computer and Business Equipment Manufacturers Association
The Information Industry Association of America
International Business Machines, Inc. (IBM)
The Software Publishers Association

The meeting focused on two issues: the reading room operations and a proposed change to a copyright regulation that would affect collections development. LC staff remarks included the following:

* The Librarian of Congress, James H. Billington, outlined the increasing importance of materials published in machine-readable formats and the Library's commitment to providing the highest level of service for them.
* Suzanne Thorin, acting chief, GRR, described the development of the Library's interest in these materials and the work of the Library groups that investigated various questions related to acquisition, organization, and service of the materials.
* Linda Arret, automated reference services specialist in GRR, described the collection being assembled and the service policies and security procedures being formulated for the room.
* Ralph Oman, Register of Copyrights, explained the plans of the Copyright Office to implement a new regulation for mandatory deposit of certain machine-readable copies.
* Ronald Morse, Library Development Officer, requested that the industry donate materials to develop this national archival collection.

After the meeting, industry representatives joined LC staff in previewing the room and in a ribbon-cutting to mark the official opening. (The MRCRR actually opened to researchers six weeks later, on July 6, 1988.)

## IV. Pilot Objectives

### Objective A: To Determine Acquisition Methods

The Library of Congress acquires materials in numerous formats for its collections through:

* Copyright Registration and Deposit
* Cataloging in Publication Program
* Exchange and Gift
* National Serials Data Program
* Government Deposit
* Purchase

At the beginning of the planning process, MRCRR staff discovered that many machine-readable titles were already in the Library and had been received through several of the sources listed above. The first task was to identify and gather the items already in LC and place them in a secured area near the MRCRR; then the methods listed above would be investigated for future acquisitions. On January 15, 1988, the MRCRR issued a Library-wide memorandum requesting that all copies of computer files received through official acquisitions funds be forwarded to the MRCRR. With the materials in the MRCRR, it would be possible to ensure their security and to make them available to the public for research purposes. Many of these materials had been routed to various LC custodial divisions, sometimes cataloged as books with disks and other times simply stored but unavailable for viewing.

The Rare Book and Special Collections Division represented a unique situation. Numerous items, considered to be books but which included machine-readable floppy disks, were held there. These materials, for which MARC book catalog records had been created, were considered "special format" and had been placed with other special format items in the custody of Rare Books. The books themselves were available to researchers, but there was no equipment for accessing the disks. After some discussion, MRCRR and Rare Books staff agreed these materials, 136 titles, should be placed in the custody of the MRCRR so that the machine-readable disks could be accessed by researchers, even though the titles are cataloged as books. During the pilot, approximately 100 more titles were found in Rare Books and transferred to the MRCRR. The Library shelflist records for all these titles have been adjusted to indicate that the materials are in the custody of "MRCRR," which is the official LC designation for the collection.

Other units that contributed computer files titles during this process included the Science and Technology Division, the Music Division, and the Microform Reading Room in GRR. Information Technology Services (formerly the Automated Systems Office), had approximately 40 machine-readable titles that were transferred to the MRCRR. Many items that had been selected from copyright receipts had been sent to the Special Materials Cataloging Division and had been kept in a secured area; these were brought to the MRCRR and eventually cataloged.

Copyright Registration and Deposit

Since 1870, the Copyright Office has been a major source for Library acquisitions in all formats. Materials come into LC either because a copyright claimant sends copies to the Library with or without registration papers, or because LC claims a copy that has been published with a copyright notice, © with a date and name of copyright claimant. (In March 1989, the United States became a party to the Berne Convention, which means that a published item need not have the copyright notice in order to be claimed by LC.) Although the 1976 revision of the copyright law addressed the new microcomputer technology, computer files were still exempt from some of the copyright requirements that applied to other formats. There are two major aspects of the 1976 copyright law revision that relate to computer files:

* a requirement for registering computer files, but without the disks
* an exemption for deposit of computer files disks

For most formats, registration comprises filing an application form, sending a fee, and submitting up to two copies of the item, the number of copies depending on the format of the piece, such as a book or motion picture. Materials registered are examined, cataloged, given a registration number, and reviewed for possible inclusion in LC's collections. Copies of materials not selected for the collections may be exchanged for materials held by other libraries or may be retained in the copyright deposit collection warehouse for future exchange or selection.

A large portion of the computer files titles that had already been received in LC had come through this copyright registration process (section 408) as voluntary deposits with copyright application forms and registration fees. In 1978, when the 1976 revised law went into effect, microcomputer and optical disk technology represented a very small, nearly nonexistent, industry. Consequently, these materials were exempt from many of the requirements for registering items for copyright. In addition, the Copyright Office Examining Division did not have the technical

capability and equipment to examine disks to determine whether they were eligible for copyright registration. Therefore, copyright registrants were required to submit with their registration only printed pages of source code (instructions written by a programmer), and not disks. Still, some registrants also submitted floppy disks. During 1978, the first year the new copyright law was in effect, a total of 724 registrations were submitted, 570 published and 154 unpublished. Most of these materials did not include disks, were not selected for LC's permanent collections, and were routed to the copyright deposit collection in Landover, Maryland. Once the MRCRR pilot project began in 1987, however, MRCRR and Copyright Office staff attempted to establish a practice of bringing new computer files registered for copyright directly to the MRCRR after the copyright cataloging had been completed. This process is working on an irregular basis and has not yet proven entirely successful in bringing materials quickly into the MRCRR. Within the Copyright Office itself, there have been no changes in policies or procedures for computer files registered for copyright.

The second major way LC acquires materials through copyright is through deposit or claiming, without registration. A copyright holder may simply send the item itself, without a fee or application form; or the Library may identify and claim a published item for the collections (section 407 of the law). In the 1976 law revision, computer files were exempted from the deposit requirements, because these materials were not widely marketed to the public at large; this meant that LC could not claim these items for its collections. So that LC could establish another avenue for building its collections, MRCRR staff consulted with Copyright Office staff to change this section of the law; this proposed change was a major part of the discussions with computer files publishers in May 1988 and again in November 1988. The proposed change was published in the ***Federal Register*** on August 9, 1988, allowing 60 days for comments. Seven organizations submitted comments, and these were discussed at the November 1988 meeting. The organizations included four trade associations, two computer manufacturers, and one law firm. Issues receiving comment included, but were not limited to, the following:

* whether copying, lending, and use of computer files would be handled securely, and whether such rules should be addressed in the regulation, rather than in an operations manual of the MRCRR
* whether the copyright deposit regulation should be harmonized with the copyright registration regulation
* whether the new regulation was too broad and too demanding of publishers, and whether the deposit features therefore should be voluntary rather than mandatory
* whether the Best Edition statement (relating to IBM and Macintosh) should be clarified

At that time, November 1988, LC decided to postpone implementing the new regulation in order to consider the comments fully and to work with publishers to encourage them to donate archival and current software for the collections. During the next several months, during which no solicited donations were received, staff from the Copyright Office and the MRCRR revised the text of the deposit regulation. Finally, on October 16, 1989, the new copyright regulation went into effect, permitting LC to claim one copy (two copies if the title is copy-protected) of IBM-compatible and Macintosh computer files (floppy, CD-ROM, videodisc). The full text of the revised regulation, including issues raised and the Library's responses, is included as Appendix C.

Cataloging in Publication (CIP) Program

In 1987 the Library's Cataloging in Publication Division, which acquires books for LC's collections through its prepublication cataloging, began its own pilot to bring publishers of computer files into the CIP process. During its pilot phase, the CIP Division hoped to receive nearly 1000 titles; for each title, CIP planned to receive prepublication information on two printed forms submitted by the publisher (CIP Software Data Sheet and CIP Software Requirements Form). The publisher might include galley proofs for printed manuals accompanying a machine-readable title. LC planned to catalog the title and return the galley and cataloging information to the publisher. As with CIP data for book materials, the cataloging information would be distributed to publishing and library organizations as part of the Library's MARC Distribution Service, thereby serving as an acquisitions tool for other institutions, and would appear in the published item. In turn, the Library would receive one copy of the finished product.

Because the Library's online application for machine-readable titles had not yet been placed into production, however, the cataloging data LC could provide as part of the CIP agreement was limited during the pilot, and the CIP Division could not move quickly to bring many publishers into the project. By late 1987, only fifty titles had been cataloged, of which nearly half had been published and copies received in LC. The Minnesota Educational Computing Corporation (MECC) contributed a majority of these items, so the initial receipts comprised educational curriculum materials. At this point, the CIP Division hopes to bring major academic publishers into the CIP program for these materials, since the Library's Computer Files (CF) MARC format application was brought into production in October, 1989.

## Exchange and Gift

Very few computer files titles have arrived in LC through exchange with other libraries or as gifts, and it is unlikely that exchange will represent a major source of acquisition in the near future. The new copyright deposit regulation will bring in only one copy of a title, for the most part; and, in consideration of the concerns expressed by computer files publishers, it is not likely that LC will exchange any additional and unneeded copies of computer files titles for other titles desired but not owned. However, several CD-ROM titles arrived in the Exchange and Gift Division during the pilot from other government agencies, which frequently submit materials in other formats as well. Among the materials received were numerous back issues of H.W. Wilson titles in CD-ROM format from the National Security Agency (including the titles Biography Index, Cumulative Book Index, and Education Index).

The major donation to the Library during the pilot was the Agnelli Foundation's de Italia, an encyclopedia of Italian culture on videodisc (including 20,000 photographs), currently installed on the Macintosh workstation in the MRCRR. Other unsolicited gifts included some current state-of-the-art software packages, given by publishers for use in the MRCRR. In addition, local Washington, D.C. residents and LC staff have donated old software titles as archival items; in one instance an old Osborne I and accompanying software programs were donated. Appendix F lists IBM-compatible and Macintosh donations.

## National Serials Data Program (NSDP)

The National Serials Data Program (NSDP) represents the U.S. in the International Serials Data System. NSDP catalogs and provides an international standard serial number (ISSN) and a key title for U.S. serials, in many instances receiving the first issue of the serial. Some serials published in machine-readable form had already been received at LC via NSDP and had been sent to the MRCRR. When NSDP receives machine-readable titles, they are now routinely sent to the MRCRR for a selection decision. Although the program has not yet represented a major source of acquisitions, as more serials are published in machine-readable form, the MRCRR staff anticipate that NSDP will provide an increasing number of titles over the years.

Government Deposit

Prior to mid-1989, there was no government policy requiring that federally-produced machine-readable titles be deposited in the nation's depository libraries via the Depository Library Program. However, legislative branch interest in related issues had been developing, particularly with regard to providing access to government-produced information.

The following legislative organizations have been investigating questions related to production and distribution of government documents in machine-readable form: the Joint Committee on Printing, the House Government Operations Committee, the Government Printing Office (GPO), the Office of Technology Assessment (OTA), and the General Accounting Office (GAO). On the executive side, the National Technical Information Service (NTIS) in the Commerce Department has also expressed continuing interest.

In late 1988, the OTA issued a report entitled Informing the Nation--Federal Information Dissemination in an Electronic Age, describing the results of a two-year study. The report suggests that demand for federal information in paper and microform formats will decline, the latter markedly, while the demand for electronic formats will increase dramatically. As part of the study, the GAO estimated that between 1983 and 1987 the number of electronic products disseminated by civilian agencies tripled, and that one fifth of all civilian agencies use floppy disks. The OTA report recommended changes in the two major disseminating agencies, GPO and NTIS, and specific changes in the Depository Library Program so as to include electronic formats. The GPO has followed with recent pilots for producing and disseminating information in CD-ROM format. A census disk has been distributed to depository libraries, and projects are under development to produce CD-ROMs of the Congressional Record, an EPA Toxic Waste Inventory, and a Congressional biography directory.

Though there are many decisions and compromises still to be reached, the MRCRR staff hope that changes in these areas will bring into LC's collections a significant number of government publications via the depository library route.

Purchase

In order to have potentially high-use titles available on opening day, during the planning phase MRCRR staff identified approximately 50 titles considered to be industry leaders in their areas, including catalogs, communications, database and information management, desktop publishing, educational, graphics, integrated programs, project management, reference, spreadsheets, utilities, windowing and multitasking, and word processing. These materials were purchased with funds made available from the Collections Policy Office (formerly the Collections Development Office). Funds expended were $13,373 for software programs and $3,350 for CD-ROMs.

The MRCRR is presently following guidelines in Acquisitions Policy Statement Number 1 (August 7, 1984) to purchase materials in machine-readable form. Materials are defined as those "in which information is coded by methods that require the use of electronic equipment for processing and access, such as magnetic tapes, punched cards, punched paper tapes, disk packs, marked sense cards, optical and digital disks, and other such materials." This policy statement describes the following scope:

1. software that constitutes necessary tools for the accessing of sources in machine-readable formats;
2. software relating to the physical and social sciences, the humanities, and the arts, excluding those purely addressed to clinical medicine and technical agriculture;
3. representative samples of software in the fields of entertainment and scientific games.

A recommendation of an Ad Hoc Committee on Funding the Purchase of Machine-Readable Titles (1987) has been implemented for computer files; this provides a separate allotment for these items within the general book acquisitions budget so as to monitor materials expenditures. (Hardware and support costs do not come from the general book acquisitions budget.) The committee also recommended that LC work out agreements with computer files publishers and suppliers (primarily of CD-ROM materials) whereby superseded disks can be kept in the LC collections for archival purposes instead of being returned. This issue, which has arisen elsewhere in the library community, has not yet presented any major problems. Some publishers consider LC's acquisition of a CD-ROM title a purchase, not a lease, and therefore have not requested superseded disks; other publishers simply have not required that LC return superseded disks.

## Acquisitions Issues

During the planning phase and pilot year, perhaps the most vexing problem experienced involved the building of the machine-readable collections. In part because the copyright and CIP methods of acquisition had not been implemented fully, MRCRR staff had to purchase titles within a very limited budget. Due in part to LC-wide funding limitations during the early months of FY89, many recommended titles were not purchased in a timely fashion and it was not always possible to know which recommended titles were in the process of being purchased, which were being delayed, and how much money was available for additional purchases.

In addition, the process of identifying which titles are suitable, operable, and affordable is time-consuming. Even with the change in the copyright deposit regulation and an increasing dependence on the CIP program, identifying which titles to acquire and which acquisitions method to use will still be a requirement. This process necessitates regular and thorough reviews of the print microcomputer literature, which is extensive and not always available in a timely manner in LC. When LC receives issues of any print journal, a decision to keep the title for the permanent collection is often postponed until a significant number of issues has been received. Until recently many microcomputer journals had been declared "discards" since the literature was considered to be ephemeral; consequently, for some time it was difficult to stay current about an industry that is changing constantly. MRCRR staff have contributed their own personal journal issues to the collection, and LC's Office of Planning and Development and Network Development and MARC Standards Office have also contributed copies of some of the important industry journals. In recent months some of these keep/discard decisions have been changed so that titles are now more readily available for review. The MRCRR will need to work closely with the Serial and Government Publications Division and the Collections Policy Office in the near future to determine an adequate number of and appropriate custodial locations for many of these journal titles.

Numerous factors come into play when selecting computer files, factors that are not involved in the selection of many other formats, primarily because of the need for special hardware, storage, security, and operating environments. In addition, the lack of uniformity in publishing patterns of these materials and special subscription arrangements for serials require additional decisions for building a major archive; some of these decisions involve licensing agreements with publishers and the need to choose among different publishers of the same title (ERIC, for instance, is published on CD-ROM by three different publishers). All these factors contribute to an acquisitions process that is complicated, time-consuming, and labor-intensive.

In addition, MRCRR staff hope to expand the scope of the computer files collection. The core collection, representing industry leaders in the high-use areas described elsewhere, essentially mirrors the scope of applications in the entire collection of 1400+ titles. However, the microcomputer industry comprises many more sophisticated, and more expensive, applications that the MRCRR did not attempt to acquire during the pilot, due primarily to lack of funds. Some of these applications are computer-aided design/manufacturing, high-end graphics and image processing, mathematics and numerical processing, expert systems, and full-text optical disk publications. Though it may be possible to begin acquiring these through copyright claiming, these applications often require expensive hardware beyond what is currently available in the MRCRR.

For the MRCRR to meet its objectives of being both a major archive of machine-readable materials published in the United States and a state-of-the-art collection of current software technology, collection development policies, procedures, and expenses need to be coordinated better and improved. To that end, the MRCRR staff will be consulting with other staff in Constituent Services, Collections Services, and the Collections Policy Office to coordinate and improve acquisitions policies and procedures.

### Objective B: To Develop Materials Preparation Policies and Procedures

During the planning phase, MRCRR staff decided to keep available for ready access on the reading room's workstations a core collection of high-use computer files titles. These were initially identified by reviewing industry surveys of the application areas to be collected for the MRCRR (catalogs, communications, database and information management, desktop publishing, educational, graphics, integrated programs, project management, reference, spreadsheets, utilities, windowing and multitasking, and word processing). When the room opened in July 1988, approximately 50 titles were deemed core; a full list of current core titles numbering 99 is available as Appendix G.

Each core title goes through a rigorous processing routine, which includes inventorying each and every piece in the package (including advertisements), labelling or stamping all pieces, noting any deficiencies or damage, completing/copying/mailing the registration card, and installing the title. Installation includes making a complete back-up copy, disk-by-disk, so that the original copy can be archived and used only when absolutely necessary. In some cases an additional service copy is made for quick hard disk installation so that a researcher can use a title on a

workstation other than the primary station on which the title is installed. This service copy removes the inconvenience of having a researcher wait when the desired title is on a primary workstation in use by a second researcher using a different title. At any given time, a title is used/viewed on only one station. This entire process, including installation, may take several hours.

The inventory process is recorded on a checklist (see Appendix D), which is then filed with copies of the license agreement, templates, registration, and advertisements, in folders maintained in the MRCRR. The manuals, reference cards, other documentation, and copies of the license agreement are filed in secured cabinets in the MRCRR, alphabetically by title, and made available to researchers. The original program disks and backups are kept in the secured deck area across from the reading room.

For materials not deemed core, the complete packages are stored in the secured deck area , and no inventory similar to that described above is performed. Materials are shelved in the deck area alphabetically by title.

### Objective C: To Develop Cataloging Policies and Procedures

During the planning stage, MRCRR staff worked closely with staff from the Special Materials Cataloging Division (SPEC MAT) to determine the scope and content of a cataloging record for the machine-readable titles. Staff followed the guidelines included in Chapter 9 (Computer Files) of the revised second edition of the Anglo-American Cataloging Rules (AACR2R). The data fields provided for in AACR2R were mapped against the specifications for LC's online application for machine-readable titles, and a subset of variable and fixed fields was agreed upon. Of special importance for the MRCRR were three fields: two fields holding technical details information, such as system requirements, and one field holding acquisitions source information. For subject access, SPEC MAT staff selected headings from the Library's online subject authority file.

Since the Library's online application for computer files was not in production when the MRCRR opened, catalog records were keyed into a database management system called InfoBase, which could easily handle MARC records. InfoBase provides browse and key word indexing for the standard access fields (author/title, etc.) and the capability for custom indexing of desired fields. The database is available on two workstations in the MRCRR and as a printed catalog.

MRCRR and SPEC MAT staff agree that the cataloging decisions made during the planning stage about the scope and content of cataloging records proved essentially sound. The guidance provided by AACR2R has proven helpful and has afforded experience that is useful now that the online cataloging application has moved into production.

Problems that have arisen mostly revolve around the practices of the software publishing industry. Though AACR2R calls for creating cataloging information primarily from the title screen of these materials, cataloging staff instead had to rely on AACR2R's subsequent choices for deriving this information, since machines were not available to enable cataloging staff to view the title screens. To have done so would have required a considerable amount of time and expense. The subsequent sources of information include the disk label and title page from the manual. Cataloging staff often found the information in these places to be inconsistent, thereby creating a risk of inaccurate or inconsistent bibliographic information. In many instances it was extremely difficult to find appropriate information in the manuals. In addition, the frequently erratic publishing patterns often made it difficult to distinguish among editions, versions, and updates of a title. It is not expected that this situation will change in the near future, unless publishers are urged to adopt some standardization.

Currently the Library's online cataloging system (MUMS) has approximately 100 records for machine-readable titles, all created since September 26, 1989 from CIP worksheets for titles not yet published. The 450+ titles keyed into InfoBase during the pilot will also be keyed into MUMS in the near future, so that the records are searchable throughout LC. The first distribution of records to LC's MARC subscribers outside LC will likely begin early in 1990.

Remaining questions concern the flow of materials through the cataloging process. In LC, the procedures in the Copyright Office and in Collections Services require that numerous staff handle materials during the acquisitions and cataloging steps. With machine-readable materials, this handling has the potential for loss or damage of loose disks and other items in a package, such as keyboard templates, licenses, and registration cards. It is likely that a secured area for computer files will be established soon so the major cataloging steps (e.g., descriptive and subject cataloging) can be accomplished with minimal disruption to the packages themselves. In one instance, for example, a decision has been made to limit the level of Dewey Decimal numbers assigned, based on experience in other libraries that full Dewey numbers are unnecessary for audiovisual and computer files titles, and in order to remove one step in the flow for security reasons.

## Objective D: To Provide Access and Reference Assistance

Planning for the daily operations of the MRCRR required addressing hours of service, staff skills, levels of service offered to researchers, security of the collections, and how to monitor use. Prior to the planning stage, decisions had been made limiting the scope of serviceable titles during the pilot year: only IBM, IBM-compatible, and Macintosh titles in the primary application areas previously mentioned would be available for research. The limited size of the reading room, the desire to control the pilot operations for precise monitoring, and the recognition that titles for these machines were considered industry leaders, contributed to this decision. Titles for other machines and operating systems were collected and made available for researchers but could not be installed on the MRCRR workstations.

When the reading room opened, there were approximately fifty machine-readable titles and accompanying manuals in the core collection of expected high-use titles. A reference collection of books and periodicals and a vertical file of computer-related articles and other material complemented the core collection. Nearly 500 additional machine-readable titles covering a variety of applications were stored in a nearby deck area.

There were five workstations available in the reading room: two Compaq Deskpro 286s, one Compaq Deskpro 286 with an Hitachi CD-ROM player, one Compaq Deskpro 386 with an Hitachi CD-ROM player, and one Macintosh II with a Sony videodisc player and monitor. Additional hardware included one Apple LaserWriter printer, one Hewlett Packard laser printer, two Hewlett Packard dot matrix printers, and a Comterm terminal hard-wired directly to the Library's mainframe for access to LC's online search systems.

The MRCRR has been open only four hours each weekday, 12:00 noon to 4:00 p.m., because no funds were available to hire additional staff to expand hours to 8:30 a.m. - 5:00 p.m., Monday through Friday. Staff from the General Reading Rooms Division were assigned MRCRR responsibilities. As previously noted, one of the key staff members was the GRR automated reference services specialist, who worked on MRCRR activities on a part-time basis. The second was a GRR reference librarian or specialist who had demonstrated interest in and had skills relevant to the operations of the MRCRR. The latter position was obtained from three sequential 120-day details for three different GRR staff members. All staff were expected to have a basic knowledge of microcomputers and their operating systems, through experience and/or training.

Additional staff included a GRR acquisitions librarian who provided part-time assistance for processing purchase orders and a GRR library technician who provided part-time assistance for reading room operations such as checking-in and maintaining reference materials, compiling statistics, and retrieving and processing machine-readable titles. Near the end of the pilot, a second full-time automated reference services specialist was hired in GRR and began to work in the MRCRR.

Researchers who use the MRCRR first sign a registration sheet (see Appendix D) for each visit and then complete an application form, at the first visit only, indicating any institutional affiliation and computer-related interests and skills. Each researcher is interviewed by a reference librarian to determine the purpose of the visit and to impart the basic guidelines for using machine-readable titles in the MRCRR. Researchers are allowed to use software programs only for research purposes, such as to compare different titles within the same type of application or to trace the development or compare different versions of a particular title. Contrary to practices in many public libraries and universities, researchers are not allowed to use the software for its intended purposes, such as using spreadsheet software to run statistics for job-related work or using word processing software to type a resume. On the other hand, researchers can use machine-readable data (e.g., encyclopedias or periodical indexes on CD-ROM or floppy disks) for any reference or research purpose.

MRCRR staff assist in helping to determine which titles are useful for a researcher's needs. If the software is already installed on one of the workstations, the staff start the program and retrieve the manual(s) and licensing agreement for the researcher. The staff provide basic assistance but do not train researchers to use specific titles, since the reading room was never intended as a training facility, a policy readily accepted by researchers. If the software is not on the hard drive, the staff retrieve, load, start the program, and provide available documentation. Researchers never handle the disks.

The MRCRR operates on a first-come, first-served basis. Only one researcher can use any one title at a time unless the MRCRR has acquired more than one copy. The staff maintain a calendar for researchers who want to schedule the use of a particular title in advance.

Security has been maintained successfully in several ways:

* At least one MRCRR staff member is always present in the reading room at all times the reading room is open to the public.

* Researchers are not permitted to use their own disks to work with the software or blank disks for downloading or copying from MRCRR materials.

* All machine-readable materials in the collection are handled only by MRCRR staff.

* Modems for online commercial services are disabled except when needed for staff use.

To house and lock the disk drives, metal boxes called PC fortresses were purchased, but these devices proved unusable when it was determined that the standard Compaq disk drives could not be placed in the boxes. Instead, security disk locks will be used. These will be securely mounted over the floppy drives and locked, preventing researchers from using their own disks. In addition, researchers are informed of the licensing agreements accompanying nearly all machine-readable titles and of the obligation to abide by those agreements.

No researcher has disapproved of the registration or security procedures or complained about the scope of use permitted. Although two or three researchers have sought to do their own work using MRCRR software programs, all have understood and easily accepted the research function of the room. Some researchers have expressed dismay at the current policy of permitting no downloading of any data files or public domain and shareware programs. The policy governing public domain software is being reviewed.

During the first six months, the reading room was consistently but not heavily used. The first press release announcing the reading room was issued only after the room had been open for four months. This was purposely done to give the staff enough time to implement procedures and assemble the collections. Researchers discovered the MRCRR through professional literature articles or announcements, and referrals from LC or other libraries' staff.

Approximately 15 reference encounters occurred each week, the majority in person and some on the telephone. Through accounts of the room and its services in the national press, reference inquiries were received by telephone and in writing from across the country. Initially, CD-ROM titles were used significantly more than software programs. Later, the use was more evenly balanced between the two. Most researchers asked to view specific titles rather than asking questions about software applications. Many researchers came to the MRCRR to consult manuals and other sources in the print reference collection.

The MRCRR staff provided reference assistance to approximately 400 registered researchers during the pilot year. A significant number of LC visitors, including several from other countries, expressed a keen interest in the project and came by for tours (see Appendix E). During the early months, nearly half the researchers were LC staff, though it is important to keep in mind that the first general public announcement was not released until the end of the fourth month. The majority of other users came from U.S. academic institutions and private industry, and others from U.S. government agencies. The MRCRR also was used occasionally during closed hours for demonstrations to LC staff by software publishers and for other LC projects, notably the American Memory Project. A number of individuals in the library or information professions have called, written, or visited to determine the nature, plans, and experiences of the MRCRR, including publishers, distributors, attorneys, journalists, computer corporation executives, and librarians.

MRCRR staff keep statistics on the use of the reading room and its collections. To this end, an extensive statistics sheet has been designed (see Appendix D). Statistics are kept and compiled on a daily basis and are divided into the following broad areas:

1. Reference activities
   a. Reference services (number of users, telephone calls, letters)
   b. Time spent on other MRCRR activities
   c. Number of researchers who used reference sources
2. Collections activities, including acquiring, processing, cataloging, and installing machine-readable titles
3. Administrative activities, including correspondence, meetings, tours, and staff training
4. Other reference activities, including creating finding aids, maintaining miscellaneous print files, and producing searching aids and user guides

## Objective E: To Suggest Additional Service Locations

The Library's current policies for determining custody of all its collections are based on space, tradition, format, language, subject, and geographic area. Materials that require microcomputer technology present a challenge to these policies for several reasons:

* Many of these materials, primarily software programs, cannot easily be categorized as to subject since, for the most part, they are not truly ABOUT something, but rather are tools.

* Within the category of computer files there are multiple "formats" that depend often on the title's operating system, whether it be MS-DOS, Macintosh, or another.

* These materials are published in multiple languages.

* These materials may require special preservation and space environments; little is now known about the long-term preservation needs of floppy and optical disks.

* Many of these materials, primarily CD-ROMs, are automated versions of traditional print reference sources (such as journal indexes like Education Index and dictionaries like the Oxford English Dictionary); in some instances the CD-ROM version has added value by virtue of providing additional searching methods. In LC, there is already precedent for having multiple copies of standard, heavily-used, print reference sources among several reading rooms, and this precedent could apply equally to CD-ROM titles.

* These materials are more interactive than other formats, especially paper and microforms, and require an active relationship between the reference staff and the researcher.

* These materials have security requirements different from other formats in LC, primarily because computer files are easily copied and destroyed and because the Library wishes to maintain a positive relationship with computer files publishers who deposit their publications for copyright protection.

In order to control and monitor the use of computer files that are part of LC's official collections, all computer files titles as defined in this report, on any subject and in any language (nearly all are in English), have been kept and maintained by the MRCRR. This excludes materials related to the Library's optical disk projects, software purchased for a particular LC area for its own office functions, and CD-ROM reference sources purchased and maintained by other reading rooms. Even with this custody decision, several occasions arose during the pilot year where reasonable questions were asked about custody in other reading rooms:

* Should software related to operating a law firm be in the Law Library or the MRCRR?

* Should a CD-ROM title with cartographic information and images be in the Geography and Map Reading Room or the MRCRR?

* What is the best location for an informational videodisc with text, still images, and moving images portraying and reporting political events?

Such questions introduce a host of technical, ergonomic, and legal issues for the Library to consider if a decision is made that all reading rooms provide their own public services for computer files. Some of these questions are:

* For copyright claiming purposes, will LC consider a computer file version of a title different from the print version of the same title?

* If only one copy of a computer file title is claimed, which reading room should have custody?

* Will disks be loaned within LC among reading rooms?

* Will license agreements that accompany computer files restrict the networked use of a single copy among several reading rooms?

* Are LC reading rooms prepared to handle researcher use of these materials, and will the same policies and procedures be followed in all reading rooms, including practices relating to security, downloading, staff training, disk storage, etc.?

* Will LC devote more time to training staff and researchers in these materials?

Also of interest and concern was the nature of reference work with computer files. The encounter between researcher and staff when handling computer files demonstrated a quality unlike that experienced with other formats. All the typical features of a researcher's encounter with a "text" (book, image, sound) are enhanced by the interactive nature of the computer files medium. Since with computer files the "text" is rarely static, the staff and researcher tended to work together closely, each exploring and learning as the process continued. This is a time-consuming effort and

qualitatively different from the extended assistance offered in LC's special collections and in general reference work. With computer files, the programs and information that comprise the collection play a more active role in this three-way relationship than does a still image, a printed book, or a globe.

Since it is not expected that other LC reading rooms will soon have enough staff and secured space to manage such a facility, MRCRR staff support the proposition that, at least for the near future, a single reading room is best for these materials, both program software and superseded optical disks (CD-ROMs and videodiscs). Other reading rooms will maintain workstations for providing access to current reference materials on CD-ROM.

The technologies of networking and remote hard-disk storage, however, offer a different scenario for the long-term future. With remote hard-disk storage and wide-area or local-area networks to link machines to a single collection, it may be possible to view computer files throughout LC while being able to maintain actual and secured custody in a single reading room. This is an issue the MRCRR staff hope the Library will address soon.

During the MRCRR pilot, in fact, LC has been continuing a parallel project, alluded to in the introduction, involving the establishment of publicly accessible workstations in general reading rooms for access to a select group of specific reference titles, including computer files versions of standard print reference sources (for example, Dissertation Abstracts, Business Periodicals Index, Applied Science and Technology Index). Currently these are all in CD-ROM format, and the CD-ROM player is secured so that disks may not be handled by researchers. Reference staff actively encourage researchers to use these materials when the specific reference inquiry is appropriate for them. Dissertation Abstracts, always a heavily used print index in the Microform Reading Room since LC owns the largest collection of dissertations among the nation's libraries, continues to be a heavily used CD-ROM product there as well. These workstations offer a kind of value-added reference service at minimal labor expense for staff (value-added since the searching capabilities on CD-ROM are enhanced beyond the searching capabilities available in the print version of the same title). There is precedent in many public and academic libraries for this type of service, and LC expects to continue making these services available.

## V. Recommendations

### 1. In the Machine-Readable Collections Reading Room:

* Establish the MRCRR as a permanent research facility in the Library of Congress and rename it the Microcomputer Research Center and Reading Room.

* Increase staff devoted to reading room operations:
  ***Two additional full-time automation specialists*** are needed to assist in the MRCRR. As described elsewhere in this report, working with computer files and microcomputers introduces new demands on and complexity for staff. Although a high degree of technical knowledge and skill about constantly changing hardware and software is required, several months of training and experience in the MRCRR are also needed before a staff member can begin to function at a reasonable level of efficiency.
  ***One acquisitions librarian*** working full-time for the MRCRR is needed to develop the collection in an orderly and balanced manner. This person would be responsible for the broad development of the collection and would work with the automation specialists and other recommending officers in the division and throughout the Library. As the size of the collection grows, increasing amounts of time will have to be paid to organization, arrangement, security, and preservation issues of both the machine-readable and print reference collections.
  ***One full-time library technician*** is needed to process and maintain the collections. Individual software program packages consist of a number of items in addition to disks, and each requires considerable time for initial processing upon receipt. Other technical support duties would include maintenance of various reference and processing files (e.g., file of clippings, serials check-in), processing materials in and out of the print reference collection, and assisting with the preparation of user instructions and catalogs of the collections.

* Increase the hours the reading room is open to eight hours a day (8:30 a.m. to 5:00 p.m., Monday through Friday) after two additional automation specialists are hired and trained.

## 2. Across the Library

* Increase the number of catalogers devoted to cataloging computer files. As acquisitions increase with changes in the copyright regulation and full implementation of the CIP program for computer files, three full-time descriptive catalogers will be required and subject catalogers will need to be trained to handle these materials.

* Improve coordination among acquisitions, cataloging, and service units so that computer files are acquired and processed in a timely, economical, and secure manner.

* Expand the scope of the collection by including more sophisticated and expensive titles that are leaders in their areas (e.g., computer-aided design/manufacturing, image processing, mathematics, expert systems, and full-text optical disk publications); acquire the hardware necessary to operate these applications.

* Investigate the feasibility of modifying copyright regulations or procedures so that the same title produced in multiple formats (print and CD-ROM) would be considered two different items, each available for claiming.

* Investigate the legal and technical requirements for networking between the Jefferson, Adams, and Madison buildings so that multiple researchers and staff in multiple locations could have access to a single copy of a title stored in a single location.

UNITED STATES GOVERNMENT

# *Memorandum*

LIBRARY OF CONGRESS

TO : Mr. William J. Welsh
The Deputy Librarian of Congress

DATE: February 23, 1983

FROM : William J. Sittig
Technical Officer
Collections Development Office

SUBJECT: Report of the Ad Hoc Committee on Selection Policy for Machine-Readable Publications

The ad hoc committee, consisting of Pamela Bacher (ASO), Lewis Flacks (Cop), Robert Hiatt (Proc), Suzy Platt (CRS), Joseph Price (Sci-Tech), William Sittig (CDO), and Robert Zich (Plan), considered a policy for the selection of machine-readable publications for the Library's collections and submits the following recommendations:

OPTICAL DIGITAL DISKS

1. The Library should begin as soon as possible to select for its collections optical digital disks using the same selection criteria as for printed works.

The optical digital disk appears to be the medium which for the near future offers the highest degree of durability and a high mass storage capability. It is also the medium which can be most effectively utilized within the context of the Library's anticipated equipment capabilities. This recommendation, however, does not mean that the Library should at this time accept optical digital disks as the "best edition" for copyright deposit.

2. The Copyright Office should seek deposit, under §407 of the Copyright Act, of all optical digital disk publications bearing a notice of copyright at the time of first publication of the disk version.

Since few, if any, optical disks have been deposited with the Copyright Office, we suggest this approach (1) as a means to acquire inexpensively and efficiently this form of material, and (2) to confront the unresolved issue of whether or not an optical disk of existing print material is considered a reprint, and whether the mandatory deposit powers have already been exercised with respect to the originals.

3. Any optical digital disks acquired should be centrally stored and made available to users in accordance with the final outcome of the Optical Digital Disk Pilot Project.

Access to the text on optical disk should be available in all reading rooms. Conceptually, images should be transmitted to high resolution terminals via a cable TV network. Economics, as well as service considerations, should govern the number of terminals available.

4. The Library should obtain licenses for the public display or performance of any optical digital disks it intends to use in public reference activities.

However optical digital disks are acquired -- through §407, by purchase or gift -- the Library must determine whether licenses for public performance or display are included as part of the distributed "package" (and the royalties paid as part of the purchase price). Where no license is granted to purchases, one should be acquired.

5. Although recommendations 1-4 pertain to computer-readable optical digital disks, the Library should consider similar provisions for videodisk materials.

DATA BASES

1. The Library should attempt to secure, ideally through copyright deposit, access to machine-readable data bases of value to its patrons.

To fulfill its role as a first-rate research and reference institution, the Library must make the increasing number of commercial and non-commercial bibliographic and informational data bases available to its staff and patrons. This need will become even more essential as the Library develops an optical digital disk system, which will be capable of rapid retrieval of large numbers of periodicals requiring bibliographic control at the article level. When the data bases are available, careful consideration will need to be given to how service will be provided; what, if any, costs should be borne by users; and the avoidance of unfair competition with others offering a search service of commercial files. It is further recommended that the Collections Development Office coordinate the selection of the data bases to be loaded.

2. The Library and the Copyright Office should enter into negotiations with the holders of rights to online data as to what form the Library might be given access.

It is apparent that changes would be required in §407 of the Copyright Act to permit the Library to request published data bases distributed solely by electronic means. Also, it is unclear what form of deposit, if obtained, would be of greatest advantage to the Library. We could receive deposits of tape or disk, or simply be given free access. The latter would be less costly in terms of investing large sums in software development (or purchase) and in new disk drives and other equipment needed to access the files, but it would require increased staff to instruct readers on the use of each individual system. If the Library received deposits of tapes or disks, they could be loaded into the existing LC system and linked to optical disks available at the Library via retrieval capabilities designed for the disks. This would be costly, however, and only a limited number of the most important data bases should be considered for loading at LC.

## OTHER MACHINE-READABLE MATERIALS

1. Retain samples for archival purposes of all other machine-readable forms deposited with the Copyright Office.

The Copyright Office is receiving an increasing quantity and variety of materials in machine-readable formats--magnetic tapes, disks, computer chips, punch cards, data cartridges, etc. Since there are currently large problems in handling, sorting, controlling, and servicing these materials, it is recommended that the Library not acquire these materials for its permanent collections. We recognize, however, that it is important to retain some of these items (1) to document concretely the historical development of this important form of publication of information, and (2) to retain some items for their content even if they cannot presently be served to readers. We are not recommending that the Library become a museum for the study of the computer science industry in all its facets, but continue in its role as a repository and provider of information and knowledge.

It is further recommended that the Science and Technology Division assume the responsibility for selecting, following established Library selection criteria, and maintaining custody of the sample machine-readable collection, and explore aspects of providing some public access to and minimal service from sample science-related software on a few of the more widely available microcomputer systems (see Miscellaneous recommendation #3).

## CONTROL

1. Those machine-readable items, most notably optical digital disks, selected and retained in their entirety for the Library's collections should be brought under full bibliographic control.

This is currently possible under Chapter 9 of the Anglo-American Cataloging Rules, second edition (and through rule statements soon to be issued concerning machine-readable data files for use with microcomputers) and through use of the MARC Format for Machine-Readable Data Files, but higher internal automation priorities seem to preclude early development of the automated system to input the cataloging of machine-readable items. We strongly urge increased attention to this matter before a large number of machine-readable materials are added to the Library's research collections.

2. Those machine-readable items that the Library does not retain in their entirety should not receive full bibliographic control.

The control currently provided by the Copyright Office appears to be sufficient for retrieval purposes.

3. Those machine-readable items that the Library does not retain in its collections but to which it has access from an external source (usually, commercial data bases) should be brought under bibliographic control.

This would require cooperation with the owners of the files to ascertain the information needed to create the bibliographic record. It might be desirable to determine on a file-by-file basis which files are brought under control if any restrictions are placed on access or use.

MISCELLANEOUS

1. The Collections Development Office should formulate a new acquisitions policy statement on computer and robotic sciences.

A draft prepared by the Science and Technology Division has been submitted to the Principal Acquisitions Officer for consideration.

2. The Examining Division of the Copyright Office should be asked to make a presentation to the appropriate Library officers and staff, displaying a sample of the machine-readable items being received and explaining current trends.

The ad hoc committee had the benefit of an excellent presentation by the Examining Division and highly recommends it for those outside the Copyright Office who will be responsible for selecting, handling, and making decisions about machine-readable materials.

3. If the recommendations regarding the selection of machine-readable materials for the collections are implemented, another group should be constituted to consider all aspects of service.

The ad hoc committee decided at the outset of its deliberations that the time was premature and the subject too complex for the group to address adequately all aspects of service of machine-readable materials. We have touched on some considerations, but a more thorough analysis of the service problems is needed. Indeed, since machine-readable technology is in a constant state of flux, new questions and practical problems will continue to arise over time. A standing group (or groups) could possibly be formed to address these challenges.

cc: Members of the Ad Hoc Committee

# Appendix A. 2: LC Committees Addressing Computer Files Issues

Machine Readable Collections

Library of Congress

Machine Readable Collections Task Force

Library of Congress

August 26, 1985

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PREFACE

The Machine-Readable Collections Task Force was appointed on August 28, 1984, by the Deputy Librarian of Congress to investigate "the whole range of problems connected with custodial arrangements, playback equipment, service to the public, copyright questions, and the relationship between the Library and depositors, vendors, or publishers" and to "submit appropriate recommendations for consideration by the library administration." The Task Force was composed of:

Jane Collins, Res Sci.
Lela Beth Criswell, ASO.
Floris Flam, CRS C.
Robert Hiatt, Proc.
Christopher Meyer, Copyright.
Peggy Morrison, Res GRR.
John Ragsdale, CRS ISS.
Vicky Reich, Plan and Dev.
Maurice Sanders, Res (Chair)
Roberta Shaffer, Law Library.
William Sittig, Col Dev.
David Smith, Proc Spec Mat
Susan Vita, Proc CIP

This document constitutes the final report of this Task Force and consists of the following sections:

Section 1: Foundation Recommendations for Machine-Readable Collections.

Section 2: Pilot Electroform Reading Room Recommendations.

Section 3: Virtual Electroform "Reading Room" Recommendations.

These categories are based mainly upon the likely sequence of events necessary to develop an atmosphere that will nourish the acquisition, bibliographic control, and service of materials in electronic form. Materials in machine-readable collections are referred to as "electroform" materials.

The recommendations in this document are built upon those submitted by the Ad Hoc Committee on Selection Policy for Machine-Readable Publications.

ABSTRACT

Currently available technology makes possible the acquisition, processing and service of machine-readable text, images and executable software. The Library should select materials in the form of optical digital disks, floppy diskettes, magnetic tapes, and other forms of digital media, using the same criteria as for printed works whenever possible. Automated assistance offers methods of managing machine-readable collections in an environment capable of storing, maintaining and "circulating" software written for the most widely-used machines.

The recommendations provided herein give guidance that marks a path toward the incremental integration of machine-readable works within the Library of Congress. The recommendations are divided into the following sections:

1. The Foundation Recommendations for Machine-Readable Collections give the first measures which should be taken.

2. The Pilot Electroform Reading Room Recommendations are based on the assumption that machine-readable collections require that machines be used to read and execute electroform software. These recommendations are also based on the assumption that certain computer hardware facilitates use of software which was written to be accessed under standard operating systems. Experience with the Pilot Electroform Reading Room is expected to demonstrate that machine-readable collections can be readily used by LC patrons. The pilot should also indicate if centralized or decentralized storage of software is preferable.

3. The Virtual Electroform "Reading Room" Recommendations are constructed on the idea that certain electronic publications should be available throughout the Library. The Virtual Electroform Reading Room is not in a specific place, but is accessible to Library of Congress patrons anywhere. The Virtual Reading Room concept provides the user with electroform publications in a surrounding that is not "medium-bound." The user need not be aware of the original form of the material, such as floppy diskette, tape, or cartridge.

## PRIORITY RECOMMENDATIONS

The actions recommended below are considered key.

1. Key Acquisitions Recommendations

   Amend the current Copyright "best edition" regulation to require registrants to deposit software in executable form rather than in printed form.

   Negotiate with the vendors of online databases for access rights to materials submitted in compliance with copyright and Cataloging-In-Publication (CIP) requirements.

   Provide funding for the acquisition of non-copyrighted databases, for example, National Technical Information Service (NTIS) files.

2. Key Bibliographic Control Recommendations

   Provide full bibliographic control for databases in this collection.

   Provide processing staff with access to equipment necessary for bibliographic processing.

3. Key Service Recommendations

   Develop a policy addressing the issue of whether or not, and how, to charge the public for commercial database services.

   Begin assembling a collection of materials in electronic form and setting up a pilot "electronic reading room" operation as soon as practicable.

   Acquire machines necessary to use the materials in electronic form.

4. Key Pilot Electroform Reading Room Service Recommendations

   Establish a special reading room section, possibly organized as a section under General Reading Rooms Division, and located on Capitol Hill. This should include a reading room based on form and including materials on diverse subjects.

   Centralize the review and allocation of funding for this equipment, its installation, and maintenance.

## SECTION 1. FOUNDATION RECOMMENDATIONS FOR MACHINE READABLE COLLECTIONS

### 1.1. Acquisitions

#### *1.1.1. Acquisitions Objective*

> To collect and maintain or provide access to a selective collection of software that best reflects and documents the life, history, and creativity of the American people and that is necessary for the work, information, and research needs of Congress and scholars.

### 1.1.2. *Acquisitions Recommendations*

LC should:

A. Amend the current Copyright "best edition" regulation to require registrants to deposit software in executable form rather than in printed form.

B. Amend the Acquisition Policy Statement to clarify that current equipment limitations should not necessarily limit the collection of useful materials in non-compatible formats. Moreover, the Acquisitions Policy Statement (APS) should distinguish between software packages that are curriculum supporting, e.g., computer-aided instruction (CAI) packages, or modeling programs, and software which is an information package or database. Computer-aided instruction (CAI) and modeling types should be collected only as is consistent with existing acquisitions policies and service guidelines. Information packages should be collected more extensively. Also, the Acquisitions Policy Statement (APS) should be changed so that its exclusion of any but representative samples of general applications software, e.g., spreadsheets, word processing programs, etc., and educational and arcade games is reinforced.

C. Attempt to secure, ideally, through copyright deposits, access to machine-readable databases of interest to LC's patrons.

D. Negotiate with the vendors of online databases for access rights to materials submitted in compliance with copyright and Cataloging-In-Publication (CIP) requirements.

E. Provide funding for the acquisition of non-copyrighted databases, for example, National Technical Information Service (NTIS) files.

F. Acquire "snapshots" of selected machine readable data files for historical coverage.

G. Acquire machine-readable formats for older works when the machine-readable format has clear advantages in currency, coverage, manipulation, etc., over the paper edition.

H. Provide selection staff with access to appropriate equipment required for the application of selection criteria.

### *1.1.3. General Selection Criteria*

AP No. 1: III. Selection Criteria for Software.

"A. Software, insofar as it represents programs, procedures, rules, or any associated documentation pertaining to the operation of a computer system, constitutes, currently, a particularly difficult area from the point of view of collection policy and it is, therefore, recommended that the policy outlined below be periodically and frequently reviewed and updated in response to changing needs and technology.

B. The Library will select software for its collections in the following categories:

1. Software that constitutes necessary tools for the accessing of sources in machine-readable formats;

2. Software relating to the physical and social sciences, the humanities, and the arts, excluding those purely addressed to clinical medicine and technical agriculture;

3. Representative samples of software in the fields of entertainment and scientific games.

C. Ordinarily, the Library will not add to its collections software pertaining to the field of popular and juvenile computer games; software addressed to educational programs below the college level; and software pertaining to industrial process control."

### *1.1.3.1. Selection Criteria for Textual Materials*

**AP No. 1: II. Selection Criteria for Materials Containing Textual Information.**

"A. In acquiring materials or information for the Library of Congress collections, the Library will, as far as feasible, make no distinction between machine-readable materials and other more traditional formats.

B. In deciding whether materials in machine-readable form should be selected for addition to the Library's collections, or accessed for readers' use, the same criteria with regard to content will be applied as for printed or microformatted materials.

C. In selecting, or recommending the acquisition of materials in machine-readable form, the following factors will be taken into account and, as far as possible, will be documented in writing:

1. Whether the contents are available both in printed and machine-readable form; whether they are both wanted; or why the machine-readable form is preferable;

2. Conditions that will regulate access by the public; need for licenses for use, royalties, etc.;

3. Fees to be paid to the supplier, vendor, or rights owners;

4. Internal costs for equipment, staff, and maintenance;

5. Custodial and special service considerations.

### *1.1.3.2. Selection Criteria for Optical Media*

**Report of the Ad Hoc Committee on Selection Policy for Machine-Readable Publications.**

"1. The Library should begin as soon as possible to select for its collections optical disks using the same criteria as for printed works. The optical digital disk appears to be the medium which for the near future offers the highest degree of durability and a high mass storage capability. It is also the medium which can be most effectively utilized within the context of the Library's anticipated equipment capabilities."

### *1.1.3.3. Selection Criteria for Databases*

> AP No. 1: II. Selection Criteria for Materials Containing Textual Information.
>
> "D. For machine-readable databases, the Library will seek either acquisition and physical custody or only electronic access, depending on a variety of factors, including cost, availability of playback equipment, size, vendors' stipulations, and the Library's requirements."

## 1.2. Bibliographic Control

### *1.2.1. Bibliographic Control Objective*

> To have all software in collections at LC, in process, on order, or likely to be acquired for the collections represented effectively in the LC computerized catalog database.

Permission was granted in September to proceed with plans to do CIP cataloging for 1,000 software titles over a one year period. Technical difficulties related to the availability of the records internally, and to their distribution externally, have been resolved by moving up the priority for implementation of the MRDF format by ASO. MRDF implementation will now be undertaken after visual materials' completion in October 1985. Completion could be as early as Fall 1986. Consequently, a Spring 1986 start date is being planned for the CIP software pilot.

In addition to receiving the input from the various interest groups within the library community, the CIP Division will be working with targeted publishers and with publishers' groups to design procedures that are mutually agreeable. Publishers to be approached first will be those that are already participating in the CIP program by submitting their print materials for CIP data. Next approached will be non-CIP software producers which have been identified as providing a large volume of titles needed by

the library community.

### *1.2.2. Bibliographic Control Recommendations*

LC should:

A. Support the Cataloging-In-Publication (CIP) Pilot Project, using those materials that are consistent with the Acquisitions Policy Statement (APS) for Machine-Readable Materials to form the basis for the Library's software collection and to gain experience in handling software.

B. Provide full bibliographic control for databases in this collection.

C. Utilize copyright registration records in achieving bibliographic control of partial databases in this collection.

D. Provide full bibliographic control for outside databases which LC uses in its services.

E. Provide processing staff with access to equipment necessary for bibliographic processing.

## 1.3. Service

### *1.3.1. Service Objective*

To enable persons to request and obtain ready access to software in collections at LC.

To enable persons to request and obtain ready access to software outside LC.

### 1.3.2. *Service Recommendations*

LC should:

A. Develop a policy addressing the issue of whether or not, and how, to charge the public for commercial database services.

B. Establish a policy restricting or limiting the use of personal software or disks on Library machines.

C. Begin assembling a collection of materials in electronic form and setting up a pilot "electronic reading room" operation as soon as practicable.

D. Acquire a representative sampling of the materials specified in APS 1, Part III Section B, in electronic forms through Copyright deposits, CIP deposit, purchase, or to be accessed through commercial facilities for use in the Electroform Reading Room.

E. Acquire machines necessary to use the materials in electronic form.

F. Set aside space to accommodate this hardware and the patrons using it--along with space to store the materials in electronic forms.

G. Load as much of the materials as possible into electronic storage facilities which can be accessed and used at any automatic data processing (ADP) workstation inside or outside LC in addition to being used in the Electroform Reading Room.

## SECTION 2. PILOT ELECTROFORM READING ROOM RECOMMENDATIONS

### 2.1. Pilot Reading Room Objective

> To provide a central research facility where persons can identify and readily use machine-readable materials both in collections at LC and outside LC.
>
> To determine if the dissemination of machine-readable works throughout the Library in a virtual electroform reading room is feasible and advisable. To determine if centralized or decentralized storage of software is preferable.
>
> To refine further requirements for storage, protection, and service of electroform materials. To determine usage, staff, and training levels. To determine future costs.

The Pilot Electroform Reading Room is intended to provide library patrons with access to publications in electronic form. Electronic software is accessed via an "operating system." An operating system is used by a computer to provide for input from a keyboard or other input device and output to video display terminals or other devices; it also provides access to data stored on other storage media: magnetic disks, magnetic tapes, optical or compact disks.

It is not practical at this time to provide access to all software written for all operating systems; however, by selecting the most widely used operating systems, we can service most of the publications that are appropriate according to the Acquisitions Policy Statement. Many software publishers provide products that are available in several formats for a variety of operating systems. The operating systems currently provided by the Automated Systems Office, in its guidelines for microcomputers (UNIX, MS-DOS, PC-DOS, CP/M) are suggested for use in the Pilot Electroform Reading Room. ASO's recommendation narrows the range of technical considerations so that hardware considerations do not interfere with the collections development, processing, and collections management aspects for many publications. Currently, there are several commercially available computers which can be used to access the types of software identified in the Acquisitions Policy Statements. The Pilot Electroform Reading Room can be supported with "off-the-shelf" computers. Hamerly Computer Systems, Molecular Computer and Northern Telecom, for example, are currently

providing this type of equipment.

## 2.2. Pilot Electroform Reading Room Service Recommendations

LC should:

A. Establish a software reading room as a pilot project, possibly organized under the General Reading Room Division, and located on Capitol Hill. This should be done after LC has acquired a moderate number of machine readable works in its collection, though CIP pilot receipts, through copyright deposits, or through purchase,

1. Base inclusion of material in this reading room on the format of the publications, not their subject content.

2. Staff this reading room with specialized reference personnel who have expertise in using electronic media and a knowledge of operating systems and hardware available in the reading room.

3. House those video disks and optical disks containing interactively-searchable data which have not been produced by LC in the Pilot Reading Room. Non-interactively-searchable disks (visual materials) should go to the appropriate custodial division, such as P&P or M/B/RS.

4. Require that reference interviews be used to screen users (analogous to Manuscript Reading Room procedures).

B. As soon as possible create a centrally coordinated commercial database search service for use by the public. The Library should support the work of the committee currently charged with this task. In support of this database search service a reference collection should be created which includes complete documentation for the online commercial databases and software packages that are available. Staff in the appropriate reading rooms should receive copies of relevant documentation. A directory of databases available at LC with the name of the person responsible for maintaining the service should be maintained. The Pilot Reading Room should service those databases for which expertise is not available elsewhere in the Library.

C. Investigate the feasibility of decentralized use of software such as journals through a network. Textual items, whose usage is likely to be needed at multiple locations, should be equally accessible at all appropriate locations.

D. Clarify the issue of the Library's rights vis a vis the publisher's, to make available to the public and to staff, for use in the Library and for loan, purchased material and material which has been sent to the Library to fulfill copyright and CIP requirements.

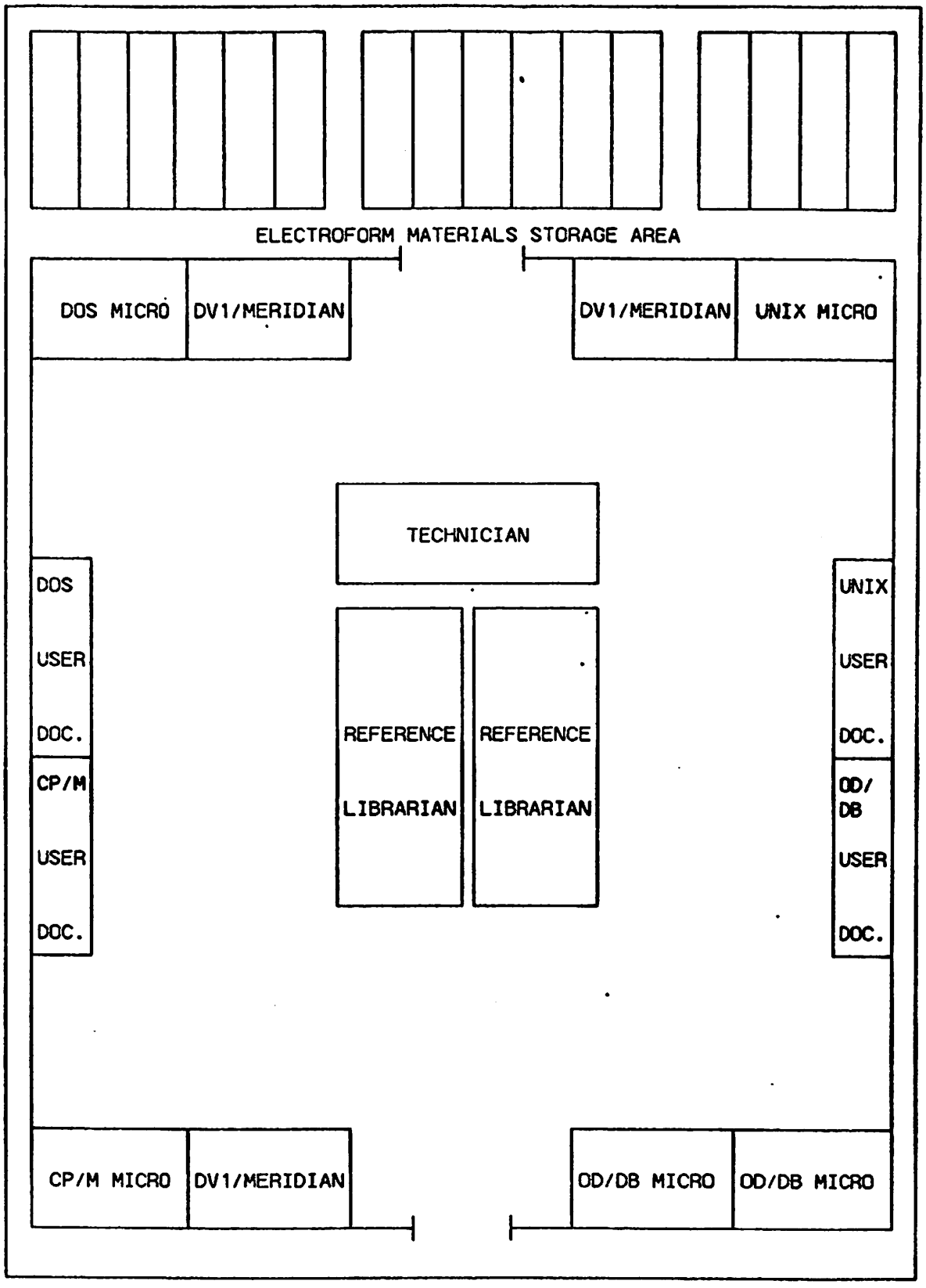
(continued)

*(Recommendations Continued)*

E. Centralize the review and allocation of funding for this equipment, its installation, and maintenance.

F. Construct a circulation control facility for electroform materials. A temporary microcomputer-based system should be used to identify custody and to control circulation of software until a library-wide circulation control facility can be used for circulation of software.

DIAGRAM OF PILOT ELECTROFORM READING ROOM



## 2.3. Resources

EQUIPMENT:

| | |
|---|---|
| DV1/MERIDIAN Terminals: | 3 |
| DOS Microcomputers: | 1 |
| UNIX Microcomputers: | 1 |
| ICP/M Microcomputers: | 1 |
| CD/DB Microcomputers: | 2 |
| DV1/MERIDIAN Microcomputer: | 1 |
| DV1/MERIDIAN Printer: | 1 |

STAFF:

| | |
|---|---|
| Reference Librarians: | 2 |
| MRC Technician: | 1 |

INITIAL COLLECTION CONTENT: SOFTWARE:

Operating Systems:
  PC/MS-DOS
  UNIX
  CP/M

Utility Systems:
  SIDEKICK
  SIDEWAYS

Word Processing Systems:
  Wordperfect
  Wordstar

Spreadsheet Systems:
  Supercalc 3
  PFS File

Database Management Systems:
  dBASE III

Graphic Systems:
  DR DRAW
  LOGO

Telecommunications Systems:
  SMARTCOM
  KERMIT
  RBBS

Integrated Systems:
  LOTUS 1-2-3
  FRAMEWORK

INITIAL COLLECTION CONTENT: DATABASES:

Bibliographic Utilities (Access to):
- RLIN
- OCLC
- WLN

Information Utilities (Access to):
- NEXIS
- DIALOG
- BRS

INITIAL COLLECTION CONTENT: ELECTRONIC TEXTS:

Electronic Journals (Access to):
- ...
- ...

Electronic Publishers (Access to):
- ...
- ...

INITIAL COLLECTION CONTENT: OPTICAL MEDIA:

Video Cassettes:
- ...
- ...

Video Discs:
- ...
- ...

Optical Discs:
- ...
- ...

## SECTION 3. VIRTUAL ELECTROFORM "READING ROOM" RECOMMENDATIONS

### 3.1. Virtual Reading Room Objective

> To provide a distributed research facility where persons can identify and readily use machine-readable materials both in collections at LC and outside LC.

The Virtual Electroform Reading Room should enable staff and patrons to read or execute materials in machine-readable form using ADP workstations. Patrons and staff should have access to computers and electronic storage facilities at LC--as well as selected computers and electronic storage facilities outside LC--through a central LC telecommunications facility. Thus, instead of staff and patrons having to go to where the electroform materials are stored, the electroform materials are transmitted to where its users are, as suggested in the following schematic.

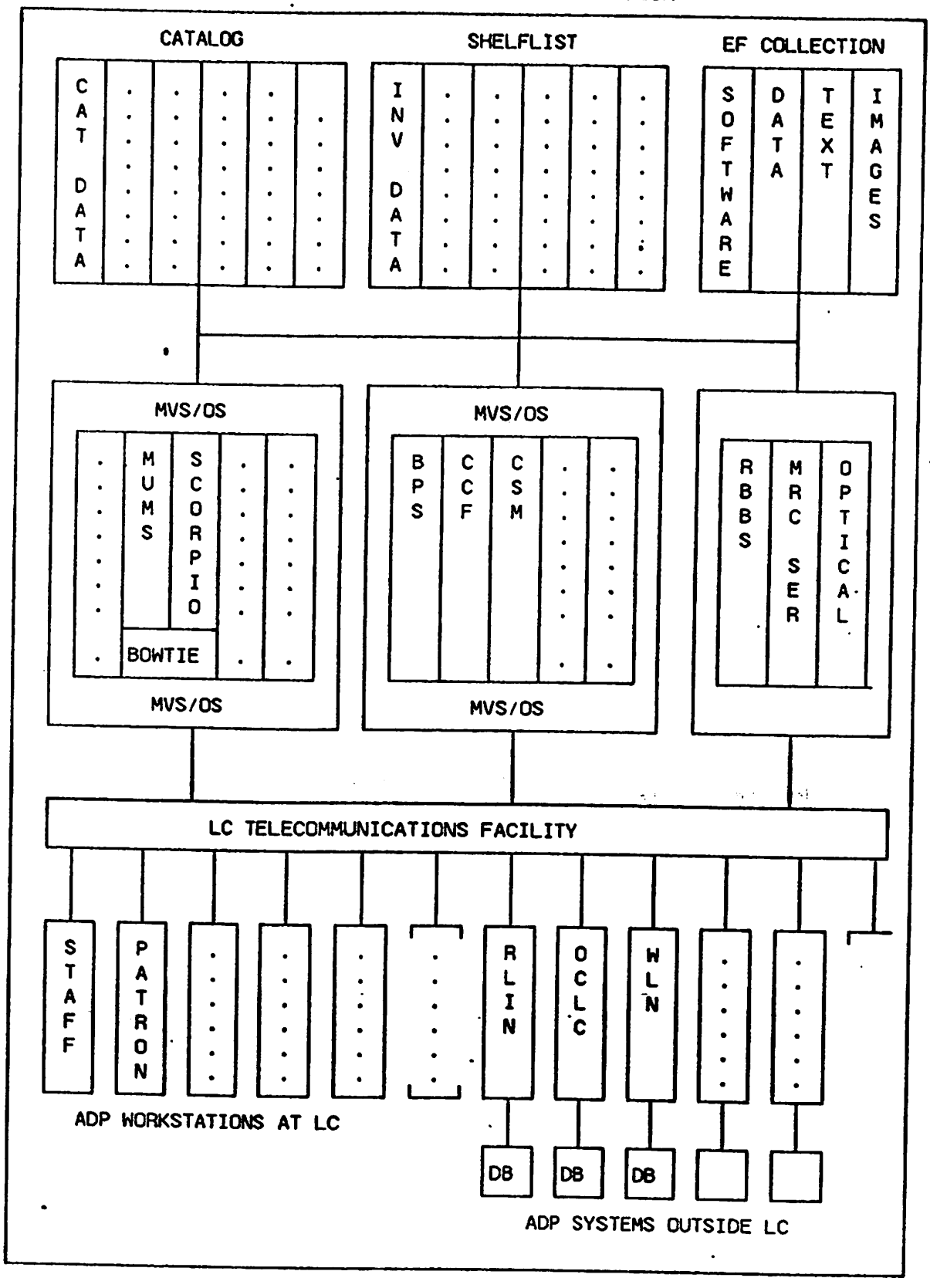
The following diagram is a symbolic representation of the virtual "reading room" concept.

Patrons and staff would use a common telecommunications facility to access database facilities. Among the in-house facilities are SCORPIO, MUMS, Book Paging System, and materials in machine-readable form. The same telecommunications facility could be used to access outside database services such as RLIN, OCLC, and WLIN.

### 3.2. Virtual Electroform "Reading Room" Recommendations

> **LC should:**
>
> A. Determine if distributed use of electroform materials is practical.
>
> B. Use experience gained in operation of Pilot Electroform Reading Room to "mainstream" machine-readable publications.

SCHEMA FOR VIRTUAL ELECTROFORM READING ROOM



## 3.3. Resources

EQUIPMENT:

| | |
|---|---|
| MRC Minicomputers: | 2 |

STAFF:

| | |
|---|---|
| Technical Support Specialists: | 2 |

INITIAL COLLECTION CONTENT: SOFTWARE:

Operating Systems:
- PC/MS-DOS
- UNIX
- CP/M

Utility Systems:
- SIDEKICK
- SIDEWAYS

Word Processing Systems:
- Wordperfect
- Wordstar

Spreadsheet Systems:
- Supercalc 3
- LOTUS 1-2-3

Database Management Systems:
- dBASE III
- PFS FILE

Graphics:
- LOGO
- DRGRAPH

Telecommunications Systems:
- SMARTCOM
- KERMIT
- RBBS

Integrated Systems:
- SYMPHONY
- FRAMEWORK

INITIAL COLLECTION CONTENT: DATABASES:

Bibliographic Utilities (Access to):
  RLIN
  OCLC
  WLN

Information Utilities (Access to):
  NEXIS
  DIALOG
  BRS

INITIAL COLLECTION CONTENT: ELECTRONIC TEXTS:

Electronic Journals (Access to):
  ...
  ...

Electronic Publishers (Access to):
  ...
  ...

INITIAL COLLECTION CONTENT: OPTICAL MEDIA:

Video Cassettes:
  ...
  ...

Video Discs:
  ...
  ...

Optical Discs:
  ...
  ...

## ADDITIONAL CONSIDERATIONS

### A. Additional Acquisition Considerations

1. Acquire or create archival copies, as appropriate, in addition to the service copies of software collected.

2. Set up procedures to ensure that any archival/service copies which the Library must create are made as soon as possible in the processing flow. This will reduce the possibility of an unauthorized copy being made of software which can only be copied once. Also, accidental damage of a master disk will be less crippling if a copy has been made due to early duplication procedures.

### B. Additional Bibliographic Control Considerations.

1. Catalog electronic media in such a way that records are identifiable and retrievable through the Library's online catalogs, e.g., MUMS, whether the item consists of software with accompanying material or whether it is a book with accompanying software.

2. Change the SPEC MAT designation in the LC Call Number for machine-readable works to MACH READ in order to distinguish them from other special format materials.

### C. Additional Service Considerations

1. Staff the Pilot Electroform Reading Room with a specialized reference staff which is expert in using electronic media and knowledgeable of the operating systems and hardware. They should have broad general knowledge of the subjects represented by materials in the room and could refer patrons elsewhere in the Library for help with specific subject questions.

2. Provide maintenance staff or service contracts for equipment.

3. Provide for the following physical environment:

(a) Controlled temperature stacks for diskettes, etc.
(b) Furniture, including sound baffles.
(c) A service printer for short printouts, with the possibility of an offline print capability for longer printouts.

4. Network textual items (including, but not limited to, journals) for access at multiple locations if their anticipated use justifies this effort. A DBMS and other software might need to be networked so that diskettes with data could be used. Other items should be used in the

special format reading room.

5. Create a central point for information about commercial database which should house a complete set of documentation for all systems accessed. A directory of databases available at LC with the name of the person responsible should be maintained. Readers should be referred to locations around the Library for specialized searches and staff in the appropriate reading rooms should receive copies of relevant documentation. The pilot reading room should service those databases not available elsewhere in the Library.

6. Create or provide service copies of diskettes in addition to the archival copy. The archival copy should be stored in ASD's secure area; the operating system against which it was booted up may also need to be kept in the archive.

7. House video disks and optical disks containing interactively-searchable material in the Pilot Electroform Reading Room; otherwise, house disks in the appropriate custodial division, e.g., P&P or MBRS.

8. Establish handling guidelines that take into consideration the fact that preservation and access may be conflicting objectives.

9. Load bibliographic records for electronic media in a separate file under MUMS.

10. Take the following steps to implement the Pilot Reading Room:

(a) Change the copyright deposit regulation.

(b) Change the acquisitions policy statement. LC should select the format that best fits the equipment we now have if that is available, but other materials with useful content should not be rejected solely because we do not now have the equipment necessary to service the material.

(c) Obtain funding for acquisition of non-copyrighted, commercial, and non-commercial materials (e.g. NTIS items), as well as materials not deposited under "trade secrets" protection.

(d) Develop in-house software needed for Pilot Reading Room.

(e) Staff Pilot Reading Room.

(f) Procure equipment required for service of electroform materials.

(g) Obtain equipment needed for storage of collection.

(h) Develop electroform circulation control facility.

11. Prohibit the loan of the archival copy, and also the loan of any service copy which is heavily used. The Pilot Reading Room should be

used to gain experience about future loan policies. Loan decisions will probably have to be made on a individual basis, at least at first. There may also be copyright considerations in determining a circulation policy.

D. Staffing Considerations

1. Support the Processing Services' 1987 budget request for additional staff for processing machine-readable materials.

2. Anticipate the increase in staff to address both the technical and the service needs that will arise with escalating acquisitions and increased demand for software. Estimates of staffing needs include:

- 2 professionals and 1 clerk/technician for the database search service.
- 2 professionals and 1 clerk/technician for the Pilot Reading Room. Note: If the two services were combined, a total of 3 professionals should probably be sufficient.

GLOSSARY

Backup: The process of copying all or part of a disk to another disk as insurance against the possible failure or loss of the first disk. Backup is also used to refer to the copy.

Bibliographic: Of or pertaining to books.

BPS: Book Paging System. Provides the capability to request books from the Library of Congress collections.

CCF: Circulation Control Facility. Which is where records are kept of books which cannot be found on the shelves because the books are charged to patrons or staff.

CP/M: Control Program/Microcomputers. A widely used microcomputer operating system.

CRT: An acronym for cathode-ray tube. It is synonymous with the video monitor.

CSM: Collections Status Monitor. CSM is a component of the ultimate Collections Control Facility. The CSM will be able to track the location of books in the collections.

Cursor: The visible marker used to indicate the current position on the video monitor.

Database: A collection of data. A data base is all of the information collected and stored by an organization.

Database Management System: Any software system for managing the creation of, storage for, updating of, and access to data stored in a data base.

DB: Abbreviation for database.

DBMS: An acronym for Database Management System.

Digital: Pertaining to data in the form of digits.

DOS: An acronym for disk operating system. Including MS-DOS and its derivatives such as PC-DOS.

Electroform: Materials in electronic form.

Floppy Diskette: A disk made of a flexible material, e.g. plastic, coated with a magnetic surface. Its appearance is similar to a 45 rpm phonograph

record.

Graphics: The use of graphics or other graphical means to obtain operating data and answers. The use of written symbols and visual displays.

Hardware: The physical equipment used in data processing. The computers, peripheral devices and other devices including communication channels associated with data processing and data transmission.

Input: The transfer of data into the computer.

Machine-Readable: A machine that is capable of being read by an input device.

Magnetic Tape: A sequentially access storage medium where one record is obtained after passing through the previous records.

Media: Material on which data may be stored or recorded such as punch cards, paper tapes, magnetic tapes, disks, and microfilm.

Microcomputer: A computer system whose processing unit is a microprocessor. A basic microcomputer includes a microprocessor, storage, and input/output facility, which may of may not be on one chip.

MRC: Machine-readable collection.

MS-DOS: Disk operating system used on IBM compatible personal computers.

MUMS: Multiple Use Marc System. A Library of Congress Bibliographic Data Base.

MVS/OS: An operating system widely used on large IBM computers, MVS is an abbreviation for Multiple Virtual Storage.

Network: An interconnection of a number of points by communications facilities.

OCLC: Online Computer Library Catalog. An online computer network, mainly in North America, for cataloging information.

Offline: Operations not under the direct control of the central processing unit of a computer.

Online: Operations under the direct control of the central processing unit of a computer.

Optical Digital Disk: A disk, typically made of plastic, containing recorded visual and sound information designed for playback on a television screen.

Output: The transfer of information from the computer to an outside device; for example, data sent from the computer to a printer or a video monitor.

Parameter: Refers to the adjustable processing characteristics of a process that are controllable by a command.

PC-DOS: Disk operating system used on the IBM Personal Computers.

Print: Transfer information from the computer to a printer.

Program: An ordered series of software instructions designed to have the computer perform a specific sequence of actions.

RLIN: Research Libraries Information Network. The RLIN system provides both bibliographic record searching and cooperative cataloging. Its database contains LC MARC records for book and non-book formats; member libraries' machine-readable cataloging, and Stanford Libraries' records.

SCORPIO: Subject Content Oriented Retrieval System for Processing Information Online. A Library of Congress Bibliographic Data Base.

Software: The actual programs which perform the specific tasks for which one is calling.

Spreadsheet: A spreadsheet consists of a two-dimensional grid containing cells at the intersection of every row and column. One can enter information into the cells and interrelate them using logical formulas and mathematical functions.

Storage: A device capable of receiving data, retaining them for an indefinite period of time, and supplying them upon command.

Telecommunications: The transmission or reception of signals, writing, sounds, or intelligence of any nature by wire, radio, light beam, or any other electro-magnetic means.

UNIX: A widely used operating system developed by Bell Laboratories. This particular operating system is written in the 'C' programming language.

Utility: Software for routine tasks or for assisting users.

Virtual: Pertaining to a conceptual presence.

WLN: Washington Library Network. WLN is an organization having two major components: a Resource Sharing Network for libraries in the state of Washington and a multi-state computer service.

# ESTABLISHING A MACHINE-READABLE COLLECTION AND PILOT READING ROOM IN THE LIBRARY OF CONGRESS

THE MACHINE-READABLE COLLECTION COMMITTEE:

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Judy McDermott (CIP)
Chris Meyer (COP REG)
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Robert Zich (PLAN)

MAY 1987

CONTENTS



For the purposes of this report, machine-readable materials shall be defined as microcomputer software and computer-readable data. Software represents digital program instructions for the operation of microcomputers. Data refers to information stored in computer-readable form. In the absence of other factors, the IBM-PC format is preferred, that being the closest to an industry standard.

# ESTABLISHING A MACHINE-READABLE COLLECTION AND PILOT READING ROOM IN THE LIBRARY OF CONGRESS

## JUSTIFICATION

The development and evolution of computer-readable material chronicles our time in a unique manner. Because there are no national software collections in existence today, this part of our history is gradually becoming inaccessible. The Library of Congress is in a position to assemble and service an invaluable research collection of machine-readable materials.

Public, academic, and special libraries across the country are collecting software and making it available to their patrons. Some libraries circulate software and hardware. The issues associated with software in libraries are being addressed on a localized basis. LC's involvement with this issue will help to coordinate the needs, interests, and services in a beneficial manner.

LC has been investigating what to do about machine-readable materials for some time [see appendix A - Background]. In January 1987, the Cataloging in Publication Division began processing the first of what will eventually be one thousand software titles to be covered in a pilot program. The copyright requirements for machine-readable materials will soon be changed to require the deposit of the actual software for specific formats. These events provide the Library with a ready-made start on the pilot machine-readable collection reading room project, with minimal investment and much room for maneuver.

## RECOMMENDATION FOR ACTION

The Library should establish a pilot machine-readable collections reading room (MRC RR) to provide access to machine-readable materials in its collections or available at the Library and to provide reference and reader services. Since this area is one of rapid change and one for which there are few precedents, the pilot reading room should, without excessive expenditures or resources, meet the basic needs and establish a foundation on which to build in the future. It is proposed that the pilot MRC RR be established by September, 1987 and be evaluated after one year.

After the pilot phase, we will have a better feeling for the needs of the Library's patrons and how to meet those needs. The experiences during the pilot period will help to define the direction that collection development and reader services will take within the constraints of the Library's overall mission, Congressional approval, and limited resources. [see Appendix D -After the Pilot].

For the pilot phase, we will start out with mainly just the machine-readable materials currently in the Library's possession, those received in the CIP pilot, and those received on copyright deposit (the MRC RR will purchase a few classic titles). A minimal number of reference materials will be procured and a modest number of online services will be accessible. A few pieces of equipment will accommodate the reference activities, online searching, and patron use until the demand justifies expansion.

**MRC RR Reference Collection**

**Collection Definition:** The selection policy will define what is to be retained from the existing machine-readable materials and from the deposits. The criteria will allow for the selection of materials which fall within the Library's overall selection criteria and are in specified formats. Of that collection, a subset will be housed in the MRC RR reference collection. The remainder will be in a secured cage on Deck 46 and will be available by call slip.

**Contents:**

A. Mainstream current and landmark historical general applications software packages primarily in IBM-PC format with indexing trails to document the evolution of each package. Applications included are: word processing, file and database managers, spreadsheets, graphics, communications and online searching packages, integrated software, programming languages, statistics packages, and related tutorials. (Limited guidance as to use will be availablefrom reference librarians.)

B. Representative samples of software to be made available to users for research purposes in the following areas: vertical market applications, entertainment, simulations, education (post-secondary), custom applications especially library applications, public domain software, especially utility programs, and software in subject areas within the scope of LC's general collections.

C. Databases to which we can provide remote access. Related online access software and training materials will be included.

D. Books or other materials which include machine-readable information (eg. materials currently housed in Special Formats and the Phono case).

E. Information in computer-readable form (in as many formats as necessary, but as few as possible) including journals, statistics, bibliographic data, conference proceedings, etc.

NOTE: the existence of the MRC RR's reference collection does not preclude having reference materials in machine-readable format at reference stations in other reading rooms, e.g., Books in Print and Ulrich's may be added in CD-ROM format to reference locations in the Main and Social Science reading rooms.

**Formats:** All of the above materials will be acquired in the format most convenient and suitable to the needs of the reading room. These formats will include, but are not limited to: diskette, rom chips, and remote access.

Materials which support the collection, including documentation, pertinent journals, general computer information, third party support books, training materials, and reference materials (directories, reviews, etc.). will be included in the Library's selection policy and housed in the pilot MRC RR.

**Access:** A registration procedure that includes a reference interview will be established to ensure that the users can responsibly operate the equipment and that their intended usage is appropriate to the purpose of the reading room.

**User Services:** The following user services will be provided:

1. Access to and study of software and data in the MRC RR collections. Data will be available without a time limit, except when lines form for use of the equipment or data. In that case, staff will impose a thirty minute time limit. In case of constant lines, staff will implement a system of advance reservation. Use of software will be limited to secondary or research use -- that is, to study the software to compare it to other such software or to analyze it for scientific or historical understanding of the genre to which it belongs. Only exceptionally and with permission would the software be put to primary use -- that is, for example, using a spreadsheet as a spreadsheet for the sake of analyzing data as opposed to analyzing the program itself.

2. Traditional reference service will be provided to help the users to locate and interpret the information they seek.

3. An information and referral file which will include product and publisher/vendor information, support numbers, version status, information about a product's compatibility with hardware and other software products will be created and maintained to be used in answering reference queries.

4. The reference staff will provide limited training for hardware operation and for patron online searching.

5. Mediated searches of general online databases and databanks will be performed upon request for patrons on a cost-recovery basis. [Ready-reference searches will continue to be performed as per existing practice in other reading rooms.] End-user searching will be accommodated on a cost-recovery basis. Patrons will pay at the time of service. Provision should be made for other Library staff to perform searches and have their departments billed.

**Copyright implications:** Copyright restriction notices will be posted in the reading room. Since the collection is intended for research purposes, patrons will not be allowed to carry personal disks in and out of the room. Photocopying of documentation will not be allowed, since this is a major concern of software publishers. Where necessary, the MRC RR will obtain licensing to use the software on more than one machine. This should alleviate most of the concerns of copyright holders.

**Physical considerations:**

1. Storage method - The original binders and documentation for the materials in the reference collection will be shelved in the reading room as will database documentation. Other materials will be secured on Deck 46.

2. Storage conditions - Controlled humidity and temperature and avoidance of magnetic fields are the primary concerns for proper storage. Surge protectors and write protection will protect the materials in the reading room.

3. Updates - Recommending officers will monitor new releases and versions and make sure that they are sent to the MRC RR. Prior versions will be archived when appropriate.

4. Copy protection - The MRC RR will attempt to obtain software that has not been copy-protected, but will set up procedures to prevent alteration or copying by patrons.

5. Backups - The reading room staff will create or obtain a backup for each package that is used. Backups will only be used in the case of the failure of the original, at which time a replacement will be requested from the publisher. The materials on Deck 46 will be backed up when requested by patrons.

6. Hardware and operating system configurations - Additional hardware and operating system configurations, beyond those mentioned below, will be considered as the need arises.

7. External communications - The MRC RR will execute its external communications through a packet switching network. Vendor contracts for online searching will be arranged in conjunction with the FEDLINK program.

8. Furniture - Workstations with terminals and/or computers and printers will allow for individual research.

**Cataloging Considerations:** Since the majority of the materials will come from deposits, they will be acquired and cataloged by Processing Services in accordance with normal routines, which mirror the processing flow for book materials. Descriptive cataloging is to be performed by the Special Materials Cataloging Division, in accordance with a revision of Chapter 9 of AACR2, soon to be published by ALA. Subject cataloging is to be performed by the Subject Cataloging Division, in accordance with ALA recommendations concerning subject access to software titles. A full Dewey Decimal Classification number will be assigned by the Decimal Classification Division. The MRC RR staff will decide if the material is within the scope of the reference collection. If so, they will make a backup and add the title to the reference collection.

**Means of Evaluation:** Patron interviews, surveys, and questionnaires will enable on-going monitoring of user reactions and indicate what needs are not being met and in which direction the service should develop. Statistics will be kept to track what type of use is occurring and which materials are being used.

## RESOURCES REQUIRED FOR THE PILOT READING ROOM

**Staff:** Initially a coordinator, reference librarian, and a technical person can be assigned from within the existing staff of the Library. It is possible that General Reading Rooms staff would be available during the closing of the Main Reading Room (September 1987-September 1988). As the need increases, additional staff can be considered. The following represents an initial staff:

1 Coordinator, who will also provide reference assistance;
1 Reference librarian to perform online searching and provide reference service;
1 Technical support assistant to configure software, maintain equipment, trouble-shoot, and provide software support.

**Space:** Deck 46 would house the collections. The pilot reading room would be located in the small room behind the Microform Reading Room (now occupied by Microform reading room reference librarians) and would be accessible only via the Microform Reading Room. The MRC RR would contain a reference collection, workstations and a reference area. [see Appendix B - Floor Plan.]

**Funds:** Staffing Allotment: No new costs; the staff would be existing GRR staff [about $84,000 imputed cost]

Database Allotment: $2000 (for training, Reading Room staff use, etc.)
Acquisitions Budget: $2,500/yr (for reference materials)
Furniture: $900 (two workstations) [assume reading room furnishings can be obtained from Library's existing furnishings.]
Equipment: $5900
The following represents the equipment necessary to begin service in the Pilot Reading Room:
2 IBM-PCs - one with color graphics, one monochrome
2 Modems
2 Dot matrix high speed printers
1 Surge protection device
2 parallel cables
Maintenance, supplies, and upgrades: $600

**TOTAL ESTIMATED INITIAL INVESTMENT:** (equipment and furniture) $6800
**ESTIMATED YEARLY EXPENSES:** (acquisitions and maintenance) $5100
**GRAND TOTAL FIRST YEAR EXPENSE: $11,900**

## LC UNITS MOST DIRECTLY AFFECTED

Library Environment Resources Office, Copyright Office, Collections Development Office, Special Materials Cataloging Division, Subject Cataloging Division, Decimal Classification Division, Cataloging in Publication Division, General Reading Rooms Division, Rare Book and Special Collections Division, Automated Systems Office, FEDLINK Network Office, and Budget Office.

**IMPLEMENTATION STEPS** [see Appendix C - Timeline.]

Prior to implementation:
a. MARC MRDF format application in use, if possible.
b. Inform the appropriate Congressional oversight committee of plans to establish this trial service.
c. Copyright deposit requirements for machine-readable materials changed to require the submission of the complete product.
d. Selection Policy and procedures established based on anticipated needs and services.
e. Location prepared for the pilot machine-readable collections reading room.
f. Location established for machine-readable collection (Deck 46).

1. Assign a coordinator and a reference librarian with searching skills and microcomputer expertise to staff the pilot reading room. Assign a technical assistant to configure software, set up telecommunication procedures, maintain equipment, and provide technical support.

2. Accumulate the machine-readable materials received as a result of the CIP software project and the copyright deposits amendment which have been determined to meet the collection criteria.

3. Store those materials that do not meet the reference collection criteria in Deck 46.

4. Store those that do meet the reference criteria in the reading room.

5. Relocate and process the machine-readable materials currently residing elsewhere: (see Appendix A, page 4)

6. Relocate microcomputer reference materials, database documentation, and serials to the pilot reading room location.

7. Equip the pilot MRC RR with IBM-PCs, printers, and modems.

8. Acquire additional reference titles as deemed necessary.

9. Create an information and referral file.

10. Arrange for access to online databases via FEDLINK.

11. Decide on and implement a payment method for online services.

12. Survey, gather statistics, and obtain other feedback from users.

13. Evaluate the success of the pilot MRC RR and plan for the final implementation, adjusting for unanticipated uses, additional equipment needs, re-definition of the selection policy, and expansion of services based on use during the pilot phase, but within budget, staff, and space constraints.

## Appendix A

### Background

The following is a summary of previous efforts and studies addressing this subject of a machine-readable collection.

The Ad Hoc Committee on Selection Policy for Machine-Readable Publications

On February 23, 1983, the Ad Hoc Committee on Selection Policy for Machine Readable Publications issued a report containing the following findings.

Several formats for selection were identified: Optical digital disks and videodisks should be selected by content using the same criteria as for printed works. The Copyright Office should seek deposit of all optical disk publications bearing a copyright notice. The Library should store these items centrally and make available in accordance with the outcome of the Optical Disk Pilot Project, obtaining licenses for those it intends to use in public reference activities.

In regard to databases, the Library should attempt to secure, ideally through copyright deposit, access to machine-readable databases of value to its patrons, entering into negotiations as to the form in which the Library might be given access.

For other machine-readable formats deposited with the Copyright Office, the Library should retain samples for archival purposes and for their content. The Science and Technology Division should assume responsibility for selection, custody, public access, and service.

The above items retained in their entirety for the Library's collections should be brought under full bibliographic control. The machine-readable items to which the Library has access should also be brought under bibliographic control.

The Collections Development Office should formulate a new acquisition policy statement on computer and robotic science [a draft was submitted for consideration], the Copyright Examining Division was directed to make a presentation of current machine-readable deposits and trends, and a group was to be formed to consider all aspects of service.

The draft acquisition policy urged that in acquiring materials, no distinction should be made between machine-readable materials and more traditional formats. However, the following factors should be documented: whether both print and machine-readable form are available, why both are wanted, or why one is preferable; conditions that would regulate access (need for royalties, licensing, etc.); fees to be paid to supplier, vendor, or owner of the rights; internal costs for equipment, staff, and maintenance, and custodial and special service considerations. For databases, the Library should seek physical custody or access depending on cost, availability of playback equipment, size, vendors' stipulations, and the Library's requirements. Machine-readable materials may be acquired for archival or later use even when problems of access remain unsolved.

Selection of software should focus on the following areas: access tools; software relating to the physical and social sciences, humanities, and the arts; and representative samples of software in the fields of entertainment and games. Specifically excluded are: those addressed to clinical medicine, technical agriculture, popular and juvenile computer games, educational programs below the college level, and software pertaining to industrial processes control.

Task Force on Computer-Readable Collection Management

On August 26, 1985, the Task Force on Computer-Readable Collection Management issued its recommendations for a machine-readable collection, a pilot reading room, and a virtual reading room -- building on much of the work of the Ad Hoc Committee. Their findings are as follows.

The acquisitions objective is to collect and maintain or provide access to a selective collection of software that best reflects and documents the life, history, and creativity of the American people and that is necessary for the work, information, and research needs of Congress and scholars. It adds that computer aided instruction (CAI) packages and modeling programs should be collected only as is consistent with existing policies. Information packages should be collected more extensively. The collection should exclude all but representative samples of general applications software, e.g., spreadsheets, word processing programs, etc. and educational and arcade games.

Funding should be provided for the acquisition of non-copyrighted databases, such as NTIS. For historical coverage, "snapshots" of selected machine-readable files should be acquired. The Library should acquire machine-readable formats for older printed works when the new format has clear advantages.

The CIP Division (slated to catalog 1,000 software titles over a one year period) should work with publishing and library representatives to design procedures that are mutually agreeable. The Library should use CIP materials which are consistent with the acquisition policy to form the basis of the software collection.

In regard to service, policies should be developed in regard to fees and as to restricting personal software or disks to be used on the Library's machines.

A pilot reading room should be set up as soon as possible with a sample collection. As possible, materials should be loaded into facilities which can be accessed and used from a variety of locations.

Since the subject areas of machine-readable materials had expanded considerably since the Ad Hoc Committee's 1983 report, G.R.R was thought by all to be the appropriate place for the pilot reading room.

The objectives for the pilot reading room are 1) to provide a central research facility where people can identify and readily use machine-readable materials both in collections inside LC and outside LC. 2) to determine if the dissemination of machine-readable works throughout the library in a virtual reading room is feasible and advisable. 3) to refine further requirements for storage, protection, and service of computer-readable materials. 4) to determine usage, staff, and training levels. 5) to determine future costs.

The materials in the reading room should be based on their format, not on their subject. The reading room should be staffed with specialized personnel. Interactive optical disks should be housed in the pilot reading room; non-interactive optical disks should remain in the appropriate custodial division. Reference interviews should be used to screen users.

A centrally coordinated commercial database search service for the public shold be created. The staff from other reading rooms should continue to search the appropriate databases and receive the appropriate documentation. The pilot reading room reference collection will contain manuals, other documentation, and directories. A directory of databases available at LC with the name of the person responsible for supporting the service should be maintained. The pilot reading room will service those databases for which expertise is not available elsewhere in the Library.

The feasibility of decentralized use of textual items will be investigated. The issues of the Library's rights to display and loan the items, the review and allocation of funding for the equipment, its installation, and its maintenance will also be addressed. A circulation control facility will be used.

The Task Force identified desirable equipment, staff, software packages, databases, electronic texts, optical media, and a possible room layout for the pilot reading room.

For the virtual reading room, the objective is to provide a distributed research facility where persons can identify and readily use machine-readable materials both in collections within LC and outside LC. The experience gained in the operation of the pilot reading room will be used to "mainstream" machine-readable publications.

Additional considerations in the Task Force report cover archival copies, SCORPIO/MUMS searching of software, staffing considerations, physical environment, networking textual items (such as journals), handling guidelines, in-house software, and loan policy.

Cataloging in Publication (CIP)

The CIP software program will deal only with software packages produced in multiple copies for commercial distribution and in which a book is not the major component. Submissions will be accompanied by a data sheet, a system requirement form, a printout or replica of the title screen display, the label for the item, and exerpts from the documentation (title page, table of contents, etc.). For the most part, CIP submissions will be educational and home-oriented software.

As of March 1987, the Automated Systems Office estimate for the MRDF format to be ready is fall of 1987. For this reason, CIP will not be actively soliciting submissions to the extent planned. Current submissions will be manually cataloged. Active solicitation will resume in late spring and summer.

Copyright Compliance Guidelines for Software

Unless machine-readable materials are in the public domain, they will be subject to the provision of the copyright law which prohibits unauthorized copying of intellectual properties outside of the limited authorizations of Fair Use doctrine. Fair Use provides for a copy for backup or archival purposes or to permit the use of the material on a particular system, but should not be repeated so as to prolong the normal life of the product. When circulating machine-readable materials, the number of copies in circulation at any time should not exceed the number of purchased copies. Libraries are not responsible for unauthorized use as long as all equipment bares a warning that copying may violate copyright laws and all materials bear a copyright notice. Copying of documentation is governed by photocopying guidelines for any printed matter.

The Library should request a backup copy with its initial order and/or arrange a licensing agreement. In all cases, copyright status should be ascertained and displayed on the product. When possible, products bearing the vendor's label should be made available to the public to limit the appearance that unauthorized copying is taking place. The Library should make a continuing effort to educate the public on the ethics of software copying and work with the publishing and library communities and with the Copyright Office to clarify these issues.

Database Access Committee

The Database Access Committee discontinued its work until the completion of the restoration.

## Existing Collections

The Science and Technology Division has two popular computer journals on floppy disk and one journal which includes a floppy disk. They have at least twelve software products, some of which are incomplete. These include TK Solver!, Investment Tax Analyst, Picture Programming (Apple), I speak PASCAL to my Apple (with disk and teacher's manual), Slide Pro Text Graphics (with disk), ABCs of Programming Your Apple (with disk), Unprintable Physics (Apple), Personal Investment Analysis (Commodore 64), PC Plus: Learn the IBM PC Fundamentals, Software Primer for dBase II (no disk), Apple Stat (duplicate of a cataloged book), and Regression Correlation Analysis.

The Rare Books and Special Collections Division has forty to fifty items which are not programs; they are primarily educational books, learning kits and tutorials which include a disk.

The Copyright Office deposits have been primarily in source code (segments of the program printed on paper), copies of the "title page" screen, and some manuals. These are stored intermixed with other deposits. There are some books with disks and some applications programs (disks or cassettes and manuals --primarily for Apple, Atari, and Commodore). There are very few that are data in a machine-readable format.

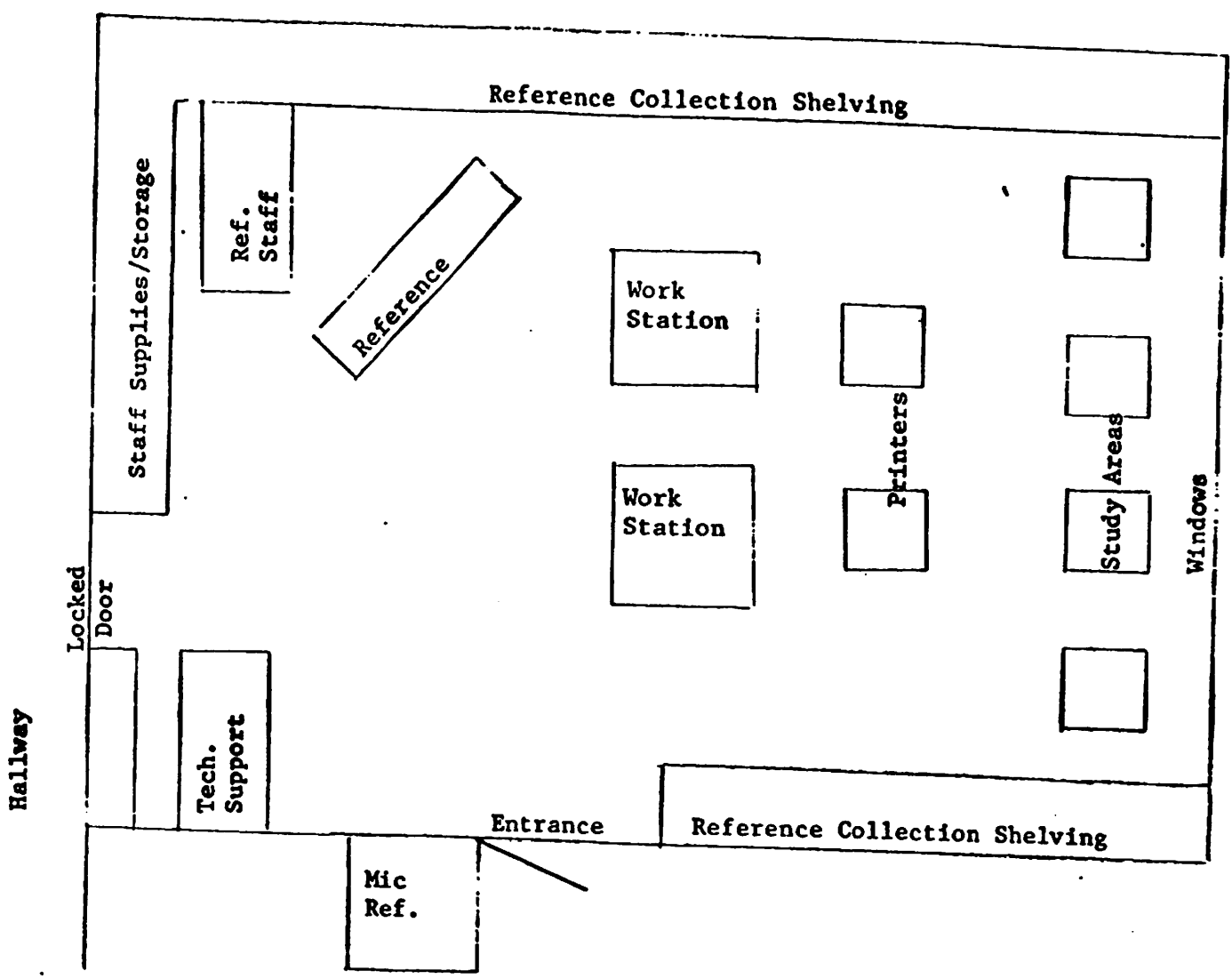
The Cataloging in Publication Division has random items which were submitted to CIP as if they were books. The titles are in IBM format unless otherwise noted: Molecular Graphics (Apple and IBM), Business Writing, Landstar (for oil and gas leases), Chemcalc, Sales Marketing, Spring Design, Statpal (Apple and IBM), Nursing Examinations, Secondary Math (Apple), Microsoft Excel (spreadsheet, graphics, and database), Graph Pad, Typing Tutor, Quantitative Systems in Business, and Heat Exchanger Design.

The Music Division has two or three titles it received by accident on copyright deposit (one is an Apple program on music theory instruction), one or two items with the phonocase designation (one is on how to program the IBM-PC), and one program, with a Commodore cassette, on composing music.

The Microform Reading Room, General Reading Rooms Division, has about twelve software titles.

Appendix B

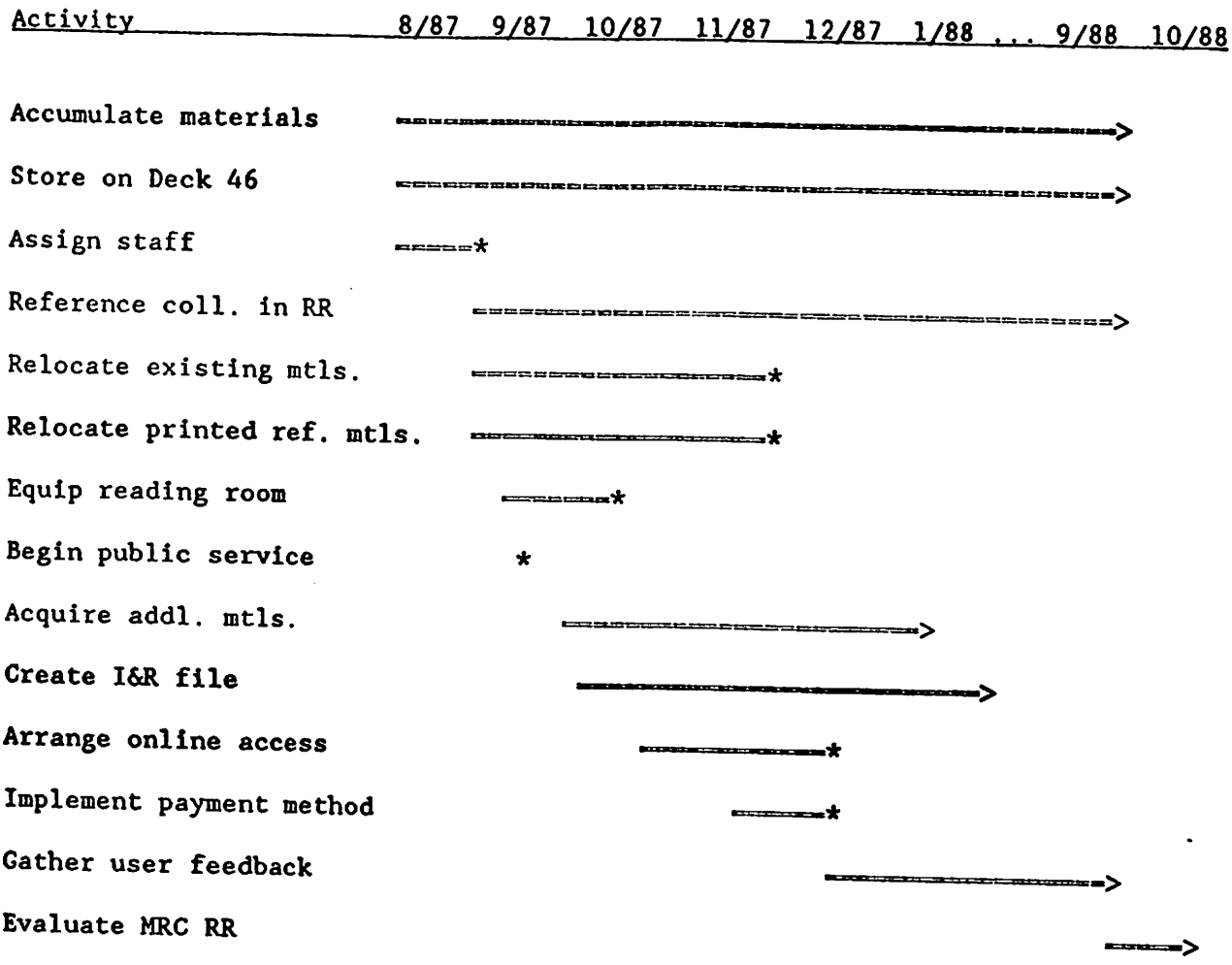
## Proposed Floor Plan




MICROFORM READING ROOM

## Appendix C

## Timeline



## Appendix D

### After the Pilot

After the pilot is over and it has been evaluated, there are many possibilities for the future of the Machine-Readable Collection Reading Room. Some options are listed here:

Expand the types of formats desired and equipment provided to include video-disk, digital optical disk, compact disk, cd-rom, magnetic tape, and other computer formats.

Include terminals for accessing LOCIS and Optical Disk files.

Include appropriate audiovisual materials and equipment.

Load software into multi-user central storage. (Either storage on a hard disk unit serviced by a local area network or storage on a mainframe computer serviced by terminals or communicating microcomputers.)

Maintain an electronic bulletin board for patron feedback.

Allow offsite access to information.

Pursue preservation testing of computer media.

Add other peripherals, such as a plotter, a mouse, etc.

Provide additional telecommunications links (eg. other libraries)

Acquire databases rather than providing remote access.

Provide a "shareware" service, whereby non-copyrighted software and software applications can be distributed.

Expand training.

Make the transition to a "virtual" reading room where all information and services are maintained centrally and accessed from terminals throughout the Library as well as from offsite locations.

## Appendix B: Memorandum Establishing the Pilot MRCRR

UNITED STATES GOVERNMENT

# *Memorandum*



TO : Those listed below

DATE: October 28, 1987

FROM : William J. Welsh
The Deputy Librarian of Congress

SUBJECT: Machine-Readable Collection and Reading Room

This is to inform you that we are currently planning for the development of a Machine-Readable Collection and for the implementation of a pilot Machine-Readable Collection Reading Room (MRC RR). The Library is committed to providing access to information regardless of format. Microcomputer software and data on diskettes and CD-ROMs are formats for which we have not provided. The assembling of the collection will begin shortly. The pilot reading room is scheduled to open in early February in LJ-140G. The pilot reading room will be under the aegis of the General Reading Rooms Division and John Kimball, Head, Automation and Reference Collections, will be administering the pilot.

Since the nature of this project will affect every department in the Library, I am asking each of you to appoint a liaison to be the contact person with the MRC RR staff. These liaisons would open further channels of communications within the departments as needed. Please submit the name of the liaison and any questions or concerns you may have to John Kimball, Head, Automation and Reference Collections, GRR, LJ-122E (x7-6760).

I know you will support this important new addition to the Library's collections and services.

cc: Donald C. Curran
Glen A. Zimmerman
Ruth Ann Stewart
Joseph E. Ross
Ralph Oman
Carleton W. Kenyon
Henriette D. Avram
✓ John C. Broderick

# Appendix C: Copyright Regulation for Mandatory Deposit of Computer Files



for which premiums are being paid. Under § 2610.23(b)(1) of the premium regulation, this value is determined by reference to 30-year Treasury constant maturities as reported in Federal Reserve Statistical Releases G.13 and H.15. The PBGC publishes these rates in Appendix B to the regulation.

For the reasons set forth in the preamble to the final payment of premiums regulation (54 FR 28944 (July 10, 1989)), the PBGC is publishing these monthly interest rates in Appendix B on a quarterly basis to coincide with the publication of the late payment interest rate set forth in Appendix A. (PBGC will henceforth publish the Appendix A rates every quarter, regardless of whether the rate has changed.) Unlike the Appendix A rate, which is determined prospectively, the Appendix B rate is not known until a short time after the first of the month for which it applies. Accordingly, the PBGC is hereby amending Appendix B to part 2610 to add the vested benefits valuation rates for plan years beginning in August, September and October of 1989.

The appendices to 29 CFR parts 2610 and 2622 do not prescribe the interest rates under these regulations. Under both regulations, the Appendix A rates are the rates determined under section 6601(a) of the Code. The interest rates in Appendix B to Part 2610 are prescribed by ERISA section 4006(a)(3)(E)(iii)(II) and § 2610.23(b)(1) of the regulation. These appendices merely collect and republish the interest rates in a convenient place. Thus, the interest rates in the appendices are informational only. Accordingly, the PBGC finds that notice of and public comment on these amendments would be unnecessary and contrary to the public interest. For the above reasons, the PBGC also believes that good cause exists for making these amendments effective immediately.

The PBGC has determined that none of these amendments is a "major rule" within the meaning of Executive Order 12291, because they will not have an annual effect on the economy of $100 million or more; nor create a major increase in costs or prices for consumers, individual industries, or geographic regions, nor have significant adverse effects on competition, employment, investment, innovation or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Because no general notice of proposed rulemaking is required for these amendments, the Regulatory Flexibility Act of 1980 does not apply. See 5 U.S.C. 601(2).

## List of Subjects

*29 CFR Part 2610*

Employee benefit plans, Penalties, Pension insurance, Pensions, Reporting and recordkeeping requirements.

*29 CFR Part 2622*

Business and industry, Employee benefit plans, Pension insurance, Pensions, Reporting and recordkeeping requirements, Small businesses.

In consideration of the foregoing, Appendix A and Appendix B to part 2610 and Appendix A to part 2622 of chapter XXVI of Title 29, Code of Federal Regulations, are hereby amended as follows:

## PART 2610—PAYMENT OF PREMIUMS

1. The authority citation for part 2610 is continued to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1306, 1307, as amended by sec. 9331, Pub. L. 100-203, 101 Stat. 1330.

2. Appendix A to part 2610 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

### Appendix A—Late Payment Interest Rates

The following table lists the late payment interest rates under § 2610.7(a) for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

3. Appendix B to part 2610 is amended by adding to the table of interest rates therein new entries for premium payment years beginning in August–October 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

### Appendix B—Interest Rate for Valuing Vested Benefits

The following table lists the required interest rates to be used in valuing a plan's vested benefits under § 2610.23(b) and in calculating a plan's adjusted vested benefits under § 2610.23(c)(1):

| For premium payment years beginning in— | Required interest rate [1] |
|---|---|
| • | • |
| August | 6.48 |
| September | 6.50 |
| October | 6.52 |

[1] The required interest rate listed above is equal to 80% of the annual yield for 30-year Treasury constant maturities, as reported in Federal Reserve Statistical Release G.13 and H.15 for the calendar month preceding the calendar month in which the premium payment year begins.

## PART 2622—EMPLOYER LIABILITY FOR WITHDRAWALS FROM AND TERMINATIONS OF SINGLE-EMPLOYER PLANS

4. The authority citation for part 2622 continues to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1382–1384, 1367–68, as amended by secs. 9312, 9313, Pub. L. 100-203, 101 Stat. 1330.

5. Appendix A to part 2622 is amended by revising the April 1, 1989, entry and adding a new entry for the quarter beginning October 1, 1989 to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

### Appendix A—Late Payment and Overpayment Interest Rates

The following table lists the late payment and overpayment interest rates under § 2622.7 for the specified time periods:

| From | Through | Interest rate (percent) |
|---|---|---|
| • | • | • |
| April 1, 1989 | Sept. 30, 1989 | 12 |
| Oct. 1, 1989 | Dec. 31, 1989 | 11 |

Issued in Washington, DC, the 6th day of October 1989.

James B. Lockhart III,

*Executive Director Pension Benefit Guaranty Corporation.*

[FR Doc. 89-24234 Filed 10-13-89; 8:45 am]

BILLING CODE 7708-01-M

## COPYRIGHT OFFICE

## Library of Congress

## 37 CFR Part 202

[Docket No. RM 88-6A]

## Registration of Claims to Copyright; Mandatory Deposit of Machine-Readable Copies

**AGENCY:** Library of Congress, Copyright Office.

**ACTION:** Final Regulations.

**SUMMARY:** The Copyright Office of the Library of Congress is adopting final

regulations for deposit of certain machine-readable copies. The amendments revoke the exemption from mandatory deposit, pursuant to section 407 of the Copyright Act of 1976, of machine-readable copies and require deposit of data and software published in IBM or Macintosh formats for use in the collections of the Library.

EFFECTIVE DATE: October 16, 1989.

FOR FURTHER INFORMATION CONTACT: Dorothy Schrader, General Counsel, U.S. Copyright Office, Library of Congress, Washington, DC 20559 (202) 707–8380.

SUPPLEMENTARY INFORMATION: On August 9, 1988 (53 FR 29923), the Copyright Office published a notice of proposed rulemaking regarding the adoption of new regulations for deposit of certain machine-readable copies. The Office proposed the repeal of the exemption for works published solely in machine-readable formats from mandatory deposit. Copies secured through mandatory deposit under section 407 of the Copyright Act would be added to the collections of the Machine-Readable Collections Reading Room.

The Copyright Office received seven comments on the proposed regulation. While some of the comments praised the broad goals of the Machine-Readable Collections Reading Room, all expressed reservations with the proposed regulation as published in the Federal Register.

The Copyright Office has studied carefully the comments that were submitted. For reasons detailed in this announcement, the Copyright Office has adopted as final, the proposed regulation without change. We are republishing as Appendix B the entire Best Edition Statement, including the additonal material regarding deposit of machine-readable copies.

## 1. Background

Under section 407 of the Copyright Act of 1976, title 17 of the United States Code, as originally enacted, the owner of copyright, or of the exclusive right of publication, in a work published with notice of copyright in the United States was required to deposit two copies (or, in the case of sound recordings, two phonorecords) of the work in the Copyright Office for the use or disposition of the Library of Congress. Effective March 1, 1989, the requirement that a work subject to mandatory deposit contain a copyright notice was eliminated. This change was made in Public Law 100–568, the Berne Convention Implementation Act of 1988.

The deposit is to be made within three months after publication in the United States. Failure to make the required deposit does not affect copyright in the work, but may subject the copyright owner to fines and other monetary liability if the failure is continued after a demand for deposit is made by the Register of Copyrights. As a qualification of these general provisions, section 407 also provides that the Register of Copyrights "may by regulation exempt any categories of material from the deposit requirements of this section, or require deposit of only one copy or phonorecord with respect to any categories."

Relying on this authorization, the Copyright Office, with the approval of the Librarian of Congress, established regulations governing mandatory deposit at 37 CFR Chap. II, §§ 202.19, 202.20, and 202.21. Section 202.19 establishes the standards governing mandatory deposit of published copies and phonorecords for the Library of Congress. Section 202.20 concerns the required deposit when application is made for registration of a copyright claim with the Copyright Office under section 408 of title 17, U.S.C. § 202.21 allows deposit of identifying material in lieu of copies or phonorecords in certain cases. In addition, the Library of Congress published its Best Edition Statement specifying the required deposit in instances where two or more different editions were published.

When these regulations were first promulgated in 1978, machine-readable copies were not widely marketed to the public at large. For this reason, the Library of Congress decided to exempt all works published solely in machine-readable formats from mandatory deposit. For purposes of copyright registration deposit, for such works generally can be satisfied by submitting identifying material comprising the equivalent of the first and last 25 pages of the source code in the case of a computer program, or the first 25 and last 25 pages of a database.

Since the time these policies were adopted, great changes have occurred. As a result of the popularity of the personal computer, computer software and databases are in wide public demand. In response to these public needs, the Library has established a Machine-Readable Collections Reading Room. The Reading Room provides public access to two categories of important machine-readable copies.

The first category is standard data in microcomputer machine-readable form that traditionally has only been available in print form (encyclopedias, census figures, standard reference publications, etc.). With the development of computer technology, many standard reference materials have become available in whole or in part in machine-readable form. The Library desires to provide patrons access to these machine-readable reference sources.

The second category is computer software in microcomputer machine-readable form. The Library makes software available in the Reading Room for purposes of review and study. The software is not acquired to perform the specific tasks for which the software was created. For this reason, utilizing the software collections of the Reading Room will not serve as a substitute for the purchase of a software package. Preview and study of the software in the Reading Room, however, may influence a researcher's selection of a package for purchase.

The Library is interested additionally in developing its software collections for archival purposes. As a general rule, a software package has a relatively short life. Therefore, acquisition and retention of software in a centralized location is vital for the use of future scholars who wish to study the computer revolution from an historical perspective.

Under the proposed regulation published in the Federal Register on August 9, 1988, § 202.19 governing mandatory deposit would be changed in two places. Section 202.19(c)(5) would limit the exemption for machine-readable copies to automated databases available only online. Section 202.19(d) would be modified by adding a new subparagraph (vii) allowing for deposit of only one machine-readable copy, except where a copy-guard system is used. In the latter case, two copies would be required.

In addition to changes in the deposit requirements, the Copyright Office proposed a new section in the Best Edition Statement covering machine-readable copies. IBM and Macintosh formats would be designated as the formats desired by the Library of Congress. In implementing mandatory deposit for machine-readable copies, the Register would demand only copies of works appearing in the formats designated in the Best Edition Statement.

## 2. Summary of Public Comments

Seven comments were received on the proposed regulation. Four comments were submitted from trade associations, two comments were received from major computer manufacturers, and one comment was received from a law firm.[1]

[1] The law firm held the mistaken belief that the proposed regulation would repeal present

Continued

The Information Industry Association (IIA) criticized the proposed regulation as overbroad, and endorsed, in its place, reliance on a voluntary system. IIA urged that the regulations provide restrictions on the uses patrons could make of machine-readable copies, and asked whether applicable licensing restrictions would be respected. Questions were raised concerning the scope of the exemption for databases available "only online." Finally, IIA asserted that differing deposit requirements for mandatory deposit and copyright registration posed a problem for the industry.

The American Association of Publishers (AAP) criticized the proposed regulation for failing to restrict copying, lending, or electronic dissemination. The AAP suggested that the extent licensing terms commonly applicable to machine-readable works would be respected was also unclear. We were also asked to clarify the applicability of the "online" exemption to works "principally" distributed online. Finally, AAP suggested recasting of the Best Edition Statement.

The Computer Software and Services Industry Association (ADAPSO) doubted that the Library's proposal to prohibit patrons from bringing in diskettes for purposes of downloading would be workable. ADAPSO also questioned whether the support services made available by publishers to licensees would be provided in the Reading Room. ADAPSO contended that the proposed regulation should be tabled in favor of a voluntary program.

The Computer and Business Equipment Manufacturers Association (CBEMA) urged that the proposed regulation be recast to exempt all machine-readable works except IBM and Macintosh formatted material. CBEMA further believed the criteria in the Best Edition Statement should be clarified. Finally, CBEMA suggested a sunset provision in order to permit a Library-industry review of developments concerning the Reading Room.

A major manufacturer of personal computers expressed support for the broad goals of the Reading Room. It urged, however, that the limitations to IBM and Macintosh formats be placed in the regulations. It additionally believed that the criteria specified in the Best Edition Statement were misleading.

Another large manufacturer of computer equipment urged that a voluntary system be established instead of implementing mandatory deposit. It urged the following steps be taken: (1) The regulations provide an exemption for works requiring the utilization of a password; (2) stringent security measures be adopted; (3) the regulation be narrowed to exclude material which can not be used by the Library; and (4) the regulations be simplified as regarding revisions, and harmonized with deposit for registration purposes.

3. Final Regulation on Mandatory Deposit of Machine Readable Copies

a. *Basic decision.* For the first eleven years of the current Copyright Act, the Library of Congress has not exercised the authority to compel deposit of works published only in machine-readable formats.

In order to advance the services of the Machine-Readable Collections Reading Room, however, the Library has determined that it is necessary to implement mandatory deposit at this time. While the commentators have uniformly expressed support for a voluntary system, the Library has attempted through meetings and letters to create a voluntary system and these attempts have not succeeded.

Before publication of the proposed regulation, the Library sponsored a meeting with industry leaders to discuss the activities of the Reading Room. At that meeting industry spokesmen endorsed establishment of a voluntary system. Unfortunately, follow-up letters sent by the Library produced no donations.

Mandatory deposit serves as an important source of acquisition for the Library of Congress. In order to provide effective public service, the Machine-Readable Collection Reading Room must have available copies of significant works. Exercise of the mandatory deposit authority is a logical and reasonable means for securing these materials. In passing the Copyright Act of 1976, Congress clearly intended the Library to exercise its mandatory deposit authority in a reasonable way to enhance the collections of the Library for the good of the public.

Since 1870, copies secured through copyright deposit have augmented the collections of the Library of Congress. While under the present copyright law mandatory deposit is not a condition of copyright protection, compliance with demands for mandatory deposit remains an obligation of those who benefit from the copyright system.

Commentators expressed criticisms that the proposed regulations were "overbroad" or "beyond what the Library could use." Commentators also expressed support for greater restrictions on the materials that could be demanded by the Library.

The Copyright Office issues demands only for works desired to be added to the collections of the Library. Demands are not issued for works which are of no use to the Library. As a result, the universe of published works subject to mandatory deposit has always been far greater than the works actually demanded. These policies will be applied to machine-readable copies.

Determination of materials appropriate for acquisition has always been the sole responsibility of the Library. In the fast changing environment of works available in machine-readable formats, narrow-based policies would quickly become obsolete. The Library needs the flexibility to adjust the kinds of formats subject to mandatory deposit in response to changing acquisitions needs. For these reasons the Copyright Office declines to exempt broad categories of machine-readable works from mandatory deposit. Nevertheless, as discussed below, the Library and the Copyright Office reiterate that for the forseeable future, only IBM and Macintosh formats will be demanded.

By this basic decision to remove the present exemption for works in machine-readable formats, the public receives notice that these formats—except for on-line database not available in disk or other hard-copy formats—are potentially subject to mandatory deposit.

b. *Restriction to IBM and Macintosh Formats.* The major restriction in the demand policies of the Library with respect to deposit of machine-readable copies is the limitation to IBM and Macintosh formats. This limitation is not expressed in the regulation, however, but rather in the format designations of the Best Edition Statement.

At present, hardware available in the Reading Room limits access to IBM and Macintosh formats. For this reason alone the Library will not proceed with demands for material which can not be utilized by the Reading Room. The Library contemplates securing additional hardware to expand the formats usable by the collections. When this occurs, the Library will amend the Best Edition Statement to expand the designated formats, and the Copyright Office will publish notice of the change in the Federal Register. This policy is far more favorable to the depositors than an unqualified regulation.

Commentators expressed support for designating formats in the regulation, but this policy would unduly hamper the Library's ability to acquire copies in the

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registration practices with respect to computer programs. This is not the case.

fast-changing environment of machine-readable works. We decline to establish narrow-based regulations which will quickly become obsolete as a result of changes in the computer industry. The alternative would be to remove the present exemption and specify a general deposit standard, such as "disks" as the preferred medium, followed by tape formats, etc. The Library elects, instead, to limit its demands to the narrow formats described in the Best Edition Statement.

c. *Restrictions on Uses by Researchers.* The Machine-Readable Collections Reading Room has been established by the Library: (1) To provide access for research purposes to data and program software in microcomputer machine-readable form; and (2) to build and maintain a national archive of data and program software in microcomputer machine-readable form.

In order to utilize the collections of the Machine-Readable Collections Reading Room, all potential researchers must register and be interviewed. All machine-readable materials are stored in a secured area, and only staff members handle disks.

In order to protect materials in the collections from copying, the Library does not permit researchers to insert their own disks into the disk drives of the computer. Researchers' use of the machines is closely monitored by staff to ensure that downloading does not occur. The Library has on order special disks that can lock disk drive slots. The securing of these special disks will simplify the monitoring task. Additionally, the Library does not permit the photocopying of computer manuals that accompany deposited copies.

The Machine-Readable Collections Reading Room does not lend machine-readable works, nor participate in interlibrary loans of such material. There is no capability for researchers to transmit materials electronically outside of the Reading Room. All applicable licenses are available for review to inform researchers of user restrictions.

Several commentators urged that restrictions on copying be placed in Copyright Office regulations. Due to the ease of copying, machine-readable works are often the subject of abusive reproduction practices. For this reason, the Library has adopted the aforementioned security measures to ensure that such abuses do not occur within the Library of Congress.

The Library concedes that no system is foolproof. It is important to remember, however, that most machine readable works are sold without any security against copying other than legal prohibitions. Of machine-readable copies distributed by copyright owners, the copies maintained within the collections of the Library of Congress will be among the most secure. The Library is confident that the security measures undertaken in the Reading Room will prevent the collections from becoming a source of access for illegal reproduction activities.

d. *The "Only Online" Exemption.* Several commentators questioned the scope of the "only online" exemption. Specifically they questioned the status of "hybrid" databases where the database is made available on CD-ROM with software included that provides access to the more up-to-date online version of the database. Additionally, we were asked to clarify whether databases distributed to a small number of vendors for purposes of offering online service would be entitled to claim the exemption.

The Library intends to secure through mandatory deposit machine-readable works which are publicly offered for sale or lease. In the case of "hybrid" databases, the Library will seek deposit of the CD-ROM. Clearly, this is a work which is not "only online." The Library will not demand deposit of the updates available online. However, once the updates are incorporated into a revised CD-ROM, the Library will seek deposit of the revised CD-ROM.

As to databases distributed to a small number of vendors for purposes of offering online service, several considerations are raised. The Library does not anticipate pressing demands where distribution of copies is genuinely restricted to special clients. However, the leasing of copies does constitute publication within the meaning of the copyright law, and works with a high price will naturally have relatively few sales. Decisions in these instances will be made on a case-by-case basis.

e. *Machine-Readable Copies Requiring Special Authorization.* In the preamble to the proposed regulation, we stated that "the Library does not intend to demand software that requires the utilization of a password or other special authorization." The comment letters revealed that this statement was unclear.

In utilizing the mandatory deposit procedures, the Library intends to acquire copies of material generally offered for sale or lease to the public. Copies that are genuinely restricted to special clients will not be sought. Factors revealing whether a distribution is genuinely restricted are face-to-face dealings and contractual provisions specifically tailored to the requirements of both parties. In instances of restricted distributions, the utilization of secret passwords might be one means for providing security for the software.

The existence or nonexistence of passwords will not be a conclusive factor in determining whether a distribution is genuinely restricted. Many mass marketed machine-readable works contain passwords. These passwords are often disclosed in the written documentation accompanying the work. The Library will determine whether a distribution is genuinely restricted on a case-by-case basis.

f. *Harmonization of the Deposit Requirements.* Under the mandatory deposit procedures adopted by the Library, deposit of machine-readable works for registration purposes differs from the deposit required for mandatory deposit. Some of the commentators urged that the Examining Division of the Copyright Office accept machine-readable copies.

The variation stems from the disparate purposes of deposit for registration and for enrichment of the Library's collections. The Examining Division is required to examine for copyrightable authorship. Machine-readable copies are generally unsuitable for this task. The computer code may not be viewable on a computer screen or printed out without utilization of expensive, and often different, hardware. The Examining Division requires human-readable deposits for examination, generally portions of source code. The Machine-Readable Collections Reading Room, on the other hand, can only utilize works in those machine-readable formats for which it has acquired hardware.

The Library has no interest in accessioning many of the computer programs in which claims to copyright have been registered in the Copyright Office. Clearly, unpublished computer programs and those of formats not designated in the Best Edition Statement could not be demanded. Additionally, certain restricted computer programs and software would not be desired by the Reading Room, and the Library will demand deposit of only those selected formats that are compatible with the limited hardware in the Reading Room. As a result, many copyright owners of computer software will never be asked to deposit machine-readable copies.

For those relatively few works that are demanded, the variation in deposit requirements is slight. It is likely, moreover, that any harmonization of the mandatory deposit and registration deposit requirements would result in deposit of both machine-readable and

human-readable copies for registration purposes.

Regulatory Flexibility Act

With respect to the Regulatory Flexibility Act, the Copyright Office takes the position that this Act does not apply to Copyright Office rulemaking. The Copyright Office is a department of the Library of Congress, and is a part of the legislative branch. Neither the Library of Congress nor the Copyright Office is an "agency" within the meaning of the Administrative Procedure Act of June 11, 1946, as amended (Title 5, chapter 5 of the U.S. Code, subchapter II and chapter 7). The Regulatory Flexibility Act consequently does not apply to the Copyright Office since that Act affects only those entities of the Federal Government that are agencies as defined in the Administrative Procedure Act.[a]

List of Subjects in 37 CFR Part 202

Copyright, Computer programs, Mandatory deposit under copyright.

Final Regulations

In consideration of the foregoing, Part 202 of 37 CFR, Chapter II, is amended in the manner set forth below.

## PART 202—REGISTRATION OF CLAIMS TO COPYRIGHT

1. The authority citation for part 202 continues to read as follows:

Authority: Copyright Act, Pub. L. 94-553, 90 Stat. 2541 (17 U.S.C. 702).

2. Section 202.19 is amended by revising paragraph (c)(5) and adding a new paragraph (d)(2)(vii) to read as follows:

§ 202.19 Deposit of published copies or phonorecords for the Library of Congress.

* * * * *

(c) * * *

(5) Automated databases available only online in the United States but not including automated databases distributed only in the form of machine-readable copies (such as magnetic tape or disks, punch cards, or the like) from which the work cannot ordinarily be visually perceived except with the aid of a machine or device, and computerized information works in the nature of statistical compendia, serials, and reference works. Also works published in a form requiring the use of a machine or device for purposes of optical enlargement (such as film, filmstrips, slide films and works published in any variety or microform), and works published in visually perceptible form but used in connection with optical scanning devices, are not within this category and are subject to the applicable deposit requirements.

* * * * *

(d) * * *

(2) * * *

(vii) In the case of published computer programs and published computerized information works, such as statistical compendia, serials, and reference works that are not copy-protected, the deposit of one complete copy of the best edition as specified in the current Library of Congress Best Edition Statement will suffice in lieu of the two copies required by paragraph (d)(1) of this section. If the works are copy-protected, two copies of the best edition are required.

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3. By adding Appendix B to part 202 as follows:

Appendix B to Part 202—"Best Edition" of Published Copyrighted Works for the Collections of the Library of Congress

The copyright law (title 17, United States Code) requires that copies or phonorecords deposited in the Copyright Office be of the "best edition" of the work. The law states that "The 'best edition' of a work is the edition, published in the United States at any time before the date of deposit, that the Library of Congress determines to be most suitable for its purposes." (For works first published only in a country other than the United States, the law requires the deposit of the best edition as first published.)

When two or more editions of the same version of a work have been published, the one of the highest quality is generally considered to be the best edition. In judging quality, the Library of Congress will adhere to the criteria set forth below in all but exceptional circumstances.

Where differences between editions represent variations in copyrightable content, each edition is a separate version and "best edition" standards based on such differences do not apply. Each such version is a separate work for the purpose of the copyright law.

The criteria to be applied in determining the best edition of each of several types of material are listed below in descending order of importance. In deciding between two editions, a criterion-by-criterion comparison should be made. The edition which first fails to satisfy a criterion is to be considered of inferior quality and will not be an acceptable deposit. Example: If a comparison is made between two hardbound editions of a book, one a trade edition printed on acid-free paper, and the other a specially bound edition printed on average paper, the former will be the best edition because the type of paper is a more important criterion than the binding.

Under regulations of the Copyright Office, potential depositors may request authorization to deposit copies or phonorecords of other than the best edition of a specific work (e.g., a microform rather than a printed edition of a serial), by requesting "special relief" from the deposit requirements. All requests for special relief should be in writing and should state the reason(s) why the applicant cannot send the required deposit and what the applicant wishes to submit instead of the required deposit.

*I. Printed Textual Matter*

A. Paper, Binding, and Packaging:

1. Archival-quality rather than less-permanent paper.

2. Hard cover rather than soft cover.

3. Library binding rather than commercial binding.

4. Trade edition rather than book club edition.

5. Sewn rather than glue-only binding.

6. Sewn or glued rather than stapled or spiral-bound.

7. Stapled rather than spiral-bound or plastic-bound.

8. Bound rather than looseleaf, except when future looseleaf insertions are to be issued. In the case of looseleaf materials, this includes the submission of all binders and indexes when they are part of the unit as published and offered for sale or distribution. Additionally, the regular and timely receipt of all appropriate looseleaf updates, supplements, and releases including supplemental binders issued to handle these expanded versions, is part of the requirement to properly maintain these publications.

9. Slip-cased rather than nonslip-cased.

10. With protective folders rather than without (for broadsides).

11. Rolled rather than folded (for broadsides).

12. With protective coatings rather than without (except broadsides, which should not be coated).

B. Rarity:

1. Special limited edition having the greatest number of special features.

2. Other limited edition rather than trade edition.

3. Special binding rather than trade binding.

C. Illustrations:

1. Illustrated rather than unillustrated.

2. Illustrations in color rather than black and white.

D. Special Features:

1. With thumb notches or index tabs rather than without.

2. With aids to use such as overlays and magnifiers rather than without.

E. Size:

1. Larger rather than smaller sizes. (Except that large-type editions for the partially-sighted are not required in place of editions employing type of more conventional size.)

[a] The Copyright Office was not subject to the Administrative Procedure Act before 1978, and it is now subject to it only in areas specified by section 701(d) of the Copyright Act (i.e. "all actions taken by the Register of Copyrights under this title (17)," except with respect to the making of copies of copyright deposits). (17 U.S.C. 706(b)). The Copyright Act does not make the Office an "agency" as defined in the Administrative Procedure Act. For example, personnel actions taken by the Office are not subject to APA-FOIA requirements

*II. Photographs*

A. Size and finish, in descending order of preference:
1. The most widely distributed edition.
2. 8 x 10-inch glossy print.
3. Other size or finish.
B. Unmounted rather than mounted.
C. Archival-quality rather than less-permanent paper stock or printing process.

*III. Motion Pictures*

A. Film rather than another medium. Film editions are listed below in descending order of preference.
1. Preprint material, by special arrangement.
2. Film gauge in which most widely distributed.
3. 35 mm rather than 16 mm.
4. 16 mm rather than 8 mm.
5. Special formats (e.g., 65 mm) only in exceptional cases.
6. Open reel rather than cartridge or cassette.
B. Videotape rather than videodisc. Videotape editions are listed below in descending order of preference.
1. Tape gauge in which most widely distributed.
2. Two-inch tape.
3. One-inch tape.
4. Three-quarter-inch tape cassette.
5. One-half-inch tape cassette.

*IV. Other Graphic Matter*

A. Paper and Printing:
1. Archival quality rather than less-permanent paper.
2. Color rather than black and white.
B. Size and Content:
1. Larger rather than smaller size.
2. In the case of cartographic works, editions with the greatest amount of information rather than those with less detail.
C. Rarity:
1. The most widely distributed edition rather than one of limited distribution.
2. In the case of a work published only in a limited, numbered edition, one copy outside the numbered series but otherwise identical.
3. A photographic reproduction of the original, by special arrangement only.
D. Text and Other Materials:
1. Works with annotations, accompanying tabular or textual matter, or other interpretative aids rather than those without them.
E. Binding and Packaging:
1. Bound rather than unbound.
2. If editions have different binding, apply the criteria in I.A.2–I.A.7, above.
3. Rolled rather than folded.
4. With protective coatings rather than without.

*V. Phonorecords*

A. Compact digital disc rather than a vinyl disc.
B. Vinyl disc rather than tape.
C. With special enclosures rather than without.
D. Open-reel rather than cartridge.
E. Cartridge rather than cassette.
F. Quadraphonic rather than stereophonic.
G. True stereophonic rather than monaural.
H. Monaural rather than electronically rechanneled stereo.

*VI. Musical Compositions*

A. Fullness of Score:
1. *Vocal music:*
a. With orchestral accompaniment—
I. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
II. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
b. Unaccompanied: Open score (each part on separate staff) rather than closed score (all parts condensed to two staves).
2. *Instrumental music:*
a. Full score and parts, if any, rather than conductor's score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to full score only.)
b. Conductor's score and parts, if any, rather than condensed score and parts, if any. (In cases of compositions published only by rental, lease, or lending, this requirement is reduced to conductor's score only.)
B. Printing and Paper:
1. Archival-quality rather than less-permanent paper.
C. Binding and Packaging:
1. Special limited editions rather than trade editions.
2. Bound rather than unbound.
3. If editions have different binding, apply the criteria in I.A.2–I.A.12, above.
4. With protective folders rather than without.

*VII. Microforms*

A. Related Materials:
1. With indexes, study guides, or other printed matter rather than without.
B. Permanence and Appearance:
1. Silver halide rather than any other emulsion.
2. Positive rather than negative.
3. Color rather than black and white.
C. Format (newspapers and newspaper-formatted serials):
1. Reel microfilm rather than any other microform.
D. Format (all other materials):
1. Microfiche rather than reel microfilm.
2. Reel microfilm rather than microform cassetes.
3. Microfilm cassettes rather than micro-opaque prints.
E. Size:
1. 35 mm rather than 16 mm.

*VIII. Machine-Readable Copies*

A. Computer Programs
1. With documents and other accompanying material rather than without.
2. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
3. *Format:*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) 5¼" Diskette(s).
(ii) 3½" Diskette(s).
(iii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
b. Apple Macintosh:
(i) 3½" Diskette(s).
(ii) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
B. Computerized Information Works, Including Statistical Compendia, Serials, or Reference Works:
1. With documentation and other accompanying material rather than without.
2. With best edition of accompanying program rather than without.
3. Not copy-protected rather than copy-protected (if copy-protected then with a backup copy of the disk(s)).
4. *Format*
a. PC-DOS or MS-DOS (or other IBM compatible formats, such as XENIX):
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 5¼" Diskette(s).
(iii) 3½" Diskette(s).
b. Apple Macintosh:
(i) Optical media, such as CD-ROM—best edition should adhere to prevailing NISO standards.
(ii) 3½" Diskette(s).

*IX. Works Existing in More Than One Medium*

Editions are listed below in descending order of preference.
A. Newspapers, dissertations and theses, newspaper-formatted serials:
1. Microform.
2. Printed matter.
B. All other materials:
1. Printed matter.
2. Microform.
3. Phonorecord.

Dated: August 31, 1989.

Ralph Oman,

*Register of Copyrights.*

Approved by:

James H. Billington,

*The Librarian of Congress.*

[FR Doc. 89-23765 Filed 10-13-89; 8:45 am]
BILLING CODE 1410-07-M

## POSTAL SERVICE

## 39 CFR Parts 3, 4, 5, 6, and 8

## Conforming the Bylaws of the Board of Governors With the Inspector General Act Amendments of 1988, and Other Miscellaneous Amendments

**AGENCY:** Postal Service.

**ACTION:** Final rule.

**SUMMARY:** The primary purpose of this final rule is to conform the bylaws of the Board of Governors with the Inspector General Act Amendments of 1988, which, among other things, require (1) that the Postmaster General's appointment of the Chief Postal Inspector must be made "in consultation with the Governors", and (2) that the

## Machine Readable Collections Reading Room

# REGISTRATION

***** Please Print *****

1 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

2 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

3 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

4 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

5 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

6 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

7 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

8 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

9 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

0 Date ___/___/____ Time ____:____ First Visit? ___ YES ___ NO NAME ___ Student ___ Business ___ Self ___ Government ___ LC Staff ___ Other PURPOSE of Visit

*GRR*

Appendix D: Selected MRCRR Forms

## MRC RR Inventory Checklist

TITLE: _____

version _____

customer support number _____

*Damage note:* _____

**DISKS:**

5 1/4" disks _____

3 1/2" disks _____

*Note:* _____

**CRITICAL INCLUSIONS:**

registration form(s) _____

licenses _____

serial number _____

*Note:* _____

**DOCUMENTATION:**

template(s) _____

titles of reference cards _____

_____

titles of manuals _____

_____

*Companion products and other notes:* _____

**MISCELLANEOUS:**

advertising enclosures _____

serial title _____

other _____

# Appendix D: Selected MRCRR Forms

MRCRR DAILY STATS--REFERENCE

| | 12 noon - 1:00 | | 1:00 - 2.00 | | 2:00 - 3:00 | | 3:00 - 4:00 | |
|---|---|---|---|---|---|---|---|---|
| | NUMBER | TIME | NUMBER | TIME | NUMBER | TIME | NUMBER | TIME |
| NUMBER OF RESEARCHERS IN MRCRR | | | | | | | | |
| NEW EACH HOUR | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| REFERENCE QUESTIONS: In PERSON MRCRR RELATED: | | | | | |
| GENERAL | | | | | |
| PARTICULAR TITLES | | | | | |
| TROUBLESHOOTING Hardware or Software | | | | | |
| OTHER: | | | | | |
| *TOTALS:* | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| REFERENCE QUESTIONS: by TELEPHONE MRCRR RELATED: | | | | | |
| GENERAL | | | | | |
| PARTICULAR TITLES | | | | | |
| TROUBLESHOOTING | | | | | |
| OTHER: | | | | | |
| *TOTALS:* | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| NUMBER OF DIFFERENT MRC TITLES USED | | | | | |
| NO. OF RESEARCHERS USING PRINT TITLES | | | | | |
| PRINT TITLES CIRCULATED | | | | | |

COMMENTS:

DATE: _____

## Appendix E: Select List of Visitors to the MRCRR

David R. Bender, Executive Director, Special Libraries Association

Philip Beresford, Bibliographic Services, British Library

Marjory Blumenthal, Staff Director, Computer Science Technology Board, National Research Council, National Academy of Sciences

Jacques Brunetiere, President, Groupement Francais des Fournisseus d'Information en Ligne, Paris

Steve Cisler, Apple Computer, Inc.

Terence A. DiBenigno, Vice-President, International Services, Electronic Information Systems

Mr. & Mrs. Elliott Goldstein, Social Issues Research Corporation

Russell B. Ham, Systems Analyst, Information International, Culver City, CA

International Business Machines (IBM) representatives

Don Jones, Star Cable Company

Glen Jones, Jones Intercable

Gyozo Kovacs, Director, Szamalk, Computer Application and Service Company, Budapest

Jerzy Lozinski and Eugeniusz Piliszek, National Culture Council, Poland

Dr. Panayotis G. Nicolopoulos, Director, National Library of Greece

Robin Ritter, Education Consultant, Applied Learning

Staffen Rumko, Free University of Berlin

A. Clark Scanlon, Director, Research and Planning Office, Foreign Mission Board of the Southern Baptist Convention

Seventeen foreign librarians from the U.S. Information Agency

Six public services librarians from the Research Libraries Group

Rozak Sodipe, Head, Information & Documentation Service, Federal Institute for Industrial Research, Lagos, Nigeria

Dr. Toolenaar, Philips Research Laboratories, Eindhoven, The Netherlands

University Microfilms Incorporated marketing representatives

Dr. Robert M. Warner, Acting Director, University of Michigan Libraries and Dean, University of Michigan, School of Information and Library Studies

# Appendix F: Computer Files Donated to the MRCRR

| Computer Files Title | Application | Donor |
|---|---|---|
| APO SECURITY SOFTWARE | Security | Anchor Pad International |
| ASKSAM | Database/Information Mgmt | askSam Systems |
| BIG THESAURUS | Reference | Deneba Systems |
| BUSINESS MYSTAT (IBM) | Statistics | Systat, Inc. |
| BUSINESS MYSTAT (Macintosh) | Statistics | Systat, Inc. |
| COMMENT | Accessory | Deneba Systems, Inc. |
| CANVAS | Graphics | Deneba Systems, Inc. |
| DE ITALIA | Reference (Videodisc) | Fondazione Giovanni Agnelli |
| ENABLE | Integrated Package | Enable Software |
| ENABLE/OA | Graphics | Aldus Corp. |
| HAYES SMARTCOM II | Communications | Hayes Microcomputer Products, Inc. |
| IZE | Database/Information Mgmt | Persoft, Inc. |
| KNOWOL | Programming/Expert System | Intelligent Machine |
| MAPWISE | Statistics | Market Action Research |
| MYSTAT (IBM) | Statistics | Systat, Inc. |
| MYSTAT (Macintosh) | Statistics | Systat, Inc. |
| PERSUASION | Graphics | Aldus Corp. |
| PROCITE (IBM) | Database/Information Mgmt | Personal Bibliographic Software |
| PROCITE (Macintosh) | Database/Information Mgmt | Personal Bibliographic Software |
| REAL ESTATE TRANSFERS | Reference (CD-ROM) | Abt Books, Inc. |
| SMARTWARE | Integrated Package | Informix Software, Inc. |
| UNIV OF GUELPH LIBRARY | Catalog (CD-ROM) | University of Guelph Library |
| WINGZ | Spreadsheet | Informix Software, Inc. |
| WORDCRUNCHER | Database/Information Mgmt | Electronic Text Corp. |
| WORDSTAR 2000 PLUS | Word Processing | MicroPro International Corp. |

# Appendix G: List of Titles in the MRCRR Core Collection

**Accessories**
Bitstream Fontware
Comment
Wordperfect Library

**Catalogs**
CDMARC Subjects (CD-ROM)
CDMARC Names (CD-ROM)
Univ of Guelph Library (CD-ROM)

**Communications**
Bibliolinks
Crosstalk
Hayes Smartcom 2
Lexis/Nexis
MAC 286
MacLink Plus/PC

**Database/Information Management Systems**
askSam
Dayflo Tracker
dBase III+ (IBM)
dBase Mac (MAC)
Foxbase+
Infobase (MRCRR Catalog)
IZE
Knowledgeman 2
Procite (IBM)
Procite (MAC)
Professional File
Revelation
Roots III
Scimate

**Desktop Publishing**
Pagemaker
Ready,Set,Go 4.5
Ventura

**Directories**
Directory of Value-Added Resellers
PC-SIG (CD-ROM)

**Disk Management**
Automaxx
MacTree
Norton Utilities
Sideways
Take Two

**Education/Training**
Microsoft Flight Simulator
Wordcruncher Bookshelf Series

**Finance**
JK Lasser's Your Income Tax

**Graphics**
Canvas
Claris MacPaint
Freehand
Lotus Freelance +
Lotus Graphwriter
Microsoft Chart
PCPaintbrush
Persuasion

**Integrated Packages**
Corporate MBA
ENABLE/OA
Lotus Symphony
Smartware II

**Multitasking**
Framework II

**Project Management**
Harvard Project Manager
Microsoft Project

**Reference**
ABI-Inform (CD-ROM)
Bible Library (CD-ROM)
Big Thesaurus
Biography Index (CD-ROM)
Books in Print (CD-ROM)
Business Periodicals Index (CD-ROM)
Computer Library (CD-ROM)
Cumulative Book Index (CD-ROM)
Datapro Master Index
de Italia (Videodisc)
Dissertation Abstracts (CD-ROM)
Education Index (CD-ROM)
Electromap World Atlas
Grammatik II
Grolier Electronic Encyc (CD-ROM)
Library Literature (CD-ROM)
Mastersearch Bible (CD-ROM)
OED (CD-ROM)
Online Hotline News Service (CD-ROM)
Periodical Abst Ondisc (CD-ROM demo)
Readers' Guide to Period. Lit. (CD -ROM)
Real Estate Transfer DB (CD-ROM)
Reference Set
Ulrich's (CD-ROM)
Video Directory (CD-ROM)

**Spreadsheets**
Lotus 1-2-3
Microsoft Excel (MAC)
Microsoft Excel (IBM)
Microsoft Multiplan
Supercalc 5
WingZ

**Statistics**
Fedstat (CD-ROM)
SPSS/PC+

**Windows**
Microsoft Window
Topview

**Word Processing**
Displaywrite
Lingua Franca
Lotus Manuscript
Microsoft Word (IBM)
Microsoft Word (MAC)
Wordperfect 5.0
Wordstar 2000+
Wordstar 5.5
Wordstar Professional
Xywrite 3+

# Appendix H: Collections Statistics

## I. MRCRR Machine-Readable Computer Files Collection

| | July 1988 | July 1989 |
|---|---|---|
| Brought from other LC collections * | | |
| Law Library | 13 | 13 |
| ITS | 40 | 40 |
| Rare Books (books with disks) | 136 | 240 |
| Purchased | 50 | 82 |
| Donation/gift | | 26 |
| Serials on disk | | 18 |
| CIP (LC cataloged) | 20 | 32 |
| Copyright registrations (LC cataloged) | | 321 |
| Copyright registrations (only copyright cataloged, not LC cataloged) | 235 | 540 |
| Demonstration packages | | 107 |
| **TOTALS** | **494** | **1419** |

* Specific counts were not kept for materials brought from other areas of the Library (Music, Science and Technology, Microform Reading Room.)

## II. MRCRR Hardware

| | July 1988 | July 1989 |
|---|---|---|
| Microcomputers | | |
| Compaq | 4 | 5 |
| Macintosh | 1 | 1 |
| Printers | 4 | 4 |
| CDROM Drives | 2 | 2 |
| Videodisk Drives + Monitors | 1 | 1 |

## III. MRCRR Machine-Readable Computer Files: CORE Collection (July 1989)

| | |
|---|---|
| Program Software | Total 74 |
| Accessory | 3 |
| Communications | 6 |
| Database/Information Management | 14 |
| Desktop Publishing | 3 |
| Directory | 1 |
| Disk Management | 5 |
| Education/Training | 2 |
| Finance | 1 |
| Graphics | 8 |
| Integrated Software | 4 |
| Multitasking | 1 |
| Project Management | 2 |
| Reference | 5 |
| Spreadsheets | 6 |
| Statistics | 1 |
| Windows | 2 |
| Word Processing | 10 |
| CDROM | Total 24 |
| Catalog | 3 |
| Directory | 1 |
| Reference | 19 |
| Statistics | 1 |
| Videodisk | Total 1 |
| Encyclopedia | 1 |

## IV. MRCRR Print Reference Collection *

| | July 1988 | July 1989 |
|---|---|---|
| Monograph Titles | 100 | 325 |
| Serial Titles | 10 | 35 |

* This reference collection fluctuates; new serials for the microcomputer industry are continuously being reviewed for inclusion, and new monographs replace old monographs in order to keep available the most recent resources. Limited shelf space has required that the collection remain small; there are, in fact, thousands of monographs and hundreds of serials addressing issues of concern to the MRCRR and its collections. Many of these materials are available in the general collections of LC.

## V. Copyright Registrations of Machine-Readable Items #

| | Published | Unpublished |
|---|---|---|
| 1978 | 570 | 154 |
| 1979 | 764 | 749 |
| 1980 | 1189 | 796 |
| FY81 | 1129 | 959 |
| FY82 | 1181 | 1490 |
| FY83 | 3342 | 2624 |
| FY84 | 5792 | 4632 |
| FY85 | 5396 | 4944 |
| FY86 | 5702 | 4654 |
| FY87 | 5258 | 4451 |
| FY88 | 5207 | 6059 |
| FY89 | 4453 | 5428 |
| **TOTALS** | **39983** | **36940** |

# Nearly all machine-readable materials registered for copyright arrive in LC with only an application and the appropriate fee; the registration regulation requires that no disks be submitted, that only a certain number of lines of source code (instructions written by a programmer) be included. Most of these materials, even those few that do include disks, have been sent to the Copyright Office warehouse in Landover, Maryland. During FY89, some materials were sent to the MRCRR for selection decisions.