

## CHAPTER 12

### MICROGRAPHICS

1. GENERAL. Micrographics is the science and technology of microfilming information and of storing, retrieving, and disposing of various types of information. It includes microfilm, microfilm jackets, microfiche, ultra fiche, micro publishing, and computer output microfilm (COM). Micrographics technology is a tool of records management that can be used to solve many managerial problems concerning personnel, space, time, and money. A micro graphics system creates a durable file with a life span far in excess of most storage media. Records on micro forms need as little as 2 percent of the space occupied by the same records on paper. Duplicate microform files kept in separate, safe storage locations protect against destruction and loss of vital information. The duplicate files can be made for a fraction of the cost of duplicating an entire paper record. However, micrographics cannot solve any problem resulting from bad management. For example, if filing is getting out of hand, it may be due to poor files management, which is not solvable by micrographics, rather than due to the managerial problem of an excessive workload, which may be solved by micrographics. If there is a space problem, it may indicate the failure to follow disposition schedules rather than the need to reduce the storage volume by using microforms. Micrographics should be considered only after the management of a records system has been reviewed and either:
  - a. Poor management is not the problem, or
  - b. All poor management practices have been corrected.If the volume of information is more than can be handled, or if the information is not available when and where it is needed, then the next step is to conduct a feasibility study to identify the remaining problems and to find out if a micrographics system is the needed solution.
2. PROGRAM OBJECTIVES. The overall objective of a micrographics management program is to ensure the cost effective use of micrographics in helping the Agency to carry out its mission. Specific goals include:
  - a. Reducing costs.
  - b. Resolving paperwork problems.
  - c. Developing user-oriented systems.
  - d. Improving equipment utilization.

- e. Providing micrographics information and assistance.

The emphasis placed on the various aspects of micro graphics management will depend on the particular needs of an office/section and the extent of its use of micro graphic systems. An office that has frequent involvement with other Federal agencies or many public information programs will place a high priority on establishing and enforcing standardization of microforms and formats.

- 3. TWELVE STEPS TO MICROFILMING RECORDS. Converting certain paper records to microfilm may offer substantial potential benefits if the appropriate records are selected and if the correct procedures are followed. Poorly planned filming operations lead only to excessive costs, waste, and inefficiency. The manager considering micro graphics can improve chances of success and avoid major problems by taking the following steps in the sequence shown:

- a. Identify the records proposed for filming. Determine, revise, or establish approved retention periods for all records series involved.
- b. Destroy, retire, or transfer records as required by the approved agency retention schedule. Use the Federal Records Center (FRC) when appropriate.
- c. Improve current file operations and paperwork systems. Study the system, then identify and correct any inadequacies in files management or in the administrative procedures used to create, maintain, and use the records.
- d. Evaluate the improved paper system. If the information will be used for a long period, look for any remaining serious problems such as:
  - (1) Excessive volume or bulk still causing difficulties;
  - (2) Information still not available when and where needed; and
  - (3) Irreplaceable records that need duplicates for protection.

If these factors exist, consider microfilm as an alternative.

- e. Learn or review at least the basic facts about the use of microfilm. (Suggest National Micrographic Association's "Introduction to Micrographics," the General Services Administration (GSA's) Handbook, "Microfilming Records," and a short training seminar if available.)
- f. Review and ensure compliance with the Federal microfilming regulations found in Federal Information Resources Management Regulations (41 CFR) 201-45.109, Micrographics Management.

- g. Analyze user needs. Find out who uses which information in the records (documents). Learn where, when, with what urgency, under what conditions, and for how long the information is needed.
- h. Analyze the paper documents. Consider their physical characteristics, current arrangement, retrieval methods, duplication needs, distribution requirements, updating activities, etc., that might impact a filming decision. Measure current volume and estimate future growth.
- i. Determine indexing needs. Indexing microfilm requires rigidly enforced standardization and highly structured procedures not usually found in paper systems. Weak indexing means lost documents. Be positive you will be able to find the information easily when it is on film.
- j. Design the proposed system. Do not become obsessed with the technology or the hardware. Work from the basic objectives of performing the mission. Channel efforts toward system improvement. Balance the user needs (step g.) with the document requirements (step h.) and make sure the system will solve the problems identified in (step d.) Determine:
  - (1) Film type (both originals and duplicates), format, size, and reduction ratio;
  - (2) Procedures for filming, updating, retrieving, duplicating, distributing, and using;
  - (3) Generic classes of equipment involved; and
  - (4) Advisability of in-house versus a service bureau.
- k. Develop a cost-benefit analysis.
  - (1) Include all costs (equipment, supplies, personnel, space, etc.). Document preparation or indexing may be the major cost;
  - (2) Compare cost of in-house, service bureau, and combination operations; and
  - (3) Evaluate benefits in both hard dollar savings and improved quality or service.
- l. Prepare the final recommendation to proceed and present the proposal to the Records Officer.



4. PROCEDURES FOR SUBMISSION OF PROPOSED MICROGRAPHICS SYSTEMS.

Each micrographics system must be approved before it is begun. The Records Officer is responsible for the review and approval of proposals for micrographics systems and applications.

a. An office considering a micrographics system must:

(1) Conduct a systems analysis, including a cost/benefit analysis, prior to establishing a system. The cost/benefit analysis will include a comparative cost analysis in accordance with Office of Management and Budget (OMB) Circular A-76, if it meets those guidelines. The systems analysis will contain the following items:

(a) An examination of the current operating system to evaluate the need for the documents or information and the use to which they are put.

(b) A consideration of the alternatives to micrographics including such measures as:

i Revising records control schedules to provide for the disposition of paper records by disposal, by transfer of inactive paper records to the FRC, or by offer of permanently valuable paper records to the National Archives and Records Administration (NARA) (36 CFR Chapter XII); and

ii Improving current retrieval and distribution procedures using paper records.

(c) A consideration of all feasible alternative methods of creating the microform records, such as:

i Acquisition of new equipment;

ii Lease-purchase of equipment already installed;

iii Sharing micrographics production equipment already in the Agency;

iv Using the micrographics facility of another agency;

v Contracting for NARA reimbursable micrographics services;

vi Contracting with a non-Government commercial services firm;  
and

vii Other alternatives identified in the analysis.

- (d) An analysis of the workload and staffing requirements to ensure sufficient trained personnel to operate and maintain the micro graphics system.
  - (e) An examination of the information needs of the user when determining reduction ratio, format, quality control procedures, viewing equipment, and user training.
  - (f) A review to ensure compatibility of microforms used within the agency and those used to transmit information to other agencies and the public.
  - (g) A determination of the availability and cost of specialized space requirements; i.e., temperature and humidity control or plumbing.
  - (h) A review to ensure adherence to NARA standards for the photographic and micrographics production and reproduction of records.
- (2) Ensure that the chosen alternative will be the most cost effective and efficient system unless overriding intangible benefits necessitate an alternate decision.
  - (3) Procure equipment that is subject to those Federal Information Resources Management Regulations provisions governing Automated Data Processing. (See Subparts 201-24, 201-30, and 201-32.)
  - (4) Submit the study through appropriate channels to the Records Officer.
  - (5) Coordinate the proposal with the Records Officer and the contracting/purchasing function prior to contacting outside commercial vendors.

b. The Records Officer will:

- (1) Review the proposal to ensure adherence to NARA standards in accordance with the guidelines established in paragraph 4a and 41 CFR 201-45.109-4.

- (2) Evaluate the continued efficiency and effectiveness of micrographics systems and applications.
  - (3) Review ongoing micrographics systems periodically for conformance to established policies, procedures, and standards.
  - (4) Ensure the disposition of microform records is carried out in the same manner prescribed for other types of records in 36 CFR part 1228 and with the additional requirements in Part 1230.
  - (5) Inform the requesting office of approval or disapproval of the proposal.
  - (6) If approved, assist the requesting office in the implementation of the project.
  - (7) Coordinate all requests for micrographics systems and applications with the contracting/procurement function.
- c. Filmed records will be disposed of in accordance with established retention periods as provided by current approved records disposal schedules. The filming of records does not change or cancel previously established retention periods of the paper records.