

# **National Historical Publications and Records Commission**

## **Microform Guidelines Publisher/Vendor Supplement (Revised 1986)**

This supplement to the NHPRC's *Microform Guidelines* has been prepared in response to requests from editors and directors of microform projects for a document to use in negotiating with publishers and vendors of microform services. It includes only those sections of the full *Guidelines* manual that apply to actual film and guide/index production.

It is expected that this supplement, like the full *Guidelines*, will be revised regularly to reflect changes in ANSI/AIIM standards and technical processes. Page numbers in this document, as in the full *Guidelines*, reflect the year of issuance.

Prospective publishers and vendors should be given a copy of this supplement to review prior to submission of formal bids or job contracts. A special microform publisher/vendor agreement form, included at the end of the supplement, should be signed by the selected publisher/vendor. A copy of the signed agreement should be forwarded by the project director to the Commission for inclusion in the project's file.

Questions about any specific aspects of these guidelines should be directed to the National Historical Publications and Records Commission, National Archives (NP), Washington, DC 20408.

## **1. Technical Standards<sup>1</sup>**

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 refile 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 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.

### **1.1 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.

### **1.2 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.

### **1.3 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.

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

#### 1.4 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.

| <b>Description of Documents</b>  | <b>Background Density (readings)</b> |
|--|--------------------------------------|
| 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                          |

#### 1.5 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 be scratched and deteriorate with heavy daily use. Therefore, two other microfilm types (diaz and vesicular) are often 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.

#### 1.6 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.

### **1.7 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 on institutional practice 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*.

### **1.8 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.

## **2. 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 to the Commission's *Microform Guidelines*.

### **2.1 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. 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.''

## **2.2 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 of the Commission's *Microform Guidelines*. 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 of the full *Guidelines*.

## **2.3 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.

# **3. Category and Number of Microforms to be Produced**

## **3.1 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.

## **3.2 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.

## **3.3 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.

## **4. Guides and Indexes**

### **4.1 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.

### **4.2 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 4.1 should be included.

### **4.3 Indexes**

The Commission recognizes that detailed subject and name indexes to microfilm 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.

#### **4.4 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.

### Microform Publisher/Vendor Agreement

The following statement should be signed by an authorized representative of the commercial publisher or microfilm service vendor selected by the sponsoring institution. A copy of the signed agreement should be forwarded to the Commission for inclusion in the grant file. This agreement does not replace the ``Microform Guidelines Agreement'' found in Appendix D of the Commission's *Microform Guidelines*. A signed copy of that agreement should be included with any microform grant application submitted to the NHPRC.

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(publisher/vendor)

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

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(project title)

In addition, the publisher agrees to honor requests to purchase individual reels or broken sets. It is the responsibility of the sponsoring institution to 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 to arrange for proper storage of the original negative security copy in a facility other than that housing the filmed records.

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Signature of Authorized Representative

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Name

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Title

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Organization Name

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Address

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Date