Technical Publication Transfer

Using:

Xerox Corporation Data

MIL-D-28000A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)

Quick Short Test Report

28 October 1992

Prepared for
Electronic Systems Center

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Quick Short Test Report
28 October 1992

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1. Introduction

1.1 Background

The Department of Defense (DoD) Computer-aided Acquisition and Logistics Support (CALS) Test Network (CTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The CTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the CTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the CTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by CTN participants. They also allow the CTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the CTN technical staff, gain experience using of the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.
1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze Xerox Corporation's interpretation and use of the CALS Standards in transferring technical publications data. Xerox used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the CTN technical staff on a 9-track magnetic tape.
2. Test Parameters

Test Plan: AFCTB 92-075

Date of Evaluation: 28 October 1992

Evaluator: George Elwood
Air Force CALS Test Bed
HQ ESC/ENCS
4027 Colonel Glenn Hwy
Suite 200
Dayton, OH 45431-1601

Data Originator: Gil Legault
Xerox Corporation
1851 E. 1st Street
Santa Ana, CA 92705

Data Description: Technical Manual Test
1 Document Declaration file
1 Document Type Definitions (DTD)
2 Initial Graphics Exchange Specification (IGES) files
3 Text files
6 Raster files
1 Computer Graphics Metafile (CGM) file

Data Source System:

IGES
HARDWARE
Unknown
SOFTWARE
Unknown

Text/Standard Generalized Markup Language (SGML)
HARDWARE
Unknown
SOFTWARE
Unknown

3
Raster

HARDWARE
Unknown

SOFTWARE
Unknown

CGM

HARDWARE
Unknown

SOFTWARE
Unknown

Evaluation Tools Used:

MIL-STD-1840A (TAPE)
SUN 3/280
CTN Tapetools (v1.2.8) UNIX
AGFA Compugraphics CAPS/CALS v40.4

MIL-D-28000 (IGES)
Sun SparcStation 2
ArborText iges2draw
IGES Data Analysis (IDA) Parser/Verifier
IDA IGESview v3.0
International TechnneGroup Incorporated
(ITI) IGES/Works 1.0
ITI IGESWorks 1.3
Rosetta Technologies Preview v3.2
Cheetah Gold 486
Autodesk AutoCAD 386 R11
Cadkey Cadkey v4.06
IDA IGES Parser/Verifier

MIL-M-28001 (SGML)
SUN SparcStation 2
AGFA CAPS v6.0x
ArborText ADEPT v4.2.1
SoftQuad Author/Editor v2.1
Cheetah Gold 486
Datalogics ParserStation v3.36
Exoterica XGMLNormalizer V1.2e3.2
SoftQuad Author/Editor V2.1
MIL-R-28002 (Raster)
SUN SparcStation 2
  ArborText g42tiff
  AGFA CAPS ccitt2caps v6.0x
  CTN validg4
  CTN calstb.475
  Island Graphics IslandPaint 3.0

SUN 3/60
  CTN validg4
  CTN calstb.350
  AGFA CAPS v4.0
  Rosetta Technology Preview v3.1

Cheetah
  Inset Systems HiJaak v2.02
  Softwar Publishing Corporation
    (SPC) Harvard Graphics v3.0
  Xerox Ventura Publisher

MIL-D-28003 (CGM)
SUN SparcStation 2
  AGFA CAPS cgm2ps v6.0x
  ArborText cgm2draw
  Island Graphics IslandDraw 3.0

Sun 3/60
  Advanced Technology Corporation
    (ATC) CGM-View R2.0

Cheetah Gold 486
  ATC MetaVIEW R 1.12
  ATC MetaCHECK R 2.05
  SPC Harvard Graphics 3.0
  Inset Systems HiJaak v2.02
  Xerox Ventura Publisher
  MicroGrafx Designer 3.1
  MicroGrafx Charisma 2.1

Standards Tested:
  MIL-STD-1840A
  MIL-D-28000A
  MIL-M-28001A
  MIL-R-28002A
  MIL-D-28003
3. 1840A Analysis

3.1 External Packaging

The tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a commercial overnight shipping bag which does not meet the ASTM-3951 requirements. The exterior of the bag was not marked with the magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tape was not enclosed in a barrier bag or barrier sheet material as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed a lack of the label indicating the recording density as required by MIL-STD-1840A, para. 5.3.1. Some 9-track tape units require this BPI to be set manually. Enclosed in the box was a packing list showing all files that were recorded on the tape.

3.2 Transmission Envelope

The 9-track tape received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

3.2.1 Tape Formats

The 1840A tape was run through the AFCTB Tapetool v1.2.8 utility. No errors and four notes were encountered while evaluating the contents of the tape labels. Three notes were "Last block was incomplete". This note was generated when Tapetool found that the last block of a fixed length file was not padded out. This could cause a critical error on some systems because they will not write out incomplete last blocks. This would cause the file to be truncated and the EOF marker would not be displayed.

*** NOTE - Last block was incomplete. Short blocks are prone to be interpreted as noise by some tape drives. Tape Label => 800, Actual => 240, Block Number => 6

A note was reported on the tape label version. MIL-STD-1840A permits the use of both versions three and four. The use of the most current standard should be used and noted.
All of the errors are shown in Appendix A, Section 9.2, Tape Evaluation Log.

3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration or Data File Headers.

4. IGES Analysis

This tape contained two (2) IGES files. Both files were evaluated using IDA's Parser/Verifier with CALS options. No CALS errors were found during this procedure.

The files were inspected for the CALS conformance statement in the Start section, which is required in MIL-D-28000A, para. 3.2.1.3.1. The files meet the current CALS MIL-D-28000A specification.

The files were read into Autodesk's AutoCAD 386 R11. Both files generated messages indicating non-supported entities but this is Autodesk's problem. The images, when displayed, were located in the upper corner of the screen. File D001Q003 did not display or print the arrow heads along the frequency line.

The files were converted using Cadkey's Cadkey ig2c utility. File D001Q003 had reported errors during this procedure. The reported errors relate to a mismatch of the DE and PD sections. Both files were read, displayed and printed without further error messages.

Entity types do not match at PARAMETER index 149
   Found entity type 102 , expected type 106

The files were read into IDA's IGESView without a problem. No errors were noted.

The files were read into ITI's IGESWorks without a problem. The arrowhead along the frequency line in file D001Q003 did not display correctly when using ITI's IGESWorks v1.0. When When ITI's IGESWorks v1.3 was used the arrows were displayed like the other software applications.
The files were converted using ArborText's iges2draw utility without a reported error. The resulting files were imported into Island Graphics' IslandDraw without a problem.

The files were converted using Rosetta Technologies' Prepare and then read into Preview. File D001Q003 reported an error during the conversion.

The IGES files meet the current CALS MIL-D-28000A specification.

5. SGML Analysis

The tape contained three (3) Text files. These files were combined for ease of handling during the evaluation process. The DTD was compiled using Exoterica's XGMLNormalizer with no reported errors. The Text files were then parsed without a reported error.

The file was parsed using Datalogics ParserStation without a reported error.

The SGML files meet the current CALS MIL-M-28001A specification.

6. Raster Analysis

The tape contained six (6) Raster files. All files were evaluated using the CTN validg4 utility. No errors were reported during this procedure.

The files were converted using Rosetta Technologies' Prepare and viewed using Preview. No errors were reported during this procedure. Orphan pixels were noted on several of the images.

The files were imported into the CTN calstb.475 viewer utility. No problems were encountered. Some images showed orphan pixels when displayed. File D001R010 displayed at a slight angle.

The files were converted using Inset Systems' HiJaak into a IMG format. No problems were noted. The resulting files
were imported into the Xerox Ventura Publisher without problem.

The files meet the current CALS MIL-R-28002A specification.

7. CGM Analysis

The tape contained one (1) CGM file. This file was evaluated using ATC's Metacheck software with CALS options. This software reported that the file meets the current CALS specification.

The file was also evaluated using the CTN validcgm utility. This program reported one error which may be a bug in validcgm, and has been reported.

The file was converted using ArborText's cgm2draw utility. No errors were reported. The resulting file was read into Island Graphics' IslandDraw, displayed and printed. The resulting image appeared to have lines that were not connected and text that ran together.

An attempt to directly import the file into Island Graphics' IslandDraw was made. This resulted in a message indicating that the file was bad.

An attempt was made to convert the file using the AGFA CAPS cgm2ps utility. An error message resulted with no output.

An attempt was made to read the file into SPC' Harvard Graphics 3.0. An error message indicated that the file was bad.

The file was read into ATC's CGMView. No error message was generated, but nothing displayed on the screen. Various parameters were tried without success.

The file was read into ATC's MetaView. The image was displayed with the following error message generated:

cl/id: 4/4, offs: 912, esqn: 55
Error detected in file \9275\C001.CGM
The file was read into the MicroGrafx Designer 3.1 but nothing displayed on the screen.

The file was imported into the MicroGrafx Charisma 2.1 with one displayed error. Nothing was displayed on the screen.

The file was converted to both an IMG and PCX format using Inset Systems' HiJaak. No error message was generated during the process. When both files were displayed, nothing showed.

The file was imported into the Xerox Ventura Publisher without a reported error. When the file was displayed and printed, nothing showed.

The file was sent to Mr. Bruce Garner at CTNO LLNL. Mr. Garner is the CALS CGM expert. His evaluation indicated that the file was a valid CALS CGM file. The problem is linked to the inability of the software in the AFCTB to handle 32 bit VDC INTEGER PRECISION. The file displayed satisfactorily with Henderson Software's MetaView v1.13 at CTNO LLNL.
8. Conclusions and Recommendations

In summary, the MIL-STD-1840A tape from Xerox Corporation was basically correct. The tape could be read properly using the CTN Tapetool and AGFA read1840A software.

The IGES files meet the current CALS MIL-D-28000A specification.

The SGML files meet the current CALS MIL-M-28001A specification.

The Raster files meet the current CALS MIL-R-28002A specification.

The CGM file meets the current CALS MIL-D-28003 specification.

The tape meets the current CALS MIL-STD-1840A requirements.
9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

CALS Test Network Catalog Evaluation - Version 1.2; Release Number 8

Standards referenced:
MIL-R-28003 (1988) - Digital Representation For Communication Of Illustration Data; CGM Application Profile
ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes for Information Interchange
ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII


MIL-STD-1840A File Catalog

File Set Directory: /cals/tapetool8/Set109

<table>
<thead>
<tr>
<th>File Name</th>
<th>File Type</th>
<th>Format/Length</th>
<th>Block Length/Total</th>
<th>Selected/Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>D001</td>
<td>Document Declaration</td>
<td>D/00260 02048/000001</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001C001</td>
<td>CGM</td>
<td>F/00080 00800/000006</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001G002</td>
<td>DTD</td>
<td>D/00260 02048/000002</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001Q003</td>
<td>IGES</td>
<td>F/00080 02000/000020</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001Q004</td>
<td>IGES</td>
<td>F/00080 02000/000012</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R005</td>
<td>Raster</td>
<td>F/0128 02048/000002</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R006</td>
<td>Raster</td>
<td>F/0128 02048/000009</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R007</td>
<td>Raster</td>
<td>F/0128 02048/000008</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R008</td>
<td>Raster</td>
<td>F/0128 02048/000009</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R009</td>
<td>Raster</td>
<td>F/0128 02048/000008</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001R010</td>
<td>Raster</td>
<td>F/0128 02048/000015</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001T011</td>
<td>Text</td>
<td>D/00260 02048/000001</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001T012</td>
<td>Text</td>
<td>D/00260 02048/000025</td>
<td>Extracted</td>
<td></td>
</tr>
<tr>
<td>D001T013</td>
<td>Text</td>
<td>D/00260 02048/000001</td>
<td>Extracted</td>
<td></td>
</tr>
</tbody>
</table>

Catalog Process terminated normally.
9.2 Tape Evaluation Log

CALS Test Network Tape Evaluation - Version 1.2; Release Number 8
Standards referenced:
   ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes
   for Information Interchange
   ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII


ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOLLAE5C01

   Label Identifier: VOLL
   Volume Identifier: AE5C01
   Volume Accessibility: 
   Owner Identifier: 
   Label Standard Version: 3

*** NOTE (ANSI X3.27; 8.3.1.8) - The Label Standard Version
   should be 4 to represent the current level of ANSI X3.27.

HDR1D001   AE5C0100010001000100 92266 92266 000000DECFILE11A

   Label Identifier: HDR1
   File Identifier: D001
   File Set Identifier: AE5C01
   File Section Number: 0001
   File Sequence Number: 0001
   Generation Number: 0001
   Generation Version Number: 00
   Creation Date: 92266
   Expiration Date: 92266
   File Accessibility: 
   Block Count: 000000
   Implementation Identifier: DECFILE11A

HDR2D0204800260 M 00

   Label Identifier: HDR2
   Recording Format: D
   Block Length: 02048
   Record Length: 00260
Offset Length: 00

HDR300000002000000000000000000000000000000000000000000000000000000000000000

HDR4  

************ Tape Mark ************

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

************ Tape Mark ************

EOF1D001  AESC0100010001000100 92266 92266 000001DECFILE11A

Label Identifier: EOF1
File Identifier: D001
File Set Identifier: AESC01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92266
Expiration Date: 92266
File Accessibility:
Block Count: 000001
Implementation Identifier: DECFILE11A

EOF2D0204800260  M  00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

EOF3000000020000000000000000000010000000000000000000000000000000000000000000

EOF4  

************ Tape Mark ************

HDR1D001C001  AESC0100010002000100 92266 92266 000000DECFILE11A

Label Identifier: HDR1
File Identifier: D001C001
File Set Identifier: AESC01
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92266
Expiration Date: 92266
File Accessibility:
Block Count: 000000
Implementation Identifier: DECFILE11A

HDR2F0080000080 M 00

Label Identifier: HDR2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

HDR30050000100000000000000000000000000000000000000000000000000000000

HDR4 00

************ Tape Mark **************

Actual Block Size Found = 800 Bytes.

*** NOTE - Last block was incomplete. Short blocks are
pronounced to be interpreted as noise by some tape drives.
Tape Label => 800, Actual => 240, Block Number => 6

Number of data blocks read = 6.

************ Tape Mark **************

EOF1D001C001 AESC0100010002000100 92266 92266 000006DECFILE11A

Label Identifier: EOF1
File Identifier: D001C001
File Set Identifier: AESC01
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92266
Expiration Date: 92266
File Accessibility:
Block Count: 000006
Implementation Identifier: DECFILE11A

EOF2F0080000080 M 00
Label Identifier: EOF2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

EOF300500001000000000000000000000000500000000000000000000000000000

EOF4

************* Tape Mark *************

<<<< PART OF LOG REMOVED HERE >>>>

************* Tape Mark *************

HDR1D001T013 AESC0100010014000100 92266 92266 000000DECFILE11A

Label Identifier: HDR1
File Identifier: D001T013
File Set Identifier: AESC01
File Section Number: 0001
File Sequence Number: 0014
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92266
Expiration Date: 92266
File Accessibility:
Block Count: 000000
Implementation Identifier: DECFILE11A

HDR2D0204800260 M 00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

HDR30000000200000000000000000000000000000000000000000000000000000

HDR4

************* Tape Mark *************

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.
************ Tape Mark ************

EOF1
Label Identifier: EOF1
File Identifier: D001T013
File Set Identifier: AESC01
File Section Number: 0001
File Sequence Number: 0014
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92266
Expiration Date: 92266
File Accessibility: 
Block Count: 000001
Implementation Identifier: DECFILE11A

EOF2
Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

EOF3

EOF4

************ Tape Mark ************

************ Tape Mark ************

############### End of Volume AESC01 ###############

############### End Of Tape File Set ###############

Deallocating /dev/rmt0...

Tape Import Process terminated with 0 error(s), 0 warning(s), and 4 note(s).
9.3 Tape File Set Validation Log

CALS Test Network File Set Evaluation - Version 1.2; Release Number 8
Standards referenced:
  MIL-R-28002 (1989) - Raster Graphics Representation In Binary Format, Requirements For


MIL-STD-1840A File Set Evaluation Log

File Set: Set109

Found file: D001
Extracting Document Declaration Header Records...
Evaluating Document Declaration Header Records...

srccsys: AEROJET ELECTRONIC SYSTEMS
srccdocid: NONE
srccrelid: NONE
chgvl: ORIGINAL
dteisu: 19920922
dstsys: NONE
dstdocid: NONE
dstcrelid: NONE
dtetrn: 19920922
dlvcac: NONE
filcnt: C1, G1, Q2, R6, T3
ttlcls: UNCLASSIFIED
doccls: UNCLASSIFIED
doctype: TECHNICAL MANUAL
docttl: NONE

Found file: D001C001
Extracting CGM Header Records...
Evaluating CGM Header Records...

srccdocid: NONE
dstdocid: NONE
txtfilid: BODY
figid: 1
srccgph: RE04TS
doccls: UNCLASSIFIED
notes: NONE

Saving CGM Header File: D001C001_HDR
Saving CGM Data File: D001C001_CGM

Found file: D001G002
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: NONE
dstdocid: NONE
notes: NONE

Saving DTD Header File: D001G002_HDR
Saving DTD Data File: D001G002_DTD

Found file: D001Q003
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: BODY
figid: 1
srcgph: NEMISS
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q003_HDR
Saving IGES Data File: D001Q003_IGS

Found file: D001Q004
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: BODY
figid: 2
srcgph: C03TS
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q004_HDR
Saving IGES Data File: D001Q004_IGS

Found file: D001R005
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: FRONT
figid: 1
srcgph: AJSEAL
doccls: NONE
rtype: 1
rorient: 000,270
rpelcnt: 000600,000304
rdensity: 0300
notes: NONE

Saving Raster Header File: D001R005_HDR
Saving Raster Data File: D001R005_GR4

Found file: D001R006
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: BODY
figid: 2
srcgph: COMPMAT
doccls: NONE
rtype: 1
rorient: 000,270
rpelcnt: 002163,000760
rdensity: 0300
notes: NONE

Saving Raster Header File: D001R006_HDR
Saving Raster Data File: D001R006_GR4

Found file: D001R007
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: BODY
figid: 3
srcgph: POWERLIN
doccls: NONE
rtype: 1
rorient: 000,270
rpelcnt: 001338,001384
rdensity: 0300
notes: NONE

Saving Raster Header File: D001R007_HDR
Saving Raster Data File: D001R007_GR4

Found file: D001R008
Extracting Raster Header Records...
Evaluating Raster Header Records...

srccdclid: NONE
dstcdclid: NONE
txtfilid: BODY
figid: 4
srcgph: RNEMISS
doccls: NONE
rtype: 1
rorient: 000,270
rpelcnt: 002176,002248
rdensty: 0300
notes: NONE

Saving Raster Header File: D001R008_HDR
Saving Raster Data File: D001R008_GR4

Found file: D001R009
Extracting Raster Header Records...
Evaluating Raster Header Records...

srccdclid: NONE
dstcdclid: NONE
txtfilid: BODY
figid: 5
srcgph: RBEMISS
doccls: NONE
rtype: 1
rorient: 000,270
rpelcnt: 002136,002296
rdensty: 0300
notes: NONE

Saving Raster Header File: D001R009_HDR
Saving Raster Data File: D001R009_GR4

Found file: D001R010
Extracting Raster Header Records...
Evaluating Raster Header Records...

srccdclid: NONE
dstcdclid: NONE
txtfilid: BODY
figid: 6
srcgph: RE02TS
doccls: NONE
type: 1
rorient: 000,270
rpelcnt: 001920,002248
rdensy: 0300
notes: NONE

Saving Raster Header File: D001R010_HDR
Saving Raster Data File: D001R010_GR4

Found file: D001T011
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: NONE
dstddocid: NONE
txtfilid: FRONT
doccls: UNCLASSIFIED
notes: NONE

Saving Text Header File: D001T011_HDR
Saving Text Data File: D001T011.TXT

Found file: D001T012
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: NONE
dstddocid: NONE
txtfilid: BODY
doccls: UNCLASSIFIED
notes: NONE

Saving Text Header File: D001T012_HDR
Saving Text Data File: D001T012.TXT

Found file: D001T013
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: NONE
dstddocid: NONE
txtfilid: REAR
doccls: UNCLASSIFIED
notes: NONE

Saving Text Header File: D001T013_HDR
Saving Text Data File: D001T013.TXT
Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

9.4 Other Tape Reading Logs

No reported error from AGfA CAPS read1840A utility.
10. Appendix B - IGES Detail Analysis

10.1. File D001Q003

10.1.1 Parser/Verifier Log

*** IGES DATA FILE ANALYSIS ***
*** MARCH 1992 ***
*** IGES Data Analysis ***
*** (708) 449-3430 ***

Input file is D001Q003.IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is October 28, 1992 10:41 AM

*** File and Product Name Information ***

File name from sender = 'NEMISS'
File creation Date.Time = '920922.154332'
Model change Date.Time = '
Author = 'Anne Barrington'
Department = '
Product name from sender = 'Xerox Expert'
Destination product name = '

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';

*** Originating System Data ***

System ID = 'Xerox Expert version 5.0'
Preprocessor version = '5.0'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 16
Floating point - Exponent = 38 Mantissa = 7
Double precision - Exponent = 38 Mantissa = 7

*** Global Model Data ***

Model scale = 1.00000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 3
Maximum line thickness = 4.1666667E-02
Minimum line thickness = 1.3888889E-02
Granularity = 1.0000000E-05
Maximum coordinate = 7.722300E+00

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status: Visible 148
               Blanked  0

Independence: Independent 114
               Physically Subordinate 32
               Logically Subordinate  2
               Totally Subordinate  0

Entity use: Geometry 118
            Annotation  27
            Definition  2
            Other       1
            Logical/Positional 0
            2D parametric 0
            Not Specified  0

Hierarchy: Structure DE applies 148
           Subordinate DE applies 0
           Hierarchy property applies 0
           Not Specified          0

*** Entity Occurrence Counts ***

<table>
<thead>
<tr>
<th>Entity</th>
<th>Form</th>
<th>Level</th>
<th>Count</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>Composite curve</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>0</td>
<td>102</td>
<td>Line</td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>General note</td>
</tr>
<tr>
<td>230</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>Sectioned area (Standard Crosshatching)</td>
</tr>
<tr>
<td>404</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Drawing</td>
</tr>
<tr>
<td>405</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>Property - Drawing size</td>
</tr>
<tr>
<td>410</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>View - Orthographic parallel</td>
</tr>
</tbody>
</table>

*** Entity Count by Level ***
<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>148</td>
</tr>
</tbody>
</table>

*** Labeling Information ***

100% of the entities are labeled.

| Unlabeled | 0 |

<table>
<thead>
<tr>
<th>Label</th>
<th>Count</th>
<th>Label</th>
<th>Count</th>
<th>Label</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>1* Line</td>
<td>102* GNote</td>
<td>27*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composit</td>
<td>8 Section</td>
<td>8* Property</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing</td>
<td>1*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NITPICK 2327: One or more of the flagged entity labels are not right-justified.

*** Line Fonts Used in Data ***

<table>
<thead>
<tr>
<th>100 102 104 106 108 110 112 114</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- 8 - - - - 96 - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>116 118 120 122 124 125 126 128</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>130 132 134 136 138 140 142 144</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - - - -</td>
</tr>
</tbody>
</table>
*** Line Widths Used in Data ***

<table>
<thead>
<tr>
<th>Weight</th>
<th>Count</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defaulted</td>
<td>100</td>
<td>(0.0139)</td>
</tr>
<tr>
<td>1</td>
<td>46</td>
<td>(0.0139)</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>(0.0278)</td>
</tr>
</tbody>
</table>

*** Colors Used in Data ***

| Defaulted | 19 |
| Green     | 129 |

******************************************
***** ENTITY ANALYSIS *****
******************************************

*** Entity type: 102

*** Entity type: 110

--- 102 lines averaging 5.398573E-01 units ---

*** Entity type: 212

27 text strings in data file.
Average text aspect ratio in file is 0.8413931.
Minimum text aspect ratio in file is 0.8400480.
Maximum text aspect ratio in file is 0.8417273.

FONTS USED IN FILE

<table>
<thead>
<tr>
<th>FONT</th>
<th>COUNT</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
<td>Default ASCII Style</td>
</tr>
<tr>
<td>1002</td>
<td>1</td>
<td>Symbol Font 2</td>
</tr>
</tbody>
</table>

*** Entity type: 230

NITPICK 2076: Entity does not have Annotation flag set at D 121.
NITPICK 2076: Entity does not have Annotation flag set at D 131.
NITPICK 2076: Entity does not have Annotation flag set at D 141.
NITPICK 2076: Entity does not have Annotation flag set at D 151.
NITPICK 2076: Entity does not have Annotation flag set at D 161.
NITPICK 2076: Entity does not have Annotation flag set at D 171.
NITPICK 2076: Entity does not have Annotation flag set at D 181.
NITPICK 2076: Entity does not have Annotation flag set at D 191.

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 295.
Drawing at D 295 contains 1 views.
Drawing at D 295 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D 1.
Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
    XMIN = Not Set    XMAX = Not Set
    YMIN = Not Set    YMAX = Not Set
    ZMIN = Not Set    ZMAX = Not Set

*** Message Summary ***

2016: 10 Invalid entity use flag.

*** Error Summary ***

0 fatal errors
0 severe errors
0 errors
0 warnings
0 cautions
11 nitpicks
0 notes

*** End of Analysis of D001Q003_IGS ***
10.1.2 Output AutoCAD R11
10.1.3 Cadkey v4.06 Log

----------------------------------------------- \9275\q003.igs -> \9275\q003.pr
IGES version  -  4.0
Date of creation:  09/22/92

Start section:
Drawing name: NEMISS. This file was converted by Expert.
Compliant with CALS class 1, per MIL-D-28000 Amendment 1.
DATE:    22-Sep-92 15:43:32

Entity types do not match at PARAMETER index 119
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 129
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 139
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 149
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 159
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 169
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 179
   Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 189
   Found entity type 102 , expected type 106

Entities Translated:
   78  (110) Line type
   27  (212) General Note type
8 (230) Sectioned Area type
1 (404) Drawing type
1 (410) View type

Entities Not Translated:
1 (406) Property type

Special Notes
8 Sectioned area(s) form 0 or 19 encountered.
(Only boundaries and islands processed)
View Entities
View at D:1 placed in Level #241
Drawing Entities
Drawing at D:295 placed in Level #241 and contains 1 views
10.1.4 Output Cadkey v4.06
10.1.5 Output IGESView

![Graph of Frequency vs. dB(dB/µV/m)]

- Frequency: 10K, 100K, 1M, 10M, 25M, 1G, 2G
- dB(dB/µV/m): 10K, 100K, 1M, 10M, 25M, 1G, 2G
- B = 100 kHz
- B = 500 Hz
- B = 5 kHz
- B = 50 kHz

Indicate Limit Level/Frequency
10.1.6 Output iges2draw/IslandDraw

![Graph showing dB/μV/M vs Frequency (Hz) with key points at 500 Hz, 5 kHz, and 50 kHz.]

Indicate Limit Level/Frequency
10.1.7 Output IGESWorks
10.1.8 Output Preview

![Graph showing dB levels at different frequencies.

Indicate Limit Level/Frequency]
10.2 File D001Q004

10.2.1 Parser/Verifier Log

*** IGES DATA FILE ANALYSIS ***
*** MARCH 1992 ***
*** IGES Data Analysis ***
*** (708) 449-3430 ***

Input file is D001Q004.IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is October 28, 1992 10:41 AM

*** File and Product Name Information ***

File name from sender = 'CE03TS'
File creation Date.Time = '920922.154233'
Model change Date.Time = '
Author = 'Anne Barrington'
Department = '
Product name from sender = 'Xerox Expert'
Destination product name = '

*** Parameter Delimiters ***

Delimiter = ' , '
Terminator = ' ; '

*** Originating System Data ***

System ID = 'Xerox Expert version 5.0'
Preprocessor version = '5.0'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 16
Floating point - Exponent = 38 Mantissa = 7
Double precision - Exponent = 38 Mantissa = 7

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 3
Maximum line thickness = 4.166667E-02
Minimum line thickness = 1.388889E-02
Granularity = 1.000000E-05
Maximum coordinate = 1.055850E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status: Visible 77
Blanked 0

Independence: Independent 70
Physically Subordinate 5
Logically Subordinate 2
Totally Subordinate 0

Entity use: Geometry 45
Annotation 29
Definition 2
Other 1
Logical/Positional 0
2D parametric 0
Not Specified 0

Hierarchy: Structure DE applies 77
Subordinate DE applies 0
Hierarchy property applies 0
Not Specified 0

*** Entity Occurrence Counts ***

<table>
<thead>
<tr>
<th>Entity</th>
<th>Form</th>
<th>Level</th>
<th>Count</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Circular arc</td>
</tr>
<tr>
<td>102</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Composite curve</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>0</td>
<td>42</td>
<td>Line</td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>General note</td>
</tr>
<tr>
<td>230</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Sectioned area (Standard Crosshatching)</td>
</tr>
<tr>
<td>404</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Drawing</td>
</tr>
<tr>
<td>406</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>Property - Drawing size</td>
</tr>
<tr>
<td>410</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>View - Orthographic parallel</td>
</tr>
</tbody>
</table>

*** Entity Count by Level ***

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>77</td>
</tr>
</tbody>
</table>
*** Labeling Information ***

100% of the entities are labeled.

<table>
<thead>
<tr>
<th>Label</th>
<th>Count</th>
<th>Label</th>
<th>Count</th>
<th>Label</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>1*</td>
<td>GNote</td>
<td>29*</td>
<td>Line</td>
<td>42*</td>
</tr>
<tr>
<td>Circle</td>
<td>1*</td>
<td>Composit</td>
<td>1</td>
<td>Section</td>
<td>1*</td>
</tr>
<tr>
<td>Property</td>
<td>1</td>
<td>Drawing</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NITPICK 2327: One or more of the flagged entity labels are not right-justified.

*** Line Fonts Used in Data ***

<table>
<thead>
<tr>
<th>100 102 104 106 108 110 112 114</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - - - - - -</td>
</tr>
<tr>
<td>1 1 - - - - 42 - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>Undefined Solid Dashed Phantom Center-line Dotted User defined</td>
</tr>
<tr>
<td>116 118 120 122 124 125 126 128</td>
</tr>
<tr>
<td>- - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>Undefined Solid Dashed Phantom Center-line Dotted User defined</td>
</tr>
<tr>
<td>130 132 134 136 138 140 142 144</td>
</tr>
<tr>
<td>- - - - - - - -</td>
</tr>
<tr>
<td>- - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>Undefined Solid Dashed Phantom Center-line Dotted User defined</td>
</tr>
</tbody>
</table>

*** Line Widths Used in Data ***
Weight   Count   Width
Defaulted  43   (0.0139)
  1       34   (0.0139)

*** Colors Used in Data ***
Defaulted  5
Green     72

******************************
***** ENTITY ANALYSIS *****
******************************

*** Entity type: 100

*** Entity type: 102

*** Entity type: 110

-- 42 lines averaging 1.290360E+00 units --

*** Entity type: 212

29 text strings in data file.
Average text aspect ratio in file is 0.8407874.
Minimum text aspect ratio in file is 0.8400291.
Maximum text aspect ratio in file is 0.8417273.

FONTs USED IN FILE

FONT   COUNT   NAME
    1   29 Default ASCII Style

*** Entity type: 230

NITPICK 2076: Entity does not have Annotation flag set at D  73.

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D  153.
Drawing at D  153 contains 1 views.
Drawing at D  153 contains 0 annotation entities.
*** Entity type: 406

*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D
Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
    XMIN = Not Set    XMAX = Not Set
    YMIN = Not Set    YMAX = Not Set
    ZMIN = Not Set    ZMAX = Not Set

*** Message Summary ***

2016: 3 Invalid entity use flag.

*** Error Summary ***

  0 fatal errors
  0 severe errors
  0 errors
  0 warnings
  0 cautions
  4 nitpicks
  0 notes

*** End of Analysis of D001Q004_IGS ***
1. Feedthrough capacitor.
2. Bond to ground plane.
3. Test sample situated in test fixture, 10 cm from fixture.
4. Bond to test fixture as defined.
5. Filtered power supply terminals at screened enclosure.
6. Test sample interconnecting lead. Length as defined in spacecraft configuration.
7. Power leads emulating the spacecraft configuration.
8. Interconnecting lead to monitoring equipment/test connectors or feedthrough filters.
9. Test fixture DC bond to screened enclosure wall of 2.5 milliohms.
10. Current probe connected to receiver via coaxial cable.
10.2.3 Output Cadkey v4.06

1. Feedthrough capacitor.
2. Bond to ground at point defined in test fixture, 10 cm from front edge of ground plane.
3. Bond test fixture to screened enclosure wall as defined in the installation specification.
4. Power supply to test fixture as defined at test fixture configuration, or as defined at test fixture configuration set via conduit. Feedthrough filters shall be less than 1000 mVAC.
5. Interconnect to screened enclosure wall or ground plane shall be less than 1000 mVAC.
6. Connects to test fixture as defined at test fixture configuration.
7. Interconnect to receiver via coxial cable.
8. Connect to test fixture as defined at test fixture configuration.
9. Interconnect to receiver via coxial cable.
10. Interconnect to test fixture as defined at test fixture configuration.

Diagram:

- Screened enclosure wall
- AMSU-A1
- AMSU-A2
- 6512-106R
- 10 PCL-25
- 1
- 3
- 4
- 6
- 7
- 8
- 9
- 10
- 11
- 12
10.2.4 Output IGESView

1. Feedthrough capacitor.
2. Bond to ground plane.
3. Test sample situated in test fixture, 10 cm from front edge of ground plane.
4. Bond to test fixture as defined.
5. Filtered power supply terminals at screened enclosure wall.
6. Test sample interconnecting lead. Length as defined in the installation specification.
7. Power leads emulating the spacecraft configuration.
8. Interconnecting lead to monitoring equipment/test set via conduit. Feedthrough connectors or feedthrough filters.
9. Test fixture DC bond to screened enclosure wall or ground plane shall be less than 2.5 milliohms.
10. Current probe connected to receiver via coaxial cable.
10.2.5 Output iges2draw/IslandDraw

1. Feedthrough capacitor.
2. Bond to ground plane.
3. Test sample situated in test fixture, 10 cm from front edge of ground plane.
4. Bond to test fixture as defined.
5. Filtered power supply terminals at screened enclosure wall.
6. Test sample interconnecting lead. Length as defined in the installation specification.
7. Power leads emulating the spacecraft configuration.
8. Interconnecting lead to monitoring equipment/test set via conduit. Feedthrough connectors or feedthrough filters.
9. Test fixture DC bond to screened enclosure wall or ground plane shall be less than 2.5 millionms.
10. Current probe connected to receiver via coaxial cable.
1. Feedthrough capacitor.
2. Bond to ground plane.
3. Test sample situated in test fixture, 10 cm from front edge of ground plane.
4. Bond to test fixture as defined.
5. Filtered power supply terminals at screened enclosure wall.
6. Test sample interconnecting lead. Length as defined in the installation specification.
7. Power leads emulating the spacecraft configuration.
8. Interconnecting lead to monitoring equipment/test set via conduit. Feedthrough connectors or feedthrough filters.
9. Test fixture DC bond to screened enclosure wall or ground plane shall be less than 2.5 milliohms.
10. Current probe connected to receiver via coaxial cable.
10.2.7 Output Preview

Feedthrough capacitor.
Bond to ground plane at least fixture, 10 cm from front edge of ground plane.
Filtered power supply signal terminals at screened enclosure wall, length as defined in the installation specification.
Filtered power leads or interconnecting equipment/test set via conduit. Feedthrough probe connected to receiver via coaxial cable.
11. Appendix C - SGML Detail Analysis

11.1 ArbotText Parser Log
No reported errors.

11.2 DataLogics Parser Log
No reported errors.

11.3 Exoterica Parser
No reported errors.
12. Appendix D - Raster Detail Analysis
12.1 File D001R005
12.1.1 Output IslandPaint
12.2 File D001R006

12.2.1 Output IslandPaint

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Para.</th>
<th>S-480-13</th>
<th>S-480-40</th>
<th>IS-2617547</th>
<th>IS-2624483</th>
<th>IS-2280259</th>
<th>IS-3267415</th>
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</thead>
<tbody>
<tr>
<td>CE01*</td>
<td>--</td>
<td>4.4.7.2</td>
<td>3.2</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.1</td>
<td>3.6.1.1</td>
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<tr>
<td>CE03</td>
<td>3.4.5</td>
<td>4.4.7.2</td>
<td>3.2</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.1</td>
<td>3.6.1.1</td>
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<tr>
<td>RE02</td>
<td>3.4.6</td>
<td>4.4.7.2</td>
<td>3.3.c</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.4.2</td>
<td>3.6.1.4.2</td>
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<tr>
<td>RE04**</td>
<td>3.4.7</td>
<td>4.5.7</td>
<td>3.3.a</td>
<td>3.4.1</td>
<td>3.4.1</td>
<td>3.5.2</td>
<td>3.5.2</td>
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<td>CS01</td>
<td>3.4.8</td>
<td>4.4.7.2</td>
<td>3.4.a</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.2</td>
<td>3.6.1.2</td>
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<tr>
<td>CS02</td>
<td>3.4.9</td>
<td>4.4.7.2</td>
<td>3.4.a</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.2</td>
<td>3.6.1.2</td>
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<td>CS06</td>
<td>3.4.10</td>
<td>4.4.7.2</td>
<td>3.4.b</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.3</td>
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<td>RS03</td>
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<td>4.4.7.2</td>
<td>3.5</td>
<td>3.4.2</td>
<td>3.4.2</td>
<td>3.6.1.5</td>
<td>3.6.1.5</td>
</tr>
</tbody>
</table>

* No emanation in the frequency range specified by this test method are present in the test sample.
** No AC emanation in the frequency range specified by this test method are present in the test sample.
### 12.3 File D001R007
#### 12.3.1 Output Island Paint

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
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<tbody>
<tr>
<td>+28V Feedthrough Capacitor Main Bus</td>
<td>AMSU A1 J1-1</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J1-1</td>
</tr>
<tr>
<td>28V Feedthrough Capacitor Main Bus Return</td>
<td>AMSU A1 J1-3</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J1-3</td>
</tr>
<tr>
<td>+28V Feedthrough Capacitor Pulse Load</td>
<td>AMSU A1 J1-5</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J1-5</td>
</tr>
<tr>
<td>28V Feedthrough Capacitor Pulse Load Return</td>
<td>AMSU A1 J1-7</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J1-7</td>
</tr>
<tr>
<td>+28V Feedthrough Capacitor Analog Telemetry Bus</td>
<td>AMSU A1 J1-9</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J1-9</td>
</tr>
<tr>
<td>28V Feedthrough Capacitor Analog Telemetry Bus Return</td>
<td>AMSU A1 J1-10</td>
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<tr>
<td></td>
<td>AMSU A2 J1-10</td>
</tr>
<tr>
<td>+10V Feedthrough Capacitor Interface Bus</td>
<td>AMSU A1 J4-12</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J4-12</td>
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<tr>
<td>10V Feedthrough Capacitor Interface Bus Return</td>
<td>AMSU A1 J4-13</td>
</tr>
<tr>
<td></td>
<td>AMSU A2 J4-13</td>
</tr>
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</table>
12.4 File D001R008

12.4.1 Output IslandPaint

---

[Diagram showing dB levels against frequency.]
12.5 File D001R009

12.5.1 Output IslandPaint

![Graph showing frequency vs. dB μV/MHz]

- **Frequency - Hz**
  - 10K
  - 100K
  - 1M
  - 10M
  - 100M
  - 1G
  - 10G

- **dB μV/MHz**
  - 150
  - 140
  - 130
  - 120
  - 110
  - 100
  - 90
  - 80
  - 70
  - 65
  - 60
  - 50
  - 40
  - 30
  - 20K
  - 200M

- □ Indicate Limit Level/Frequency
12.6 File D001R010

12.6.1 Output IslandPaint

![Diagram of output island with labels and measurements]

**14 kHz to 10 GHz Antennas**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrometrics</td>
<td>RVR-25 Rod</td>
<td>14 kHz - 30 MHz</td>
</tr>
<tr>
<td>AIL Tech</td>
<td>94455-1 Biconical</td>
<td>20 MHz - 200 MHz</td>
</tr>
<tr>
<td>AIL Tech</td>
<td>93490-1 Log Conical</td>
<td>200 MHz - 1 GHz</td>
</tr>
<tr>
<td>Electrometrics</td>
<td>RGA-180</td>
<td>1 GHz - 18 GHz</td>
</tr>
</tbody>
</table>
12.6.2 Output Ventura Publisher - all

GenCorp
AEROJET

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V Feedthrough</td>
<td>AMSU A2 34-12</td>
</tr>
<tr>
<td>Connector Main Bus</td>
<td>AMSU A2 34-16</td>
</tr>
<tr>
<td>12V Feedthrough</td>
<td>AMSU A1 34-1</td>
</tr>
<tr>
<td>Connector Main Bus</td>
<td>AMSU A1 34-5</td>
</tr>
<tr>
<td>12V Feedthrough</td>
<td>AMSU A1 34-3</td>
</tr>
<tr>
<td>Connector Main Bus</td>
<td>AMSU A1 34-2</td>
</tr>
<tr>
<td>12V Feedthrough</td>
<td>AMSU A1 34-8</td>
</tr>
<tr>
<td>Connector Power Lead</td>
<td>AMSU A2 34-8</td>
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<tr>
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<td>Connector Power Lead</td>
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<td>Connector Analog Power Bus</td>
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<td>Connector Interface Bus</td>
<td>AMSU A2 34-6</td>
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<tr>
<td>12V Feedthrough</td>
<td>AMSU A1 34-13</td>
</tr>
<tr>
<td>Connector Interface Bus</td>
<td>AMSU A2 34-13</td>
</tr>
</tbody>
</table>
13. Appendix E - CGM Detail Analysis

13.1 File D001C001

13.1.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/28/92  Time:  11:52:23

Metafile Examined : \9275\c001.cgm
Pictures Examined : All
Elements Examined : All
Bytes Examined : All

============= Trace Report =============
Tracing not selected.

======== CGM Conformance Violation Report ========
No Errors Detected

======== CALS CGM Profile (MIL-D-28003) Report ========
No profile discrepancies detected.

============= Conformance Summary Report =============

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/28/92  Time: 11:52:25

Name of CGM under test: \9275\c001.cgm
Encoding : Binary
Pictures Examined : All
Elements Examined : All
Bytes Examined : All

BEGIN METAFILE string : "RE04TS.cgm"
METAFILE DESCRIPTION : "Xerox-Expert/CGM Converter MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 166; string contains: "RE04TS.cgm"
Conformance Summary: This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

1 Pictures Tested
183 Elements Tested
3420 Octets Tested

=================================
| No Errors Were Detected |
=================================

End of Conformance Report

13.1.2 validcgm Log

Analysis for file c001.cgm using table table
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 11) occurred 1 time
(1, 13) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 1 time
(2, 7) never occurred, required by standard B
(3, 1) occurred 1 time
(4, 1) occurred 146 times
(4, 4) occurred 12 times
(4, 18) occurred 6 times
(5, 3) occurred 2 times
(5, 10) occurred 1 time
(5, 15) occurred 1 time
(5, 30) occurred 1 time
13.1.3 Output IslandDraw

CABLES HAVE BEEN OMITTED FOR CLARITY.

WOOD SUPPORT FIXTURE

1 METER

AMSU A1

10 CM

MAGNA PROBE MOW4-2508

GAUSSMETER 6
13.1.4 Output Metaview 1.13

NOTE: CABLES HAVE BEEN OMITTED FOR CLARITY.

WOOD SUPPORT FIXTURE

1 METER

AMSU A1

10 CM

MAGNA PROBE MOW4-2506

GAUSSMETER 620