

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE MANUAL 37-123

31 AUGUST 1994



**Information Management
MANAGEMENT OF RECORDS**

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(Ms Grace T. Rowe)
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This manual implements DoD Directive 5015.2, *Records Management Programs*, March 22, 1991 with Change 1 and AFPD 37-1, *Information Management*. It establishes procedures for managing records. When supplemented by major commands (MAJCOM), field operating agencies (FOA) and direct reporting units (DRU), send a copy of the supplement to SAF/AAIQ, 1610 Air Force Pentagon, Washington DC 20330-1610.

SUMMARY OF REVISIONS

This revision aligns the manual with AFPD 37-1.

Chapter 1

OBJECTIVES AND RESPONSIBILITIES

1.1. Why We Need Efficient Records Maintenance. Records play a vital role in managing and operating Air Force activities. They serve as the memory of the organization, a record of past events, and the basis for future actions. Records managed systematically are complete, easily accessible, and properly arranged to serve current and future management needs and enhance effectiveness and economy of operations.

1.2. Duties and Responsibilities. See AFI 37-122 , *Air Force Records Management Program* (formerly AFR 4-74).

1.3. Records Maintenance and New Technologies. Records are information that we preserve and manage; they exist independent of form. Various automated systems store information. More and more, we convert paper documents to microform, optical disks, video disks, and compact disk-read only memory (CD-ROM); and we replace paper copies with electronic files. However, paper records will continue to exist. See **Chapter 2** of this manual for information on Records Information Management System (RIMS). See **Chapter 6** for microfilming and **Chapter 7** for managing electronic records.

Chapter 2

RECORDS INFORMATION MANAGEMENT SYSTEM (RIMS)

2.1. About RIMS RIMS is a mandatory Air Force-wide Information Management (IM) Standard Automated System. It provides the tools records managers need to automate some of their records management and staff support.

2.1.1. Security. Do not put sensitive, classified information or Privacy Act material in RIMS.

2.1.2. Description. RIMS automates records management functions by providing an abbreviated, on-line data base of tables and rules from AFMAN 37-139, *Disposition of Air Force Records-Records Disposition Schedule* (formerly AFR 4-20, volume 2). RIMS makes it easier to prepare file plans, disposition control labels, and folder labels; tracks Staff Assistance Visits (SAV) and the training schedules of records technicians; manages staged records; provides backup and recovery; and allows difficulty reporting. See *Records Information Management System (RIMS) End Users Manual* for details.

2.2. RIMS Files Procedures. Records managers must use the "Location" field in the RIMS file plan to show where documents are filed or if they are not filed with the majority of the files to indicate items that have subdivisions (e.g., use terms like "see attached sheet"). Key in subdivision when preparing the RIMS file plans. RIMS will print out labels for items and subdivisions when they are keyed on the file plan.

2.2.1. Files Maintenance and Disposition Plan. Records managers must determine who will enter the data into RIMS. RIMS will print out all files maintenance and disposition information for the office of record. The chief of the office of record (COR) signs the RIMS file plan. If there are any changes, the Functional Area Records Manager (FARM) may update the file plan and provide the records manager with the updated information on disk. The RIMS file plan is considered approved only when both the records manager's administrative approval (using RIMS) is stated on the file plan and the chief of the office of record's signature appears on the file plan as approval of the office's files. The chief of the office of record signs the file plan above his or her typed name. Do not change the title of the table and rule in the data base since this would cause RIMS to print the changed title for every office of record using that table and rule. (If desired, add local titles in pen and ink in parenthesis on the RIMS file plan).

2.2.1.1. Distribution. Records managers must keep their approved file plans on their disk and additionally may keep them on paper as an option. Send copies of file plans to the individuals who need to use the files.

2.2.1.2. Review. Redo the file plan as needed, but not simply because a records technician or chief of the office of record changes. You may make a change of this type of information on the paper copy or in your computer. Keep records managers advised so they can update the RIMS data base. When conducting SAVs, records managers will check for file plans to be sure they are approved.

2.2.2. Files Disposition Control Label. RIMS generates a file disposition control label. RIMS allows only one disposition authority (table and rules) per records series on the file plan.

2.2.3. Locator Guide Card Labels. Manually prepare labels for locator guide cards, if needed. RIMS does not provide this information. See paragraph 3.7.2.

2.2.4. Folder Labels. RIMS will print folder labels for each file plan item, each office or all offices of record, specific tables and rules, and recently modified rules. RIMS will accept subdivisions and will prepare separate folder labels for the subdivision labels. Manually mark the folders containing classified records with the highest classification of the contents. Use folders for each records series listed on the file plan that are maintained in file cabinets. Records maintained outside the file cabinets, in binders, card file boxes, or posted on wall, do not need a folder.

2.2.5. Filing Classified Records. Follow the procedures in paragraph 4.3.

2.3. Files Cutoff Procedures. Cut off files as indicated in paragraph 4.4. Destroy, transfer, or retire eligible records according to the latest cutoff instructions on the RIMS disposition control label (See AFI 37-138, *Disposition of Air Force Records, Procedures and Responsibilities* and AFMAN 37-139). Chiefs of the office and records technicians must cut off files at a specific time after an event or completed action. Use the disposition control label and AFMAN 37-139 to guide records disposition.

2.4. Electronic and Other Non-Paper Records. When the item is the record copy, indicate the kind of non-paper medium (e.g., microfilm, optical disk, diskette) on the file plan. Place the disposition control label on guide cards, or on containers for floppy disks, diskettes, cassettes, tapes, or other physical media.

Chapter 3

PLANNING AND ARRANGING RECORDS

3.1. Office Arrangement. Arrange records to provide safe and easy access for workers and protection of sensitive, classified information and Privacy Act material.

3.2. Basic Filing Arrangement. When possible, separate records series for ease of filing and retrieving without separate indexing systems. If warranted by the volume of records, subdivide a series for ease of filing, but avoid setting up subdivisions that contain only a few records. Unless directives specify filing procedures, you may use one of the following arrangements:

3.2.1. Numerical. Use this arrangement to identify or refer to files by number.

3.2.2. Chronological. Use this arrangement when files are in date sequence or when the date is the primary means of reference. Place record with the latest date on top.

3.2.3. Geographical. Use this arrangement to file records -- state, country, or city, for example - when the geographical arrangement is the primary means of reference.

3.2.4. Organizational. Use this arrangement when the name of the organization or level of command is the primary means of reference.

3.2.5. Alphabetical. Use this arrangement when filing by name of persons, companies, or agencies in an alphabetical sequence. Disregard articles, conjunctions, and prepositions when filing alphabetically.

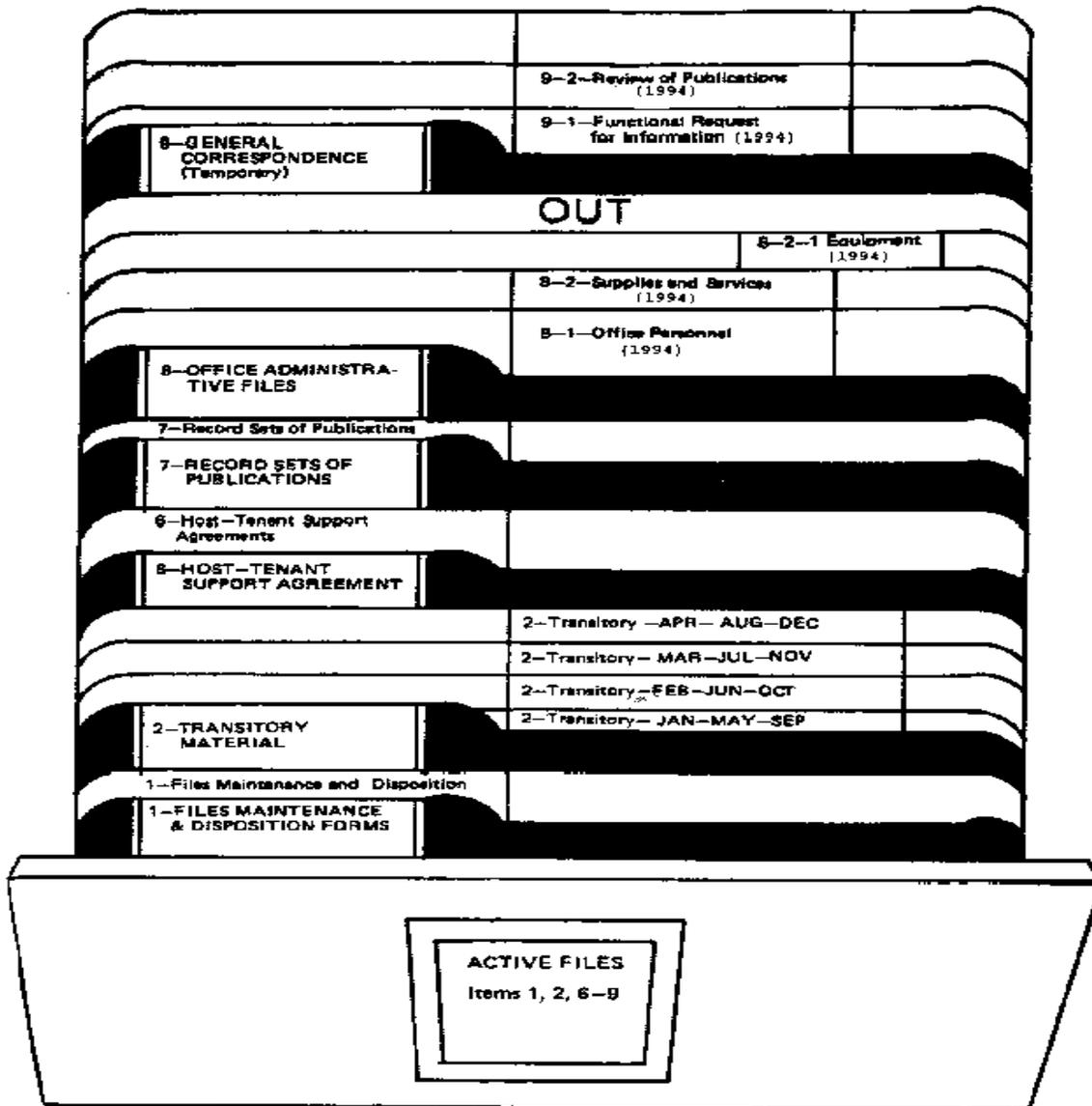
3.2.6. Subjective. Use this arrangement when the subject is the primary means of reference. If a records series uses a subjective arrangement and has subdivisions, the overall arrangement is subjective, even if you file the subdivision in chronological order.

3.3. General Correspondence File. Keep General Correspondence files to a minimum. AFMAN 37-139 is very detailed; most files fall under one of the tables and rules for disposition purposes.

3.4. Standardization. The base records manager may approve standardized file plans pertinent for base or unit-level.

3.5. File Drawer. After preparing the file plan, the files disposition control, and folder labels, arrange the file drawer in the sequence shown on the file plan, using **Figure 3.1.** as an example.

Figure 3.1. Sample File Drawer.



3.6. Charge-Out Records. Prepare and place an AF Form 614 or 614a, **Charge Out Record**, in place of a record or folder removed from the files. See illustration in **Figure 3.1**. Use AF Form 241, **Microfiche Charge Out Record**, when removing microfiche from the files for an extended period.

3.7. Instructions For Using Guide Cards, Folders, and Labels:

3.7.1. Disposition Guide Cards. Use a guide card, with the disposition control label affixed to control each records series listed on the file plan. Place a disposition guide card in front of each series and in the same sequence shown on the file plan using **Figure 3.1**. as an example. Place the disposition control labels consistently throughout the file. Keep disposition guide cards with the active and inactive files as long as kept in the current files area. Do not retire or discard disposition guide cards when retiring or destroying the records; reuse them if they are still in serviceable condition. When a dispo-

sition guide card cannot be placed in front of a records series, or when kept away from the file drawer, place the disposition control label on the container, or on a card or sheet of paper in the container or binder, where they are obvious. Using a disposition guide card at times does not work too well with hanging files. Cut down the guide card and place it with a disposition control label in the hanging file.

3.7.2. Locator Guide Cards. Affix a guide card with a label in any position to facilitate reference to the files. Use a locator guide cards to support large volumes of records or to show break of smaller subdivisions. If necessary, use locator guide cards in active and inactive files.

3.7.3. Folders. Use folders to group related paper records together. Use a folder for each record series or subdivision listed on the file plan when filed in a drawer. File transitory material in one folder or in four as shown in **Figure 3.1**. Manually mark the folders containing classified records with the highest security classification of the contents.

3.7.4. Folder Labels. Use RIMS-generated labels for each records series and subdivision listed on the file plan. Position labels to suit the need of the office; be sure to be consistent throughout the file. Place the folder labels on Kraft file folder in hanging files, not on the hanging file. Include the year, (calendar or fiscal) on the folder labels for records with a retention period of 1 year or longer. Cut off transitory records monthly; do not put the year on the folder labels. Perpetual-type records that are cut off and disposed of after an event occurs, or when superseded, or no longer needed, do not require the year on the label. If the contents of the folders become too bulky for easy use, use a second, third, or as many folders as necessary. If so, label to show inclusive dates in each folder. Mark the folders containing classified records with the highest classification of the contents. **EXCEPTION:** Label form folders that the Publishing Distribution Officer (PDO) issues (e.g., clinical and field personnel records, and folders (e.g. flight records folders or on-the job training (OJT) folders) that move with the individual on reassignment) according to the directive prescribing their use.

3.7.5. Label for Locator Guide Cards. Type the item number and title of record series (or other key designator) on the label of locator guide card to make it easier to locate specific records. Include the year, if needed, to distinguish between years in perpetual-type records.

3.7.6. Drawer Label. Include enough information on the drawer label to identify the records kept in the drawer. The words "ACTIVE" and "INACTIVE" may suffice for small files. When the files expand to more than one drawer, add the inclusive series numbers from the file plan on drawer labels (**Figure 3.1**).

Chapter 4

FILES PROCEDURES FOR PAPER RECORDS

4.1. Preparing Records for Filing:

4.1.1. Mark Records for Filing. Make sure all actions are complete and records are ready for filing. Mark records for file by using the word "file" and the proper official's initials. Mark for file and file code in the upper right hand corner of the record (**Figure 4.1.**). Use the item number of the separate series from the file plan and, if needed, the letter or number of the subdivisions, a subject or enough identification to show where to file the record. Documents that obviously are ready for filing as soon as you create or receive them do not require the file code, the word "file" or the official's initials. **EXAMPLE:** Suspense copies of a mail control form; memoranda for record prepared for file only; signed receipts for a classified document loaned or transferred; document placed in library-type accumulations for reference use, such as reference copies of publications; copies of messages placed in message reference files; and historical research and reference materials maintained by historians.

4.1.2. Assemble Documents for Filing. Assemble documents for filing in the same manner as required for their creation, dispatch, and use with the latest action on top. Make sure the file is complete; keep or account for all attachments. If the file is not complete, take action to get the missing records or information included in the file or make a notation to show what part of the file is missing or where filed, if included in another series. Remove all mail control forms and receipts, envelopes, and memo routing or coordination slips, except those containing remarks of significant record value. If a record requires a destruction certificate, you may file a copy of the destruction certificate with the record.

4.2. Cross-References. Use Optional Form (OF) 21, **Cross Reference**, when filing a record that involves more than one records series. If copied, use the copies instead of the OF 21. Mark the copies by circling the appropriate file code in the upper-right hand corner to show where the duplicate copies are filed.

4.3. Filing Classified Records. Safeguard classified files according to DoD Regulation 5200.1-R/AFP 31-4, *Information Security Program* (formerly AFR 205-1). File classified material separately, unless it is necessary to maintain continuity of a particular transaction or event, or the volume of unclassified material is too small to justify establishing separate files. Do not file extra copies of classified records except to support the case file. Show on the folder tab (or on the folder label, if there is enough space) the highest classification of the records in the file (DoD 5200.1-R/AFP 31-4). Otherwise, keep label and file designations the same as the folders containing unclassified material. Also stamp the outside front and back of the file folder with the highest classification of the records filed in the folder. File classified records or other classified material in equipment authorized for each classification or in a secure area or vault (DoD 5200.1-R/AFP 31-4). Keep separate folders for classified and unclassified records on the same subject. Place a cross-reference sheet (OF 21) in both folders. When adding a classified record to a large unclassified file, substitute a cross-reference sheet for the classified record. Do not make any classified entries on the cross-reference sheets.

Figure 4.1. Document Showing Authorization and Code for Filing (Including Cross-Reference Designation).



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

*file 45
X16*

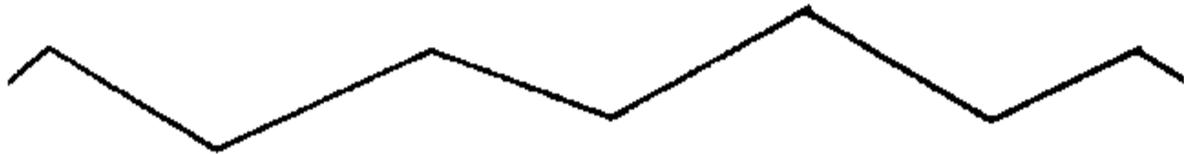
MEMORANDUM FOR HQ ABC/XYZ
ATTENTION: MAJ JOHN DOE

FROM: SAF/AAIQ
1610 Air Force Pentagon
Washington, DC 20330-1610

SUBJ: XXXX XXXXXX XXXXXX

XX XXXXX XXX XXXXXXXX XX XXXXX XXXX XXXX XX XXXX XX XXXX
XXXX XXXX XXX XXXXX XX XX XXXX XX XXXXX XX. XXX XXXXXXXXXX
XX XXXXX XXXXXXXX XX XXX XX XXXXXXXXX.

XXX XX XXX XXXXXXXX XX X XXXX XXX XX XXX XXXXX X XX XXXX
XXXXXXXX XXX X XXX XX XXXX XXX. XXXX XX X XXXXX XXX X XX XX.



4.4. Files Cutoff Procedures. The chief of the office makes sure records technicians review the files at least annually, cut off the files, and separate active from inactive records. Destroy, transfer, or retire eligible records according to instructions on the file disposition control label and AFMAN 37-139 (formerly AFR 4-20, volume 2), with the cutoff date determined by the table and rule, or by AFI 37-138, chart 3-1 (formerly AFR 12-50, volume I). The chief of the office ensures the files are cut off at a specific time after an event or completed action, and dispose of them according to AFMAN 37-139, table and rule.

EXCEPTION: There are many records series for which a cutoff date is not proper, such as material eligible for immediate destruction when superseded, obsolete, no longer needed, or similar circumstances. Also, there are perpetual files that continue as active until the specified disposition occurs. Review these files at least annually to determine status.

Chapter 5

FILING SUPPLIES AND EQUIPMENT

5.1. Filing Supplies and Equipment. Use the most economical filing supplies and equipment possible. With the advent of computerized and document imaging systems records, use newly designed filing equipment and supplies when sufficiently justified. The following is a suggested list of items to be used in maintaining files. Office improvement or upgrade is not enough justification to request new filing equipment.

5.2. Standard Filing Supplies:

5.2.1. Guide Cards, Folders, Labels. Suggest use of the following standard guide cards, file folders, and labels in **Table 5.1.**, unless a strong justification warrants the use of nonstandard supplies:

Table 5.1. Items To Use in Maintaining Files.

R U L E	A	B	C
	If the description is	and it is	then the National Stock Number (NSN) is
1	guide cards	letter size, first or third cut	7530-00-988-6515
2		second cut	7530-00-988-6516
3		legal size, first or third cut	7530-00-988-6520
4		second cut	7530-00-988-6521
5	file folders	kraft folders, letter size	7530-00-663-0031
6		kraft folders, legal size	7530-00-200-4308
7	RIMS support materials	Printing paper (8 1/2 by 11 inches) (tabulating machine, continuous, flatfold)	7530-00-800-0996
		Labels (4 by 1 7/16 inches) (Tape, PS adhesive, Class C, general purpose with pinfeed holes, Style 1)	7530-00-082-2662

5.2.2. Letter-Size and Legal-Size Folders. Since the Air Force is phasing out legal-size files, use letter-size folders and guides when possible. Local supply activities may issue nonstandard filing supplies when standard supplies are not available and when an Air Force directive prescribes them (e.g., supervisor's employee work folders, six-part jackets for aircraft maintenance records). Do not substitute RIMS support material, since it must interface with the software.

5.3. Suggested Standard Filing Equipment. The federally approved letter-size, upright, five-drawer metal filing cabinet (or upright, key-lock five-drawer filing cabinet) is standard filing equipment for

unclassified material. However, continue to use the four-drawer filing cabinet if on hand. If ordering new filing cabinets, order the five-drawer cabinet from the *General Services Administration Stores Stock Catalog*. Do not order the four-drawer filing cabinet. Consider the two-drawer filing cabinet or safe, as well as all other filing equipment listed in Table of Allowance (TA) 006, as nonstandard equipment. Make sure all filing equipment, whether standard, nonstandard, or office system equipment, is functionally compatible with the filing procedures in this manual. Be sure equipment has file stops in order to use the guide cards and file folders, and the equipment has drawer labeling capability. The use of hanging files is authorized when office systems equipment is approved. Use them as hanging "holders" rather than hanging folders, using a Kraft folder inside for filing your records. Do not send hanging files when shipping records to staging areas or records centers. Hanging files are nonstandard filing supplies. Do not use them in standard file cabinets or four- and five-drawer security safes that have file stops. If hanging files are required, order them through supply channels. The recommended type is the fifth cut hanging files, and the NSN is 7530-01-207-4322. Consider used or reconditioned filing equipment as a suitable substitute for new filing equipment. Make excess filing equipment available to other offices within an organization or turn it in for redistribution.

5.4. Shelf-Filing Equipment. Shelf-filing equipment, authorized in TA 006, may be more appropriate than filing cabinets for certain office needs. The seven-tier open-shelf file cabinet, with or without doors, is standard equipment and is more economical. It also provides greater storage of records per square foot than filing cabinets. Save-an-Aisle shelf files are authorized when justified and approved by the COR.

5.5. Procedures for Requesting and Controlling Filing Equipment and Nonstandard Filing Supplies:

5.5.1. Filing Cabinets. Use letter-size cabinets to the maximum extent practicable for letter-size material. Use legal-size cabinets when the majority of the filed material is legal-size or larger. Use key-lock cabinets only when directives require material to be kept under lock and key. Consult with the records manager when planning the use of powered or mechanized filing equipment. Do not contact the vendors' representatives directly without approval of the records manager and the contracting office. If, after consultation, the records manager concurs with the need for such equipment, send the request through the COR for approval or disapproval. Consider the following factors:

5.5.1.1. The system for which the equipment is intended is well established and not likely to undergo changes that would eliminate the need for the equipment.

5.5.1.2. The location of the equipment is suitable.

5.5.1.3. The appropriate safety standards, physical features of the building, and protection of classified information.

5.5.2. Chiefs of the Offices. The Chief of the Office of Record reviews each request for nonstandard filing equipment or supplies, except powered equipment approved under AFI 37-161, *Receiving, Distributing, Requisitioning, and Warehousing Publications and Forms*, for publications and forms storage. The Chief approves or disapproves each request for nonstandard filing equipment or supplies, coordinates with the records manager, and sends approved requests to the supply activity for necessary action.

Chapter 6

MICROFILMING

6.1. Microfilming. Convert a record from paper and other media to appropriate microform, or vice versa, when it is cost beneficial and ensures the record (or information in it) is easily retrievable throughout record's prescribed life cycle. For permanent and long-term temporary records, obtain SAF/AAIQ concurrence before implementing conversion. Accomplish proposals and approvals for microform system design and redesign using the provisions of paragraph 7.3.

Chapter 7

MANAGING ELECTRONIC RECORDS

Section 7A—Introduction

7.1. Objectives and Scope:

7.1.1. Objectives. The overall objectives of this chapter are to provide essential procedures to manage and protect electronic records and to ensure the integrity of electronic records throughout their life cycle. Procedures apply to all electronic records systems, whether on micro-, mini-, or mainframe computers, in networked or stand-alone configurations, regardless of storage media. This manual provides standards to ensure provisions for preserving, protecting, and disposing of official records on electronic media are made and incorporated into each phase of the record's life cycle. Electronic records systems include systems that image official records using scanners.

7.1.2. Electronic Records. Electronic records are data in a form that can be read and processed by a computer and that satisfy the legal definition of a record. A data base is still considered an electronic record, even if the output products are converted to paper records. Electronic records may include data files and data bases, machine readable indexes, electronic spreadsheets, electronic mail and electronic messages, as well as other text or numeric information. Electronic recordkeeping involves the use of a computer to create, store, retrieve, analyze, transmit, or delete records.

7.1.3. Imaging Technologies Use Computers To Store Records On Non-Magnetic Media.

Examples include computer output microfilm (COM), computer-assisted retrieval (CAR), microform, optical disk, computer output laser disk (COLD), and CD-ROM.

7.2. Electronic Records and Air Force Records Management Program. CORs and information systems personnel must conform to federal records disposition schedules in AFMAN 37-139 when disposing of or erasing media that store the only copy or the official copy of the record.

7.3. Responsibilities Assigned:

7.3.1. Records Management Branch, Administrative Communications and Records Management Division, Directorate of Information Management (SAF/AAIQ). SAF/AAIQ is the office of primary responsibility (OPR) for planning and managing the *Records Management Program* and establishing related policies. SAF/AAIQ serves as approval authority for electronic records systems for records kept for 10 years or longer, including permanent records; reviews disposition proposals, and sends requests for disposition to National Archives and Records Administration (NARA) for appraisal.

7.3.2. Command Records Managers (CRM) at MAJCOM, FOA, and DRU and Affected Unified and Specified Commands. The CRM is the approval authority for proposals on electronic recordkeeping in their command on records kept less than 10 years.

7.3.2.1. The CRM Actions on Electronic Recordkeeping Proposals For Use. CRM bases approval on, at a minimum, disposition according to AFMAN 37-139, and considerations at **Attachment 2**. The CRM requests an electronic records system number from SAF/AAIQ and provides copies of approved proposals.

7.3.2.2. Establishing Procedures To Ensure Compliance With This Manual. The CRM gives advice and guidance to commanders and staff elements on electronic recordkeeping as needed and periodically reviews electronic records systems to ensure they conform to requirements of the *Records Management Program* as described in AFI 37-138.

7.3.3. Base and Unit RM:

7.3.3.1. Review and Evaluate Systems. Base and unit RMs review and evaluate OPR system proposals for electronic records, send proposals to the CRM before system implementation, advise OPR on electronic records requirements, and provide advice on the *Records Management Program*.

7.3.4. Functional Area Records Manager (FARM). The FARM assists the OPR and RM in preparing proposals, in reviewing and evaluating electronic recordkeeping, and sending automated electronic records systems proposals to the CRM.

7.3.5. Chief of the Office of Record (COR). The chief of the office ensures all electronic records are maintained according to the requirements of this manual by ensuring official records on the computer are transferred to a new system during system termination and upgrade. In the event of a loss of records, the COR reports it per AFI 37-138. The COR provides liaison with the servicing RM to ensure correct information is included in AF Form 1341, **Electronic Record Inventory (Figure 7.2.)**, for long-term accession of information and that the disposition complies with disposition standards in AFMAN 37-139, before erasing magnetic media. If Item 6 of the AF Form 1341 is filled in, SAF/AAIQ will coordinate with the Air Force Privacy Act Officer. The AF Form 1341 is used when retiring records.

7.3.6. Electronic Records System OPR: The OPR prepares a separate electronic recordkeeping proposal for each series of records (**Attachment 2**) and obtains concurrence of the COR. The OPR coordinates all proposed new or enhanced electronic systems with the Communications-Computer Systems Officer (CSO).

7.3.7. Communications-Computer Systems Officer. The CSO notifies and coordinates with the servicing RM and FARM on all proposed new or enhanced electronic record systems, where the electronic records are the only or official copy of the records. The CSO lists the OPR, the system name or identification including the records title and disposition table and rule from AFMAN 37-139, the applications, if known, and the system location.

7.4. Application to Contractors. Government contractors who create or maintain Air Force electronic records must meet the requirements of this manual. The OPR will include these requirements in the Contract Statement of Work.

Figure 7.1. Sample of AF Form 1341, Electronic Record Inventory.

ELECTRONIC RECORD INVENTORY		1. MEDIA <input checked="" type="checkbox"/> ON-LINE <input type="checkbox"/> TAPE <input type="checkbox"/> DISKETTE <input type="checkbox"/> OPTICAL DISK <input type="checkbox"/> OTHER (Specify)	
2. FUNCTIONAL AREA CREATING RECORDS SAF/ABCD		3. POINT OF CONTACT MSgt John Doe	
		4. ADDRESS (Include City, State, and Zip Code) Pentagon (Room 5B123) Washington, DC 20330	5. TELEPHONE 456-7890
6. RECORD SYSTEM TITLE AND IDENTIFIER AND PRIVACY ACT SYSTEMS OF RECORDS NUMBER (if any) Table SQ5: Quarterly Personal Income by Major Sources and Earning			
7. SUBSYSTEMS OR FILES <input checked="" type="checkbox"/> NONE			
8. SCOPE OF DATA (Subjects covered by categories) DBMS. Data QX. Data PATDH. Data QX. CBX ES*. Data			
9. SOURCE(S) OF DATA (Give form numbers, if any) AF Forms 9876 and 8765			
10. PURPOSE(S) FOR MAINTAINING SYSTEM To facilitate sorting, maintaining, and disposing of records and to prepare quarterly reports.			
11. USE(S) OF DATA (Output Product(s)) Print out to AF-wide offices of record.			
12. DATES OF RECORD SYSTEM FROM: 1 Jan 90 TO: 31 Dec 90 <input type="checkbox"/> ONE-TIME STUDY		14. LOCATION(S) OF DUPLICATE AND/OR BACKUP COPIES Data Processing Center in SAF/ABC	
13. UPDATES (Period or event or NA) N/A			
15. RETENTION (AFR 12-50 Table and Rule) <input checked="" type="checkbox"/> UNSCHEDULED		16. SECURITY CLASSIFICATION OF DATA <input checked="" type="checkbox"/> UNCLASSIFIED <input type="checkbox"/> SECRET <input type="checkbox"/> CONFIDENTIAL <input type="checkbox"/> TOP SECRET	

AF Form 1341, MAR 91 PREVIOUS EDITION IS OBSOLETE

Section 7B—Planning New or Enhanced Systems

7.5. Characteristics of Electronic Records. Records on electronic media are extremely fragile. The possibility of undetected alteration and tampering is greater with electronic records than with paper records. The electronic record can be erased and the electronic media reused. The data can also be manipulated rapidly. The ease of updating, revising, or reusing electronic media makes their life cycle brief and more complex than that of other records. For these reasons, determine security safeguards and the disposition of electronic records as early as possible in the life cycle of the record. Because electronic processing is necessary to convert electronically stored records to human-readable form, the procedures for controlling such processes must be readily available and explained in the Electronic Records Proposal.

7.6. Documentation. The OPR must address the disposition of the records in all life cycle documents and incorporate the documentation into applicable tables and rules of AFMAN 37-139. The OPR keeps satisfactory information to access, retrieve, and make changes to the records and up-to-date technical documentation for each electronic records system that produces, uses, or stores data files.

7.7. Electronic Recordkeeping Decisions. The OPR must base decisions to initiate electronic recordkeeping on the serviceability of the records, as determined under the 37-series instructions. (See **Table 7.1.**) Records are serviceable if the system and filing procedures provide timely search and retrieval, and ease of update with an adequate audit trail. The OPR must provide security against unauthorized access, (AFI 33-202, *The Computer Security (COMPUSEC) Program* (formerly AFR 56-1 and Air Force Special Security Instructions (AFSSI) 5100, 5101, 5102, 7000, 7003, 7005) and identification of information reporting requirements that are in keeping with the value of the records.

7.8. Text Documents. Electronic records systems that maintain the official copy of text documents on electronic media must meet the minimum requirements by providing a method for authorized users to retrieve documents. The system must provide an appropriate level of security and provisions for the disposition of records during initial design. The user must be able to correlate the records in such systems with related records on other media using a standard interchange format, when necessary, to permit the exchange of documents on electronic media between Air Force organizations using different software or operating systems and the conversion or migration of documents on electronic media from one system to another.

7.9. Security for New Systems. The OPR must ensure that electronic records security is included in the electronic record systems security plans prepared according to AFI 33-202.

Section 7C—Managing Electronic Records

7.10. Disposition Grouping Codes. Use the disposition grouping codes in **Table 7.2.** to designate the retention periods of records on approved electronic records systems. Make provisions for the use of these codes during the initial development of electronic record systems that store the official copy of the electronic record that have been approved according to this instruction and the AF 33-series instructions.

Table 7.1. Disposition Grouping Codes.

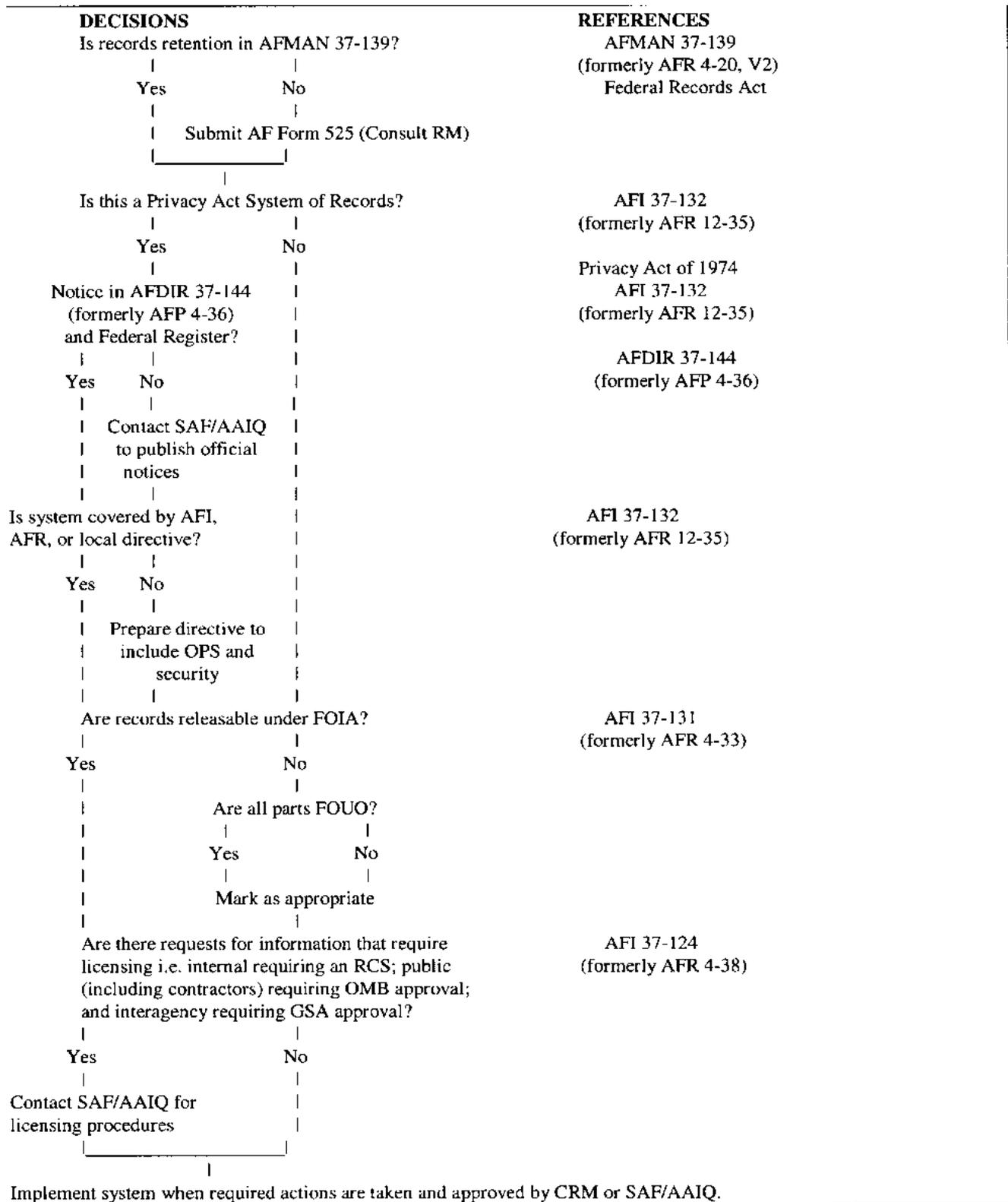
L I N E	A	B
	Code	Action or Comment
1	T = Temporary	Destroy 2 years from 1 January following the date of the record.
2	M = Middle	Destroy 8 years from 1 January following the year the record is dated.
4	L = Long	Destroy 20 years from 1 January following the year the record is dated. This applies to records 9 years or longer, but which do not meet the criteria for the I or P codes.
4	I = Indefinite	Indefinite retention of records, the disposition of which is based on an event or action (such as supersession, obsolescence, or completion of action). If AFMAN 37-139, disposition authority prescribes retention for a specific time following an event or completion of action, change the code to reflect the actual disposition date.
5	P = Permanent	Applies to records which must be retained permanently (never destroyed) and which will be offered to the National Archives.

7.11. Vulnerability of Electronic Systems. Electronic records systems require the careful management of procedures and equipment to ensure the continuing accuracy and availability of the record. Section B provides requirements for planning new or enhanced systems, and AF 33-series publications contain instructions for hardware and software management policy.

7.12. Maintaining and Preserving Electronic Records. OPRs identify series of electronic records on the file plan. Accurate and complete external and internal labeling is essential to ensure personnel can identify the contents of individual disks, diskettes, and tapes; retrieve information stored on them; and preserve the electronic records from unintentional or illegal destruction.

7.12.1. External Labels for Diskettes. The OPR must properly identify information on external labels for diskettes when using them to process or temporarily store the official version of permanent or unscheduled electronic records. Identification could include the name of the organizational unit, the table and rules from AFMAN 37-139, a descriptive title of the contents, the dates of creation, and identification of hardware and software used.

Figure 7.2. Some Decisions on a New Automated Electronic Record System.



7.12.2. External Labels for Magnetic Tapes. The originator of the documents is responsible for the external identification. External labels for magnetic tapes (or the equivalent automated tape management system) that store permanent or unscheduled electronic records will provide unique identification for, at a minimum, each reel, including the name of the organizational unit responsible for the data, system title, and security classification, if applicable. Additionally, maintain the following information for (but not necessarily attached to) each reel used to store permanent or unscheduled electronic records: file titles; dates of creation; dates of coverage; the recording density; type of internal labels, if any; volume serial number, if applicable; number of tracks; character code/software dependency; information about block size; reel sequence number, if the file is part of a multi-reel set. For numeric data files, include record format and logical record length, if applicable; data set names and sequence, if applicable; and number of records for each data set.

7.12.3. Other External Labels. In addition, provide the labels below as required. *Note: If unable to affix labels to a 3 1/2" disk, place the disk in an envelope and affix the labels mentioned in subparagraphs 7.12.3.1. to 7.12.3.3. on the envelope.*

7.12.3.1. Records Management Disposition Control Label. The OPR places the label on guide cards, the monitor, containers for floppy disks, diskettes, cassettes, tapes, or other physical media, as appropriate and also uses a cross-reference method on that copy. The project officer ensures the label on a disk accurately describes the information on it, gives its location, and tells how to dispose of it.

7.12.3.2. SF Forms 706, Top Secret ADP Media Classification Label; 707, Secret ADP Media Classification Label; and 708, Confidential ADP Media Classification Label. If the medium contains classified information, label it with the highest classification of the contents.

7.12.3.3. AF Visual Aid 205-15, Privacy Act Label. Protect Privacy Act material on electronic media to avoid inadvertent unauthorized access. Label each physical medium, such as diskettes, tapes, or other media, that contains Privacy Act material with AF Visual Aid 205-15, *Privacy Act Label* (or equivalent). Also use AFVA 205-15, or equivalent, to label monitors that access electronic storage systems containing Privacy Act material. The physical size of some media may not accommodate AFVA 205-15. In these cases, use an equivalent label to identify the contents. Clearly mark all personal information protected by the *Privacy Act of 1974* and information generally exempt from public disclosure under exemption (b)(6) of the *Freedom of Information Act (FOIA)* with external and internal warning labels.

7.12.4. Internal Identification. The originator of the document is responsible for the internal identification. All systems require a unique name for new records or files in order to save the record on the medium. The design of each computer operating system determines how physical file names are entered into that system. Because of the variety of systems and software, activities must establish common file naming conventions, especially where official records are on networks or common systems and software are used. The internal identification of magnetic tapes is controlled by the software and written on the beginning of each tape. The OPR provides enough information to identify the record and allow quick and easy retrieval. For system tapes, ensure internal tape purge date is later than the disposition date on the external tape label (See AFIs in the 33-series).

7.12.5. Internal Indexes. OPRs will use internal indexes with the file plan. At the time the electronic record is created, the OPR must indicate, as a minimum, the name of the record, the addressee,

the date created, and the name or number of media on which the record is stored, and provide a short summary of the record, if possible.

7.13. Selection and Maintenance of Magnetic Storage Media. Records are stored on a variety of storage media, to include paper, magnetic tape or disk, or optical disks. This paragraph establishes selection and maintenance policy strictly for magnetic media that store the official electronic record. It focuses on electronic records that are parts of electronic record systems.

7.13.1. Storage Media Selection. The OPR selects appropriate media and systems for storing electronic records according to their life cycle. Media and systems selected must allow easy retrieval in a timely fashion, distinguish between record and non-record material, retain records in a usable format until their authorized disposition according to AFMAN 37-139, and allow permanent text documents to be printed on paper or converted to transferable tape before transferring them to the National Archives or Federal Records Center.

7.13.2. Media Care and Maintenance Standards. Generally, magnetic media used to store electronic records can be grouped into three broad categories: diskettes, hard disks, and immediate access devices. Care and maintenance standards below apply.

7.13.2.1. Diskettes. OPRs follow the manufacturer's instructions and AFIs in the 33-series (formerly 700-series) for guidelines when using diskettes. Use diskettes for the short-term (less than 2 years) storage of official records. OPRs do not send official records on diskettes to staging areas or to Federal Records Centers.

7.13.2.1.1. Care of Disks. Don't use rubber bands or paper clips on the diskette or its envelope. The rubber band may cause the disk to remain bent permanently after storage. The paper clip may emboss the media and cause permanent loss of the record.

7.13.2.1.2. Manually Labeling. If manually labeling, the project manager always writes on the external label before it's applied to the disk. If using the original label, use a soft, felt-tipped pen with permanent ink. Ball point pens or pencils can emboss the surface and cause permanent surface defects and loss of the record.

7.13.2.1.3. External Labels. Project officers never erase the external label. They use a felt-tipped pen to cross out previous information. Erasures can be a source of contamination. Don't paste a new label over the old one since this can weigh down one side of the disk in the drive, and don't cover any flexible disk holes with the new label.

7.13.2.1.4. Keeping Magnets Away From The Records. Project officers must keep magnets, including magnetic watches or instruments, at least one foot away from flexible and rigid disks. Magnets will erase the records stored on those disks.

7.13.2.1.5. Backups. The OPR must store backups of master flexible disks in alternate locations and consider climatic conditions when storing diskettes.

7.13.2.1.6. Mailing Diskettes and Protecting Them From X-Rays. When mailing or carrying diskettes in a briefcase, the OPRs protect them from damage and temperature extremes by using special sturdy envelopes. Hand carry and pass diskettes over to security personnel before going through X-Ray machines. Under no circumstances does the OPR store diskettes in luggage or briefcases when passing through any security X-Ray machines.

7.13.2.1.7. Wet Diskettes. OPRs should not reinsert wet diskettes in the computer disk drive. Even when dried, residue may damage the drive heads by transferring foreign matter to them, which may damage diskettes later placed in the drives. OPRs should discard wet floppy diskettes and use the backup copy.

7.13.2.2. Online Storage with Hard Disks. A hard disk is a high capacity storage and retrieval medium for computers. A good portion of the information stored on hard disks is in the form of software programs. Because of the large volume of information stored on the hard disk, it's important to keep the software program and the records it creates separated. Hard disks require a certain amount of housekeeping in the form of space management, indexing, and retention management.

7.13.2.3. Immediate Access Storage (IAS) Devices. Devices such as disks, removable hard disks, disk packs, and drums are sometimes called direct access storage. The records on a removable hard disk are subject to error or even deletion if anything having a magnetic force is placed near the hard disk. When processing or temporarily storing official electronic records on removable hard disks, the OPR provides external labels for them that contain the same information as for diskettes. Use the more stringent of either the manufacturer's instructions or procedures in AFIs in the 33-series (formerly 700-series) procedures for IAS devices that will store the official record copies of electronic records.

7.13.2.4. Magnetic Tapes that Store Records Retained for 10 Years or Longer, Unscheduled Records, or Records Scheduled for Permanent Retention. The person responsible for storing the tapes must accomplish two tasks. First, test tapes no more than 6 months before using them to store these electronic records. This test should verify the tape is free of permanent errors and complies with National Institute of Standards and Technology or industry standards for long-term storage of official records. Second, rewinding, reading, and copying tapes. The electronic records system OPR rewinds under controlled tension all tapes containing record copies of unscheduled records and records scheduled for permanent retention at least once every 3 1/2 years.

7.13.2.5. Annual Reading of Tapes. Annually, the person responsible for storing the tapes reads at least a statistical sample of all reels of magnetic computer tape containing the official copy of these records to identify any loss of data and to discover and correct the causes of data loss. In tape libraries with 1,800 or fewer reels, he or she reads a 20 percent sample or a sample size of 50 reels, whichever is larger. In tape libraries with more than 1,800 reels, he or she reads a sample of 384 reels. Replace tapes with 10 or more errors and, when possible, restore the lost data. The person responsible for storing the tapes must read and correct all other tapes that might have been affected by the same cause (i. e., poor quality tape, high usage, poor environment, improper handling, etc.).

7.13.2.6. Copying Tapes. The person responsible for storing the tapes must copy the magnetic tapes before the tapes are 10 years old. He or she sends the new external tape labeling information to the RM and certifies that the tapes have been copied successfully.

7.13.2.7. Tape Labels. See paragraph 7.12.2.

7.13.3. Environmental Requirements for Unscheduled and Permanent Records Stored on Magnetic Tape. This paragraph establishes environmental requirements for all storage areas solely for magnetic tapes that store the official electronic record that is a part of an electronic record system. These requirements are in addition to those given in AFM 88-4, Chapter 11, *Criteria for Data Processing Facility Design and Construction*; AFI 32-1023 (formerly AFRs 8-20, 88-31, and 89-1,

Design and Construction Standards and Execution of Facility Construction Projects); and AF 33-series instructions (formerly AF 700-series regulations). Where there are differences, the requirements of this document take precedence. These temperature and humidity standards apply to operating, storing and transporting of records on magnetic tape.

7.13.3.1. Temperature in Storage Area. Maintain the storage and test areas for computer magnetic tapes at a constant temperature of 62 to 68°F and a constant relative humidity of 35 to 45 percent.

7.14. Official Records on Personally Owned Computers. The chief of the office is responsible for official records his or her office creates. Do not use personally owned computers (including such systems at home) to create, process, maintain, or store the only copy or the official copy of an Government record (See AFI 33-202). If a record is created on a personally owned computer (particularly in one's home), transfer the record as soon as possible to an approved official electronic records system.

7.15. Judicial Use of Electronic Records. Records on electronic media may contain information that is of legal significance. Electronic records may be admitted as evidence in state or federal court proceedings if authenticity, accuracy, and general trustworthiness are established. System integrity must be established by thoroughly documenting the system's operation and the controls imposed on it.

7.16. Legal Admissibility. To enhance the legal admissibility of Air Force electronic records, the office of record must:

7.16.1. Document the Records. Document the electronic records system which uses the same processes each time to electronically generate and store similar kinds of records and uses a standard retrieval approach.

7.16.2. Be Sure of Your Security Procedures. Substantiate that security procedures for the Electronic Recordkeeping (ERK) system prevent anyone from making changes or deletions to a record the System Manager did not authorize and that security procedures protect against such problems as power interruptions.

7.16.3. Identify Electronic Media. Identify the electronic media that stored the records throughout their life cycle, the maximum time the electronic records remain on each storage medium, and the disposition from AFMAN 37-139 for all electronic records. Document system operational status to electronic record system malfunctions. To the maximum extent practicable, ensure personal identifiers are recorded for personnel who review, revise, or otherwise affect document content. Coordinate items in this paragraph and those in 7.16.1. through 7.16.2. above with records management and legal personnel.

7.17. Security of Electronic Records. Degauss magnetic media that have ever stored classified records before reusing them for records at a lower classification level. Several operating systems do not actually erase or delete the entire file when the user tries to delete the record. Instead, some systems remove the file name from the system's directory. To the user, it appears the file is deleted or erased, but the record is still on the medium. Only the file name is deleted. This allows a new file (and new file name) to occupy that space on the medium. It is possible to recreate files that have previously been deleted from used media. Follow instructions in AFI 33-202 to degauss magnetic media. Ensuring the electronic record is secure if the media previously contained classified records may present a problem.

7.18. Duplicate Records on Mixed Media. When records are duplicated on different media, the Chief of the Office must determine which medium has the official record and must ensure the official record is managed according to the appropriate records management instruction.

7.19. Records Integration. Official electronic records may be integrated with those on other media. As far as possible, limit the use of mixed media (for example, paper and floppy diskette) for parts of the same record. Where similar records that would normally be grouped together (i. e., as for a case file) are on mixed media, provide for as much integration of the records as is possible or practical by converting all the records to a single media (e. g., all paper or all magnetic). Digitize incoming paper records by use of traditional optical character recognition (OCR) if signature authentication is not critical. Otherwise, scan them in using other appropriate scanners (e. g., intelligent character recognition (ICR), raster, bit-mapped). Merge scanned records with their related electronic records. Or if appropriate, print electronic records on paper or convert to microform or some other medium.

7.20. Cross-Referencing Records. Where it's necessary to keep related documents in two or more places or on two or more media, cross-reference the records to the related stored records on different media. Identify all electronic records and their location on the file plan.

7.21. Determining Appropriate Storage Media for Electronic Records. Several factors influence information loss on magnetic media. These factors include the variety of materials used by magnetic media manufacturers (many of which are industrial secrets); media storage and handling conditions; media usage; frequency of use; and changing technology. Where less than optimal conditions prevail, loss of all or part of the record is possible. Retentions suggested below assume media are maintained under optimal conditions.

Table 7.2. Suitable Media (See Note).

L	A	B
I N E	Media	Type
1	Floppy Disk, Rigid Disk, Magnetic Tape, Hard Disk, and IAS Device	Records retained up to 2 years. Temporary storage (less than 2 years) of permanent or unscheduled records. Working copies of permanent or unscheduled records on tape. Event-based dispositions, if 2 years or less. Backup for official records on another floppy disk or rigid disk.
2	Magnetic Tape	(See requirements in paragraph 7.13.3 for tapes that store records retained for 10 years or longer, unscheduled or permanent records.)
3	Optical Disk	See rule 1.

NOTE:

Retentions are based on disposition instructions in AFMAN 37-139.

Section 7D—Appraisal of Electronic Records

7.22. Retention Standards. The functional OPR must make provisions to retain the electronic records and their documentation for as long as the Air Force needs them. This means the OPR must:

7.22.1. Schedule Disposition. Schedule the disposition of all electronic records, as well as related documentation and indexes. If the electronic records are unscheduled, the functional OPR for the system must submit an AF Form 525, **Records Disposition Recommendation**, to the RM (including those operated for the Air Force and Unified and Specified Commands by a contractor) not later than 1 year after implementing the electronic records system.

7.22.2. Send Electronic Records to the National Archives. The National Archives will accept transfer copies of the electronic record and related documentation and indexes at the time specified in AFMAN 37-139. Transfer may take place at an earlier date if convenient for the Air Force and the National Archives.

7.23. Multiple Master Files Within One System. Systems may contain two or more master files, each made up of possibly related but discrete records which require different processing. A system of multiple master files may require a different disposition for each such file. Master files are in three categories in this manual:

7.23.1. Current Master File (CMF). The CMF is the system's most recent version. Disposal of this file takes place on termination of the system, when a new file supersedes it, or when the need for the file no longer exists.

7.23.2. Prior Master File (PMF). The PMF is the superseded updated master file. The disposition of the PMF may range from "on creation of the first update" to an indefinite number of updates, or upon an event. Disposition of the file is extremely critical when equivalent records do not exist elsewhere (See AFMAN 37-139).

7.23.3. Historical (Transaction) File. Activities often keep duplicate data files for historical and security backup purposes. These files duplicate either the CMF, the PMF, or a combination of both. Activities store them apart from the master files.

7.24. Special Considerations: Give special consideration to the status of the master file (CMF) (for example, if the master file or data base reflects prior transactions) and to the disposal patterns for prior transactions (or the PMF).

Section 7E—Disposition of Electronic Records

7.25. Scheduling Planned or Operational Systems. OPRs schedule information in each electronic record system in a comprehensive manner by including data sets and files in the system; source documents and outputs; the processing subset and special format files the system creates and uses; and system documentation and data descriptions. OPRs also establish disposition instructions for each of these components in light of the overall system. If AFMAN 37-139 does not contain an authorized disposition, the functional OPR must submit an AF Form 525 through records management channels to SAF/AAIQ for securing disposal instructions for all unscheduled electronic records on planned or operational systems.

7.26. Disposition Guidelines for OPRs. Functional OPRs use the guidelines below to help establish disposition standards for electronic records. The two phases are identified as (1) determining the disposition and (2) developing the disposition proposal.

7.26.1. Disposition of Master Files. Determining the Disposition includes identifying all master files in the system and listing the governing instruction for the system; sources of data; users and uses of the system; inclusive dates of operation; technical data on the system (including storage medium, density, any coding and data base management system, and the type of central processing unit, if known). In developing a retention or disposal recommendation, the functional managers consider the retention date based on the functional value and program needs of these data files. As a minimum, they consider the last master file (on termination of its use or of the data system) and duplicate files or duplicate transactions that activities keep for historical, security backup, or other similar purposes. After approval of the official retention period, incorporate the disposition instructions for the data into the system's design.

7.26.2. Developing the Disposition Proposal. The OPR will coordinate with the Communications-Computer Systems Officer, affected program offices, ADP service providers, etc., to ensure all affected parties know the proposed outcome of the information. They consult with the RM during the conceptual stage for advice on records management requirements for the proposal. This proposal will consist of information outlined in **Attachment 2**.

7.27. Destroying Electronic Records. The OPR destroys electronic records only according to authorized dispositions and will ensure that the record is disposed of in a manner that protects any sensitive, proprietary, or national security information. Also, the media that stores the record has value. If possible, recycle the media for another use (See **Section 7C**).

Figure 7.3. Sample of NA Form 14097, Technical Description for Transfer of Electric Records to the National Archives.

TECHNICAL DESCRIPTION FOR TRANSFER OF ELECTRONIC RECORDS TO THE NATIONAL ARCHIVES		
FILE IDENTIFICATION		
01. OFFICIAL FILE TITLE, COMMONLY USED IDENTIFIER, AND/OR DESCRIPTIVE TITLE: Airline Service Quality Performance File		02. ACRONYM ASSIGNED TO FILE: On Time Performance
03. RESTRICTIONS ON ACCESS: N/A		
04. TITLE/DESCRIPTION OF DOCUMENTATION PROVIDED: Flight Delay Data		05. FORMAT OF DOCUMENTATION: <input type="checkbox"/> Paper <input checked="" type="checkbox"/> Electronic Format (Specify) <input type="checkbox"/> Other (Specify)
06. ELECTRONIC RECORDS SUBMITTED BY (Agency name and address): Department of Transportation/Research and Special Programs Admin./Office of Airline Statistics, DAI-20 400 7th St., SW, Wash., DC 20590-0001		07. IDENTIFY TECHNICAL CONTACT(S): Name: Charles Bradford Phone: (202) 366-4376
FILE CHARACTERISTICS		
08. SHORT TITLE ON EXTERNAL LABEL: J3.J3NAXXXX.NARA.DELAY.Y920112	10. STORAGE MEDIA UNIT VOLUME SERIAL NUMBER: 117226, 119164	12. DENSITY (CPV/FP): 37,871
09. RETURN STORAGE MEDIA TO AGENCY AFTER ARCHIVAL PROCESSING: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Address for Return (if different from item 06):	11. TYPE OF MEDIA PROVIDED: <input type="checkbox"/> Open-Reel Magnetic Tape <input checked="" type="checkbox"/> 3480-Class Tape Cartridge <input type="checkbox"/> Other (Specify)	13. NUMBER OF TRACKS: <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 18 <input type="checkbox"/> Other (Specify)
14. FILE ORGANIZATION ON STORAGE MEDIA: <input type="checkbox"/> One File on One Media Unit <input checked="" type="checkbox"/> One File on Multiple Media Units <input type="checkbox"/> Multiple Files on One Media Unit <input type="checkbox"/> Multiple Files/Multiple Media Units	15. RECORDED LABEL (Internal Label): <input checked="" type="checkbox"/> IBM OS <input type="checkbox"/> IBM DOS <input type="checkbox"/> ANSI X 3.27 Standard <input type="checkbox"/> No Internal Labels <input type="checkbox"/> Other (Specify and Describe)	18. CHARACTER SET: <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> BCD (7 track only) <input type="checkbox"/> Binary <input type="checkbox"/> Packed Decimal <input type="checkbox"/> Other (Specify)
17. DATE FILE COPIED: 2/18/93	16. INTERNAL FILE NAME/IDENTIFIER (Take Data Set Name): J3.J3NAXXXX.NARA.DELAY.Y920112	20. NUMBER OF LOGICAL RECORDS PER BLOCK (Block Factor): 200
21. RECORD TYPE: <input type="checkbox"/> Fixed Length (F) <input checked="" type="checkbox"/> Fixed Length Blocked (FB) <input type="checkbox"/> Other Than Fixed Length (Specify Format)	22. LENGTH OF LOGICAL RECORDS IN CHARACTERS OR BYTES: 11	24. NUMBER OF LOGICAL RECORDS: 5,092,157
	23. LENGTH OF PHYSICAL RECORDS IN CHARACTERS OR BYTES: 14,200	25. NUMBER OF PHYSICAL RECORDS (Blocks): 25,460
26. AGENCY COMMENTS		
27. FORM PREPARED BY: Name: Gloria Laury	Phone: (202) 366-0923	28. DATE FORM COMPLETED: 2/22/93

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

INSTRUCTIONS ON OTHER SIDE

NA Form 14097 (Rev. 8/82)

Figure 7.3. Continued.

INSTRUCTIONS

GENERAL:

The purpose of this form is to facilitate the transfer of electronic records with continuing or enduring value to the National Archives. A packet containing additional information on the transfer of electronic records is available from the National Archives. This form is not intended to take the place of other required documentation. FIPS PUB 20 contains a discussion of file documentation. Technical information describing each file is required by 36 CFR, but NA Form 14097 is optional. If there is an alternative reporting format that provides all of the required information, substitute the report for NA Form 14097 include the required information as an attachment to the SF 258. A separate form should be completed for each file. If multiple files have very similar technical specifications, one form with an attachment that specifically identifies all of the files covered by the form may be used.

IDENTIFICATION SECTIONS

- 01. Official Title, Commonly Used Identifier, and/or Descriptive Title. Enter the name by which the agency identifies the file. Consider how the title would appear in a bibliographic entry. If there is no official title, provide a descriptive title.
- 02. Acronym Assigned to File. Enter the commonly used abbreviation or acronym as assigned by the agency. Often, the acronym will be used on the external (gummed) label of the storage media unit.
- 03. Restrictions on Access. Specify any restrictions that apply to this file — cite FOIA exemption, and, if b(3), cite statute, indicate specific columns or types of records in this file that are affected; specify length of restriction on access and method of determining the date when restrictions end, if there are no applicable restrictions on access, always indicate.
- 04. Title/Description of Documentation Provided. Documentation is required for all transfers of electronic records to the National Archives. Enter the title or description of the documentation provided by the agency for the file. Guidelines are available on the source and content of documentation. If any documentation is available in electronic form, include it in the transfer.
- 05. Format of Documentation Provided. Mark all boxes that apply to the transfer with an "X." If "Electronic Format" is checked, include a technical description form for each documentation file in electronic format. If "Other" is checked, be as specific as possible in describing the documentation transferred.
- 06. Electronic Records Submitted by. Enter the name and address of the agency that is responsible for the transfer.
- 07. Identify Technical Contact(s). Identify the person who will respond to technical questions about the records if they arise during archival processing.

FILE CHARACTERISTICS

- 08. Short Title on External Label of Storage Media Unit. Enter the short title that appears on the external (gummed) label of the storage media unit(s).
- 09. Return Storage Media to Agency After Archival Processing. The National Archives returns the reels or cartridges included in the transfer to the agency when two preservation copies have been created. Check "No" to indicate that the storage media should not be returned or provide an address for return shipment, if Yes. Provide Address for Return (if different from item 06).
- 10. Storage Media Unit Volume Serial Number. Enter the volume serial number which uniquely identifies the tape/reel cartridge. If the file is recorded on multiple volumes, enter the first volume serial number in this item and list as others, in sequence, in item 26.
- 11. Type of Media Provided. To comply with the transfer standard specified in 36 CFR, a storage media unit should be an open-reel magnetic tape or 3480 tape cartridge. Enter an "X" in the appropriate box. If "Other" is checked, contact the National Archives prior to transfer and provide a specific identification of the storage media used for transfer.
- 12. Density (CPUBPI). Enter an "X" in the appropriate box to indicate characters or bytes per inch.
- 13. Number of Tracks. Enter an "X" in the appropriate box. For 7 track tapes, indicate whether the parity is odd or even in item 26.

- 14. File Organization on Storage Media. Enter an "X" in the appropriate box. If a single file on a single storage media unit is described, check "One File on One Media Unit." If a multi-volume file is described, check "One File on Multiple Media Units." If more than one file is on the storage media unit, check "Multiple Files on One Media Unit." If the transfer includes multiple files on multiple storage media units, check "Multiple Files on Multiple Media Units."
- 15. Recorded Label (Internal Label). Enter an "X" in the appropriate box. If "Other" is checked, provide a specific description of the internal labels in item 26.
- 16. Character Set. Enter an "X" in the appropriate box. If "Binary" or "Packed Decimal" is checked, indicate the characters (bytes) that are stored in those formats in item 26.
- 17. Date File Copied. Enter the date that appears on internal labels, if the files are labeled. This is the date the records were copied onto the storage media unit(s).
- 18. Internal File Name/Identifier (aka Data Set Name). If there is a recorded label, enter the file identification (e.g., Data Set Name) used in the label. File Names in IBM standard label(s) should follow IBM OS/400 naming conventions.
- 19. Sequence of File on Storage Media Unit. If this is the only file on the storage media unit, enter a "1." If the storage media unit contains multiple files, enter the file's position number on the storage media unit. See item 14.
- 20. Number of Logical Records per Block (Block Length). If "Fixed Length" is checked in item 21, enter the block length.
- 21. Record Type. Enter an "X" in the appropriate box. If "Other Than Fixed Length" is checked, a specific description of the format is very important, especially if the documentation provided does not contain a precise description. Use item 26 to describe "Other" formats.
- 22. Length of Logical Records in Characters or Bytes. Enter the logical record length in bytes or characters. If the record is not fixed length, enter the maximum size record, and describe techniques used to control and indicate size in item 26.
- 23. Length of Physical Records in Characters or Bytes. Enter the physical record length in bytes or characters. If the record is not fixed length, enter the maximum size record, and describe techniques used to control and indicate size in item 26.
- 24. Number of Logical Records. Enter the number of logical records in the file. This number is usually supplied by the program which created the file. Labels are not included in this count. If the last block is padded with blank records to fill out the block, please provide a total record count and a count of records that contain information.
- 25. Number of Physical Records (Blocks). Enter the number of physical records (blocks). Labels are not included in the count.
- 26. Comments. Provide additional information as necessary or desired. If the information pertains to another item on the form, identify the relevant item number. Files transferred to the National Archives should not be software-dependent in accordance with 36 CFR. If there are any exceptions to this, identify the release and/or level of any software required to read the file. Provide attachments if the information required will not fit in item 26.
- 27. Form Prepared By. Enter the name and phone number (including area code) of the individual who prepared this form.
- 28. Date Form Completed (YY/MM/DD). Enter date this form was prepared.

Section 7F—Transferring Electronic Records

7.28. Transferring Electronic Records to National Archives. OPRs transfer permanent electronic records that are on magnetic tape to the National Archives as soon as possible.

7.28.1. Use of SF 258, Request to Transfer, Approval, and Receipt of Records to National Archives of the United States. The OPR prepares an SF 258, and sends it to SAF/AAIQ to be signed by the Air Force Records Officer, with an AF Form 1341, **Electronic Record Inventory**, for files transferred to the National Archives. This form is used to transfer permanent records to the National Archives. The OPR need not transfer tapes until phaseout of the file or the data system.

7.28.2. Transfer of Magnetic Tapes. When transferring magnetic tapes, write them on half-inch 7- or 9-track open reel magnetic tapes, or 3480 class cartridges. Record them at 800, 1600, or 6250 bytes per inch (BPI) and blocked no higher than 30,000 bytes in ASCII or EBCDIC. Strip the files of all operating system unique control characters except record length for variable length records.

7.28.3. Servicing Documentation. When transferring records to National Archives, the OPR sends adequate servicing documentation sufficient to support the use of the records for secondary analysis. Include specific information on how the media was written, identification and definition of data sets transferred, record layouts with their relative positions, completed AF Form 1341 (see paragraph 7.3.5.) and a data dictionary that defines all data elements, code books for unique codes in the records, and completed NA Form 14097 (See **Figure 7.2.**).

7.29. Retirement to Federal Records Centers (FRC). Organizations have authority to store magnetic tapes in FRCs that have heat and humidity controlled storage. The functional OPR is responsible for inspecting a statistical sample of the records on tape and will ask the FRC to return the tapes to the OPR to complete annual inspection requirements. The OPR will inspect the tapes and return them to the FRC for refile. Because magnetic tapes are so fragile, OPRs will transfer permanent files back to the National Archives as soon as possible. This allows the National Archives to get the records under their control and take on the responsibility for maintenance and inspection, and for security of the system.

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Administrative Assistant

Attachment 1

GLOSSARY OF ABBREVIATIONS, ACRONYMS, AND TERMS

ADP—Automatic data processing or automated data processing (American National Dictionary for Information Processing Systems [Federal Information Processing Standards Publication (FIPS PUB) 11-2]).

Appraisal—The process of determining the value and thus the final disposition of a record, making it either temporary or permanent (Federal Records Management Glossary). The National Archives and Records Administration (NARA) is the only Federal agency with the authority to appraise government records.

ASCII—American Standard Code for Information Interchange. The standard representation of numbers and letters by computers other than IBM (See also EBCDIC).

Current Master File (CMF)—As distinguished from the Prior Master File, the current state of a data file in an automated system at a given time; or master continuous update tapes (or other media) containing data merged with valid transaction data to create a new (or updated) master file.

Command Records Manager (CRM)—Records managers at MAJCOM, FOA, DRU, and Unified or Specified Commands for which the Air Force is the executive agent.

Data Base—(1) A set of data, consisting of at least one data file, that is sufficient for a specific purpose (Chapter XII of Title 36 of the Code of Federal Regulations, Part 1234); (2) In electronic recordkeeping, a set of data, consisting of at least one file or a group of integrated files, usually stored in one location and made available to several users at the same time for various applications (Federal Records Management Glossary: 1989).

Data Base Management System (DBMS)—A software system used to access, retrieve, and otherwise manage the data in a database (Chapter XII of Title 36 of the Code of Federal Regulations, Part 1234).

Data Element—In electronic recordkeeping, a combination of characters or bytes referring to one separate item of information, such as name, address, or age (Federal Records Management Glossary: 1989).

Data File—Related numeric, text, or graphic information that is organized in a strictly prescribed form and format (Chapter XII of Title 36 of the Code of Federal Regulations, Part 1234).

Disposition—(1) A comprehensive term that includes destruction, salvage, or donation; transfer to a staging area or records center; transfer from one organization to another; (2) Actions taken with inactive records. These actions may include erasure of data, transfer to a records center, or transfer to the National Archives (Chapter XII of Title 36 of the Code of Federal Regulations, Part 1234).

Disposition Instructions—Precise instruction in AFMAN 37-139, specifying the date or event for cutoff, transfer, retirement, or destruction of records.

Documentation—(1) The act or process of substantiating by recording actions and/or decisions. (2) Records required to plan, develop, operate, maintain, and use electronic records and software. Included are systems specifications, file specifications, codebooks, record layouts, user guides, and output specifications.

DRU—Direct reporting unit.

EBCDIC—Extended Binary Coded Decimal Interchange Code. The standard representation of numbers and letters by IBM computers.

Electronic Records—Records stored in a form that only a computer can process (Federal Records Management Glossary: 1993).

Electronic Records System—Any information system that produces, processes, or stores records by using a computer (Federal Records Management Glossary: 1993).

FARM—Functional area records manager. The FARM is the point of contact and monitors the Records Management Program within his or her functional area.

File—In electronic recordkeeping, an organized collection of related data, usually arranged into logical records that are stored together and treated as a unit.

FOA—Field Operating Agency.

Historical (Transaction) File—(1) A file containing relatively transient data, that, for a given application, is processed together with the appropriate master file (American National Dictionary for Information Processing Systems); (2) A file of accumulated data from previous transactional updates the office of primary responsibility (OPR) keeps separately for historical purposes. A valid file of items the OPR uses with the master data input file to create a master data output file. A file identical in format and content to a master file, that the OPR keeps separately for security backup, historical, or similar purposes.

Information System—(1) A system that consists of people, machines, and methods organized to accomplish specified operations on data that represent information. An information system may include data processing equipment, such as computers and storage devices; office machines, such as word processors and copiers; communications equipment, such as communication controllers and switching devices; peripheral equipment; and associated data, media, and accessories (American National Dictionary for Information Processing Systems); (2) The organization, collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual (Office of Management and Budget Circular No. A-130, *Management of Federal Information Resources*); (3) Often refers to a system containing electronic records. Sometimes called a record system (Federal Records Management Glossary: 1989).

Master File—The definitive version of a data file in an automated system. The file is long-term, even though the data may change.

Microforms—Various microfilm formats containing greatly reduced images, or microimages, on microfilm. Roll, or generally serialized, microforms include microfilm on reels, cartridges, and cassettes. Flat, or generally unitized, microforms include microfiche, microfilm jackets, aperture cards, and microcards, or micro-opaques.

Nonrecord—Information materials that are not part of the legal definition of a record. Includes extra copies of documents kept only for convenience of reference, stocks of publications and of processed documents, and library or museum materials intended solely for reference or exhibition (Federal Records Management Glossary: 1989).

Official Record—Recorded information, regardless of media, maintained by an agency to comply with its legal obligations or created as a result of its transactions of public business. Excluded as records are library and museum materials, extra copies of documents preserved for convenience or references, stocks of publications, and blank forms.

OPR—Office (or officer) of primary responsibility (OPR). Any headquarters, agency, or activity having primary functional interest in, and responsibility for, a specific action, project, plan, program, or problem.

Permanent Records—Records the Archivist of the United States has appraised and approved for permanent retention by the Government of the United States, and for accessioning into the National Archives.

Preservation—(1) The provision of adequate facilities to protect, care for, or maintain records; (2) Specific measures, individual and collective, undertaken to maintain, repair, restore, or protect records (Federal Records Management Glossary: 1989).

Prior Master File—A file that was at one time the current master file, but the master file updating process superseded it. Usually second, third, or fourth generation tapes (or other media) reflecting superseded data or a superseded master file that has lost all or some of its data.

Records—"All books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included." (Title 44 USC 3301)

Record Copy—The official or file document that you so mark and recognize, complete with enclosures or related papers.

Retention Period—The length of time the Air Force keeps a record before disposing of it according to the disposition schedules. Records not authorized for a specified disposition have a retention period of "permanent."

Scheduling—The process of developing a schedule for the disposition of the records, using AF Form 525, Records Disposition Recommendation, so the disposition instructions can be published in AFMAN 37-139.

Series of Records—A group of related records having a distinct title, application and disposition schedule.

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

Transaction File—See Historical File.

Unscheduled Record—A record whose disposition is waiting on NARA's final approval.

Vital Records—Records essential to the continued functioning or reconstitution of an organization during and after an emergency and also those records essential to protecting the rights and interests of that organization and of the individuals directly affected by its activities.

Attachment 2

SAMPLE OF FORMAT TO BE USED FOR ELECTRONIC RECORDKEEPING PROPOSAL ORGANIZATIONAL LETTERHEAD

MEMORANDUM FOR (Local Records Manager)

FROM: (Complete 3-line address)

SUBJECT: Electronic Records Proposal

1. Per AFMAN 37-123, request authorization to develop the following electronic records system:
 - a. **Office Accumulating/Creating Records, and Name and DSN of Point of Contact.**
 - b. **Name of System.** Indicate the commonly used name and acronym of the system.
 - c. **System Control Number.** Specify the internal control number assigned to the system for reference, control, or cataloguing purposes, e.g. the information system inventory number or ADP plan control number.
 - d. **Prescribing Directive for Records.**
 - e. **Title of Records.** Take title from AFMAN 37-139. If none are listed, complete and attach an AF Form 525, **Records Disposition Recommendation.**
 - f. **Maintenance and Disposition Instructions of Records.** Insert the applicable disposition instructions from AFMAN 37-139 Table and Rule - formerly AFR 4-20, volume 2. If none are listed, refer to attached AF Form 525.
 - g. **Record Life Preservation.** Describe how the system will retain records in a usable format until their authorized disposition.
 - h. **Records Density.** Give records' density and the access time to retrieve stored records.
 - i. **Record and Nonrecord Distinction.** State how the proposed system will distinguish between record and nonrecord material.
 - j. **Medium Portability.** Describe the portability of the medium. Not all media will run on the equipment of multiple manufacturers. When selecting a storage medium, consider the ability to transfer the record from one medium to another, such as from optical disk to magnetic tape, and the equipment's ability to read and access the record.
 - k. **Records Identification and Retrieval.** Describe how users can identify and retrieve records, and provisions for internal and external labels according to chapter 2 and AFIs in the 33 series.
 - l. **Program Supported by the System.** Show the program or mission to which the system relates, and cite any laws, instructions or directives authorizing such programs or missions. Also, list the names, office addresses, telephone number and location of program personnel who can provide additional information about the program and the system supporting it.
 - m. **Purpose.** Explain the system's purpose. Does it serve different purposes for different users? Do the different purposes entail different needs for retaining information?.
 - n. **Data Input and Sources.** What inputs are needed and how long should they be retained? Are they needed for legal or audit purposes? Describe the primary data input sources and providers of the data to

the system. Also, give the names of any other systems, either inside or outside the DoD, from which the information system receives data.

o. **Online Retention.** How long must information be kept online? Are online retention requirements directly mapped onto unit records or data sets?.

p. **Offline Retention.** When information is no longer needed online, must it be kept offline? How long?.

q. **System Design Integration.** Can retention and disposition requirements be integrated with systems design and operations to allow update procedures, regular backup operations, creation of history files, subset files, and public use data sets, etc.?.

r. **Major Outputs.** Does the system contain reporting requirements that require licensing with a control symbol? If so, ensure that the reporting requirements are properly licensed in accordance with AFI 37-124, *The Information Collections and Reports (ICR) Program*. Coordinate with the MAJCOM ICR manager, or if an Air Force-level system, with the Air Force Information Management Control Officer (IMCO) at SAF/AAIQ. What will happen to all reports, generated either on paper, tape, or computer output microfilm (COM) generated by the system? List the following: the system's main output products with the appropriate control symbols, frequency of preparation (i.e. weekly, monthly, annually), activities that input the data for the report, and the activity(s) that require the data for the report. Indicate if the information is transferred to other systems.

s. **Information Content.** Indicate the main subject matter, date coverage, time span, geographic coverage, update cycle, and other characteristics of the system. Also, indicate whether the system saves suspended information and whether it contains micro-data or summary data.

t. **Type of Data Base Management Systems (DBMS) or File.** Indicate how the information in the data base can be accessed.

u. **Information Integrity.** Are multiple copies of the information needed? In what media? In what locations? What happens to the different media, and when? How will integrity and authority be assured?.

v. **Records Maintenance.** Tell how required maintenance will be carried out to retain the integrity of the record. See chapter 3 for specific maintenance procedures.

w. **Records Loss Prevention.** Explain provisions to ensure the record isn't lost because of changing technology or deterioration. Describe plans for storage media conversion to provide computability with changing hardware and software and plans to ensure the disposition given in AFMAN 37-139 (formerly AFR 4-20, volume 2), can be implemented using the new media.

x. **Storage and Backup.** Explain plans for separate storage and backing up electronic records regularly to safeguard against loss of information due to equipment malfunctions or human error. Backups of records retained for 10 years or longer, and permanent or unscheduled records on magnetic media must be maintained in storage area separate from the location of the records that have been copied.

y. **Privacy Act (PA).** Is the system subject to the PA? Explain provisions for ensuring information is timely, accurate, complete and relevant and capable of being updated or corrected.

(1) **Privacy Act Systems of Record Notice.** Insert the PA system of records notice number and identification, if applicable. If none is currently listed, but the PA applies, prepare and attach a system notice proposal.

z. **Vital Records.** Is information in the system a vital record? If so, explain provisions to assure availability of information in an emergency.

aa. **Documentation.** Tell who is responsible for maintaining accurate, current information in the system. Where will the documentation be maintained? Specify all technical characteristics necessary to read or process the record. Identify all defined inputs and outputs. Define the contents of the files and records. Define restrictions on access and use. Describe update cycles or conditions and rules for adding information to the system, changing information in it, or deleting information from it; and ensuring the timely, authorized disposition of the record.

bb. **Long Term Storage.**

Current retention period is 9 years or longer.

(Then explain which medium containing the record must be given special care to ensure record is preserved for long-term operational needs or for archival purposes).

Current retention period has not been established. See attached AF Form 525.

cc. **Current Master File (CMF).** Explain provisions in effect to ensure disposition of the CMF (the system's most recent version) will comply with records disposition instructions.

dd. **Prior Master File (PMF).** Explain provisions in effect to ensure disposition of the PMF (superseded updated master file) will comply with records disposition instructions.

ee. **Relationship of Master Files.** Explain relationship, if any, of CMF and PMF to any other DoD records, regardless of medium.

ff. **Historical (Transaction File).** Explain where the Historical file (duplicates of either the CMF or PMF, or a combination of both) will be kept to ensure they are stored apart from master files.

gg. **Cost Analysis.** List the cost of storing and retrieving the records. Cost benefit analysis should include factors such as the cost of equipment and storage media; operational personnel costs; contractor costs, if applicable; size of the record collection, including backups; frequency of retrieval; amount of media recycling possible, and storage method.

2. Concurrence of Other Interested/Affected Offices. Identify the office, grade, name and telephone number of individuals. As a minimum, obtain concurrence of the Communications-Computer Systems Officer (CSO).

3. System Security. Written instructions are in place to:

- a. Limit access to authorized personnel only.
- b. Provide backup and recovery of electronic records to protect against loss.
- c. Train and monitor users to protect sensitive and classified information.
- d. Minimize the risk of unauthorized alterations or erasures of electronic records.

4. Attachments. Attached are: (Attach either or both)

a. Communications-Computer Requirement Document (AF Form 3215). (Needed to document requirements that are not satisfied with equipment on a Table of Allowance (TA); are expected to cost less than \$25 million in a single year or less than \$75 million total; and do not require research and development (R&D)(3600) funds.

b. Statement of Need (SON). Attach a copy of the SON if R&D (3600) funds are required.

NAME, GRADE, TITLE
OF REQUESTING OFFICIAL
(CHIEF OF THE OFFICE OR HIGHER)

Attachments:

1. AF Form 525 (If applicable)
2. Privacy Act System Notice (If applicable)
3. AF Form 3215 (If applicable)
4. Statement of Need (If applicable)
5. Sample Output Documents (If applicable)
6. AF Form 1341 (If applicable)

Attachment 3

TABLE OF MEASUREMENT EQUIVALENTS

Table A3.1. Measurement Equivalents.

Calculate or estimate cubic feet volume according to the following cubic foot equivalents:

Filing Cabinets:	One letter-size drawer = 1 6/12 cubic feet One legal-size drawer = 2 cubic feet
Filing Cases:	One 3- by 5-inch case = 1/12 cubic foot One 4- by 6-inch case = 3/12 cubic foot One 5- by 8-inch case = 3/12 cubic foot
Shelf Files:	Letter-size, 1 linear foot = 10/12 cubic foot Legal-size, 1 linear foot = 1 cubic foot
Machines Runs:	15 by 11 inches, 10-inch thickness = 1 cubic foot 8 6/12 by 11 inches, 18-inch thickness = 1 cubic foot 8 6/12 by 5 6/12 inches, 38-inch thickness = 1 cubic foot
Tabulating Cards:	10,000 cards = 1 cubic foot

Records in Outsize Equipment and Records Not Filed in Containers: Multiply length by width by height (inches), then divide by 1,728 to get cubic footage.

Microform:	100	16mm reels (100 feet) = 1 cubic foot
	50	35mm reels (100 feet) = 1 cubic foot
	12	inches microfiche = 2/12 cubic foot
	72	inches microfiche = 1 cubic foot
	10,000	microfiche = 1 cubic foot

Magnetic Tapes: 7 reels = 1 cubic foot; or base measurement on following where applicable:

Reel Size:	
1/4 inch by 7 inches by 1800 feet	36 reels = 1 cubic foot
1/4 inch by 7 inches by 3600 feet	36 reels = 1 cubic foot
1/2 inch by 10-1/2 inches by 3600 feet	13 reels = 1 cubic foot
1/2 inch by 10-1/2 inches by 2400 feet	13 reels = 1 cubic foot
1/2 inch by 14 inches by 9200 feet	8 reels = 1 cubic foot
1/2 inch by 1/2 inch by 4600 feet	13 reels = 1 cubic foot
1/4 inch by 10-1/2 inches by 3600 feet	17 reels = 1 cubic foot
1/4 inch by 7 inches by 1200 feet	36 reels = 1 cubic foot
1 inch by 14 inches by 9200 feet	5 reels = 1 cubic foot
1 inch by 12-1/2 inches by 7200 feet	6 reels = 1 cubic foot
1/2 inch by 14 inches by 7200 feet	10 reels = 1 cubic foot
1 inch by 10 inches by 5000 feet	11 reels = 1 cubic foot
1 inch by 14 inches by 10,200 feet	5 reels = 1 cubic foot
Magnetic Tape Selectric Typewriter Tapes:	
4 inches by 4 inches by 1 inch	108 reels = 1 cubic foot

Still Pictures:

Negatives:	2300	35mm 6 exposure strips	= 1 cubic foot
	8640	2- by 2-inch mounted slides	= 1 cubic foot
	2184	4- by 5-inch film sheets	= 1 cubic foot
	5960	2 1/4- by 3 1/4-inch film sheets	= 1 cubic foot

Table A3.1. Continued.

Prints:	2350	8- by 10-inch glossies or contact sheets	= 1 cubic foot
	9400	4- by 5-inch glossies	= 1 cubic foot
Motion Pictures:	6	35mm reels (1000 feet)	= 1 cubic foot
	11	16mm reels (1200 feet)	= 1 cubic foot
	15	16mm reels (800 feet)	= 1 cubic foot
	32	16mm reels (400 feet)	= 1 cubic foot
Sound Recordings:	76	16-inch disc recordings	= 1 cubic foot
	144	12-inch disc recordings	= 1 cubic foot
	48	7-inch audiotape reels	= 1 cubic foot
	16	10-inch audiotape reels	= 1 cubic foot
Video Recordings:	10	3/4-inch cassettes	= 1 cubic foot
	3	2-inch reels	= 1 cubic foot
	9	1-inch reels	= 1 cubic foot
	43	1/2-inch reels	= 1 cubic foot
	192	8mm cassettes	= 1 cubic foot
	24	1/2-inch Beta/VHS cassettes	= 1 cubic foot

Electronic Recordkeeping:

			CUBIC INCHES	CUBIC FEET
Cassettes (4 inches by 2 1/2 inches by 5/16 inch):				
1	4 by 2.5 by .3125	=	3.125	---
100	4 by 2.5 by 31.25	=	312.5	.18
300	4 by 2.5 by 93.75	=	937.5	.54
500	4 by 2.5 by 156.25	=	1562.5	.90
600	4 by 2.5 by 187.5	=	1875	1.00
Floppy Discs: 8-inch disc:				
10	8 by 8 by 1 3/4 inches		112	.06
100	8 by 8 by 17 1/2 inches		1120	.65
130	8 by 8 by 22 3/4 inches		1456	.84
150	8 by 8 by 26 1/4 inches		1680	.97
160	8 by 8 by 28 inches		1792	1.00
Floppy Discs: 5 1/2 inch disc:				
10	5 1/2 by 5 1/2 by 1 3/4 inches		52	.03
100	5 1/2 by 5 1/2 by 17 1/2 inches		529	.31
150	5 1/2 by 5 1/2 by 26 1/4 inches		794	.46
300	5 1/2 by 5 1/2 by 52 1/2 inches		1588	.92
330	5 1/2 by 5 1/2 by 57 3/4 inches		1747	1.00