

APPENDIX V

GLOSSARY OF TERMS

Access Time. (1) Time it takes to get an instruction or a unit of data from computer memory to the processing unit of a computer. (2) Time it takes to get a unit of data from a direct access storage device to computer memory.

AIIM. Acronym for Association for Information and Image Management. Trade association and professional society for the micrographics, optical disk and electronic image management markets.

Algorithm. Mathematical formula or procedure.

ANSI. Acronym for American National Standards Institute. ANSI is a voluntary nonprofit consensus standards organization which coordinates private-sector standards activities and serves all industries and users in the United States. ANSI is the primary interface with the U.S. Government on matters relating to standards and also is the recognized representative to the International Organization for Standardization (ISO).

Aperture card. (1) A card with a rectangular opening(s) specifically prepared for the mounting or insertion of microfilm. (2) A processable card of standard dimensions into which microfilm frames can be inserted.

Archival quality. The ability of a processed print or film to permanently retain its original characteristics. The ability to resist deterioration.

Array. An arrangement of elements in one or more dimensions.

ASCII. Acronym for American Standard Code for Information Interchange - American National Standard binary-coding scheme consisting of 128 eight-bit patterns (7-bits plus a parity check bit) for printable characters and control of equipment functions.

Base. Transparent plastic material, usually of cellulose triacetate or polyester, upon which a photographic emulsion or other material may be coated.

Baud. Unit of transmission speed equal to the number of signal events per second.

Binary. Pertaining to a system of numbers with a base of two.

Binary digit (bit). Represents the binary code (0 or 1) with which the computer works.

Bit-Map. Method of representing images by assigning an individual memory location for each picture element (pixel).

Book cradle. A device which holds a large bound book open and flat during filming with a planetary camera.

Byte. 1) Group of binary digits (bits), processed or operating together. 2) Term used to describe one character of information.

Camera microfilm. First generation microfilm; also called the master film.

Camera-processor. A device which performs both filming and processing within one unit.

Cartridge. A container enclosing processed microforms, designed to be inserted into readers, reader-printers and retrieval devices. When applied to roll microfilm, it describes a single-core device.

Cassette. (1) A double core container enclosing processed roll microfilm, designed to be inserted into readers, reader-printers and retrieval devices. (2) A lightproof container of rigid metal or plastic containing film for daylight loading in cameras. (3) A container for magnetic tape.

CCITT. Acronym for Consultative Committee for International Telegraph & Telephone. This group establishes international standards for telecommunications including the Group III and Group IV digital standards that cover data compression and decompression.

CD-ROM. Acronym for Compact Disk-Read Only Memory. Optical disk that is created by a mastering process and used for reading.

CD-WORM. Acronym for Compact Disk-Write Once Read Many. An optical disk that is user written and then available for reading.

Cellulose ester. A film base composed mainly of cellulose esters of acetic, propionic or butyric acids or mixtures thereof.

Cine mode. Vertical Mode. (1) The arrangement of images on roll microfilm in which the lines of print or writing are perpendicular to the length of the film for horizontal script and parallel for vertical script. (2) The arrangement of images on a microfiche in which the first microimage is in the top left-hand corner of the grid pattern and succeeding microimages appear in sequence from top to bottom and in columns from left to right.

Comic mode. Horizontal Mode. (1) The arrangement of images on roll microfilm in which the lines of print or writing are parallel to the length of the film for horizontal script and perpendicular for vertical script. (2) The arrangement of images on a microfiche in which the first microimage is in the top left-hand corner of the grid pattern and succeeding microimages appear in sequence from left to right and in rows from top to bottom.

Computer Micrographics. Branch of micrographics dealing with microforms that are generated, stored, retrieved or manipulated with the aid of computer techniques.

Computer-Output Microfilm (COM). Microforms containing data produced by a recorder from computer-generated electrical signals.

Data. Symbols or representations of facts or ideas that can be communicated, interpreted, or processed by manual or automated means. Often associated with electronic data or with statistics or measurements.

Data Base. A set of data, consisting of at least one file or of a group of integrated files, usually stored in one location and made available to several users at the same time for various applications.

Data Base Management System. A software system used to access and retrieve data stored in a database.

Data Compression. Conversion of a digital image to a lower number of bits for storage.

Data File. An organized collection of related data, usually arranged into logical records that are stored together and treated as a unit.

Densitometer. A device used to measure the optical density of an image or base by measuring the amount of light reflected or transmitted.

Dense (Density). (1) The light-absorbing or light-reflecting characteristics of a photographic image. (2) The relation of amount of text to non-text areas on a document.

Diazo Film. A slow print film, sensitized by a coating of diazonium salts which, subsequent to exposure to light and development, forms an image. Diazo film generally produces nonreversed images; i.e., a positive image will produce a positive image and a negative image will produce a negative image.

Digital. Use of binary code to record information. "Information" can be text in a binary code, e.g., ASCII, or images in bit-mapped form or sound in a sampled digital form or video.

Digitize. Process of representing images as a matrix of picture elements (pixels), where each pixel is small enough that it can be considered homogeneous and represented by a numeric value, often just 0 or 1.

Dots per inch (dpi). Measure of output device resolution and quality, e.g., number of pixels per inch on display device. Measures the number of dots horizontally and vertically.

Drive. Machine for reading and, when possible, writing a data storage medium (disk, tape, card or otherwise); can be optical, magnetic, etc.

Dry-process silver film. A nongelatin silver film that is developed by application of heat.

Duplicate. (1) A copy of a microform made by contact printing or by optical means. (2) To make multiple copies of a document or microfilm, usually with the aid of the master film or intermediate copies.

EBCDIC. Acronym for Extended Binary Coded Decimal Interchange Code. 8-bit computer code that is used to represent upper and lowercase characters and special symbols.

Electronic Records. Records stored in a form that only a computer can process. Also called machine-readable records or Electronic Data Processing (EDP) records.

Electronic Records System. Information system that produces, manipulates, or stores auditable records of a county's transactions by using a computer.

Emulsion. A single- or multi-layered coating consisting of light-sensitive materials in a medium carried as a thin layer on a film base.

Exposure. (1) The act of exposing a sensitive material to light/radiant energy. (2) The time during which a sensitized material is subjected to the action of radiation. (3) The product of radiation intensity and the time during which it acts on the photosensitive material.

Eye loupe. (Measuring Magnifier) A hand-held magnifying glass with a power of 6 to 15x.

Generation. One of the successive stages of photographic reproduction. The first generation is the camera film. Copies made from this first generation are second generation, etc.

Gray Scale. Array of adjacent neutral density areas varying by a predetermined rate or step from black to white and used to expose film to determine its sensitometric curve.

Hardcopy. (1) An enlarged reproduction from a microform usually on paper. (2) A printed copy of machine output in a readable form, for example, output from a computer printer.

Image. (1) A representation of information produced by light/radiant energy. (2) In electronic imaging, digital representation of a document.

Image Conversion. In electronic imaging, the operation of converting a human readable image on paper or a microform to a bit-map.

Image Enhancement. The process of cleaning up or intensifying a digital image using algorithms to improve legibility.

Image File Headers. Analogous to a "table of contents" describing the set of scanned images stored on a disk. Data may include such items as the file size, compression formula, and image density and is used to link a user's request for an image to a specific location on the storage device.

Information. Data and documents that have been given value through analysis, interpretation or compilation in a meaningful form.

Information System. Logical group of subsystems and data required to support the data needs of one or more business processes.

Integrated Information System. Information systems that combines two or more technologies or subsystems, e.g., CD-ROM and microcomputer.

ISO. Acronym for International Organization for Standardization. ISO produces standards or recommendations, including those that impact the information technology field, which are the result of free and open agreement among nations. Its purpose is to coordinate standardization efforts and encourage cooperation in economic, intellectual, technological, and scientific endeavors.

Jacket. A flat, transparent, plastic carrier with single or multiple film channels made to hold single or multiple microfilm images.

Jukebox. Automated device for housing multiple optical disks and one or more read/write drives.

LAN. Acronym for Local Area Network. Data communication network of connected devices within a small area, such as a building or group of buildings.

Laser. Source that produces light that is monochromatic (of only one wavelength) and highly coherent (with waves in phase both temporally and spatially). Acronym for light amplification by stimulated emission of radiation.

Laser-beam COM recorder. COM recorder that uses a laser beam to generate images directly on film.

LE rating. Acronym for Life Expectancy rating. The LE rating is the life expectancy of film when stored under specified storage conditions. For example, film with an LE rating of 100 would have an estimated life expectancy of 100 years when stored under recommended storage conditions.

Light box. A device for inspecting film that provides diffused illumination evenly dispersed over the viewing area.

Master film. Any film, but generally the camera microfilm, used to produce further reproductions, such as intermediates or distribution copies.

Methylene blue. A chemical dye formed during the testing of archival permanence of processed microimages using the methylene-blue method.

Microfiche. A transparent sheet of film with microimages arranged in a grid pattern.

Microfilm. (1) A fine-grain, high-resolution film used to record images reduced in size from the original. (2) A microform consisting of strips of film on rolls that contain multiple microimages. (3) To record microphotographs on film.

Microform. A form, usually film, which contains microimages.

Micrographics. Refers to the techniques associated with the production and handling of microfilm, microfiche and related storage technologies based on retaining a photographic representation on film.

NAPM. Acronym for National Association of Photographic Manufacturers, Inc.

Negative-appearing image. An image in which the lines and characters appear light against a dark background.

NIST. Acronym for National Institute for Standards and Technology. Formerly known as the National Bureau of Standards (NBS), it was established in 1901 to support industry, commerce, scientific institutions, and all branches of Government. NIST laboratories work to advance measurement science and develop standards for industry and commerce.

OCR. Acronym for Optical Character Recognition. Technique by which characters can be machine-identified then converted into computer processable codes (e.g., ASCII, EBCDIC, etc.)

Optical Disk. Medium that will accept and retain information in the form of marks in a recording layer, that can be read with an optical beam. See also compact disk-read only memory, rewritable optical disk and write-once read-many optical disk.

Optical System. Essential and accessory optical elements designed to contribute to the formation of an image.

Packing Density. The determination of the amount of information contained within defined dimensions.

Peripheral Equipment. Supplementary equipment external to a computer that puts data into or accepts data from the computer, such as disk drives and printers.

Pixel. Smallest element of a display surface that can be independently assigned color or intensity.

Planetary camera. A type of microfilm camera in which the document being photographed and the film remain in a stationary position during the exposure. The document is on a plane surface at the time of filming. Also known as a flatbed camera.

Polarity. The change or retention of the dark to light relationship of an image, i.e., a first-generation negative to a second-generation positive indicates a polarity change, while a first-generation negative to a second-generation negative indicates the polarity is retained.

Polyester. A transparent plastic made from polyesters and used as a film base because of its dimensional stability, strength, resistance to tearing and relative nonflammability.

Positive-appearing image. An image in which the lines and characters appear dark against a light background.

Processing. A series of steps involved in the treatment of exposed photographic material to make the latent image visible and ultimately usable, e.g., development, fixing, washing, drying.

Raster. Description of a rectangular or square array formed by a number of horizontal scan lines comprising a number of picture elements. The number of scan lines establishes the vertical dimension of the array and the number of picture elements forms vertical rows which establish the horizontal dimension of the array.

Raster COM (R-COM). Device that produces microforms from any computer-managed pixel image storage device.

Raster COM Recorder. COM recorder that generates microimages from pixel representation.

Recordkeeping System. A set of policies and procedures for organizing and identifying files or documents to speed their retrieval, use and disposition and to provide adequate documentation of the agency's functions and transactions.

Records: Permanent. Records which have been scheduled for permanent retention by the County Records Committee or by applicable statute or regulation.

Records: Vital. Records regardless of archival value that are essential to functions of government during and after an emergency. Also, those records essential to the protection of the rights and interests of that organization and of the individuals for whose rights and interests it has responsibility.

Redox blemish. A microspot formation on silver-gelatin type films caused by air pollution, improper packaging or storage conditions. Synonymous with aging blemishes, measles, microspots and red spots.

Reduction ratio. The relationship (ratio) between the dimensions of the original or master and the corresponding dimensions of the microimage; e.g., reduction ratio is expressed as 1:24.

Residual thiosulfate ion. Ammonium or sodium thiosulfate (hypo) remaining in film or paper after washing. Synonymous with residual hypo.

Resolution. The ability of a photographic system to record fine detail.

Resolving Power. The numeric expression of the ability of an optical or photographic system to distinguish or separate two entities spaced closely together. In micrographics, it is the product of the number of the resolution test pattern resolved in the image multiplied by the reduction and is expressed in line pairs per millimeter.

Rewritable Optical Disk. Optical disk on which data is recorded. The data in specified areas can subsequently be deleted and other data can be recorded.

Roll microfilm. Microfilm that is or can be put on a reel, spool or core.

Rotary camera. A type of microfilm camera that photographs documents while they are being moved by some form of transport mechanism. The document transport mechanism is connected to a film-transport mechanism, and the film also moves during exposure so there is no difference in the rate of relative movement between the film and the image of the document.

Safety film. A comparatively nonflammable film support (base) that meets ANSI requirements for safety film.

Scanner. Device that converts a document into binary (digital) code by detecting and measuring the intensity of light reflected from paper or transmitted through microfilm.

SCSI. Acronym for Small Computer Systems Interface - (pronounced "scuzzy"). Industry standard for connecting peripheral devices and their controllers to a microprocessor. Note: The SCSI defines both hardware and software standards for communication between a host computer and a peripheral.

Silver film. A photographic film containing photosensitive silver compounds suspended in a suitable material. When developed, the image consists of metallic silver.

Silver halide. A compound of silver and one of the following elements known as halogens: chlorine, bromine, iodine, and fluorine.

Splice. A joint made by cementing, taping or welding (heat splice) two pieces of film or paper together so they will function as a single piece when passing through a camera, processing machine, viewer or other apparatus.

Step-and-repeat camera. A type of microfilm camera that can expose a series of separate images on an area of film according to a predetermined format, usually in orderly rows and columns, e.g., microfiche.

System. Organized collection of hardware, software, supplies, people, maintenance, training and policies to accomplish a set of specific functions.

Target. (1) Any document or chart containing identification information, coding or test charts. (2) An aid to technical or bibliographic control that is photographed on the film preceding or following the document.

Text Documents. Narrative or tabular documents, such as letters, memorandums, and reports, in loosely prescribed form and format.

Vesicular film. A film in which the light-sensitive component is suspended in a plastic layer. On exposure, the component creates optical vesicles (bubbles) in the layer. These imperfections form the latent image which becomes visible and permanent by heating the plastic layer and then allowing it to cool.

WORM. Acronym for Write-Once-Read-Many. Digital optical disk on which data is recorded by the user once and can be read many times.