NAME OF SYSTEM:

Machine Readable Catalog Dissemination (Project MARC)

ORIGINATOR:

Information Systems Office

Library of Congress

Washington, D.C. 20540

OBJECTIVE. To develop and implement techniques and methods for converting source catalog card data into machine-readable form to improve library service nationwide.

BACKGROUND. As the name implies, the first responsibility of the Library of Congress is service to Congress. One department, the Legislative Reference Service, functions exclusively for that purpose. As the Library has developed, its range of service has come to include the entire Government establishment, as well as the public at large, so that it has become, in effect, a national library for the United States.

As we enter the 1970's, libraries across the nation are feeling the effects of the information explosion. The profusion of books, journals, analytical reports, and miscellany threatens to overwhelm even the most sophisticated information handling centers. Conventional library methods are presenting problems to the librarians and users alike. Among these problems are the preparation, maintenance, and searching of the 3 x 5 inch catalog or index cards, and preparation of shelf lists, control records, etc.

Computer technology now possesses the proven potential to support the library community in a number of application areas. Among several studies and applications currently being conducted by the Library of Congress is the MARC (*MA*chine-*R*eadable *C*ataloging) system that is now serving 90 subscribing libraries with weekly distribution of bibliographic data in machine-readable form.

THE NEW METHOD. The MARC System converts records for selected current catalog card entries into machine-readable form and distributes the information on magnetic tape reels to participating libraries around the Nation. The library participants, in turn, use these records as input for their local catalog card processing requirements.

The MARC tape distributed to participants contains separate files of information such as the machine-readable catalog record; an abbreviated author-title record, to include the Library of Congress catalog card number; and subject and descriptive cross-references for tracing records generated by the machine-readable catalog record. The machine catalog record includes all the data with which the cataloger and reference librarian have long been familiar, as well as certain new data elements that provide for augmented approaches to the catalog.

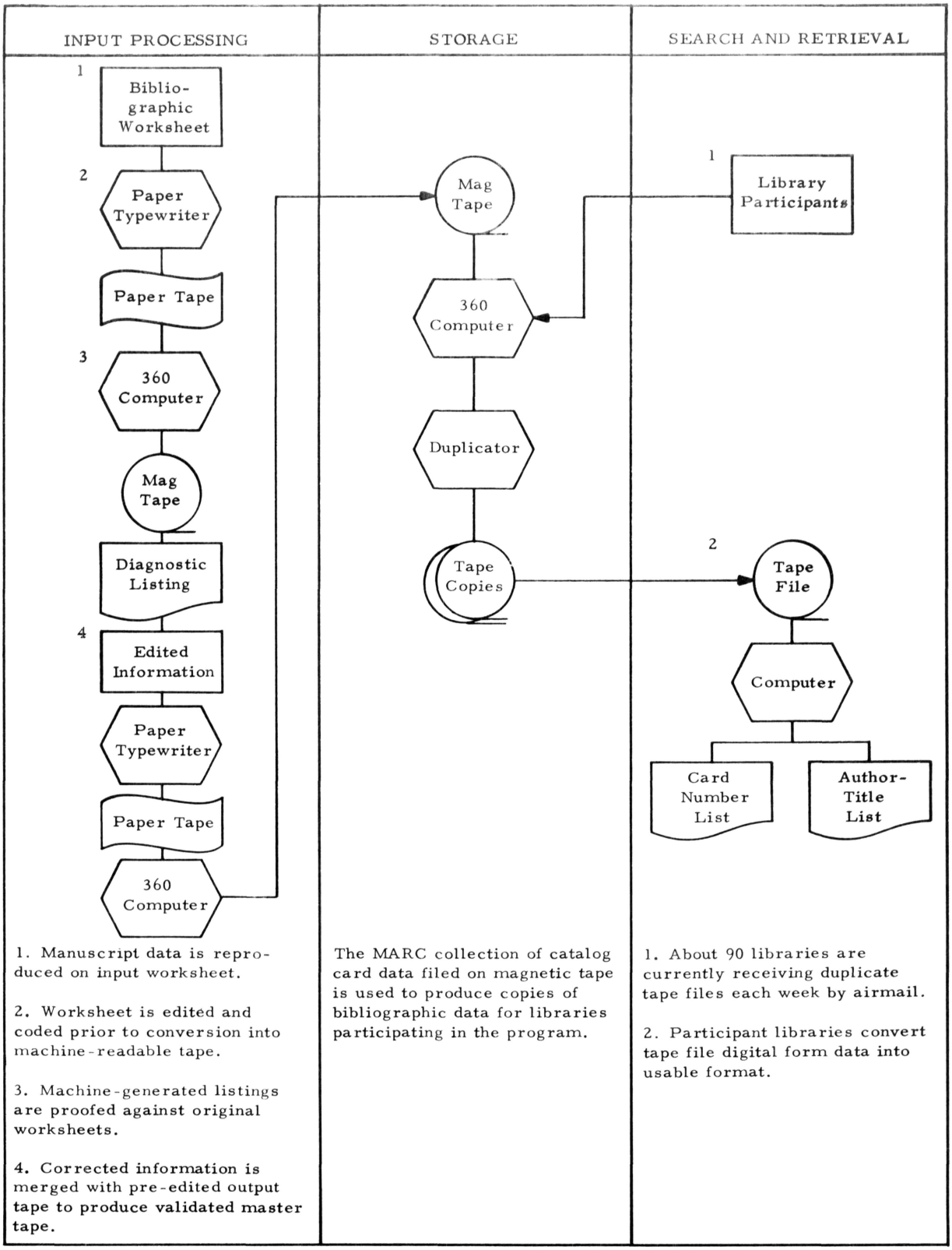
Processing within MARC begins with the receipt of a bibliographic record in the form of a reproduction of the card prepared by the Library of Congress catalogers. This card, used to produce the typeset Library of Congress catalog card, is reproduced on an input worksheet and becomes the source data for the MARC System. The worksheet information is edited, punched on a paper tape typewriter, and converted to magnetic tape. The data undergo both a daily and weekly processing cycle prior to output as a MARC master tape record. The master tape is then duplicated for distribution to participating libraries weekly.

REMARKS. One immediate result of the distribution of the MARC tapes has been the stimulation of interest in the concept of library data transmission. It has become evident, for example, that the MARC system has suggested to the library community the possibility that individual libraries can use a MARC-like system to contribute their own cataloging data for the use of others. Libraries will not only receive data from a centralized source like the Library of Congress, but they also may send data. This feature would bring much closer to reality the long anticipated concept of a network of libraries that can create and utilize a common data base.

A library participant, in evaluating the early results of the MARC Pilot Project, estimated that the system will minimize the searching, editing, keypunching, and verifying for about 24,000 volumes during the year. The MARC magnetic tape record represents a valuable potential for reducing operating costs and improving service since it can be used in a wide variety of ways, such as the automatic preparation of index cards, purchase orders, shelf lists, book spine labels, and charge-out cards; automatic searching of index records by computer; and on-line searching using remote terminals.

This example of dissemination of catalog data in digital form between the Library of Congress and the growing number of participating libraries throughout the Nation is only the forerunner of many additional library applications to be developed over the next few years. Since many of these concepts have application in the office world, their progress should be watched closely.

MACHINE READABLE CATALOG DISSEMINATION (PROJECT MARC)



1. Manuscript data is reproduced on input worksheet.

2. Worksheet is edited and coded prior to conversion into machine-readable tape.

3. Machine-generated listings are proofed against original worksheets.

4. Corrected information is merged with pre-edited output tape to produce validated master tape.

The MARC collection of catalog card data filed on magnetic tape is used to produce copies of bibliographic data for libraries participating in the program.

1. About 90 libraries are currently receiving duplicate tape files each week by airmail.

2. Participant libraries convert tape file digital form data into usable format.