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# TRANSMITTAL FORM FOR DESCRIBING COMPUTER MAGNETIC TAPE FILE PROPERTIES

CATEGORY: SOFTWARE  
SUBCATEGORY: DOCUMENTATION

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## **Foreword**

The Federal Information Processing Standards Publication Series of the National Bureau of Standards is the official publication relating to standards adopted and promulgated under the provisions of Public Law 89-306, and Part 6 of Title 15 Code of Federal Regulations. The entire series constitutes the FEDERAL INFORMATION PROCESSING STANDARDS REGISTER.

The series is used to announce Federal Information Processing Standards, and to provide standards information of general interest and an index of relevant standards publications and specifications. Publications that announce adoption of standards provide the necessary policy, administrative, and guidance information for effective standards implementation and use. The technical specifications of the standard are usually attached to the publication, otherwise a reference source is cited.

Comments covering Federal Information Processing Standards and Publications are welcomed, and should be addressed to the Associate Director for ADP Standards, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234. Such comments will be either considered by NBS or forwarded to the responsible activity as appropriate.

Ernest Ambler, *Acting Director*

## **Abstract**

This publication provides a standard magnetic tape transmittal form (SF-277), together with instructions for providing the necessary information on the form. The standard magnetic tape transmittal form, Computer Magnetic Tape File Properties (SF-277), will be used by Federal agencies to document the physical properties and characteristics of a recorded magnetic tape file needed by the receiving agency to process the tape.

**Keywords:** Computer magnetic tape file properties; computers; data processing; Federal Information Processing Standards; information processing.

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# Federal Information Processing Standards Publication 53

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ANNOUNCING THE STANDARD FOR



## TRANSMITTAL FORM FOR DESCRIBING COMPUTER MAGNETIC TAPE FILE PROPERTIES

Federal Information Processing Standards Publications are issued by the National Bureau of Standards pursuant to the Federal Property and Administrative Services Act of 1949, as amended, Public Law 89-306 (79 Stat. 1127), Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 Code of Federal Regulations (CFR).

**Name of Standard.** Transmittal Form for Describing Computer Magnetic Tape File Properties.

**Category of Standard.** Software, Documentation.

**Explanation.** This publication provides a standard magnetic tape transmittal form (SF-277), together with instructions for providing the necessary information on the form.

**Approving Authority.** Secretary of Commerce.

**Maintenance Agency.** Institute for Computer Sciences and Technology, National Bureau of Standards, Department of Commerce.

**Applicability.** The standard magnetic tape transmittal form, Computer Magnetic Tape File Properties (SF-277), will be used by Federal agencies to document the physical properties and characteristics of a recorded magnetic tape file needed by the receiving agency to process the tape.

**Implementation Schedule.** This standard becomes effective upon publication. Federal agencies, based upon their specific operational requirements, will develop procedures and provide implementing instructions for the use of this standard within their organizations.

**Specifications.** Federal Information Processing Standard Publication 53, Transmittal Form for Describing Computer Magnetic Tape File Properties (affixed).

**Waiver Procedure.** Heads of agencies may waive the provisions of the implementation schedule. Proposed waivers will be coordinated in advance with the National Bureau of Standards. Letters should be addressed to the Associate Director for ADP Standards, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234. They should describe the nature of the waiver and set forth the reasons therefor.

Sixty days should be allowed for review and response by the National Bureau of Standards. The waiver is not to be made until a reply from the National Bureau of Standards is received; however, the final decision for granting the waiver is a responsibility of the agency head.

**Qualifications.** The standard form provided in this document is based upon an analysis and selection of relevant data elements which are useful in describing computer magnetic tape file properties. In the future, this standard may require modification to retain its value. Comments or suggestions regarding its content and use are welcomed and should be addressed to the Associate Director for ADP Standards, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234.

Federal Information  
Processing Standards Publication 53

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SPECIFICATIONS FOR



**TRANSMITTAL FORM FOR DESCRIBING  
COMPUTER MAGNETIC TAPE FILE PROPERTIES**

1. **Name of Standard.** Transmittal Form for Describing Computer Magnetic Tape File Properties.
2. **Category of Standard.** Software, Documentation.
3. **Explanation.** This publication provides a standard magnetic tape transmittal form (SF-277), together with instructions for providing the necessary information on the form.
4. **Specifications.** The following pages provide a copy of the referenced Standard Form (SF-277), Computer Magnetic Tape File Properties, together with instructions for completion.
5. **Special Information.** FIPS PUB 20, Guidelines for Describing Information Interchange Formats, provides a checklist of characteristics that should be considered in documenting data interchange formats. Users of this standard will find FIPS PUB 20 a useful guide to be used in conjunction with its application.

## COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date Year    Month    Day			02. Form Prepared By (Name and Phone)			03. Reel ID Number (Property Control No.)		
04. Recording Date Year    Month    Day			05. File Identifier or Descriptive Title			06. Short Title (External Label Name)		
07. Source Unavailable Year    Month    Day			08. Documentation Yes    No    Available (Enter Citation)			09. File Position on Reel _____ of _____		
10. To Be Returned Yes    No    To Other Than The Sender			11. Submitting Organization & Address			12. Receiving Organization & Address		
13. Due Back Date Year    Month    Day								
14. Technical Contact(s) & Phone Number(s)								

## RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit		17. No. of Tracks 7    9    Other			18. Parity Odd    Even		19. Density (BPI)
	16. Tape Subsystem							
RECORDING SOFTWARE	20. Operating System, Release & Version		22. Internal File Identifier					
	21. Utility Program or Data Base Language							
23. Characters Set (Graphics) <input type="checkbox"/> ASCII <input type="checkbox"/> BCD <input type="checkbox"/> Other (Specify) <input type="checkbox"/> EBCDIC <input type="checkbox"/> FIELDATA <input type="checkbox"/> Non-Print Codes			24. Recorded Label (Internal Label) <input type="checkbox"/> Header <input type="checkbox"/> ANSI X 3.27 Standard <input type="checkbox"/> Other <input type="checkbox"/> Trailer <input type="checkbox"/> FIPS Standard <input type="checkbox"/> None					

## FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical	27. Record Type <input type="checkbox"/> Fixed Length <input type="checkbox"/> Other Than Fixed		28. Records/Block (Blocking Factor)	29. TYPE OF FILE ORGANIZ- ATION (Check One Box)  <input type="checkbox"/> One File One Reel <input type="checkbox"/> One File Multiple Reels <input type="checkbox"/> Multiple Files One Reel <input type="checkbox"/> Multiple Files Multiple Reels
	26. Logical				
RECORD LENGTH	30. Physical <input type="checkbox"/> Bytes <input type="checkbox"/> Chars. <input type="checkbox"/> Words (    Bits/Word)				
	31. Logical <input type="checkbox"/> Bytes <input type="checkbox"/> Chars. <input type="checkbox"/> Words (    Bits/Word)				

## SUPPLEMENTAL INFORMATION

32. Use/Handling Constraints (Specify if Yes)	
Yes	No
33. For Submitting Organization Use	



## GENERAL:

The purpose of this form is to facilitate the interchange of recorded magnetic tape. This form is not intended to replace other subject matter/content documentation. If elements of documentation are available, they should be attached, or their location should be indicated in Item 8. Examples are: description of the record and/or file content; file layout; record format; record sequence; file type (data, bibliographic, source or object program; "as of" date; period of coverage; record names; file function; location and number of tape marks; character set; padding character information; last block conventions; special (record/file) separation (marks/characters); end of file or end of reel conventions (other than standard labels); and characteristics peculiar to the operating system or the practices of the generating agency. See FIPS PUB 20 for a discussion of the elements of file documentation for information interchange.

A separate form should be completed for each file.

01. **Completion Date.** Enter the date this form was prepared.
02. **Form Prepared By.** Enter the name and phone number (including area code) of the individual who prepared this form.
03. **Reel I.D. Number.** Enter the number which uniquely identifies this reel. It, generally, will be a property control number for the submitting organization. If the file is recorded on multiple reels, enter the first reel number in this item and list all others, in sequence, in Item 33. This information is used to identify the tape reels transmitted.
04. **Recording Date.** Enter the date the reels identified in Item 3 were recorded (copied).
05. **File Identifier or Descriptive Title.** Enter the name used to identify the file. If it is a generally known file, use the name by which it is commonly known. If it is not generally known, make the title as descriptive as possible.
06. **Short Title.** Enter the commonly used abbreviation or acronym which identifies the file. This will usually be the file identification written on the external (gummed) reel label.
07. **Source Unavailable.** Enter the date when your organization will no longer be able to supply a copy of this file.
08. **Documentation Available.** Enter an "X" in the appropriate box. If documentation is available, but is not being forwarded to the recipient as part of this transaction, provide in this space a bibliographic citation or mailing address.
09. **File Position on Reel.** If this is the first or only file on the reel, enter a "1". If the reel contains multiple files, enter the file's position number on the reel. See Item 29.
10. **To Be Returned.** Enter an "X" in the appropriate box. If the file is to be returned to an organization other than the sender, enter an "X" in "to other than sender", fill in Item 13, and enter the appropriate address in Item 33; or include a completed mailing label, and enter instructions for return in Item 33.
11. **Submitting Organization and Address.** Identify the sending organization. Fill in complete mailing address, including street, city, state, and zip code of the sending organization.
12. **Receiving Organization and Address.** Identify the receiving organization. Fill in complete mailing address, including street, city, state, and zip code. If possible, include the name of the individual who is expecting the file.
13. **Due Back Date.** Enter the date the file is expected to be returned, if the "Yes" box was checked in Item 10.
14. **Technical Contact(s) and Phone Number(s).** Enter person(s) or office(s) to be contacted for clarification and further information concerning the tape reel contents. Include telephone area code. Provide the organization name and mailing address (in Item 33), if different from that in Item 11.

## RECORDING SYSTEM CHARACTERISTICS

## EQUIPMENT MANUFACTURER AND MODEL

15. **Processing Unit.** Enter the manufacturer's name and model number of the computer used (or emulated) to record the data.
16. **Tape Sub System.** Enter the manufacturer's name and model number of the tape drive used (or emulated) to record the data.
17. **Number of Tracks.** Enter an "X" in the appropriate box. If "Other" is checked, enter the number of tracks in Item 33.
18. **Parity.** Enter an "X" in the appropriate box.
19. **Density.** Enter the number of bits recorded per inch (e.g.: 200,556,800,160C,6250 BPI). For those unusual cases where "characters per inch" must be used, explain in Item 33.

## RECORDING SOFTWARE

20. **Operating System, Release and Version.** Identify the system software used to record this tape.
21. **Utility Program or Data Base Language.** Enter the name of the utility program used to copy the tape or the data base language used to create it. Identify the release and/or level.
22. **Internal File Identifier.** If there is a recorded label, enter the file identification (e.g., Data Set Name) used in the label.
23. **Character Set (Graphics).** Place an "X" in all appropriate boxes. If "Other" and/or "non-print codes" are checked, describe briefly in Item 33 and supply appropriate documentation. If nonprinting formats (such as packed decimal or three-bytes-in-four-characters) are used, specify in Item 33 and include documentation.
24. **Recorded Label (Internal Label).** Enter an "X" in all appropriate boxes. If "Other" is checked, include documentation of the label(s).

## FILE CHARACTERISTICS

## NUMBER OF RECORDS

25. **Physical.** Enter the number of physical records (blocks) in the file. This number is normally supplied by utility programs which copy physical records without regard to the logical structure of the tape. Labels are not included in this count.
26. **Logical.** 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.
27. **Record Type.** Enter an "X" in the appropriate box. If "Other" is checked, provide documentation on how physical and logical record length control is established.
28. **Records/Block (Blocking Factor).** If "fixed length" is checked in Item 27, enter the blocking factor.
29. **Type of File Organization.** Enter an "X" in the appropriate box. If this form accompanies a single reel of tape which contains a single file, check "one file, one reel". If this form accompanies several reels of tape which contain a single file, check "one file, multiple reels". If this form is one of several which accompany a single reel of tape containing several files, check "multiple files, one reel". Finally, if this form accompanies several reels of tape which contain several files, check "multiple files, multiple reels" and describe this file's position in the file set in Item 33.

## RECORD LENGTH

If the record is not fixed length, enter the maximum size record length, and describe techniques used to control and indicate size in Item 33. Enter an "X" in the appropriate box to indicate the unit of measurement. If size is indicated in number of words, also enter the word size as "bits per word".

30. **Physical.** Enter the physical record length (block size).
31. **Logical.** Enter the logical record length.

## SUPPLEMENTAL INFORMATION

32. **Use/Handling Constraints.** If the data in this file is subject to National Security classification, Atomic Energy Act classification, any Privacy Act constraints, Reproduction constraints, etc., enter an "X" in the "Yes" box. If "Yes" has been checked, indicate the security level and procedures to be followed.
33. **For Submitting Organization Use.** This area is provided for use of the organization submitting this form. It may contain any additional information useful to the recipient of the file. If information is entered here as a result of checks in other item numbers, the information should be identified by the corresponding item number. Use additional pages, if necessary.

Standard Form 277 Back (12-77)

**Where to Obtain Copies.** Copies of this publication are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. When ordering, refer to Federal Information Processing Standards Publication 53 (NBS-FIPS-PUB-53), and title. When microfiche is desired, this should be specified. Payment may be made by check, money order, American express card, or deposit account.

Copies of the Standard Form, Computer Magnetic Tape File Properties (SF-277), are available as a Federal Supply National Stock item, FSN-7540-01-045-0610. The forms will be issued in units of 50 copies to a pad at a price of \$.50 a pad. Supplies of this Standard Form should be obtained from the nearest GSA supply distribution facility.

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