

719

PIONEER 10 72-012A-11D

PIONEER 11 73-019A-11E

15-MIN INTERPLANETARY CRUISE DATA, SFDU

---

## Table of Contents

1. Introduction
2. Errata/Change Log
3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM
4. Catalog Materials
  - a. Associated Documents
  - b. Core Catalog Materials

---

## **1. INTRODUCTION:**

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

## 2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

*When printing, special settings may be required to make the text box appear on the printed output.*

| Version | Date | Person | Page | Description of Change |
|---------|------|--------|------|-----------------------|
| 01      |      |        |      |                       |
| 02      |      |        |      |                       |

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents      To find associated documents you will need to know the document ID number and then click here.  
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

REQ. AGENT

ACQ. AGENT

-----  
CMW

-----  
JFC

PIONEER 10

15-MIN INTERPLANETARY CRUISE DATA, SFDU

72-012A-11D SPHE-00460

This data set consists of 5 magnetic tapes. The data tapes were written on 9-track, 6250 bpi, in the SFDU format, and can be read, with the VAX COPY command in VMS directory format. All file sizes are in VAX blocks = 512 bytes/block. Each tape is labeled and contains the volume description file, the formats file, the software file and the publications file. These are followed by the data files, each data file contains six months worth of data. The backup tapes are 3480 cartridges. The D and C numbers and time span are as follows:

| D#       | C#       | DATA FILES | LABEL  | TIME SPAN           |
|----------|----------|------------|--------|---------------------|
| -----    | -----    | -----      | -----  | -----               |
| D-089486 | C-029439 | 05         | P10K1A | 01/01/72 - 06/30/74 |
| D-089487 | C-029440 | 09         | P10K2A | 07/01/74 - 12/31/78 |
| D-089488 | C-029441 | 09         | P10K3A | 01/01/79 - 06/30/83 |
| D-089489 | C-029442 | 11         | P10K4A | 07/01/83 - 12/31/88 |
| D-089490 | C-029443 | 20         | P10K05 | 01/01/89 - 10/06/96 |

THE UNIVERSITY OF IOWA

17 OCTOBER 1996



Dr. Joseph H King  
National Space Science Data Center  
World Data Center A for Rockets  
and Satellites  
Goddard Space Flight Center  
Mailstop 633.0  
Greenbelt, MD 20771

Dear Joe:

Subject: Transmittal of University of Iowa Archival  
Data Tapes for Pioneer 10 and 11:

15 minute Average -- Interplanetary Cruise  
Data -- Trajectory Merged -- SFDU Format

One-Hour Average Interplanetary Cruise Data  
for Pioneer 10

24-Hour Average RTG and Temperature Corrected  
Trajectory Merged Interplanetary Cruise Data  
for Pioneer 10

The following University of Iowa/Geiger Tube Telescope  
data are being sent under separate cover:

| Pioneer 10                | LABEL   | PERIOD  |                                |
|---------------------------|---|---|--------------------------------|
| <i>replace</i><br>Tape #5 | NSSD_P10K_0005  | 89A through 96B                                 | SFDU Format                    |
| <i>replace</i><br>Tape #5 | One-Hour Averages<br>Pioneer 10 Cruise                                  | DOY 84 1988 to<br>DOY 280 1996                  | Same as earlier<br>submissions |
| Tape #1                   | 24-Hour Averages<br>RTG and Temperature<br>Corrected with<br>Trajectory | covering from<br>launch through<br>DOY 280 1996 | Same as earlier<br>submissions |
| Pioneer 11                |   |   |                                |
| <i>replace</i><br>Tape #5 | NSSD_P11K_0005  | 89B through 95A                                 | SFDU Format                    |

For the tapes in the SFDU format, A means first six months  
of calendar year and B means second six months of the calendar  
year.

All of the data in the SFDU format have been written on nine-track tapes at 6250 BPI using DEC FILES-11 (VMS 5.4) . Each tape is labeled and contains the updated volume description file, the formats file, the software file, and the publications file. These are followed by the indicated data files. The SFDU format is as specified and approved by the NSSDC.  
(DOY 280 1996 for Pioneer 10 and DOY 24 1995 for Pioneer 11)

All of the other tapes have been written on nine-track tapes at 6250 BPI and are VAX compatible.

The one-hour average cruise data start where the last submission on 1 June 1988 left off and continue to the present.  
(DOY 280 1996 for Pioneer 10)

The 24-Hour averages have been corrected for temperature and RTG background per Van Allen and Randall [1985]. These data have also been merged with selected trajectory data. These files have the same format as the one-hour cruise data but have twenty additional integer words added to the record length for the trajectory information. The format is the same as the previous submission and the time period is from launch through the present.  
(DOY 280 1996 Pioneer 10)

Sincerely yours,



B. A. Randall  
Co-Investigator

ARC/NASA Grant NAG2-571

cc: Dr. J. A. Van Allen/U. of Iowa  
Dr. J. F. Cooper, NSSDC  
Dr. L. E. Lasher, Code 244-14/ARC  
Mr. Fred Wirth, Code 224-14/ARC  
Mr. R. L. Brechwald/U. of Iowa



## THE UNIVERSITY OF IOWA



14 April 1992

Dr. James Lauer Green  
 National Space Science Data Center  
 World Data Center A for Rockets  
 and Satellites  
 Goddard Space Flight Center  
 Greenbelt, MD 20771

Dear Jim:

Subject: Transmittal of University of Iowa Archival  
 Data Tapes for Pioneer 10 and 11:  
 15 minute Average -- Interplanetary Cruise  
 Data -- Trajectory Merged -- SFDU Format

The following University of Iowa/Geiger Tube Telescope  
 data are being sent under separate cover:

| Pioneer 10     | LABEL          | PERIOD          | <i>New Label</i> |
|----------------|----------------|-----------------|------------------|
| Tape 1         | NSSD_P10K_0001 | 72A through 74A | <i>P10K1A</i>    |
| Tape 2         | NSSD_P10K_0002 | 74B through 78B | <i>P10K2A</i>    |
| Tape 3         | NSSD_P10K_0003 | 79A through 83A | <i>P10K3A</i>    |
| Tape 4         | NSSD_P10K_0004 | 83B through 88B | <i>P10K4A</i>    |
| Tape 5         | NSSD_P10K_0005 | 89A through 91A | <i>P10K5A</i>    |
| <br>Pioneer 11 |                |                 |                  |
| Tape 1         | NSSD_P11K_0001 | 73A through 75A | <i>P11K1A</i>    |
| Tape 2         | NSSD_P11K_0002 | 75B through 78B | <i>P11K2A</i>    |
| Tape 3         | NSSD_P11K_0003 | 79A through 82A | <i>P11K3A</i>    |
| Tape 4         | NSSD_P11K_0004 | 82B through 89A | <i>P11K4A</i>    |
| Tape 5         | NSSD_P11K_0005 | 89B through 91A | <i>P11K5A</i>    |

A means first six months of calendar year and B means  
 second six months of the calendar year.

All of the data have been written on nine-track tapes at 6250 BPI using DEC FILES-11 (VMS 5.4) . Each tape is labeled and contains the volume description file, the formats file, the software file and the publications file. These are followed by the indicated data files.

All of the data tapes are in the SFDU format as specified and approved by the NSSDC.

The fifth tape in both cases, has room for more data and will be periodically updated.

Sincerely yours,

*B. A. Randall*

B. A. Randall

Co-Investigator

ARC/NASA Grant NAG2-571

cc: Dr. J. A. Van Allen/U. of Iowa  
Dr. J. F. Cooper, NSSDC  
Dr. L. E. Lasher, Code 244-14/ARC  
Mr. R. O. Fimmel, Code 224-14/ARC  
Mr. R. L. Brechwald/U. of Iowa

*Tapes received, rewritten,  
and submitted to archive.*

*John F. Cooper*

*John F. Cooper*

*NSSDC/Hughes STX*

*1/4/93*

Note 1: The Pioneer 10 and 11 GTT data tapes were written, and can be read, with the VAX COPY command in VMS directory format. All file sizes listed above are in VAX blocks = 512 bytes/block.

Note 2: The \*.SFD (Standard Formatted Data Unit or SFDU document) files contain metadata describing the Pioneer spacecraft, GTT experiment, and dataset parameters in the VOLDESC.SFD file, the binary data file format in the FORMAT.SFD file, a sample FORTRAN code to read the binary data in the SOFTWARE.SFD file, and a list of publications in the PUBLICATION.SFD file. Only the VOLDESC.SFD file, which also lists names and time coverages of data files on the current tape volume, is changed for each new volume.

Note 3: All the GTT tapes originally submitted by the experimenters were recopied by J. F. Cooper at NSSDC/Hughes STX with changes in the metadata file names and substitution of a new software file provided after the tape submission to NSSDC. No changes were made to the data file names or contents.

VAX/VMS Directory Listings for the Pioneer 10 GTT Dataset Tapes

P10K1A - PIONEER 10 GTT TAPE #1

|                   |       |
|-------------------|-------|
| VOLDESC.SFD;1     | 57    |
| FORMAT.SFD;1      | 17    |
| SOFTWARE.SFD;1    | 30    |
| PUBLICATION.SFD;1 | 72    |
| GTT_P10_72A.DAT;1 | 18903 |
| GTT_P10_72B.DAT;1 | 29856 |
| GTT_P10_73A.DAT;1 | 27532 |
| GTT_P10_73B.DAT;1 | 28281 |
| GTT_P10_74A.DAT;1 | 25432 |

Total of 9 files, 130180 blocks.

P10K2A - PIONEER 10 GTT TAPE #2

|                   |       |
|-------------------|-------|
| VOLDESC.SFD;1     | 58    |
| FORMAT.SFD;1      | 17    |
| SOFTWARE.SFD;1    | 30    |
| PUBLICATION.SFD;1 | 72    |
| PUBLICATION.SFD;1 | 72    |
| SOFTWARE.SFD;1    | 30    |
| GTT_P10_74B.DAT;1 | 26871 |
| GTT_P10_75A.DAT;1 | 19144 |
| GTT_P10_75B.DAT;1 | 17686 |
| GTT_P10_76A.DAT;1 | 8047  |
| GTT_P10_76B.DAT;1 | 10400 |
| GTT_P10_77A.DAT;1 | 10090 |
| GTT_P10_77B.DAT;1 | 10409 |
| GTT_P10_78A.DAT;1 | 9268  |
| GTT_P10_78B.DAT;1 | 9381  |

Total of 13 files, 121473 blocks.

P10K3A - PIONEER 10 GTT TAPE #3

|                   |       |
|-------------------|-------|
| VOLDESC.SFD;2     | 58    |
| FORMAT.SFD;2      | 17    |
| SOFTWARE.SFD;2    | 30    |
| PUBLICATION.SFD;2 | 72    |
| GTT_P10_79A.DAT;1 | 3687  |
| GTT_P10_79B.DAT;1 | 18744 |
| GTT_P10_80A.DAT;1 | 10508 |
| GTT_P10_80B.DAT;1 | 14270 |
| GTT_P10_81A.DAT;1 | 13897 |
| GTT_P10_81B.DAT;1 | 15578 |
| GTT_P10_82A.DAT;1 | 16623 |
| GTT_P10_82B.DAT;1 | 15266 |
| GTT_P10_83A.DAT;1 | 13888 |

Total of 13 files, 122638 blocks.

P10K4A - PIONEER 10 GTT TAPE #4

|                   |       |
|-------------------|-------|
| VOLDESC.SFD;1     | 50    |
| FORMAT.SFD;2      | 17    |
| SOFTWARE.SFD;2    | 30    |
| PUBLICATION.SFD;2 | 72    |
| GTT_P10_83B.DAT;1 | 17143 |
| GTT_P10_84A.DAT;1 | 11517 |
| GTT_P10_84B.DAT;1 | 8717  |
| GTT_P10_85A.DAT;1 | 5926  |
| GTT_P10_85B.DAT;1 | 8016  |
| GTT_P10_86A.DAT;1 | 14600 |
| GTT_P10_86B.DAT;1 | 9899  |
| GTT_P10_87A.DAT;1 | 8771  |
| GTT_P10_87B.DAT;1 | 9731  |
| GTT_P10_88A.DAT;1 | 13376 |
| GTT_P10_88B.DAT;1 | 10904 |

Total of 15 files, 118779 blocks.

P10K5A - PIONEER 10 GTT TAPE #5

|                   |       |
|-------------------|-------|
| VOLDESC.SFD;1     | 57    |
| FORMAT.SFD;3      | 17    |
| SOFTWARE.SFD;2    | 30    |
| PUBLICATION.SFD;1 | 72    |
| GTT_P10_89A.DAT;1 | 10982 |
| GTT_P10_89B.DAT;1 | 8261  |
| GTT_P10_90A.DAT;1 | 5471  |
| GTT_P10_90B.DAT;1 | 6015  |
| GTT_P10_91A.DAT;1 | 7597  |

Total of 9 files, 38502 blocks.

Pioneer 11 73-019A-01E )  
15-min. interplanetary cruise  
Data

REQ. AGENT

ACQ. AGENT

-----  
CMW

-----  
JFC

PIONEER 11

15-MIN INTERPLANETARY CRUISE DATA, SFDU

73-019A-11E SPHE-00459

This data set consists of 5 magnetic tapes. The data tapes were written on 9-track, 6250 bpi, in the SFDU format, and can be read, with the VAX COPY command in VMS directory format. All file sizes are in VAX blocks = 512 bytes/block. Each tape is labeled and contains the volume description file, the formats file, the software file and the publications file. These are followed by the data files, each data file contains six months worth of data. The backup tapes are 3480 cartridges. The D and C numbers and time span are as follows:

| D#       | C#       | DATA FILES | LABEL  | TIME SPAN           |
|----------|----------|------------|--------|---------------------|
| -----    | -----    | -----      | -----  | -----               |
| D-089491 | C-029444 | 05         | P11K1A | 01/01/73 - 06/30/75 |
| D-089492 | C-029445 | 07         | P11K2A | 07/01/75 - 12/31/78 |
| D-089493 | C-029446 | 07         | P11K3A | 01/01/79 - 06/30/82 |
| D-089494 | C-029447 | 14         | P11K4A | 07/01/82 - 06/30/89 |
| D0-89495 | C-029448 | 16         | P11K05 | 07/01/89 - 01/24/95 |

THE UNIVERSITY OF IOWA

14 April 1992



Dr. James Lauer Green  
National Space Science Data Center  
World Data Center A for Rockets  
and Satellites  
Goddard Space Flight Center  
Greenbelt, MD 20771

Dear Jim:

Subject: Transmittal of University of Iowa Archival  
Data Tapes for Pioneer 10 and 11:  
15 minute Average -- Interplanetary Cruise  
Data -- Trajectory Merged -- SFDU Format

The following University of Iowa/Geiger Tube Telescope  
data are being sent under separate cover:

| Pioneer 10        | LABEL          | PERIOD          | <i>New Label</i> |
|-------------------|----------------|-----------------|------------------|
| Tape 1            | NSSD_P10K_0001 | 72A through 74A | <i>P10K1A</i>    |
| Tape 2            | NSSD_P10K_0002 | 74B through 78B | <i>P10K2A</i>    |
| Tape 3            | NSSD_P10K_0003 | 79A through 83A | <i>P10K3A</i>    |
| Tape 4            | NSSD_P10K_0004 | 83B through 88B | <i>P10K4A</i>    |
| Tape 5            | NSSD_P10K_0005 | 89A through 91A | <i>P10K5A</i>    |
| <b>Pioneer 11</b> |                |                 |                  |
| Tape 1            | NSSD_P11K_0001 | 73A through 75A | <i>P11K1A</i>    |
| Tape 2            | NSSD_P11K_0002 | 75B through 78B | <i>P11K2A</i>    |
| Tape 3            | NSSD_P11K_0003 | 79A through 82A | <i>P11K3A</i>    |
| Tape 4            | NSSD_P11K_0004 | 82B through 89A | <i>P11K4A</i>    |
| Tape 5            | NSSD_P11K_0005 | 89B through 91A | <i>P11K5A</i>    |

A means first six months of calendar year and B means  
second six months of the calendar year.

All of the data have been written on nine-track tapes at 6250 BPI using DEC FILES-11 (VMS 5.4) . Each tape is labeled and contains the volume description file, the formats file, the software file and the publications file. These are followed by the indicated data files.

All of the data tapes are in the SFDU format as specified and approved by the NSSDC.

The fifth tape in both cases, has room for more data and will be periodically updated.

Sincerely yours,

*B. A. Randall*

B. A. Randall

Co-Investigator

ARC/NASA Grant NAG2-571

cc: Dr. J. A. Van Allen/U. of Iowa  
Dr. J. F. Cooper, NSSDC  
Dr. L. E. Lasher, Code 244-14/ARC  
Mr. R. O. Fimmel, Code 224-14/ARC  
Mr. R. L. Brechwald/U. of Iowa

*Tapes received, rewritten,  
and submitted to archive.*

*John F. Cooper*

*John F. Cooper*

*NSSDC/Hughes STX*

*1/4/93*



VAX/VMS Directory Listings for the Pioneer 11 GTT Dataset Tapes

P11K1A - PIONEER 11 GTT TAPE #1  
VOLDESC.SFD;1 55  
FORMAT.SFD;1 18  
SOFTWARE.SFD;2 30  
PUBLICATION.SFD;1 72  
GTT\_P11\_73A.DAT;1 14299  
GTT\_P11\_73B.DAT;1 30137  
GTT\_P11\_74A.DAT;1 28929  
GTT\_P11\_74B.DAT;1 30833  
GTT\_P11\_75A.DAT;1 24901  
GTT\_P11\_REG.SFD;2 173  
Total of 10 files, 129457 blocks.

P11K2A - PIONEER 11 GTT TAPE #2  
VOLDESC.SFD;1 55  
FORMAT.SFD;5 18  
SOFTWARE.SFD;3 30  
PUBLICATION.SFD;2 72  
GTT\_P11\_75B.DAT;1 20986  
GTT\_P11\_76A.DAT;1 9891  
GTT\_P11\_76B.DAT;1 14284  
GTT\_P11\_77A.DAT;1 27265  
GTT\_P11\_77B.DAT;1 17653  
GTT\_P11\_78A.DAT;1 14952  
GTT\_P11\_78B.DAT;1 9870  
Total of 11 files, 115076 blocks.

P11K3A - PIONEER 11 GTT TAPE #3  
VOLDESC.SFD;2 55  
FORMAT.SFD;5 18  
SOFTWARE.SFD;3 30  
PUBLICATION.SFD;2 72  
GTT\_P11\_79A.DAT;1 20875  
GTT\_P11\_79B.DAT;1 17624  
GTT\_P11\_80A.DAT;1 15404  
GTT\_P11\_80B.DAT;1 15811  
GTT\_P11\_81A.DAT;1 21869  
GTT\_P11\_81B.DAT;1 12544  
GTT\_P11\_82A.DAT;1 15610  
Total of 11 files, 119922 blocks.

P11K4A - PIONEER 11 GTT TAPE # 4  
VOLDESC.SFD;1 55  
FORMAT.SFD;5 18  
SOFTWARE.SFD;3 30  
PUBLICATION.SFD;2 72  
GTT\_P11\_82B.DAT;1 10238  
GTT\_P11\_83A.DAT;1 11679  
GTT\_P11\_83B.DAT;1 8819  
GTT\_P11\_84A.DAT;1 11203  
GTT\_P11\_84B.DAT;1 10430  
GTT\_P11\_85A.DAT;1 7753  
GTT\_P11\_85B.DAT;1 6626  
GTT\_P11\_86A.DAT;1 8569  
GTT\_P11\_86B.DAT;1 5530  
GTT\_P11\_87A.DAT;1 4006  
GTT\_P11\_87B.DAT;1 4517  
GTT\_P11\_88A.DAT;4 9273  
GTT\_P11\_88B.DAT;1 10198  
GTT\_P11\_89A.DAT;1 8879  
Total of 18 files, 117905 blocks.

P11K5A - PIONEER 11 GTT TAPE #5  
VOLDESC.SFD;1 54  
FORMAT.SFD;5 18  
SOFTWARE.SFD;3 30  
PUBLICATION.SFD;2 72  
GTT\_P11\_89B.DAT;1 10561  
GTT\_P11\_90A.DAT;1 4727  
GTT\_P11\_90B.DAT;1 3404  
GTT\_P11\_91A.DAT;1 2906  
Total of 8 files, 21772 blocks.

Note 1: The Pioneer 10 and 11 GTT data tapes were written, and can be read, with the VAX COPY command in VMS directory format. All file sizes listed above are in VAX blocks = 512 bytes/block.

Note 2: The \*.SFD (Standard Formatted Data Unit or SFDU document) files contain metadata describing the Pioneer spacecraft, GTT experiment, and dataset parameters in the VOLDESC.SFD file, the binary data file format in the FORMAT.SFD file, a sample FORTRAN code to read the binary data in the SOFTWARE.SFD file, and a list of publications in the PUBLICATION.SFD file. Only the VOLDESC.SFD file, which also lists names and time coverages of data files on the current tape volume, is changed for each new volume.

Note 3: All the GTT tapes originally submitted by the experimenters were recopied by J. F. Cooper at NSSDC/Hughes STX with changes in the metadata file names and substitution of a new software file provided after the tape submission to NSSDC. No changes were made to the data file names or contents.

Note 4: For further information on this dataset please contact Dr. John F. Cooper by regular mail at National Space Science Data Center, Hughes STX Corporation, Code 633.9, NASA Goddard Space Flight Center, Greenbelt, MD 20771, by e-mail at ncf::jcooper or jcooper@nssdca.gsfc.nasa.gov, by phone at 301-513-1668, or by Fax at 301-513-1608.

FATS070 CONTROL CARD TABLE SIZE IS 4096 BYTES

FATAR CONTROL CARDS

|      |                                     |          |
|------|-------------------------------------|----------|
| 1--  | ANALYZE LABELS=NO,RETRY=5           | 00110099 |
| 2--  | PRINT LF=14,B=1-2,L=1000,DUMP       | 00130099 |
| 3--  | PRINT LF=14,B=5180-5181,L=1000,DUMP | 00131699 |
| 4--  | PRINT LF=17,B=1-2,L=1000,DUMP       | 00131799 |
| 5--  | PRINT LF=17,B=8182-8183,L=1000,DUMP | 00131899 |
| 6--  | PRINT LF=20,B=1-2,L=1000,DUMP       | 00131999 |
| 7--  | PRINT LF=20,B=7545-7546,L=1000,DUMP | 00132099 |
| 8--  | PRINT LF=23,B=1-2,L=1000,DUMP       | 00133099 |
| 9--  | PRINT LF=23,B=7751-7752,L=1000,DUMP | 00134099 |
| 10-- | PRINT LF=26,B=1-2,L=1000,DUMP       | 00135099 |
| 11-- | PRINT LF=26,B=6970-6971,L=1000,DUMP | 00136099 |

FATS071 TAPE BUFFER SIZE IS 65535 BYTES

CHARACTERISTICS OF THE TAPE TO BE ANALYZED

UNIT SERIAL DEN TRTCH  
5BA CMWS02 38000

FATAR DETAIL REPORT

BLOCK LNGLTH/ MESSAGE/ 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
NUMBER DISPL BLOCK TYPE (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

|           |             |   |                   |           |
|-----------|-------------|---|-------------------|-----------|
| * * * * * | START FILE  | 1 |                   |           |
| * * * * * | END OF FILE | 1 | -- FILE CONTAINED | 5 BLOCKS  |
| * * * * * | START FILE  | 2 |                   |           |
| * * * * * | END OF FILE | 2 | -- FILE CONTAINED | 15 BLOCKS |
| * * * * * | START FILE  | 3 |                   |           |
| * * * * * | END OF FILE | 3 | -- FILE CONTAINED | 4 BLOCKS  |
| * * * * * | START FILE  | 4 |                   |           |
| * * * * * | END OF FILE | 4 | -- FILE CONTAINED | 4 BLOCKS  |
| * * * * * | START FILE  | 5 |                   |           |
| * * * * * | END OF FILE | 5 | -- FILE CONTAINED | 5 BLOCKS  |
| * * * * * | START FILE  | 6 |                   |           |
| * * * * * | END OF FILE | 6 | -- FILE CONTAINED | 4 BLOCKS  |
| * * * * * | START FILE  | 7 |                   |           |
| * * * * * | END OF FILE | 7 | -- FILE CONTAINED | 4 BLOCKS  |
| * * * * * | START FILE  | 8 |                   |           |

~~C-29439~~

C-29439

D-89486

FATAR DETAIL REPORT

BLOCK LNTH/ MESSAGE/ 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 NUMBER DISPL BLOCK TYPE (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

```

* * * * * END OF FILE      8 -- FILE CONTAINED      8 BLOCKS
* * * * * START FILE      9
* * * * * END OF FILE      9 -- FILE CONTAINED      4 BLOCKS
* * * * * START FILE     10
* * * * * END OF FILE     10 -- FILE CONTAINED      4 BLOCKS
* * * * * START FILE     11
* * * * * END OF FILE     11 -- FILE CONTAINED     19 BLOCKS
* * * * * START FILE     12
* * * * * END OF FILE     12 -- FILE CONTAINED      4 BLOCKS
* * * * * START FILE     13
* * * * * END OF FILE     13 -- FILE CONTAINED      4 BLOCKS
* * * * * START FILE     14
    
```

```

1 2048 PRINT REQUESTED
30393336 31393732 2D30332D 30335430 333A3032 3A35342E 35373139 0A000000 .....
+00033 48000000 3F000000 00000000 023F2515 00000000 0A3F77A3 00000000 0C000000 .....
+00065 0F000000 01000000 A5000000 25450000 00000000 25450000 00000000 25450000 .....
+00097 00000000 25450000 00000000 25450000 00000000 25450000 00000000 25450000 .....
+00129 00000000 25450000 00000000 25450000 00000000 25450000 00000000 A5450000 .....
+00161 00000000 A5450000 00000000 8D47A6EA 00000000 2745FFFF 00000000 C5445455 .....E...
+00193 00000000 8647A72A 00000000 00000000 00000000 00000000 00000000 0245AAAA .....
+00225 00000000 C0430000 00000000 00000000 00000000 2A42ABAA 00000000 0A48A70A .....
+00257 00000000 00000000 00000000 DC428E2F 00000000 8240C753 00000000 19403315 .....
+00289 00000000 D0425929 00000000 00000000 00000000 00000000 00000000 4A4036BB .....G...
+00321 00000000 143F09F2 00000000 00000000 00000000 843D5E65 00000000 D642742C .....2...;...O...
+00353 00000000 00000000 00000000 2A401CBD 00000000 033F875B 00000000 C93E5255 .....$...I...
+00385 00000000 2640E302 00000000 00000000 00000000 00000000 00000000 E73E63B1 .....T...;...X...
+00417 00000000 463E0C98 00000000 00000000 00000000 843D5E65 00000000 EE3F4424 .....;...
+00449 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00481 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00513 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00545 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00577 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00609 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00641 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00673 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00705 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 .....
+00737 00000000 00000000 00000000 D445FADF 00000000 7B43FEFF 00000000 1343FFFF .....M...#...
+00769 00000000 C945FA3F 00000000 00000000 00000000 00000000 00000000 4343FEFF .....I...
+00801 00000000 10420000 00000000 00000000 00000000 80400000 00000000 4F46FA0F .....|...
    
```



FATAR DETAIL REPORT

BLOCK LNTH/ MESSAGE/ NUMBER DISPL BLOCK TYPE 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

|        |          |          |          |          |          |          |          |          |   |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| +00193 | 00000000 | 2A45A9AA | 00000000 | 00000000 | 00000000 | 2A42ABAA | 00000000 | 5245A8AA |   |
| +00225 | 00000000 | AA44AAAA | 00000000 | 2A42ABAA | 00000000 | 00000000 | 00000000 | A5455455 |   |
| +00257 | 00000000 | AA42ABAA | 00000000 | 3B40CFE3 | 00000000 | A4405467 | 00000000 | 4540CC48 |   |
| +00289 | 00000000 | 4840766A | 00000000 | 00000000 | 00000000 | 483D796A | 00000000 | 77406A63 |   |
| +00321 | 00000000 | C83F776A | 00000000 | 483D796A | 00000000 | 00000000 | 00000000 | 42402327 |   |
| +00353 | 00000000 | 483D796A | 00000000 | C23E460D | 00000000 | 003F6D5A | 00000000 | C63E0ED8 | H |
| +00385 | 00000000 | C83E776A | 00000000 | 00000000 | 00000000 | 483D786A | 00000000 | DE3EBBAA | H |
| +00417 | 00000000 | 8D3E27B7 | 00000000 | 483D786A | 00000000 | 00000000 | 00000000 | 8B3ECA7B |   |
| +00449 | 00000000 | 0D3D27B7 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | # |
| +00481 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00513 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00545 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00577 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00609 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00641 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00673 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00705 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |   |
| +00737 | 00000000 | 00000000 | 00000000 | 6F43FEFF | 00000000 | D143FCFF | 00000000 | 7B43FDFF |   |
| +00769 | 00000000 | 7F43FDFF | 00000000 | 00000000 | 00000000 | 80400000 | 00000000 | 9D43FEFF |   |
| +00801 | 00000000 | FF42FEFF | 00000000 | 80400000 | 00000000 | 00000000 | 00000000 | F743FDFF |   |
| +00833 | 00000000 | 00410000 | 00000000 | 00000000 | 0B47FBCB | 08EF7055 | A641323F | EF64208B |   |
| +00865 | 82403421 | C8B39046 | AF41E78C | 050BD091 | 8B443C66 | 62BF70F1 | AD44E681 | 9623007E |   |
| +00897 | AC44C4B3 | 540D606D | 2D39335D | F947481E | 53409E0B | 64F0B040 | 0142E124 | C0007000 | H |
| +00929 | 374166CF | EC5860A7 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | X |
| +00961 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 1 |
| +00993 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | W |

\* \* \* \* \* END OF FILE 26 -- FILE CONTAINED 6971 BLOCKS  
 \* \* \* \* \* START FILE 27  
 \* \* \* \* \* END OF FILE 27 -- FILE CONTAINED 4 BLOCKS  
 \* \* \* \* \* START FILE 28  
 \* \* \* \* \* END OF FILE 28 -- FILE CONTAINED 0 BLOCKS

FATS020 ANALYSIS TERMINATED AT TAPEMARK SEQUENCE

|            |             |            |           |           |           |               |                |
|------------|-------------|------------|-----------|-----------|-----------|---------------|----------------|
| FILES READ | BLOCKS READ | BYTES READ | FEET READ | TEMP ERRS | PERM ERRS | FILES WRITTEN | BLOCKS WRITTEN |
| 27         | 35753       | 73078480   | 399       | 0         | 0         | 0             | 0              |

FINAL TOTALS

FATS070 CONTROL CARD TABLE SIZE IS 4096 BYTES

*Pioneer 11*

FATAR CONTROL CARDS

- 1-- ANALYZE LABELS=NO,RETRY=5
- 2-- PRINT LF=14,B=1,L=2000
- 3-- PRINT LF=14,B=5752,L=2000
- 4-- PRINT LF=17,B=1,L=2000
- 5-- PRINT LF=17,B=2711,L=2000
- 6-- PRINT LF=20,B=1,L=2000,DUMP
- 7-- PRINT LF=20,B=3915,L=2000,DUMP
- 8-- PRINT LF=23,B=1,L=2000,DUMP
- 9-- PRINT LF=23,B=7473,L=2000,DUMP
- 10-- PRINT LF=26,B=1,L=2000
- 11-- PRINT LF=26,B=4839,L=2000
- 12-- PRINT LF=29,B=1,L=2000,DUMP
- 13-- PRINT LF=29,B=4098,L=2000,DUMP
- 14-- PRINT LF=32,B=1,L=2000,DUMP
- 15-- PRINT LF=32,B=2705,L=2000,DUMP

C- 29445

D- 89492

FATS071 TAPE BUFFER SIZE IS 65535 BYTES

CHARACTERISTICS OF THE TAPE TO BE ANALYZED  
 UNIT SERIAL DEN TRTCH  
 5A3 CMWS02 38000

FATAR DETAIL REPORT

1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

| BLOCK NUMBER | LNGLTH/ DISPL | MESSAGE/ BLOCK TYPE |   |                             |
|--------------|---------------|---------------------|---|-----------------------------|
| *****        |               | START FILE          | 1 |                             |
| *****        |               | END OF FILE         | 1 | -- FILE CONTAINED 5 BLOCKS  |
| *****        |               | START FILE          | 2 |                             |
| *****        |               | END OF FILE         | 2 | -- FILE CONTAINED 15 BLOCKS |
| *****        |               | START FILE          | 3 |                             |
| *****        |               | END OF FILE         | 3 | -- FILE CONTAINED 4 BLOCKS  |
| *****        |               | START FILE          | 4 |                             |
| *****        |               | END OF FILE         | 4 | -- FILE CONTAINED 4 BLOCKS  |
| *****        |               | START FILE          | 5 |                             |
| *****        |               | END OF FILE         | 5 | -- FILE CONTAINED 5 BLOCKS  |
| *****        |               | START FILE          | 6 |                             |
| *****        |               | END OF FILE         | 6 | -- FILE CONTAINED 4 BLOCKS  |
| *****        |               | START FILE          | 7 |                             |

FATAR DETAIL REPORT

1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

| BLOCK NUMBER | LNTH/ DISPL | MESSAGE/ BLOCK TYPE | 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80 |
|--------------|-------------|---------------------|--|
| *****        |             | END OF FILE         | 7 -- FILE CONTAINED 4 BLOCKS   |
| *****        |             | START FILE          | 8  |
| *****        |             | END OF FILE         | 8 -- FILE CONTAINED 8 BLOCKS   |
| *****        |             | START FILE          | 9  |
| *****        |             | END OF FILE         | 9 -- FILE CONTAINED 4 BLOCKS   |
| *****        |             | START FILE          | 10   |
| *****        |             | END OF FILE         | 10 -- FILE CONTAINED 4 BLOCKS  |
| *****        |             | START FILE          | 11   |
| *****        |             | END OF FILE         | 11 -- FILE CONTAINED 19 BLOCKS   |
| *****        |             | START FILE          | 12   |
| *****        |             | END OF FILE         | 12 -- FILE CONTAINED 4 BLOCKS  |
| *****        |             | START FILE          | 13   |
| *****        |             | END OF FILE         | 13 -- FILE CONTAINED 4 BLOCKS  |
| *****        |             | START FILE          | 14   |

1 2048 PRINT REQUESTED

+00080  
 +00160  
 +00240  
 +00320  
 +00400  
 +00480  
 +00560  
 +00640  
 +00720  
 +00800  
 +00880  
 +00960  
 +01040  
 +01120  
 +01200  
 +01280  
 +01360  
 +01440  
 +01520  
 +01600  
 +01680  
 +01760

```

        *      *      *      *      *      *      *      *      *      *      *
        $      g      p      L      (      i$      o      >      r      L      *      *      *
        } I      }      }      }      }      }      }      }      }      }      }      }
        ≤      +      +      +      +      +      +      +      +      +      +      +
        B      & φJ      k      e      i      i      |      G      ,      .      v      7      B      L
        ±      ±      ±      ±      ±      ±      ±      ±      ±      ±      ±
        H      z >t      H      z >t      H      z >t      H      z >t      H      z >t
        { φsj      e 4\ V\ r      5 r {      } 5      } >      o \      m D{ c_s { b      { c      $ ?
        .      .      .      .      .      .      .      .      .      .      .
        | z      L      M      M      s
        27      x &      o      Nv      $      +      vP      o      }      +      W P      {
        a <7      o      $R      $      vP      o      }      +      W P      {
        r      w      1|      ; }≤      $      ) ±      % g      u IE      % 9
        r      w      1|      ; }≤      $      ) ±      % g      u IE      % 9
        - 2³{      %f \fb      +q- c J      { ? .e      e T, o r      5 -2
    
```



FATAR DETAIL REPORT

BLOCK LNTH/ MESSAGE/ NUMBER DISPL BLOCK TYPE 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80 (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

```

+01601 00000000 8644A777 00000000 B244D773 00000000 00000000 00000000 00000000
+01633 00000000 31444875 00000000 4244DC57 00000000 00000000 00000000 00000000 .....P.....
+01665 00000000 A944CEA0 00000000 00000000 00000000 A0410000 00000000 84430000
+01697 00000000 74430000 00000000 00000000 00000000 00000000 00000000
+01729 00000000 54430000 00000000 70420000 00000000 00000000 00000000
+01761 00000000 20420000 00000000 00000000 00000000 00000000 2247209E 0DD28536
+01793 FC41BB0E 81AA0001 8240F320 726E8080 E7413A3C 78C98050 8B44DF2F 2E4700AF .....K..
+01825 1744235C 7102005E AC44E9BA D91380FB 353AB08C D849001E C441E9A8 EE1200FD .....3.>.X...I.&.....
+01857 63C03943 81858009 34410840 40F60018 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E ...*.Z.R.....Q...D.Z.....
+01889 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E .....6.....
+01921 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E ;;;;;;;;;;
+01953 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E ;;;;;;;;;;
+01985 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E 5E5E5E5E ;;;;;;;;;;

```

```

* * * * * END OF FILE 29 -- FILE CONTAINED 4098 BLOCKS
* * * * * START FILE 30
* * * * * END OF FILE 30 -- FILE CONTAINED 4 BLOCKS
* * * * * START FILE 31
* * * * * END OF FILE 31 -- FILE CONTAINED 4 BLOCKS
* * * * * START FILE 32

```

```

1 2048 PRINT REQUESTED
30393336 31393738 2D30372D 30315430 373A3134 3A32392E 37383933 0B000000 .....
+00033 4E000000 B6000000 00000000 B13F99D1 00000000 B43FAEF2 00000000 21000000 +.....J.....2.....
+00065 0F000000 01000000 09000000 10450000 00000000 10450000 00000000 10450000
+00097 00000000 10450000 00000000 10450000 00000000 10450000 00000000 10450000
+00129 00000000 10450000 00000000 10450000 00000000 10450000 00000000 90450000
+00161 00000000 90450000 00000000 55435555 00000000 28450000 00000000 E5445555 .....V...
+00193 00000000 00430000 00000000 2A42ABAA 00000000 00000000 00000000 38450000
+00225 00000000 00440000 00000000 00000000 00000000 00000000 00000000
+00257 00000000 00000000 00000000 BD3E2FA1 00000000 95405555 00000000 4B4013DA
+00289 00000000 633E398E 00000000 973D26B4 00000000 00000000 00000000 A340398E
+00321 00000000 633F398E 00000000 00000000 00000000 00000000 00000000 973E26B4
+00353 00000000 00000000 00000000 293E229C 00000000 163F8C83 00000000 F83E6AB2 .....8...
+00385 00000000 033E1761 00000000 973D26B4 00000000 00000000 00000000 1D3FA984 ...../.....
+00417 00000000 833E1761 00000000 00000000 00000000 00000000 00000000 D63D9B8A ...../.....0...
+00449 00000000 00000000 00000000 A53E8B10 00000000 944087A3 00000000 4940B6AA .....
+00481 00000000 8D3E3F43 00000000 00000000 00000000 00000000 00000000 9F40A026 .....
+00513 00000000 783FC48B 00000000 00000000 00000000 00000000 00000000 9D3E3809 .....D...
+00545 00000000 00000000 00000000 2F4117B0 00000000 1A3F8E50 00000000 1F40AFCA .....&...
+00577 00000000 0441AB55 00000000 00000000 00000000 00000000 00000000 1440252D .....
+00609 00000000 3740B1E7 00000000 00000000 00000000 00000000 00000000 27402952 .....X.....
+00641 00000000 0E000000 00000000 4E440E43 00000000 09442F14 00000000 7E4393AC .....+.....=...
+00673 00000000 EB43A925 00000000 00000000 00000000 00000000 00000000 A5437556 .....
+00705 00000000 FE43251F 00000000 00000000 00000000 00000000 00000000 6143502C .....
+00737 00000000 00000000 00000000 A0410000 00000000 7C430000 00000000 2C430000 ...../.&...
+00769 00000000 40410000 00000000 80400000 00000000 00000000 00000000 8A430000 .....a.....

```

FATAR DETAIL REPORT

BLOCK LNTH/ MESSAGE/ 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 NUMBER DISPL BLOCK TYPE (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

|        |          |          |          |          |          |          |          |          |                             |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------------------|
| +00801 | 00000000 | 40420000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00420000 | .....                       |
| +00833 | 00000000 | 00000000 | 00000000 | 00000000 | 224738A1 | C01AC187 | FC410979 | B7828098 | .....A.....                 |
| +00865 | 82408D21 | A43840CC | E741CE5C | E3364034 | 8B44358E | E8B080BF | 17448465 | BBE9007F | .....X.XT.....Y.....Z..     |
| +00897 | AC44E9BA | B1D9C011 | 493A6018 | 506000DF | C441355E | C2098036 | 65C0D9E1 | 5F34C0E8 | ..Z..R...-&...D.;B....R...Y |
| +00929 | 394163B9 | 0A0A004C | 30393336 | 31393738 | 2D30372D | 30315430 | 373A3234 | 3A32332E | .....<.....                 |
| +00961 | 37373732 | 0B000000 | 4E000000 | B6000000 | 00000000 | B53FD056 | 00000000 | BA3F916C | .....+.....%                |
| +00993 | 00000000 | 22000000 | 0F000000 | 01000000 | 0E000000 | 60450000 | 00000000 | 60450000 | .....-.....-                |
| +01025 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | .....-.....-                |
| +01057 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | .....-.....-                |
| +01089 | 00000000 | E0450000 | 00000000 | E0450000 | 00000000 | 00430000 | 00000000 | 7A45AAAA | .....:.....                 |
| +01121 | 00000000 | 78450000 | 00000000 | AA42ABAA | 00000000 | AA42ABAA | 00000000 | 2A42ABAA | .....:.....                 |
| +01153 | 00000000 | 4A45AAAA | 00000000 | 2A44AAAA | 00000000 | 00000000 | 00000000 | 00000000 | .....φ.....                 |
| +01185 | 00000000 | 55435555 | 00000000 | 2A42ABAA | 00000000 | 123E2549 | 00000000 | 8F40F43C | .....4.....                 |
| +01217 | 00000000 | 8D40DBB6 | 00000000 | C33D310C | 00000000 | C33D310C | 00000000 | 433D310C | .....C.....C.....           |
| +01249 | 00000000 | 67407A9E | 00000000 | 433F300C | 00000000 | 00000000 | 00000000 | 00000000 | .....:.....                 |
| +01281 | 00000000 | F33D3DCF | 00000000 | C33C310C | 00000000 | A83D8CEA | 00000000 | EC3ED161 | .....3.....C.....J/         |
| +01313 | 00000000 | EB3E131F | 00000000 | 893D64EB | 00000000 | 893D64EB | 00000000 | 433D310C | .....:.....                 |
| +01345 | 00000000 | D43E588C | 00000000 | 433E310C | 00000000 | 00000000 | 00000000 | 00000000 | .....M.....                 |
| +01377 | 00000000 | 5A3DE311 | 00000000 | C33C310C | 00000000 | 0F3E0E6F | 00000000 | 8E4056F1 | .....!T.....C.....?.....I   |
| +01409 | 00000000 | 9240C930 | 00000000 | CE3D6472 | 00000000 | 00000000 | 00000000 | 00000000 | .....I.....                 |
| +01441 | 00000000 | 6240B6A0 | 00000000 | 443FBC8B | 00000000 | 00000000 | 00000000 | 00000000 | .....:.....                 |
| +01473 | 00000000 | F83D1DC2 | 00000000 | 00000000 | 00000000 | C13F5AA2 | 00000000 | CB3EDD58 | .....8..B.....A!.....       |
| +01505 | 00000000 | 004069AE | 00000000 | B240F7CF | 00000000 | 00000000 | 00000000 | 00000000 | .....7.....                 |
| +01537 | 00000000 | BD3F52A2 | 00000000 | 0B3F7A0C | 00000000 | 00000000 | 00000000 | 00000000 | .....:.....                 |
| +01569 | 00000000 | 1D409177 | 00000000 | 00000000 | 00000000 | 77449B20 | 00000000 | FC4354F7 | .....7.....                 |
| +01601 | 00000000 | 9044AD73 | 00000000 | 244442D4 | 00000000 | 00000000 | 00000000 | 00000000 | .....:.....M.....           |
| +01633 | 00000000 | 0E44F315 | 00000000 | 8744E665 | 00000000 | 00000000 | 00000000 | 00000000 | .....3.....W.....           |
| +01665 | 00000000 | 1A44B681 | 00000000 | 00000000 | 00000000 | 40410000 | 00000000 | BC430000 | .....:.....                 |
| +01697 | 00000000 | BA430000 | 00000000 | 00410000 | 00000000 | 00410000 | 00000000 | 80400000 | .....:.....                 |
| +01729 | 00000000 | 98430000 | 00000000 | 80420000 | 00000000 | 00000000 | 00000000 | 00000000 | .....:.....                 |
| +01761 | 00000000 | A0410000 | 00000000 | 80400000 | 00000000 | 00000000 | 224741A1 | A119D759 | .....:.....P.....           |
| +01793 | FC413E7A | 52E38033 | 82408E21 | 38F8C019 | E7412D5D | 2B05C071 | 8B44488F | FD3D80B4 | .....:T.....8..X..)         |
| +01825 | 1744A065 | 01380069 | AC44E9BA | F0DB40D8 | 493A4251 | 0DA30009 | C4415B5D | F8A08065 | .....:Z.O.Q.....D.\$)8...   |
| +01857 | 65C078E9 | B7EC4029 | 394151C9 | C06600D4 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | ...Z...I...M;.....          |
| +01889 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | .....                       |
| +01921 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | .....                       |
| +01953 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | .....                       |
| +01985 | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | 5E5E5E5E | .....                       |

2705 2048 PRINT REQUESTED

|        |          |          |          |          |          |          |          |          |                       |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------------|
| +00033 | 4E000000 | 6D010000 | 00000000 | E03FF41A | 00000000 | E53F8030 | 00000000 | 2A000000 | +.....4.....V.....    |
| +00065 | 0F000000 | 01000000 | 0E000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | .....-.....-.....-    |
| +00097 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | .....-.....-.....-    |
| +00129 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | 60450000 | 00000000 | E0450000 | .....-.....-.....-    |
| +00161 | 00000000 | E0450000 | 00000000 | AA42ABAA | 00000000 | 4D455555 | 00000000 | 2245AAAA | .....(.....           |
| +00193 | 00000000 | 2A43ABAA | 00000000 | 00000000 | 00000000 | 2A42ABAA | 00000000 | 8245AAAA | .....:.....           |
| +00225 | 00000000 | 95445555 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 80430000 | .....:.....           |
| +00257 | 00000000 | 2A42ABAA | 00000000 | C33D310C | 00000000 | 6A40AAAA | 00000000 | 39409EE7 | .....C.....X          |
| +00289 | 00000000 | 433E310C | 00000000 | 00000000 | 00000000 | 433D310C | 00000000 | 95405555 | .....:.....           |
| +00321 | 00000000 | AA3FAAAA | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 123E2449 | .....:.....           |
| +00353 | 00000000 | C33C310C | 00000000 | 893D64EB | 00000000 | D53E26F1 | 00000000 | BE3EDC6B | .....C.....N..I.....; |

FATAR DETAIL REPORT

BLOCK LNTH/ MESSAGE/ 1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80
NUMBER DISPL BLOCK TYPE (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

Table with columns for Block Number, Length, Displacement, Message, Block Type, and a grid of data characters. The data is organized in rows and columns, with some characters appearing as symbols like \$, %, #, and various letters and numbers.

FATAR DETAIL REPORT

1...5...10...15...20...25...30...35...40...45...50...55...60...65...70...75...80  
 (COLUMN GRID IS VALID ONLY FOR CHARACTER FORMATTED DATA)

BLOCK LNTH/ MESSAGE/  
 NUMBER DISPL BLOCK TYPE

```

* * * * * END OF FILE      32  -- FILE CONTAINED    2705 BLOCKS
* * * * * START FILE      33
* * * * * END OF FILE      33  -- FILE CONTAINED      4 BLOCKS
* * * * * START FILE      34
* * * * * END OF FILE      34  -- FILE CONTAINED      0 BLOCKS
    
```

FATS020 ANALYSIS TERMINATED AT TAPEMARK SEQUENCE

|            |             |            |           | FINAL TOTALS |           |               |                |  |  |
|------------|-------------|------------|-----------|--------------|-----------|---------------|----------------|--|--|
| FILES READ | BLOCKS READ | BYTES READ | FEET READ | TEMP ERRS    | PERM ERRS | FILES WRITTEN | BLOCKS WRITTEN |  |  |
| 33         | 31629       | 64601040   | 353       | 0            | 0         | 0             | 0              |  |  |

| PHYS FILE | DATASET NAME<br>(LAST 17 CHARS) | FILE SERIAL | FIL# VOL# | CRDATE | EXPDATE | REC- FM | LRECL BLKSZ | CREATING JOB&STEP | SEC | BLOCKS READ | BYTES READ | PERM TEMP | ---BLOCKSIZES--- |      |      | EST. FEET |
|-----------|---------------------------------|-------------|-----------|--------|---------|---------|-------------|-------------------|-----|-------------|------------|-----------|------------------|------|------|-----------|
|           |                                 |             |           |        |         |         |             |                   |     |             |            |           | MIN              | AVG  | MAX  |           |
| 1         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 5           | 400        | 0         | 80               | 80   | 80   | 0         |
| 2         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 15          | 31K        | 0         | 2048             | 2048 | 2048 | 0         |
| 3         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 4         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 5         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 5           | 10K        | 0         | 2048             | 2048 | 2048 | 0         |
| 6         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 7         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 8         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 8           | 16K        | 0         | 2048             | 2048 | 2048 | 0         |
| 9         | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 10        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 11        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 19          | 39K        | 0         | 2048             | 2048 | 2048 | 0         |
| 12        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 13        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 14        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 5752        | 12M        | 0         | 2048             | 2048 | 2048 | 64        |
| 15        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 16        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 17        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 2711        | 5552K      | 0         | 2048             | 2048 | 2048 | 30        |
| 18        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 19        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 20        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 3915        | 8018K      | 0         | 2048             | 2048 | 2048 | 44        |
| 21        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 22        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 23        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 7473        | 15M        | 0         | 2048             | 2048 | 2048 | 84        |
| 24        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 25        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |
| 26        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4839        | 9910K      | 0         | 2048             | 2048 | 2048 | 54        |
| 27        | ZMCOWFD2.R0003337               |             |           |        |         |         |             |                   |     | 4           | 320        | 0         | 80               | 80   | 80   | 0         |

FATAR

TAPE SUMMARY FOR TAPE VOLUME -CMWS02- AT DENSITY 38000 BPI

3/24/93

| PHYS<br>FILE              | DATASET NAME<br>(LAST 17 CHARS) | FILE<br>SERIAL | FIL#<br>VOL# | CRDATE | EXPDATE | REC-<br>FM | LRECL<br>BLKSZ | CREATING<br>JOB&STEP | SEC | BLOCKS<br>READ | BYTES<br>READ | PERM<br>TEMP | ---BLOCKSIZES--- |      |      | EST.<br>FEET |     |
|---------------------------|---------------------------------|----------------|--------------|--------|---------|------------|----------------|----------------------|-----|----------------|---------------|--------------|------------------|------|------|--------------|-----|
|                           |                                 |                |              |        |         |            |                |                      |     |                |               |              | MIN              | AVG  | MAX  |              |     |
| 28                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 4              | 320           | 0            | 80               | 80   | 80   | 0            |     |
| 29                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 4098           | 8393K         | 0            | 2048             | 2048 | 2048 | 45           |     |
| 30                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 4              | 320           | 0            | 80               | 80   | 80   | 0            |     |
| 31                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 4              | 320           | 0            | 80               | 80   | 80   | 0            |     |
| 32                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 2705           | 5540K         | 0            | 2048             | 2048 | 2048 | 30           |     |
| 33                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 4              | 320           | 0            | 80               | 80   | 80   | 0            |     |
| 34                        | ZMCOWFD2.R0003337               |                |              |        |         |            |                |                      |     | 0              | 0             | 0            | 0                | 0    | 0    | 0            |     |
| HIGHEST EXPIRATION ==>>>> |                                 |                |              |        |         |            |                |                      |     |                |               |              |                  |      |      |              |     |
| TOTALS ==>>>>             |                                 |                |              |        |         |            |                |                      |     |                | 31629         | 65M          | 0                |      |      |              | 351 |