

National Historical Publications and Records Commission

Microform Guidelines

(Revised 1986)

1. Introduction

In 1964 the National Historical Publications Commission launched a grant program to provide funds to universities, libraries, historical societies, and other organizations and institutions for the publication of documentary sources central to the study of American historical figures and themes. An integral part of this program has been the Commission's use of microform as a fast and reliable medium for the preservation and dissemination of large bodies of significant historical materials. Commission-supported microform projects have involved historical records that range chronologically from the colonial period to the present century and geographically from New England to Hawaii and that cover such subjects as agriculture, finance, sociology, law, politics, religion, military affairs, and science. Scholars, universities, and other research centers now have easy and low-cost access to large, important collections previously available in only one place or not at all. Documents in deteriorating condition have received the protection of reduced handling afforded by microfilm; no longer is it necessary for the content of deteriorated documents to be withheld from scholars or to be threatened with damage from intensive use. As the mass of historical documentation has proliferated through the years, microform has become an indispensable tool for the scholarly community.

In 1974 the advent of the historical records program, which changed the Commission's name to the National Historical Publications and Records Commission (NHPRC), broadened the Commission's mandate and the scope of its grant programs from the field of publishing documents to supporting archival preservation work. The Commission, along with its State Historical Records Advisory Boards, has moved vigorously to attack some of the monumental and complex problems plaguing the nation's recordkeeping institutions. Charged by Congress with the responsibility for supporting work in documentary preservation, arrangement, and description, the Records Program is determined to lead the way in saving significant documentary materials from destruction and in making them accessible for research. The use of microforms is important in this work.

This guide discusses the types of microform projects supported by the Publications and Records Programs, technical standards, and other subjects of concern to grant applicants.

2. Eligible Types of Microform Proposals

There are three distinct categories of microform proposals that the Commission normally considers. These categories are collected microforms, microform supplements to books, and noncollected microforms. Other types of proposals will be considered upon receipt.

2.1 Collected Microforms

Collected microforms are the product of publication projects that are established to gather, select, and film documents from different locations and repositories relating to a person, event, or topic of national historical significance.

Examples are: *The Papers of Aaron Burr* (a comprehensive edition of Burr manuscripts found in thirty-three states, five foreign countries, and twenty private collections), *The Horatio Gates Papers* (a comprehensive edition of correspondence, orderly books, military lists, and financial materials gathered from seventy repositories), and *The Papers of Panton Leslie & Co.* (a comprehensive edition of the records of a loyalist trading firm as found in repositories on three continents: North and South America and Europe).

2.2 Microform Supplements to Books

Microform supplements to books are publications that offer more documentary material than the printed volumes. The microfilm or microfiche supplement may contain additional documents and annotations not printed in the book, or it may contain facsimiles of materials that are transcribed and annotated in the book.

An example is the microfiche supplement to *The Documentary History of the Ratification of the Constitution*.

2.3 Noncollected Microforms

Noncollected microforms, which may or may not involve a formal publication for sale and distribution, are projects to film entire collections or groups of records held by one institution or one type of institution within a relatively small geographic area.

Examples are: the creation of security and loan copies of the Mark Twain papers in the Bancroft Library (legal considerations preclude sale of a microform edition); a sale edition of the George Bancroft papers at Cornell University; the creation of one preservation copy and multiple user copies of Buffalo, NY, city council minutes; and microfiche preservation, reference, and sale copies of the Oakland, CA, Museum's historic photograph collections.

2.4 How Grant Proposals Are Processed

The Commission divides the types of microform grant proposals between the Records and Publications Programs as follows:

A. Preservation microfilming projects, usually noncollected microforms, not primarily intended and/or suitable for sale and wide distribution will be considered as Records Program requests.

B. Microform publications intended and/or suitable for sale and wide distribution, consisting of a single collection filmed at a single repository or of a group of materials collected from several manuscript sources, will be considered as Publications Program requests. The Commission expects that the proposals submitted in this category will pertain to materials of national historical significance.

C. Any proposal that requests funds for extensive indexing or item description work must be considered under the Publications Program. This requirement does not apply to preservation microform proposals that include less costly and less detailed finding aids, such as series, folder, file, or reel descriptions. Also exempt are records proposals that state a plan to use or modify with little expense preexisting finding aids, including detailed indexes, registers, or inventories. See section 8 for specific suggestions on the content of guides.

Two separate brochures, both entitled ``Guidelines and Procedures: Applications and Grants,' ' are available from the Commission office for the Records Program and the Publications Program. Each brochure describes the program's mechanisms of operation, categories of grants, restrictions on grant funds, and grant

administration procedures, and gives relevant addresses and telephone numbers for Commission staff members. The Records Program brochure also offers advice on records grant proposal writing, defines terms, sets forth current Commission policies, provides a sample budget and Records Program application cover sheet, and lists addresses and telephone numbers for State Historical Records Coordinators and related organizations and grant programs. These brochures may be obtained by writing or calling the National Historical Publications and Records Commission, National Archives (NP), Washington, DC 20408, (202) 501-5605 (Publications), (202) 501-5610 (Records).

The Commission staff strongly recommends that all prospective applicants for microform grants discuss the project idea with the staff by telephone or submit a one- or two-page outline by mail. The staff will advise the applicant of the appropriate grant program and of the application deadlines.

Publications Program applications should be sent in single copies to the staff in Washington, DC. Applicants to the Records Program should consult the Records Program brochure to ascertain the number of proposal copies (depending on the type of grant) that should be sent to their State Historical Records Coordinator and to the Commission's Washington office. In all cases the original signed copy should be sent to the Commission's Washington office.

3. Budget Items

3.1 Allowable

Grant support may be requested for the salary and fringe benefits for full-time and part-time project personnel for additional staff positions during the grant period; purchase of office supplies; purchase and use of automation equipment (see special guidelines in the Records Program brochure; consult with Commission staff for Publications Program guidelines); purchase of training manuals and expenses for courses in micrographic techniques; travel funds (if necessary to the project); copying or duplicating expenses; payments for research assistance at distant repositories; test run expenses from different microform producers; composition, printing, and distribution costs of the guide to the microform, including, for sale editions of microforms, 100 free guide copies for repositories of the grantee's choice and, for all microforms, up to ten free guide copies sent to the Commission (the exact number to be determined by consultation with the NHPRC staff); and production costs of the master negative (security copy) and duplicate negative (printing copy) and one or two positive and/or negative copies for loan purposes and for use at the sponsoring institution (see 3.3). In addition, for nonprofit institutions acting as publishers, the Commission may bear the costs of the two (sometimes one) Library of Congress copies of published editions that are required for copyright purposes. Applicants should note that although grant support for these expenses may be requested from the Commission, preference will be given to applications which provide institutional cost sharing or other funding for a substantial portion of these items.

3.2 Unallowable

Unallowable expenses include most equipment purchases (typewriters, microform readers and printers, microform cameras, and developers); costs of construction or renovation of microform vaults, darkrooms, and temperature and humidity control systems; sales brochures, catalogs, and publicity expenses; travel expenses to professional meetings; miscellaneous or contingency funds; purchase of original documents; or purchase of literary rights or copyright. Such expenses should be supported through institutional cost sharing or outside funding. Also, it is the Commission's policy to give preference to applications that do not request grant funds to cover indirect costs. For additional information regarding allowable and unallowable

budget items see the brochures for the Publications and Records Programs.

3.2 Use of Commercial Microform Publication Firms

The Commission encourages grant applicants to investigate publication or distribution contracts with commercial microform publishers before applying for a grant. Grant applicants, however, may not want to investigate such contracts when the nature of the materials to be filmed limits their sales potential, making preservation and the preparation of a few copies for internal use the primary goals. Publishers often will assume some or all production costs of the microfilm and guide once the basic preparation cost has been financed under a Commission grant. Many commercial firms offer good quality control, are familiar with the difficulties involved in filming old and faded documents, have excellent publicity and sales networks, and can provide proper storage of the security copy in a location away from the collection. Applicants are encouraged not to request production costs as part of the grant unless there are good reasons for the grantee acting as publisher-distributor. These reasons must be explained in detail in the application.

4. Discretionary Items

4.1 Royalties

The Commission encourages grant recipients to waive royalties from commercial houses in return for one or more of the following: a larger or more detailed guide/index than the publisher would otherwise agree to pay for and print; additional copies of the microform publication (for loan or deposit); distribution of additional free copies of the guide/index (beyond the initial 100 copies) to research libraries and historical societies; or advances against royalties, which can be used to underwrite editorial expenses during the life of the project.

4.2 Microform Copyright

Decisions about copyright of the guide/index and microform publication are left to the discretion of the grantee. The Commission does not require that either guide/index or microform publication be copyrighted and does not provide funds for copyright expenses beyond the Library of Congress copies mentioned in 3.1.

5. Technical Standards¹

Because it is both expensive and difficult to produce a documentary microform publication, it is important that work done once should not have to be repeated later. The best way to ensure against a need to refilm a collection is to observe stringent technical standards of the Association for Information and Image Management (AIIM) (formerly the National Micrographics Association) and the American National Standards Institute (ANSI) for using silver-halide safety microfilm and carefully defined archival storage conditions. The Commission requires that all grantees conform to these standards. In particular, see ANSI PH1.28-1984, ``American National Standard for Photography (Film) - Archival Records, Silver-Gelatin Type, on Cellulose Ester Base''; ANSI PH1.41-1984, ``American National Standard for Photography (Film) - Archival Records, Silver-Gelatin Type, on Polyester Base''; and ANSI/AIIM MS23-1983, ``Practice for

¹Portions adapted from ANSI/AIIM MS23-1983, courtesy of the Association for Information and Image Management.

Operational Procedures/Inspection and Quality Control of First-Generation Silver-Gelatin Microfilm of Documents.' These and other standards and related publications may be obtained from the Association for Information and Image Management, 1100 Wayne Avenue, Silver Spring, MD 20910. A complete publications list may be requested from AIIM.

5.1 Master Negatives

Commission-sponsored microforms, whether 16-mm or 35-mm reel microfilm or 105-mm by 148-mm microfiche, must begin with a camera negative of the silver-halide type that meets the minimal ANSI standards for permanent record microfilm. The microfilm should be fine grained, high contrast, panchromatic, unperforated, and antihalation protected. Lower contrast microfilm is acceptable for projects involving preservation of historical photographs. Frame-by-frame inspection of the developed negative for defects and omissions is required.

5.2 Resolution

For printed documents, a recognized standard for the minimum resolution on microforms of source documents is the quality index (QI) method of determining resolution as described in ANSI/AIIM MS23-1983. An index of at least 5 (preferably 8) is required at the level of the specific number of generations used in the system. Resolution tests shall be performed using the National Bureau of Standards 1010a Microcopy Resolution Test Charts and following the instructions provided with the charts. Because of the variability of manuscript documents, it is impossible to establish a single standard for resolution values that applies to all situations, but a reasonable minimum for a planetary camera is from ninety to 100 lines per millimeter.

5.3 Development

Exposed silver-halide microfilm must be developed only with an organic developing agent that is compounded to produce an essentially black image, fixed in a thiosulfate bath, and washed with water to remove residual hypo (sodium thiosulfate). Under no circumstances should any use be made of developers that are intended to produce stained or colored images, or of so-called hypo eliminators. The thiosulfate ion residue on the microfilm should be less than .007 grams per square meter in a clear area, as determined by the methylene blue test method.

Testing procedures are outlined in ANSI/ASC PH4.8-1985, ``American National Standard for Photography (Chemicals) - Residual Thiosulfate and Other Chemicals in Films, Plates, and Papers - Determination and Measurement.' A test of the processed microfilm is required.

5.4 Density (Opacity of the Developed Microfilm's Background)

As noted in paragraph 4.1.4 of ANSI/AIIM MS23-1983, gross background densities from 0.80 to 1.50 in clear-base negative-appearing film are recommended depending on the type of original document and on the reduction. The following list shows the range of densities, as measured with a densitometer, at which particular types of documents are likely to be filmed successfully. Any of the documents may be filmed at a lower density, but poor-quality documents are not likely to be filmed successfully at higher densities.

Description of Documents	Background Density (readings)
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High-quality, high contrast printed materials and black typing	1.30 - 1.50
Fine-line originals, black opaque pencil writing, and documents with small high-contrast printing	1.15 - 1.40
Pencil and ink drawings, faded printing, and very small printing, such as footnotes	1.00 - 1.20
Low-contrast manuscripts and drawings, graph paper with pale fine-colored lines, letters typed with a worn ribbon, and poorly printed, faint documents	0.80 - 1.00
Poor-contrast documents (not a general practice)	0.70 - 0.85

5.5 Positive or Negative User Copies

To date, only silver-halide microfilm has been judged suitable for permanent preservation of documentary materials. Despite its high quality, its silver emulsion can deteriorate with heavy daily use. Therefore, two other microfilm types (diaz and vesicular) are widely used in certain applications. Diaz microfilm, the least expensive of the three types, fades with prolonged exposure to bright light but is a good choice for private purchasers who intend to use selected reels or microfiche only occasionally. Vesicular microfilm, which is slightly cheaper than silver-halide microfilm, is commonly used for reader or loan copies by many producers. There is, however, some disagreement among experts in the micrographics industry and the library profession about the suitability of vesicular microfilm for library collections in relation to such areas as expected durability of the microfilm and the conditions under which it should be stored. This may be resolved with implementation of a new national standard for vesicular film, ANSI PH1.67-1985, "American National Standard for Photography (Film) - Processed Vesicular Film - Specifications for Stability." Standards for medium- and long-term (but not archival or permanent) diazo microfilms are available from AIIM as ANSI PH1.60-1985, "American National Standard for Photography (Film) - Processed Diazo Films - Specifications for Stability." The Commission permits producers of NHPRC-sponsored microfilms to offer editions on diazo and vesicular microfilm only if silver-halide microfilm is also available to a prospective purchaser. Microfilm or microfiche supplements to books should be produced on silver-halide microfilm if it is to be sold and distributed with the book. However, if the supplement is to be offered separately, the publisher may also offer it on diazo or vesicular microfilm.

5.6 Color Microfilm

Because of high cost, relatively poor resolution, and a pronounced tendency to scratch and fade, color microfilm and microfiche are generally not acceptable under the Commission's grant programs. New photographic processes, products, and standards (such as AIIM TR-9 Proposed, "Color Microforms"), which may overcome these problems, are under development and will be monitored carefully by the Commission staff.

5.7 Retakes and Splicing

Splicing should generally be avoided, but if it is necessary there should be no more than four splices (two retakes) per roll of first generation film, and no splices in second generation film. Care should be taken to keep the number of splices to a minimum; splices should be made in the negative before any positive copies are prepared. Although splicing methods may vary depending upon institutional practices and the type of film

stock being used, tape and/or cemented splices should not be used. A duplicate negative should be created on archival-quality, silver-halide stock as the security copy.

Retakes should be accurately spliced in proper sequence and should include at least the two frames (pages) preceding and following the frames being refilmed. In addition, allow a two-inch (50.8-mm) space for splicing before and after the retake, which itself should consist of at least one foot (304.8-mm) of images. In the finished film the first frame in the spliced strip will be a duplicate of the frame immediately preceding the first splice; a corresponding duplication will occur at the second splice. This arrangement will ensure at each splice point one good frame unaffected by the splicing process.

For additional information see AIIM MS18-1984, ``Standard for Micrographics - Splices for Imaged Film - Dimensions and Operational Constraints,'` the Library of Congress' *Specifications for Microfilming Manuscripts*, and the Research Libraries Group's *RLG Preservation Manual*.

5.8 Environmental Conditions for Microfilm Storage

Grant applicants must certify in writing in the application that the sponsoring institution will adhere to the current ANSI standards for storage of processed safety photographic film and will arrange proper fireproof, humidity- and temperature-controlled storage of the original negative or other designated negative security copy in a facility other than that housing the filmed records. Present practice requires that storage temperatures not exceed seventy degrees Fahrenheit and that relative humidity not exceed forty percent, with temperature and humidity variations of not more than five degrees (temperature) and five percent (humidity) in twenty-four hours. The grantee must report to the Commission the location of the security copy and the environmental conditions under which it is stored at the time the project's final financial report is submitted. To guard against deterioration, inspection of the security copy at two-year intervals is recommended. Applicants should use the microform guidelines agreement form in Appendix D.

5.9 Packaging

The Commission recommends the use of inert plastic reels or cores for 16-mm or 35-mm microfilm and acid-free envelopes for microfiche. Paper bands, sealing tapes, and boxes must also be sulfur-free and acid-free. Rubber bands should not be used to fasten film onto reels or cores. Adherence to ANSI/ASC PH1.53-1984, ``American National Standard for Photography (Processing) - Processed Films, Plates, and Papers, Filing Enclosures and Containers for Storage,'` is recommended. Security copies should, in addition, be placed in sealed, nonferrous (or properly coated ferrous) metal cans for long-term storage.

6. Formats

The choice of an appropriate mode, arrangement, and reduction ratio is crucial to the cost and ease of use of the microform. For a comparative discussion of microfilm and microfiche formats, see Appendix A.

6.1 Microfiche

Three formats within the 105-mm by 148-mm dimensions are acceptable. First is the fourteen column by seven row grid arrangement, which produces ninety-eight single frames or forty-nine double frames at reduction ratios of from 24:1 to 28:1. Second is the arrangement in three rows of trimmed, spliced-in 35-mm

microfilm, which produces a variable number of frames and is useful for reproducing oversized objects, such as engineering drawings, maps, and large group photographs. Third is the use of five-channel microfiche jackets with 16-mm microfilm strips to create microfiche negatives. If microfiche is created by splicing or stripping, a duplicate negative should be created on archival-quality, silver-halide stock and stored under archival conditions (see 5.8). All microfiche should be filmed in such a way that the user is not required to rotate the microfiche to bring a frame right side up. The technical term for the arrangement is the comic mode. See ANSI/AIIM MS5-1985, ``American National Standard for Micrographics - Microfiche.''

6.2 Microfilm

Every effort should be made to adopt a uniform position for all images on a particular reel. Manuscript materials ordinarily should be microfilmed at a ratio between 12:1 and 16:1 on 35-mm microfilm. The use of lower reduction ratios can increase the legibility of the microimages. The reduction ratio can also affect the cost of film used. The use of 16-mm reel microfilm should be reserved for preservation microfilming (nonsale editions) of records or the preparation of jacketed microfiche negatives and should be carefully justified. For suggestions regarding targets, test frames, arrangement, sequential numbering, and labeling, see Appendix B. The four types of commonly accepted image placement on reel microfilm are described in the guides and information literature listed in the bibliography, Appendix C.

6.3 Text Plus Microfiche

In certain instances, it may be desirable to enclose microfiche as an integral part of a book. Care should be taken to ensure that the books do not contain acidic papers or binding materials and that the cards can be removed easily. In general, microform librarians prefer to store microform supplements separately from books.

7. Category and Number of Microforms to be Produced

7.1 Security Copy (One)

The security copy is preferably the original camera negative (silver-halide), which will be stored under special archival conditions and used only to generate the duplicate negative or its replacement.

7.2 Duplicate Negative (One)

The duplicate negative is the copy (diaz or silver-halide) from which all positive and negative user copies and sale prints will be made.

7.3 User Copies (One or More)

In every instance, at least one positive or negative user copy of the microfilm should be made on silver-halide, diazo, or vesicular stock. The degree of expected research interest in the microfilm should govern the number of other copies that are produced. In general, the Commission encourages all preservation microform projects and requires all publication microform projects to create a second user copy for interlibrary loan. If the filmed material warrants deposit copies in other repositories (e.g., another user copy of city council minutes for deposit in the local public library), the grant applicant should estimate the expense, identify the prospective recipient, and justify the request for additional funding.

Sale copies usually are produced to order on the microfilm stock specified by the purchaser. The Commission requires that the microform publisher honor requests to purchase individual reels or broken sets. The Commission does not require that publications be offered for sale in both positive and negative modes, nor does the Commission regulate prices of the microfilm.

Exception: The publisher of a microform supplement to a book edition may omit arrangements for an interlibrary loan copy if the supplement is distributed with and included in the price of the book edition.

8. Guides and Indexes

8.1 Guides to Published Microform Editions

A guide should contain:

- A. A brief analysis of the contents of the edition, with specific reference to historical topics or problems to which the edition relates, and a name list of important correspondents and an estimate of the relative number of documents relating to each correspondent.
- B. A general statement about the microfilm, including the number of reels or microfiche, followed by a description and history of the documents that have been filmed.
- C. A description of existing finding aids.
- D. An indication of parts of the manuscript collection(s), record group(s), or series of documents that have not been microfilmed and the reasons for their exclusion.
- E. An indication of the status of literary property rights or copyright interests.
- F. Information on closely related material in public and private repositories.
- G. Purchasing information for copies of the microform and/or guide.
- H. Information on how to order the microform on interlibrary loan.
- I. Biographical or historical information and suggestions that will assist the user in finding information in the edition.
- J. Bibliographical guidance, including an indication of previous documentary publications based on the materials that may be of value to the user.
- K. An explanation of the microfilming plan and of the relationship between series.
- L. An explanation of the arrangement within series and an indication of the arrangement policy followed regarding undated items and fragments.
- M. An explanation of any differences between the arrangement of the documents and the arrangement of the microfilm edition (when filmed documents are from only one collection or record group).
- N. A reel or microfiche list with appropriate titles and notes.

8.2 Guides to Unpublished Microforms

Microforms not intended primarily for sale will normally be accompanied by less elaborate, unpublished guides. Ordinarily an existing finding aid, such as a standard archival inventory or register, should be adapted as the finding aid to the microform edition. In adapting an existing finding aid or in preparing a new finding aid for microforms not intended for sale, information suggested in items B through H and K through M in 8.1 should be included.

8.3 Indexes

The Commission recognizes that detailed subject and name indexes to microform editions are valuable

to researchers. The costs to produce such indexes, however, make it impossible for the Commission to provide financial support for all index projects. Generally, a microform publication involving the compilation of documentary materials from several sources should include at least name and place indexes, and the Commission will often support the preparation of these indexes. Other microfilm editions published through commercial microform publishers are also often accompanied by indexes although, in these cases, the Commission urges that much of the indexing costs be borne by the commercial publisher or the applicant as cost sharing. For sale editions, the Commission will normally entertain proposals to prepare finding aids to folders or files but not to individual documents. For nonsale editions, the Commission will also consider requests for expanding an existing finding aid, particularly to provide folder-title lists. All applicants are urged to consider carefully the costs and benefits of indexing and should describe their conclusions, plans, and cost estimates in the proposal. Requests for Commission funding of indexing will require detailed and convincing justification.

8.4 Distribution of Free Copies

Guides or indexes to sale editions should be printed in sufficient quantity to satisfy orders for at least five years. Normally, 500 copies will meet this need. Up to ten complimentary copies should be sent to the Commission (the exact number to be determined by consultation with the NHPRC staff). One hundred complimentary copies are to be distributed to archives, research libraries, historical societies, and similar institutions of the grantee's choice.

8.5 Cataloging and Reference Listing

If possible, microforms and their printed guides or indexes should be cataloged in an appropriate USMARC format for inclusion in an online bibliographic system, such as OCLC, RLIN, UTLAS, or WLN to provide information to potential users of the microfilm and to facilitate interlibrary loan. Generally, collected microform publications should be cataloged in the USMARC Books format, with separate cataloging provided in that format for their printed guides. Cataloging practices for preservation microforms of single manuscript collections or archival record units are less clearly defined, but bibliographic information about them can be provided in USMARC Archival and Manuscripts Control (AMC) format records describing the originals of the materials that were filmed. Grantees should also see that microforms are listed in appropriate catalogs at sponsoring institutions. For more information about cataloging procedures grantees should contact their institution's library's cataloging or technical services staff.

Microforms should also be listed, when appropriate, in such standard reference works as the *National Union Catalog of Manuscript Collections* (NUCMC) and the *Guide to Microforms in Print*, which appears annually in author-title and subject volumes. Entry forms and an information circular describing the listing of microforms in NUCMC are available from the Manuscripts Section, Special Materials Cataloging Division, Library of Congress, Washington, DC 20540. For information on listing in *Guide to Microforms in Print*, contact Meckler Publishing, 11 Ferry Lane West, Westport, CT 06880.

9. Grant Application Checklist

Relevant items from the following list should be included in microform grant applications:

- A. A point-by-point discussion of budget items, showing calculations.
- B. The qualifications of named project personnel or appropriate job descriptions for positions to be filled.

- C. A specific work plan and timetable.
- D. A description of contracting procedures and procedures for selection of a microform publisher, if any.
- E. A statement of technical standards that will apply and the adequacy of in-house production facilities to comply with these standards.
- F. A discussion of the choice of medium (microfilm or microfiche, 35mm or 16mm).
- G. A justification of restoration work (i.e., deacidification, repairs, encapsulation, or lamination) that is to precede microfilming.
- H. The degree of urgency, if any.
- I. A discussion of any arrangements to make copies available for loan or sale.
- J. A discussion of the national historical significance of the materials and the past and probable future research use of them.
- K. A completed, signed cover sheet (available from the Commission office).
- L. A signed agreement to adhere to NHPRC microform guidelines and current ANSI standards for storage of the security copy (see Appendix D).

Appendix A

Microfilm or Microfiche: Which To Select

The Commission encourages project directors to consider carefully the suitability of the collection for microfiche or reel microfilm. The growing dominance of microfiche over reel microfilm in the commercial world has resulted in rapid and dramatic improvement in microfiche technology, especially in the development of high-quality cameras, readers, and reader/printers. Most users find microfiche less cumbersome than reel microfilm. Libraries report less film damage and fewer storage problems with microfiche than with reels. In addition, the column-and-row format of microfiche permits speedy retrieval of individual images. Not every collection, however, is appropriate for microfiche production.

Several major considerations can help a project director decide whether to choose microfilm or microfiche. Although microfiche is a suitable medium for oversized maps and drawings, special filming and splicing, if required, is costly and time consuming. In addition, items may need to be reduced a great deal to fit on the small image area used by certain fiche formats. The Commission, however, does not recommend use of the Molex process to create microfiche masters. Single frame 105-mm fiche, a standard for which is currently under development (AIIM MS37-Proposed, ``Microphotography of Cartographic Materials''), may be a viable solution and is being monitored by the Commission staff. In general, however, any collection containing a significant number of items that exceed 8.5-by-11 inches in size (especially in the vertical dimension) might best be preserved on 35-mm reel microfilm, not microfiche. Similarly, a collection containing numerous faint originals, negative prints, or poor-quality photocopies would benefit from the lower reduction ratios of 35-mm reel microfilm. Because there are exceptions to even these simple rules of thumb, project directors should seek expert technical advice during early planning.

In most instances, project directors will find microfiche to be significantly more costly to produce than reel microfilm, especially if the collection poses technical problems or requires a great deal of special handling. Almost certainly, the preparation of the collection and of the necessary microfiche program cards, which show the camera operator the location of each page on the microfiche, will prove more difficult, time consuming, and expensive than comparable preparations for reel microfilm.

Additional advice may be found in the articles by Thomas E. Jeffrey listed in the bibliography, Appendix C.

Appendix B

Suggestions for Filming Procedures

Numerous guides of varying length and explicitness that describe acceptable procedures for preparing, targeting, and microfilming records exist. A good, brief summary is contained in Bruce W. Dearstyne's ``Microfilming Historical Records: An Introduction.'` Somewhat more detailed is the Library of Congress' manual, *Specifications for Microfilming Manuscripts*. Probably the most thorough set of directions is to be found in chapters XIV, XV, and XVI of the National Center for State Courts' publication, *Microfilm and the Courts: Reference Manual*. For suggested targets and blank forms, see ANSI/AIIM MS19-1978, ``Recommended Practice for Identification of Microforms.'`

Reel Microfilm

In brief, reel microfilm should include the following:

- A. At least 18 inches of blank leader.
- B. A large, readable START target.
- C. A reel number target.
- D. One or two frames containing title and descriptive information, such as series identification and inclusive dates.
- E. A frame containing National Bureau of Standards resolution test charts, a density test area, and information about the reduction ratio(s).
- F. A repetition of the identification information at the end of the reel, a signed and filmed certificate of authenticity (if required for legal reasons), and a large, readable END target inserted just before the 18-inch trailer.

Targeting within the reel should follow standard practices of noting series changes, faint or illegible original documents, omitted or missing pages (if numbered), mutilations, deliberate multiple exposures, and changes of reduction ratio. All frames should be sequentially numbered, preferably with a mechanical counter in the bed of the planetary camera.

Microfiche

Microfiche cards should have readable titles, series identification, and card numbers printed across the top of each card. The first frame (A1) of each card or, at a minimum, the card beginning each series, should contain the test charts and reduction information. START and END targets are unnecessary. Avoid inserting blank frames between items. Except in collected editions where the location of the original document is necessary information, individual targets for each document need not be prepared. Whenever possible, the staff engaged in collecting projects should design document accession or control cards that can later be used as targets protruding from underneath the item to be filmed. Separate frames for target cards should be avoided.

Appendix C

Selected Bibliography

Articles, Books, Guides, and Manuals

Association for Information and Image Management*. *Basic U.S. Government Micrographic Standards and Specifications*. 6th ed. Silver Spring, MD: AIIM, 1982.

_____. *Glossary of Micrographics*. AIIM TR2-1980. Silver Spring, MD: AIIM, 1980.

_____. *Guidelines for Microfilming Public Records on Silver-Halide Film*. AIIM TR6-1985. Silver Spring, MD: 1985.

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Appendix D

Microform Guidelines Agreement

The following statement should be signed by the authorizing representative of the sponsoring institution and included with any microform grant application submitted to the National Historical Publications and Records Commission.

(sponsoring institution)

agrees to adhere to the National Historical Publications and Records Commission's *Microform Guidelines*, including the specified ANSI/AIIM standards, in producing or contracting for production of

(project title)

The sponsoring institution will adhere to ANSI PH1.43-1983, "American National Standard for Photography (Film) - Storage of Processed Safety Film," or latest version, for storage of processed safety photographic film and will arrange for proper storage of the original negative or other designated negative security copy in a facility other than that housing the filmed records.

The sponsoring institution will report to the Commission the location of the security copy and the environmental conditions under which it is stored at the time the project's final financial report is submitted.

Signature of Authorizing Representative

Name

Title

Institution Name

Address

Date

