DOCUMENT RESUME

ED 352 979 IR 054 329

AUTHOR Kesse, Erich
TITLE Survey of Micropublishers: A Report to the Commission on Preservation and Access.
INSTITUTION Commission on Preservation and Access, Washington, DC.
PUB DATE Oct 92
NOTE 10p.
AVAILABLE FROM Commission on Preservation and Access, 1400 16th Street, N.W., Suite 740, Washington, DC 20036-2117 ($5 prepaid); (survey results and list of micropublishers--attention Rebecca Kelly--$10).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Colleges; Foreign Countries; Higher Education; *Information Storage; *Microfilm; Microforms; *Microreproduction; *Preservation; Professional Associations; Public Agencies; Publishing Industry; Statistical Analysis; Surveys
IDENTIFIERS Micropublishing; North America; United Kingdom

ABSTRACT

Based on a survey previously developed and pretested by the American Association of Law Libraries to gather information about the practices and use of standards by the producers of first generation microfilm, this survey was implemented by the Research Libraries Group, Inc., under contract to the Commission on Preservation and Access. The intent of the survey is to describe the state of preservation microfilming in English-speaking countries, primarily North America and the United Kingdom, by quantifying the methods of production, storage, and availability of microforms. Four types of microfilm producers were targeted: learned societies and professional associations, commercial micropublishers, educational institutions, and government agencies. The survey questions were organized into six categories: (1) general information; (2) microform production and quality control; (3) storage of camera masters; (4) storage containers and enclosures; (5) inspection of stored film; and (6) micropublishing history (e.g., business acquisitions, mergers). Results in each category are described in detail, and conclusions and recommendations based on the these findings are summarized. The latter are concerned with standards of production; the practice of acquiring microform "masters"; inspection programs for stored microfilm; training of staff; and quality assurance programs. It is noted that a copy of the full report of the survey, which includes a directory of micropublishers, is available for sale from the Commission. (ALF)

The Commission on Preservation and Access

SURVEY OF MICROPUBLISHERS

A report to the Commission on Preservation and Access

by

Erich Kesse

October 1992

1400 16th Street, N.W., Suite 740, Washington, D.C. 20036-2217 • (202) 939-3400

A private, nonprofit organization acting on behalf of the nation's libraries, archives, and universities to develop and encourage collaborative strategies for preserving and providing access to the accumulated human record.

Published by
The Commission on Preservation and Access
1400 16th Street, NW, Suite 740
Washington, DC 20036-2117

October 1992

Reports issued by the Commission on Preservation and Access are intended to stimulate thought and discussion. They do not necessarily reflect the views of Commission members.

Additional copies are available from the above address for $5.00. Orders must be prepaid, with checks made payable to "The Commission on Preservation and Access," with payment in U.S. funds.

This paper has been submitted to the ERIC Clearinghouse on Information Resources.

The paper in this publication meets the minimum requirements of the American National Standard for Information Sciences-Permanence of Paper for Printed Library Materials ANSI Z39.48-1984.

TABLE OF CONTENTS

*** Not included.** To obtain a copy of the Survey results and the Appendix send a check for $10.00 (U.S. funds only) to The Commission on Preservation and Access 1400 16th Street, NW, Suite 740 Washington, DC 20036 attention: Rebecca Kelly.

INTRODUCTION

The wide use of microfilm for the preservation of the intellectual wealth of the nation's academic research institutions is relatively recent, although microfilm has been used as a storage medium for records since the mid-1930s. As research institutions have undertaken the task of preserving their deteriorating collections, terms like "preservation microfilm" and "preservation master negative" have become part of the everyday vocabulary of librarianship. The movement by libraries in the United States to preserve their collections, mandated by the inexorable march of brittle materials toward self-destruction, has required an effort that few of us could have envisioned in the late 1970s, when libraries began educating themselves about how to save their collections. The effort to preserve our nation's intellectual heritage is one of the most massive and remarkable cooperative undertakings in the history of libraries.

At one time, it was thought that commercial micropublishers and academic research institutions might be allies in the attempt to save embrittled book and paper collections. Micropublishers were eager to film and sell selected portions of library collections, and librarians were eager both to acquire the microform copies and to collect royalties from their sale. Nancy Gwinn states, however, in the introduction to *Preservation Microfilming: A Guide for Librarians and Archivists*, that this alliance of micropublishers and librarians did not last long:

> In addition to the selection issue—that is, what items were to be preserved on microfilm—the relationship between micropublishers and libraries was also influenced, and occasionally strained, by concern for the technical standards that affect the physical quality of the film, and for the bibliographic practices governing the identification and access to the microform.[1]

As libraries began to develop a clearer definition of their purpose in preservation and to articulate specific policies that fulfilled that purpose, the alliance between commercial micropublishing and preservation microfilming was challenged. The needs and requirements of commercial micropublishers—to select materials which will be marketable and to reformat them for a competitive price—were not necessarily compatible with the goals of preservation microfilming. Preservation microfilm is produced and stored according to specific standards that attempt to ensure its bibliographic completeness, image stability and quality, and physical longevity;[2] it was assumed that commercial film might not be held to the same requirements.

Yet so many titles have been and continue to be filmed by commercial micropublishers that duplicate filming by libraries for preservation purposes would waste valuable resources. Development of a methodology for the evaluation of commercially-produced microfilm has become more and more important as libraries have sought to stretch available resources to address only those materials most in need of preservation. We cannot afford to microfilm twice

---

[1] Nancy E. Gwinn, ed., *Preservation Microfilming: A Guide for Librarians and Archivists* (Chicago: American Library Association, 1987), p. xiii.

[2] In the United States, the term "preservation microfilm" is defined as microfilm produced to certain density and resolution standards using 35mm silver-gelatin, polyester-based roll film, which is projected to last several hundred years if properly stored (Nancy E. Elkington, ed., *RLG Preservation Microfilming Handbook* [Mountain View, Calif.: Research Libraries Group, 1992], p. 7, 14).

merely because we assume that the *purpose* of the producer—to return a profit—has unfavorably influenced its quality. Yet neither can we afford to examine each piece of commercially produced microfilm to prove its quality. Until now it has been time-consuming and expensive to determine whether commercially micropublished materials could be considered as having been adequately preserved, according to preservation microfilming standards.

This survey set out to construct a reliable instrument for comparison of the microfilm produced by four types of microfilm producers—learned societies and professional associations, commercial micropublishers, educational institutions, and government agencies—which fall into two categories: those for whom microfilming is a for-profit business, and those for whom it is not. This survey was designed on two key assumptions: first, that one can successfully predict microfilm quality from information supplied by the producer on how the microfilm is produced; and second, the production *method* of the microfilm is a more reliable predictor than its intended purpose in indicating the quality of the microfilm, and, consequently, in indicating whether it can be considered adequate as a preservation copy.

The implementation of certain standards in the microfilming process should assure that microfilmed information will be usable and long-lived. Standards, and the degree of adherence to them, can also give us a reliable measure of microfilm quality; the same kinds of assessment can be made of all microfilm producers, without reference to the purpose for which microfilm is produced. Instead of assuming that all microfilm produced for profit is suspect, and that all microfilm produced by libraries is adequate, we can use adherence to and implementation of standards as a predictor of the consistent quality of microfilm from any microfilm producer, without having to inspect it frame by frame. This survey asked for indications of both knowledge of the key standards and information about practices being followed by certain types of producers in the micropublishing community. Analysis of the responses to this survey used standards as a rule base for interpretation of the data.

As we move toward a national preservation program, it is necessary to know precisely how microfilm producers of all types produce and store microfilm, in order to evaluate all types of micropublished materials properly within the structure of such a national program. Additionally, as new technologies expand our definitions both of "publishing" and of "preservation," it is imperative that the preservation community learns to assess and evaluate the quality of reformatting efforts in both the academic and the commercial worlds, in order to inform wisely our own preservation strategies for the future.

DEVELOPMENT OF THE SURVEY

The *Survey of Micropublishers* is based on a survey developed and pretested by the American Association of Law Libraries (AALL) under contract to the Commission on Preservation and Access, to gather information about the practices of and use of standards by the producers of first generation microfilm.[3] After the pretest was completed in 1990, the Commission contracted with the Research Libraries Group, Inc., to manage the full implementation of the survey, which was

---

[3] Information gathered in this survey deals specifically with the use of standards published by the American National Standards Institute (ANSI), the Association for Information and Image Management (AIIM), the British Standards Institute (BSI), the Canadian Standards Institute (CSI), and the International Standards Organization (ISO). Some analysis of the data includes references to the *RLG Preservation Microfilming Handbook*, which incorporates many standards into a single, widely-used set of guidelines, but is not issued by a standards agency.

conducted in late 1991 by the University of Florida. The intent of this survey is to describe the state of preservation microfilming in English-speaking countries, primarily North America and the United Kingdom, by quantifying the methods of production, storage, and availability of microforms. Targeted in this survey were four types of microfilm producers—learned societies and professional associations, commercial micropublishers, educational institutions, and government agencies.

The survey instrument was designed for RLG and AALL by Erich J. Kesse, Preservation Officer at the Smathers Libraries of the University of Florida, and Wil Meredith, Preservation Officer at the Law Library of Harvard University. The survey instrument was pretested in 1990 by AALL for the Commission on Preservation and Access, with the assistance of seven microfilm producers of varying sizes from North America and the United Kingdom. The pretest determined that, with slight modifications, the survey could serve as a reliable method for collecting the desired information.

Information, during both the pretest and the survey, was gathered from participants with the assurance that responses would be summarized and individual questionnaire data would be treated confidentially. The survey was mailed to 675 microfilm producers at more than 725 addresses. A list of these microfilm producers and their addresses was compiled from published and online sources, and forms the basis of the "Directory of Micropublishers," included as Appendix A.[4] *Micropublisher*, as defined by the survey, is a publisher, institution, association, etc., which has control over the creation, maintenance, and distribution of first generation camera master negative microforms. The terms *micropublisher* and *microfilm producer* are used interchangeably throughout this report.

The questions on the survey were organized into six categories:

A. General information.
B. Microform production and quality control.
C. Storage of camera masters.
D. Storage containers and enclosures.
E. Inspection of stored film.
F. Micropublishing history (business acquisitions, mergers, etc.)

Results in each category are described in detail in the next section of this report.

Conclusions were reached through data analysis. The survey did not attempt to verify findings through examination of microfilm.[5] Survey analysis established redundancy among various questions through cross-tabulation; for instance, many micropublishers tended to cite standards in reference to certain procedures, but, when asked about specific methods and treatments, were unable to provide a response which indicated implementation. Such inadequate responses may indicate a failure to understand the standards.

---

[4] There is no single existing source for this information; sources used include *Guide to Microforms in Print, National Register of Microform Masters,* OCLC and RLIN bibliographic records, and publishers' advertisements and catalogs.

[5] The pretest, which did examine microfilm, found a strong correlation between survey reports about microfilm and the actual microfilm.

GENERAL ASSUMPTIONS AND FINDINGS

One of the early motivations of this study was to examine the widely-held assumption that microfilm produced for profit would necessarily fall below the quality of microfilm produced exclusively for preservation, which in many cases is funded by government agencies that require the most rigorous preservation microfilming standards of their recipients. As the survey demonstrates, there is no correlation between adherence to standards and the purpose for which the microfilm is produced; in general, the degree of adherence to standards of commercial and educational micropublishers is about the same.[6] There is a strong correlation, however, between adherence to standards and the use of an online bibliographic network by the microfilm producer, regardless of type.[7]

In general, the survey responses, which are detailed in the following section, show that most microfilm producers, whether commercial, academic, governmental, or otherwise produce first generation camera negatives on 35mm polyester monochrome AHU microfilm using a planetary camera, and this film is usually tested using the methylene blue test. On the average, five density readings per reel are taken of the first generation film, but the range of acceptable densities extends well beyond the limits specified by RLG guidelines.[8] Splices are most often ultrasonic welds, and in the aggregate, splices are limited to fewer than five per roll. About half of all third generation film meets the RLG guideline for a Quality Index level of 8.0 (high quality);[9] it is notable, however, that of those micropublishers of all types who use a national online bibliographic network, more than three-quarters meet or exceed a QI rating of 8.0 in third generation film.[10]

Questions about storage revealed that most microfilm producers of all types store film in facilities that meet specifications in ANSI PH1.43-1985, and climate control within storage facilities of all microfilm producers appears within standards. Most microfilm producers store film in chemically inert, lignin-free, acid-free envelopes, boxes, and ties, but conversely, most do not test enclosures or containers to verify their quality.[11]

Few micropublishers have written policies for the inspection of stored first generation microfilm, and about a quarter of micropublishers reported *never* inspecting stored master negatives.[12] These findings suggest that the preservation community needs to reexamine procedures to include periodic inspection of stored film as part of routine, long-term maintenance of preservation microfilm.

---

[6] This conclusion is supported by comparison of the data in questions B1a, B3a, B4a, B4b, B4c, B4d, B4e, B5a, B5b, B5c, B6a, B7a, B7b, C2a, C3, C4, C4a, C5, C8c, C8d, C8e, D1, D2, E1, E2, E3, E4, E6, and E7.

[7] Supporting data for this correlation may be found in cross-tabulations between question F10 and questions B1a, B3a, B4b, B6a, B6b, B8, B11, C2c, C8c, C8e, and E1.

[8] *Handbook*, Guideline 4.4.3.

[9] *Handbook*, Guideline 4.4.5.

[10] See survey responses in section B.

[11] See responses in section D.

[12] See responses in section E.

Only a tiny fraction of responses indicated that microfilm is being treated with a protective coating of any kind. This trend may change abruptly, as IPI's SilverLock™, a formulation of polysulfide, comes into wide acceptance.

A number of cross-tabulations between survey responses to certain questions reveal that there is a significant correlation between the use by a microfilm producer of a national online bibliographic network, and adherence to standards and accepted procedures.[13] Microfilm producers which are users of online bibliographic networks tend to produce film of higher quality and maintain it under better conditions than do non-user microfilm producers. More than three-quarters of RLIN and OCLC users have written policies for production and quality control, compared to only 53.5% of non-user microfilm producers.[14] While only 19% of non-user microfilm producers meet the RLG specification for allowable deviation among density readings,[15] and only 33% of non-user microfilm producers meet or exceed the ANSI MS23-1991 standard for resolution for third generation film,[16] about three-quarters of RLIN and OCLC users meet or exceed both specifications.

What accounts for the positive effect of the use of bibliographic networks upon the overall adherence to standards? It is possible that the use of a national bibliographic network for bibliographic control of microforms is an indication of an overall commitment to standards; i.e., that those producers who invest in the production of high-quality microfilm are also likely to invest significantly in methods for providing the widest access to those materials. It is also possible that the financial investment in hardware, software, and computing services necessary to participate in a bibliographic network signifies a commitment to pursuing quality in every part of the microfilming process. In addition, networked microfilm producers may well communicate better about changes to current standards, about quality assurance procedures, and about technological developments in the field.

CONCLUSIONS AND RECOMMENDATIONS

The general findings of the survey are reassuring when comparing microfilm produced for profit and that produced specifically for preservation purposes; in general terms, the level of adherence to standards for both kinds of producers is about the same. The survey also shows, however, that general adherence to standards could be improved significantly by all types of micropublishers; the responses to the survey, when examined in detail, point out specific areas in which certain types of micropublishers can focus efforts at higher attention to standards.

Findings in section F suggest that there is considerable confusion over the practice of acquiring microform "masters." It would be advisable for the preservation microfilming community to develop clear, unambiguous language to describe the purchase, transfer, and assignment of rights of microfilms of each generation. Particularly in the case of institutions who contract for

---

[13] Cross-tabulations documenting the effect of use of a bibliographic utility were examined between question F10 and questions B1a, B3a, B4b, B6a, B6b, B8, B11, C2c, C8c, C8e, and E1.

[14] Survey question B1a.

[15] Survey question B4e.

[16] Survey question B6b.

microfilming services, it is important that issues about ownership and use of the master negative be clearly understood.

One of the peripheral findings of this survey is that many micropublishers currently listed in machine readable bibliographic records have moved, sold all or portions of their businesses, or are no longer supplying microfilm copies of masters. A number of actions might be taken in light of this finding. One action is to establish and maintain a single directory of micropublishers in order to better manage changes of ownership in microform masters. Another action which may be taken is the establishment of one or more central storage facilities in which the master negative for *all* preservation microfilm is deposited. A central depository service would also facilitate such matters as routine inspection of stored microfilm and appropriate environmental controls, while decreasing the risk of losing access to a master negative through changes in its ownership.

Routine inspection programs for stored microfilm should also be immediately devised and implemented. In light of the findings of the survey, RLG plans to review procedures for the inspection of stored microfilm and issue guidelines that will be added to the *Handbook*. Regular inspection of stored microfilm masters will yield valuable information about the long-term maintenance of silver-gelatin microfilm masters. In addition, inspection will allow the prompt identification of known, treatable conditions, or even the discovery of new hazards that may place microform masters at risk.

Because of the diversity of the population reporting in this survey, not all of the findings may be relevant to specific subsets of respondents. Additional efforts to survey smaller groups are recommended. Such smaller-scale surveys might bring together groups of institutions and commercial microform producers with common working interests. RLG will undertake its own survey of academic and commercial microfilm producers who are likely to participate in RLG cooperative microfilming efforts.

Every institution involved in preservation microfilming—whether as a producer, consumer, or both—should provide some level of instruction about standards to appropriate staff. Further, a quality assurance program should be developed that addresses the ongoing needs of institutions acquiring microfilm on a regular basis.

Increased education among microfilm producers of all kinds about standards and their implementation will solve many of the problems brought to light in this survey. It is hoped that each microfilm producer in the preservation microfilming community will examine and improve its use of standards, in order to assure the viability of each master negative for many generations to come.