



CALS TEST NETWORK

**AFCTN Test Report  
94-017**

**AFCTB-ID  
93-049**



# Technical Publication Transfer

Using:



**Northrop Corporation's Data**



- MIL-D-028000A (IGES)**
- MIL-M-28001A (SGML)**
- MIL-R-28002A (Raster)**
- MIL-D-28003 (CGM)**



**19960822 048**

## Quick Short Test Report



**17 May 1993**

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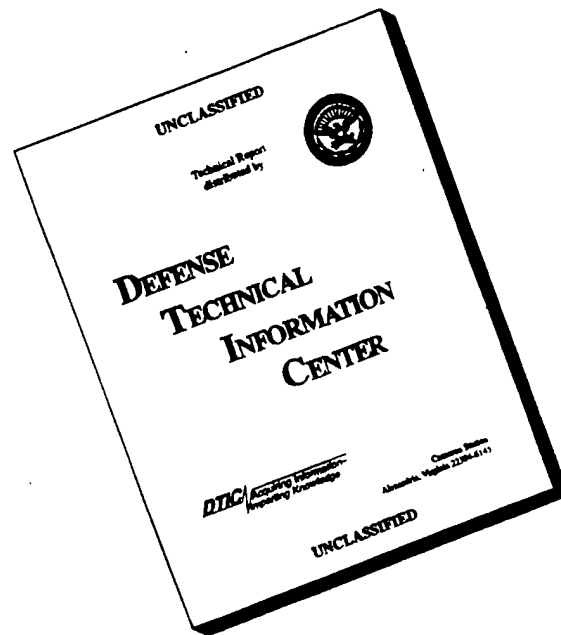
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**Quick Short Test Report**

**17 May 1993**

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## 1. Introduction

### 1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-Cycle Support (CALs) Test Network (AFCTN) 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 AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN 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 AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN 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 AFCTN technical staff, gain experience using 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.

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## 1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze Northrop Corporation's interpretation and use of the CALS standards, in transferring technical publication data. Northrop used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on two 9-track magnetic tapes. The tapes were the same except for the recording density, one was at 1600 bpi and the second at 6250 bpi.

## 2. Test Parameters

**Test Plan:** AFCTB 93-049

**Date of Evaluation:** 17 May 1993

**Evaluator:** George Elwood  
Air Force CALS Test Bed  
DET 2 HQ ESC/AV-2P  
4027 Colonel Glenn Hwy  
Suite 300  
Dayton OH 45431-1672

**Data Originator:** John P. Kent  
Northrop Corporation  
B-2 Division  
M/S L591/UB  
8900 East Washington Blvd  
Pico Rivera CA 90660  
(310) 948-0624

**Data Description:** Technical Manual Test (2x)  
1 Document Declaration file  
1 Document Type Definition (DTD)  
4 Initial Graphics Exchange Specification (IGES) files  
1 Text/Standard Generalized Markup Language (SGML) file  
1 Raster file  
1 Computer Graphics Metafile (CGM) file

**Data Source System:** 1840

**HARDWARE**

Unknown

**SOFTWARE**

Unknown

---

IGES

**HARDWARE** Unknown  
**SOFTWARE** Unknown

Text/SGML

**HARDWARE** Unknown  
**SOFTWARE** Unknown

Raster

**HARDWARE** Unknown  
**SOFTWARE** Unknown

CGM

**HARDWARE** Unknown  
**SOFTWARE** Unknown

Evaluation Tools Used:

**MIL-STD-1840A (TAPE)**

SUN 3/280

AFCTN *Tapetool v1.2.9 UNIX*

XSoft *CAPS/CALS v40.4*

Texas Instruments (TI) *Tapetool v1.0.1*

PC 486/50

AFCTN *Tapetool v1.2.9 DOS*

**MIL-D-28000 (IGES)**

Sun SparcStation 2

ArborText *iges2draw*

IGES Data Analysis (IDA) *Parser/Verifier v92*

IDA *IGESView v3.05*

International TechneGroup Incorporated  
(ITI) *IGES/Works v1.3*

Rosetta Technologies *Preview v3.2*

PC 486/50

AUTODESK AutoCAD 386 R12  
AUTODESK AutoCAD 386 R11  
AUTODESK Micro Engineering Solutions  
(MES) CheckMark v1.0  
Cadkey Cadkey v5.02  
Cadkey Cadkey v4.06  
IDA IGES Parser/Verifier v92  
IDA IGESView Windows  
Wiz Worx IGESDRAW

MIL-M-28001 (SGML)

SUN SparcStation 2

ArborText ADEPT v4.2.1

PC 486/50

Exoterica XGMLNormalizer v1.2e3.2  
Exoterica Validator v2.0 EXL  
McAfee & McAdam Sema Mark-it v2.3  
Public Domain sgmls

MIL-R-28002 (Raster)

SUN SparcStation 2

ArborText g42tiff

AFCTN validg4

AFCTN calstb.475

IDA IGESView v3.0

Island Graphics IslandPaint v3.0

PC 486/50

AFCTN validg4

IDA IGESView Windows

Inset Systems HiJaak v2.1

Inset Systems HiJaak Window v1.0

Software Publishing Corporation

(SPC) Harvard Graphics v3.0

Corel Ventura Publisher

MIL-D-28003 (CGM)

SUN SparcStation 2

ArborText cgm2draw

Island Graphics IslandDraw v3.0

PC 486/50

Advance Technology Center

(ATC) MetaVIEW R 1.12

ATC MetaCheck R 2.05

SPC Harvard Graphics v3.05

Inset Systems HiJaak v2.1

Inset Systems HiJaak v1.0 Windows

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*Micrografx Designer v3.1*  
*Corel Ventura Publisher*

**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 tapes arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with a magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tapes were enclosed in a barrier bag as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reels showed the labels indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the boxes were packing lists showing all files recorded on the tapes.

#### **3.2 Transmission Envelope**

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

##### **3.2.1 Tape Formats**

The tapes were run through the AFCTN *Tapetool v1.2.9* utility. No errors were encountered while evaluating the contents of the tape labels on either tape.

The tapes were read using XSoft's *CAPS read1840A* utility without any reported errors.

The tapes were read using TI's *Tapetool v1.0.1* without a reported error.

The physical structure of both tapes meets the CALS MIL-STD-1840A requirements.

### 3.2.2 Declaration and Header Fields

No errors were reported in the Document Declaration file and data file headers on either tape.

Both tapes meet this portion of the CALS MIL-STD-1840A requirements.

## 4. IGES Analysis

The tapes contained four IGES files each. The files of both tapes were compared and found to be the same. The files from only one tape were evaluated. These files were evaluated using IDA's parser and verifier set for CALS MIL-D-28000A Class I specification. No CALS errors were reported during this procedure. However, many basic IGES warnings were issued. The log files from this evaluation are included in the Appendix to this report.

The AFCTB has several tools for viewing IGES files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The files were converted using ArborText's *iges2draw* utility with no reported errors. When resulting files were read into Island Graphics' *IslandDraw* nothing displayed on the screen. The files were converted again using an undocumented function of *iges2draw*. The error in the files was the base locations defined as a negative X and Y coordinate. When the resulting files from the second conversion were read into *IslandDraw* they all displayed correctly.

The files were read using AUTODESK's *AutoCAD R12* with translator version 5.1 without a reported error.

The files were read into MES's *CheckMark* software without a reported error.

The files were converted using Cadkey's *ig2c* utility. The resulting files were read into Cadkey's *Cadkey*, displayed and printed.

The files were read using IDA's *IGESView* and *IGESView for Windows* without a reported error.

The files were read using ITI's *IGESWorks* without a reported error. The files were displayed and printed.

The IGES files were converted using Rosetta Technologies' *Prepare* without a reported error. The resulting files were read into Rosetta Technologies' *Preview*, displayed and printed.

The files were read into the *Wiz Worx IGESDRAW* utility without a reported error.

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

## 5. SGML Analysis

The AFCTB has several parsers available for evaluating submitted DTD and Text files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. These products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings unless specified in the report. Changes to DTD or Text files required by each system are not documented in the report.

The SGML files from both tapes were compared and found to be exact duplicates. The files from only one tape were evaluated.

The Text and DTD files from this document were evaluated using Exoterica's *Validator* parser with no reported errors although four warnings were issued. These warnings were the same as the ones issued by the *ArborText* parser.

The Text and DTD files from this document were tested using Exoterica's *XGMLNormalizer* parser with no reported errors.

---

The Text and DTD files from the tape were evaluated using McAfee & McAdam's *Sema Mark-it* parser with no reported errors.

The Text and DTD files from the tape were evaluated using the Public Domain *sgmls* parser with no reported errors.

An attempt was made to import the files into ArborText's *Adept* software. When parsing the DTD, three warnings were generated which prevented the files from parsing. The errors relate to the tags "ENTRY", "NOTICE", and "RESULT". When the FOSI was parsed multiple errors were reported. Because of the number of errors, no further effort was made to correct them.

The DTD and Text files parsed successfully on all but one of the software tools available in the AFCTB. The Output Specification was not evaluated. The SGML part of the tapes meet the CALS MIL-M-28001A specification.

## 6. Raster Analysis

The tapes contained one Raster file each. These files were compared and found to be exact duplicates and only one file was evaluated. This file was evaluated using the AFCTN *validg4* utility. This program reported that the file meets the CALS MIL-R-28002A specification.

The file was read into the AFCTN *calstb.475* viewing utility. No problems were noted.

The AFCTB has several tools for viewing Raster files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings. Even though all images may have been printed, a sample of the images are included in the Appendix to this report unless there are significant differences between outputs.

---

The file was converted using ArborText's *g42tiff* utility without a reported error. The resulting file was read into Island Graphics' *IslandPaint*, displayed and printed.

The file was read into IDA's *IGESView* and *IGESView for Windows* without a reported error.

The file was read into Inset Systems' *HiJaak for Windows* without a reported error.

The file was converted using Inset Systems' *HiJaak for DOS* into an IMG format without a reported error. The resulting file was read into Corel's *Ventura Publisher*, displayed and printed.

The Raster file was converted using Rosetta Technologies' *Prepare* without a reported error. The resulting file was read into Rosetta Technologies' *Preview*, displayed and printed.

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

## 7. CGM Analysis

The tapes contained one CGM file each. These files were compared and found to be exact duplicates so only one file was evaluated. This file was evaluated using ATC's *Meta-Check* with CALS options. This utility reported that the file meets the CALS MIL-D-28003 specification.

The CGM file was evaluated using the beta AFCTN *validcgm* utility. This utility reported several errors.

The AFCTB has several tools for viewing CGM files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The CGM file was converted using ArborText's *cgm2draw* utility without a reported error. The resulting file was read into Island Graphics' *IslandDraw*, displayed and

---

printed. With the exception of the dark background, the printed image was acceptable for insertion into a publication. When the background was removed, the white text disappeared on the white background.

The file was viewed using ATC's *MetaView* software with a reported error relating to fonts.

The file was read into Inset Systems' *HiJaak for Windows*, but nothing was displayed on the screen and no error messages were displayed.

The file was imported directly into Island Graphics' *IslandDraw* without a reported error, however, the resulting image was displayed along the top of the screen as a series of lines.

The file was imported into the *Micrografx Designer* without a reported error, however, nothing displayed on the screen.

According to Michael Harrison of Micrografx, "Micrografx is aware of the problems associated with reading these files and is working on a solution to be implemented in a future release of our products."

The file was imported into SPC's *Harvard Graphics v3.05* with two reported errors. The first was "line style errors" and the second was "165 non CGM entities not translated". The resulting image was not usable. The background color had to be changed in order to see the text.

The file was imported into Corel's *Ventura Publisher* but an error message, indicating an incorrect file type, was displayed and nothing imported.

The CGM files were reported as meeting the CALS MIL-D-28003 specification. However, all but one of the CGM tools available in the AFCTB failed to display a usable image.

## 8. Conclusions and Recommendations

The physical structure of the tapes from Northrop Corporation were correct. No errors were reported by any of the tape reading utilities available in the AFCTB on either tape. The CALS Document Declaration file and data file headers were also reported without error. This portion of the tapes meet the CALS MIL-STD-1840A requirements.

The IGES files on the tapes were reported without CALS errors although basic IGES warnings were noted during the evaluation. The IGES files meet the CALS MIL-D-28000A specification.

The Text and DTD files meet the CALS MIL-M-28001A specification.

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

The CGM files were reported as meeting the CALS MIL-D-28003 specification.

The tapes from Northrop Corporation meet the CALS MIL-STD-1840A requirements.

---

## 9. Appendix A - Tapetool Report Logs

### 9.1 Tape Catalog

Air Force CALS Test Network Catalog Evaluation - Version 1.2; Release 9 (0)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes  
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Mon May 17 09:26:15 1993

MIL-STD-1840A File Catalog

File Set Directory: C:\CTN129\OVERLAND\SET008

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Extracted
D001T001	TEXT	D/00260	02048/000009	Extracted
D001G002	DTD	D/00260	02048/000010	Extracted
D001H003	Output Specification	D/00260	02048/000072	Extracted
D001Q004	IGES	F/00080	02000/000281	Extracted
D001Q005	IGES	F/00080	02000/000138	Extracted
D001Q006	IGES	F/00080	02000/000224	Extracted
D001Q007	IGES	F/00080	02000/000224	Extracted
D001C008	CGM	F/00080	00800/000062	Extracted
D001R009	Raster	F/00128	02048/000017	Extracted

Catalog Process terminated normally.





### 9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release 9 (O)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Mon May 17 09:26:16 1993

MIL-STD-1840A File Set Evaluation Log

File Set: SET008

Found file: D001

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: John P. Kent, ITDS Chief Engineer, Northrop Corporation, B-2 Division, L591/GK  
E. Washington Blvd., Pico Rivera, CA 90660-3765 (310) 948-0624

srcdocid: 1B-2A-2-21JG-10-1

srcrelid: NONE

chglvl: ORIGINAL

dteisu: 19910301

dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT,  
TechneCenter, 4027 Col. Glenn Highway, Dayton, OH 45431-1601

dstdocid: 1B-2A-2-21JG-10-1

dstrelid: NONE

dtetrn: 19930507

dlvacc: NONE

filcnt: T1, H1, G1, C1, Q4, R1

ttlcls: UNCLASSIFIED

doccls: UNCLASSIFIED

doctyp: JOB GUIDE

docttl: ENVIRONMENTAL CONTROL - ECS CONTROL

Found file: D001T001

Extracting Text Header Records...

Evaluating Text Header Records...

srcdocid: 1B-2A-2-21JG-10-1

dstdocid: 1B-2A-2-21JG-10-1

txtfilid: W

doccls: UNCLASSIFIED

notes: NONE

Saving Text Header File: D001T001.HDR

---

Saving Text Data File: D001T001.TXT

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

srcdocid: 1B-2A-2-21JG-10-1  
dstdocid: 1B-2A-2-21JG-10-1  
notes: NONE

Saving DTD Header File: D001G002.HDR  
Saving DTD Data File: D001G002.DTD

Found file: D001H003  
Extracting Output Specification Header Records...  
Evaluating Output Specification Header Records...

srcdocid: 1B-2A-2-21JG-10-1  
dstdocid: 1B-2A-2-21JG-10-1  
notes: NONE

Saving Output Specification Header File: D001H003.HDR  
Saving Output Specification Data File: D001H003.OS

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

srcdocid: 1B-2A-2-21JG-10-1  
dstdocid: 1B-2A-2-21JG-10-1  
txtfilid: W  
figid: NONE  
srcgph: B2AJG2111-0101A  
doccls: UNCLASSIFIED  
notes: NONE

Saving IGES Header File: D001Q004.HDR  
Saving IGES Data File: D001Q004.IGS

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

Found file: D001C008  
Extracting CGM Header Records...  
Evaluating CGM Header Records...

srcdocid: 1B-2A-2-21JG-10-1  
dstdocid: 1B-2A-2-21JG-10-1

---

txtfilid: W  
figid: NONE  
srcgph: B2AJG2111-0103D  
doccls: UNCLASSIFIED  
notes: NONE

Saving CGM Header File: D001C008.HDR  
Saving CGM Data File: D001C008.CGM

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

srcdocid: 1B-2A-2-21JG-10-1  
dstdocid: 1B-2A-2-21JG-10-1  
txtfilid: W  
figid: NONE  
srcgph: B2AJG2111-0104D  
doccls: UNCLASSIFIED  
rtype: 1  
rorient: 000,270  
rpelcnt: 003408,004408  
rdensty: 0400  
notes: NONE

Saving Raster Header File: D001R009.HDR  
Saving Raster Data File: D001R009.GR4

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.

## 10. Appendix B - Detailed IGES Analysis

### 10.1 File D001Q004

#### 10.1.1 Parser/Verifier Log

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

Input file is /novell/9349/d001q004.igs

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

Today is May 17, 1993 1:17 PM

#### \*\*\* File and Product Name Information \*\*\*

```
File name from sender   = '0101A.gef.igs'  
File creation Date.Time = '930218.130008'  
Model change Date.Time = ''  
Author                  = 'NORTHROP B2 ITDS CTB'  
Department              = ''  
Product name from sender = '0101A.gef.igs'  
Destination product name = '0101A.gef.igs'
```

#### \*\*\* Parameter Delimiters \*\*\*

```
Delimiter = ','  
Terminator = ';' 
```

#### \*\*\* Originating System Data \*\*\*

```
System ID           = 'ITDS CONVERTER: GEF_IGES'  
Preprocessor version = '1.0'  
Specification version = 6 (IGES 4.0)
```

#### \*\*\* Precision levels \*\*\*

```
Integer bits = 32  
Floating point - Exponent = 38  Mantissa = 6  
Double precision - Exponent = 308  Mantissa = 15
```

#### \*\*\* Global Model Data \*\*\*

---

Model scale = 1.0000E+00  
 Unit flag = 1  
 Units = 'IN'  
 Line weights = 1  
 Maximum line thickness = 6.300000E-03  
 Minimum line thickness = 6.300000E-03  
 CAUTION 2317: Maximum line thickness equal to minimum thickness.  
 Granularity = 1.000000E-03  
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

\*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	1850
	Blanked	0
Independence:	Independent	1838
	Physically Subordinate	9
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1831
	Annotation	19
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1850
	Hierarchy property applies	0
	Not Specified	0

\*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
104	1	0	659	Conic arc - ellipse
106	63	0	8	Simple closed planar curve
110	0	0	497	Line
112	0	0	5	Parametric spline curve
124	0	0	659	Transformation matrix
212	0	0	9	General note

230	0	0	8	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

\*\*\* Entity Count by Level \*\*\*

Level	Count
0	1850

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled	1850
-----------	------

\*\*\* Line Fonts Used in Data \*\*\*

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
-	-	166	8	-	42	4	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	493	-	-	455	1	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	659	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted

---

- - - - - User defined

\*\*\* Line Widths Used in Data \*\*\*

Weight	Count	Width
Defaulted	1850	(0.0063)

\*\*\* Colors Used in Data \*\*\*

Defaulted	1784
Black	57
White	9

\*\*\*\*\*  
\*\*\*\*\* ENTITY ANALYSIS \*\*\*\*\*  
\*\*\*\*\*

\*\*\* Entity type: 104

WARNING 2265: Start point off conic by 1.190300E-03 at D 539.  
WARNING 2265: Start point off conic by 1.234213E-03 at D 595.  
WARNING 2265: Start point off conic by 1.388423E-03 at D 743.  
WARNING 2039: End point off conic by 1.388423E-03 at D 743.

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

WARNING 2265: Messages regarding invalid start point suppressed. WARNING 2039: Message regarding conic end points suppressed.

\*\*\* Entity type: 106

\*\*\* Entity type: 110

-- 497 lines averaging 2.015512E-01 units --

\*\*\* Entity type: 112

\*\*\* Entity type: 124

659 transformation matrices, 659 non-zero translations.

NOTE 2341: 659 matrices contain translation information.

\*\*\* Entity type: 212

9 text strings in data file.

Average text aspect ratio in file is 0.9883842.

Minimum text aspect ratio in file is 0.9821430.  
Maximum text aspect ratio in file is 0.9910715.

FONTS USED IN FILE

FONT	COUNT	NAME
1	9	Default ASCII Style

\*\*\* Entity type: 230

\*\*\* Entity type: 404

Drawing at D 5 contains 1 views.

Drawing at D 5 contains 0 annotation entities.

\*\*\* Entity type: 406

\*\*\* Entity type: 410

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 \*\*\*

2015: 98 Mathematically incorrect definitions.

2018: 1 Problems with line weight/width display information.

\*\*\* Error Summary \*\*\*

0 fatal errors

0 severe errors

0 errors

98 warnings

1 cautions

0 nitpicks

1 notes

\*\*\* End of Analysis of /novell/9349/d001q004.igs \*\*\*

---

## 10.1.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)

=====  
File: I:/9349/D001Q004.xli

Date: Mon, May 17, 1993

Time: 16:03:10  
=====

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750

Translating from IGES file: I:/9349/D001Q004.IGS  
to AutoCAD Drawing: I:\9349\D001Q004.dwg

=====  
Options obtained from: default settings

Curves Approximated to Tolerance of 0.01

Surfaces Approximated to Tolerance of 0.01

Text Font/Style mapping:

IGES Text font	Style Name	ACAD Font
0	SYMBOL0	iges0
1	STANDARD	txt
2	LEROY	txt
3	FUTURA	txt
6	COMP80	txt
12	GOTHICE	gothice
13	GOTHICI	gothici
14	ROMANS	romans
17	ROMANT	romant
18	ROMAND	romand
19	OCR	txt
1001	SYMBOL1	iges1001
1002	SYMBOL2	iges1002
1003	SYMBOL3	iges1003
2001	KANJI	bigfont

IGES Linefont/AutoCAD Linetype mapping

IGES Line Font	AutoCAD linetype	Shape file
0	BYLAYER	
1	CONTINUOUS	
2	DASHED	acad.lin
3	PHANTOM	acad.lin
4	CENTER	acad.lin

5

DOT

acad.lin

=====  
Parse phase

\*\*\* Warning (IEVM\_BAD\_VECTOR\_124) \*\*\*

(DE 493, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

\*\*\* Warning (IEVM\_BAD\_START\_POINT\_104) \*\*\*

(DE 495, TF 104:1) Entity's start point not on the conic. Value found was  
1.2643260e-002, 6.7795300e-003.

Action taken: Start point moved 1.5608861e-003 units, from 1.2643260e-002,  
6.7795300e-003 to 1.4204146e-002, 6.7795300e-003.

\*\*\* Warning (IEVM\_BAD\_END\_POINT\_104) \*\*\*

(DE 495, TF 104:1) Entity's End Point not on the conic. Value found was  
-1.3838220e-002, 6.3987300e-003.

Action taken: End point moved 1.0075731e-003 units, from -1.3838220e-002,  
6.3987300e-003 to -1.4845793e-002, 6.3987300e-003.

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

\*\*\* Warning (IEVM\_BAD\_VECTOR\_124) \*\*\*

(DE 589, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

=====  
Start Section:

CONFORMANCE:

MIL-D-28000 Amendment1, 20 December 1988  
Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:

0101A.gef.igs

Global Section:

Parameter Delimiter: ,

Record Delimiter: ;

Sending Product ID: 0101A.gef.igs

File Name: 0101A.gef.igs  
 System ID: ITDS CONVERTER: GEF\_IGES  
 Preprocessor Version: 1.0  
 Size of Integer: 32  
 Sgl. Precision Mag: 38  
 Sgl. Precision Sig: 6  
 Dbl. Precision Mag: 308  
 Dbl. Precision Sig: 15  
 Receiving Product ID: 0101A.gef.igs  
 Model Space Scale: 1.000000  
 Unit Flag: 1  
 Unit String: IN  
 # of Line Weights: 1  
 Maximum Line Width: 0.006300  
 Creation Date: 02/18/93 13:00:08  
 Minimum Resolution: 0.001000  
 Maximum Coordinate: 7.243750  
 Author: NORTHROP B2 ITDS CTB  
 Organization:  
 IGES Version Number: 6  
 Drafting Standard: 0

Entity Summary:

Type	Form	Description	Count
104	1	Ellipse	659
106	63	Simple Closed Planar Curve	8
110	0	Line	497
112	0	Parametric Spline Curve	5
124	0	Transformation Matrix	659
212	0	General Note (Simple)	9
230	0	Section Area (Standard Fill)	8
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1
Total			1850

Translation phase

Drawing Entity (404 Form 0) at DE 5, with  
 name = ,  
 size = 3.937500, 6.300000,  
 units = IN,

was processed in the AutoCAD drawing file: I:\9349\D001Q004.dwg

\*\*\* Warning (ACAD\_NEW\_VIEW\_VOLUME\_GENERATED) \*\*\*  
( DE: 1 TF: 410:0 )

A new view volume has been generated for the view with:

XMIN (-4.641649), XMAX (0.401133),  
YMIN (0.456990), YMAX (7.663985),  
ZMIN (-0.688634), ZMAX (0.688634).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
104	1	Ellipse	659	659	0
106	63	Simple Closed Planar Curve	9	9	0
110	0	Line	497	497	0
112	0	Parametric Spline Curve	5	5	0
212	0	General Note (Simple)	9	9	0
230	0	Section Area (Standard Fill)	8	8	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
Totals			1190	1190	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	2
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
LINE	953	0
TEXT	9	0
SOLID	7	0
INSEFT	1	0
POLYLINE	210	0
BLOCK	1	0
Totals	1181	0

=====  
Error Summary:

The following message was issued 659 time(s)  
Entity's start point not on the conic. Value found was  $%.7e$ ,  $%.7e$ .

The following message was issued 658 time(s)  
Entity's End Point not on the conic. Value found was  $%.7e$ ,  $%.7e$ .

The following message was issued 610 time(s)  
Entity has a column which is not a unit vector.

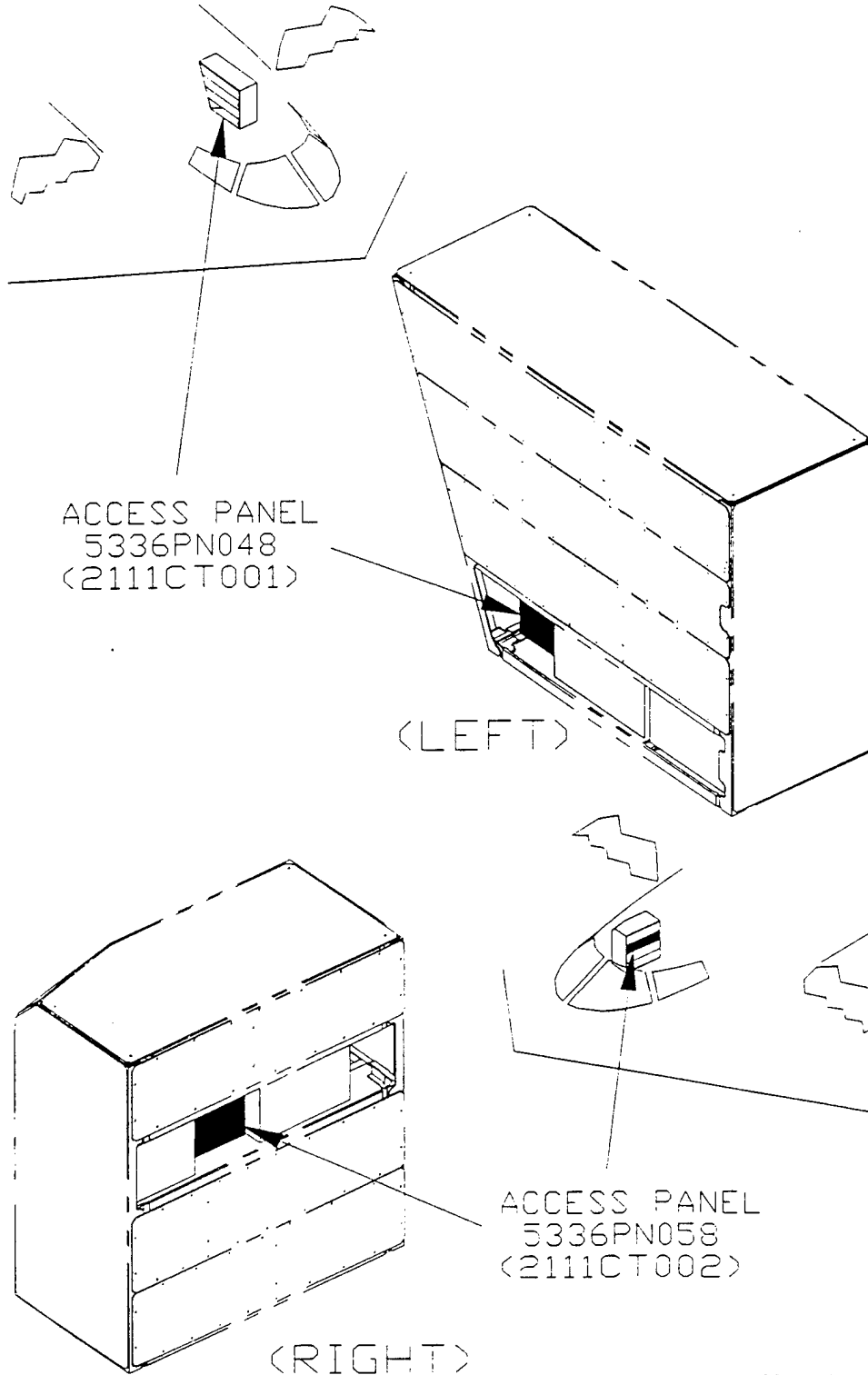
The following message was issued 1 time(s)  
A new view volume has been generated for the view with:  
XMIN (%lf), XMAX (%lf),  
YMIN (%lf), YMAX (%lf),  
ZMIN (%lf), ZMAX (%lf).

Status: 0  
Warning: 1928  
Error: 0  
Fatal: 0

Elapsed Time:

Processor: 00:01:12  
Clock: 00:01:12

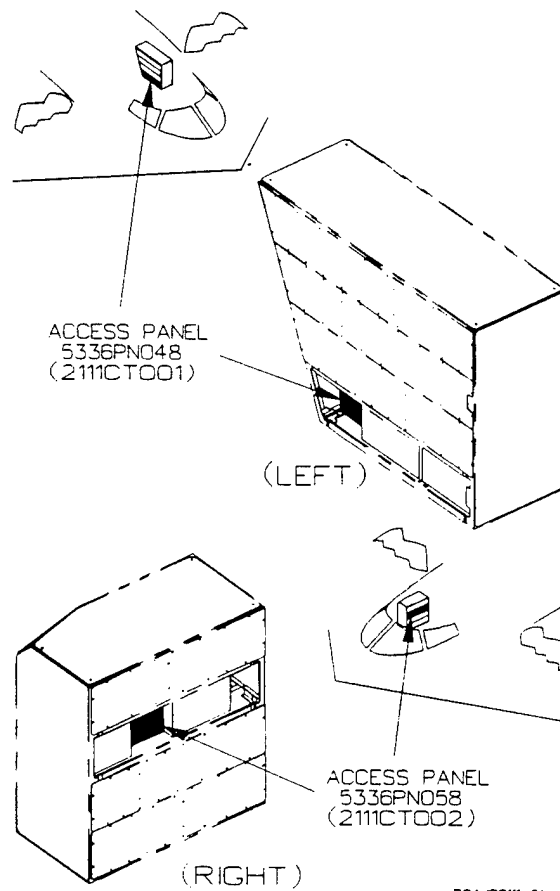
### 10.1.3 Output AutoCAD R12



B2AJG2111-0101A

---

### 10.1.4 Output IGESView



## 10.2 File D001Q005

### 10.2.1 Parser/Verifier Log

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

Input file is /novell/9349/d001q005.igs

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

Today is May 17, 1993 1:19 PM

#### \*\*\* File and Product Name Information \*\*\*

```
File name from sender      = '0101A.gef.igs'  
File creation Date.Time   = '930218.130511'  
Model change Date.Time    = ''  
Author                    = 'NORTHROP B2 ITDS CTB'  
Department                = ''  
Product name from sender  = '0101A.gef.igs'  
Destination product name  = '0101A.gef.igs'
```

#### \*\*\* Parameter Delimiters \*\*\*

```
Delimiter = ','  
Terminator = ';' 
```

#### \*\*\* Originating System Data \*\*\*

```
System ID          = 'ITDS CONVERTER: GEF_IGES'  
Preprocessor version = '1.0'  
Specification version = 6 (IGES 4.0)
```

#### \*\*\* Precision levels \*\*\*

```
Integer bits = 32  
Floating point - Exponent = 38  Mantissa = 6  
Double precision - Exponent = 308  Mantissa = 15
```

#### \*\*\* Global Model Data \*\*\*

```
Model scale          = 1.0000E+00  
Unit flag           = 1
```

---

Units = 'IN'  
 Line weights = 1  
 Maximum line thickness = 3.937490E-03  
 Minimum line thickness = 3.937490E-03  
 CAUTION 2317: Maximum line thickness equal to minimum thickness.  
 Granularity = 1.000000E-03  
 Maximum coordinate = 4.168750E+00

Drafting standard applicable to original data is not specified.

\*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	834
	Blanked	0
Independence:	Independent	830
	Physically Subordinate	1
	Logically Subordinate	3
	Totally Subordinate	0
Entity use:	Geometry	830
	Annotation	4
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	834
	Hierarchy property applies	0
	Not Specified	0

\*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	1	Circular arc
104	1	0	108	Conic arc - ellipse
106	63	0	1	Simple closed planar curve
110	0	0	421	Line
112	0	0	189	Parametric spline curve
124	0	0	108	Transformation matrix
212	0	0	1	General note
230	0	0	1	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	1	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

\*\*\* Entity Count by Level \*\*\*

Level	Count
0	834

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled 834

\*\*\* Line Fonts Used in Data \*\*\*

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
1	-	108	1	-	415	189	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	1	-	-	Phantom
-	-	-	-	-	5	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	108	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

---

\*\*\* Line Widths Used in Data \*\*\*

Weight	Count	Width
Defaulted	834	(0.0039)

\*\*\* Colors Used in Data \*\*\*

Defaulted	118
Black	715
White	1

\*\*\*\*\*  
\*\*\*\*\* ENTITY ANALYSIS \*\*\*\*\*  
\*\*\*\*\*

\*\*\* Entity type: 100

\*\*\* Entity type: 104

WARNING 2265: Start point off conic by 1.336260E-03 at D 969.

WARNING 2039: End point off conic by 1.336260E-03 at D 969.

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

\*\*\* Entity type: 106

\*\*\* Entity type: 110

-- 421 lines averaging 1.199761E-01 units --

\*\*\* Entity type: 112

WARNING 2238: Polynomial segment (4) at D 1343 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1487 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1513 is degenerate.

WARNING 2238: Polynomial segment (0) at D 1537 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1541 is degenerate.

WARNING 2238: Polynomial segment (0) at D 1645 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1647 is degenerate.

\*\*\* Entity type: 124

108 transformation matrices, 108 non-zero translations.

NOTE 2341: 108 matrices contain translation information.

\*\*\* Entity type: 212

---

1 text strings in data file.  
Average text aspect ratio in file is 0.9873866.  
Minimum text aspect ratio in file is 0.9873866.  
Maximum text aspect ratio in file is 0.9873866.

FONTS USED IN FILE

FONT	COUNT	NAME
1	1	Default ASCII Style

\*\*\* Entity type: 230

\*\*\* Entity type: 404

Drawing at D 5 contains 1 views.

Drawing at D 5 contains 0 annotation entities.

\*\*\* Entity type: 406

\*\*\* Entity type: 410

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 \*\*\*

2015: 14 Mathematically incorrect definitions.

2018: 1 Problems with line weight/width display information.

\*\*\* Error Summary \*\*\*

0 fatal errors

0 severe errors

0 errors

14 warnings

1 cautions

0 nitpicks

1 notes

\*\*\* End of Analysis of /novell/9349/d001q005.igs \*\*\*

---

## 10.2.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)

=====  
File: I:/9349/D001Q005.xli

Date: Mon, May 17, 1993

Time: 16:04:28  
=====

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750

Translating from IGES file: I:/9349/D001Q005.IGS

to AutoCAD Drawing: I:\9349\D001Q005.dwg  
=====

Options obtained from: default settings

Curves Approximated to Tolerance of 0.01

Surfaces Approximated to Tolerance of 0.01

Text Font/Style mapping:

IGES Text font	Style Name	ACAD Font
0	SYMBOL0	iges0
1	STANDARD	txt
2	LEROY	txt
3	FUTURA	txt
6	COMP80	txt
12	GOTHICE	gothice
13	GOTHICI	gothici
14	ROMANS	romans
17	ROMANT	romant
18	ROMAND	romand
19	OCR	txt
1001	SYMBOL1	iges1001
1002	SYMBOL2	iges1002
1003	SYMBOL3	iges1003
2001	KANJI	bigfont

IGES Linefont/AutoCAD Linetype mapping

IGES Line Font	AutoCAD linetype	Shape file
0	BYLAYER	
1	CONTINUOUS	
2	DASHED	acad.lin
3	PHANTOM	acad.lin
4	CENTER	acad.lin

5

DOT

acad.lin

=====  
Parse phase

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*  
(DE 853, TF 100:0) Entity's radii are not equal. Start point radius:  
2.8098244e-003. Terminate point radius: 2.9871534e-003.

Action taken: Start point moved 8.8664518e-005 units from -2.5998840e+000,  
2.5412147e+000 to -2.5999726e+000, 2.5412116e+000. Terminate point moved  
8.8664518e-005 units from -2.5972404e+000, 2.5383308e+000 to -2.5972356e+000,  
2.5384193e+000.

\*\*\* Warning (IEVM\_BAD\_VECTOR\_124) \*\*\*  
(DE 855, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

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

\*\*\* Warning (IEVM\_BAD\_CONTINUITY\_112) \*\*\*  
(DE 1287, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.  
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

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

\*\*\* Warning (IEVM\_BAD\_CONTINUITY\_112) \*\*\*  
(DE 1331, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.  
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

=====  
Start Section:

CONFORMANCE:  
MIL-D-28000 Amendment1, 20 December 1988  
Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:  
0101A.gef.igs

Global Section:

Parameter Delimiter: ,  
 Record Delimiter: ;  
 Sending Product ID: 0101A.gef.igs  
 File Name: 0101A.gef.igs  
 System ID: ITDS CONVERTER: GEF\_IGES  
 Preprocessor Version: 1.0  
 Size of Integer: 32  
 Sgl. Precision Mag: 38  
 Sgl. Precision Sig: 6  
 Dbl. Precision Mag: 308  
 Dbl. Precision Sig: 15  
 Receiving Product ID: 0101A.gef.igs  
 Model Space Scale: 1.000000  
 Unit Flag: 1  
 Unit String: IN  
 # of Line Weights: 1  
 Maximum Line Width: 0.003937  
 Creation Date: 02/18/93 13:05:11  
 Minimum Resolution: 0.001000  
 Maximum Coordinate: 4.168750  
 Author: NORTHROP B2 ITDS CTB  
 Organization:  
 IGES Version Number: 6  
 Drafting Standard: 0

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	1
104	1	Ellipse	108
106	63	Simple Closed Planar Curve	1
110	0	Line	421
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	108
212	0	General Note (Simple)	1
230	0	Section Area (Standard Fill)	1
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	1
410	0	View	1
Total			834

Translation phase

Drawing Entity (404 Form 0) at DE 5, with

name = ,  
size = 3.937500, 3.150000,  
units = IN,

was processed in the AutoCAD drawing file: I:\9349\D001Q005.dwg

\*\*\* Warning (ACAD\_NEW\_VIEW\_VOLUME\_GENERATED) \*\*\*  
( DE: 1 TF: 410:0 )

A new view volume has been generated for the view with:

XMIN (-4.497428), XMAX (0.222914),  
YMIN (0.675154), YMAX (4.418330),  
ZMIN (-0.470488), ZMAX (0.470488).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
100	0	Circular Arc	1	1	0
104	1	Ellipse	108	108	0
106	63	Simple Closed Planar Curve	2	2	0
110	0	Line	421	421	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	1	1	0
230	0	Section Area (Standard Fill)	1	1	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
Totals			726	726	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	1
Total			1

AutoCAD Entity Summary

Entity	Created	Errors
LINE	509	0
TEXT	1	0
ARC	1	0

---

INSERT	1	0
POLYLINE	211	0
BLOCK	1	0
Totals	=====	=====
	724	0

=====  
Error Summary:

The following message was issued 1 time(s)  
Entity's radii are not equal. Start point radius: %.7e. Terminate point  
radius: %.7e.

The following message was issued 108 time(s)  
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 108 time(s)  
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 162 time(s)  
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of  
Continuity calculated to be %d.

The following message was issued 106 time(s)  
Entity has a column which is not a unit vector.

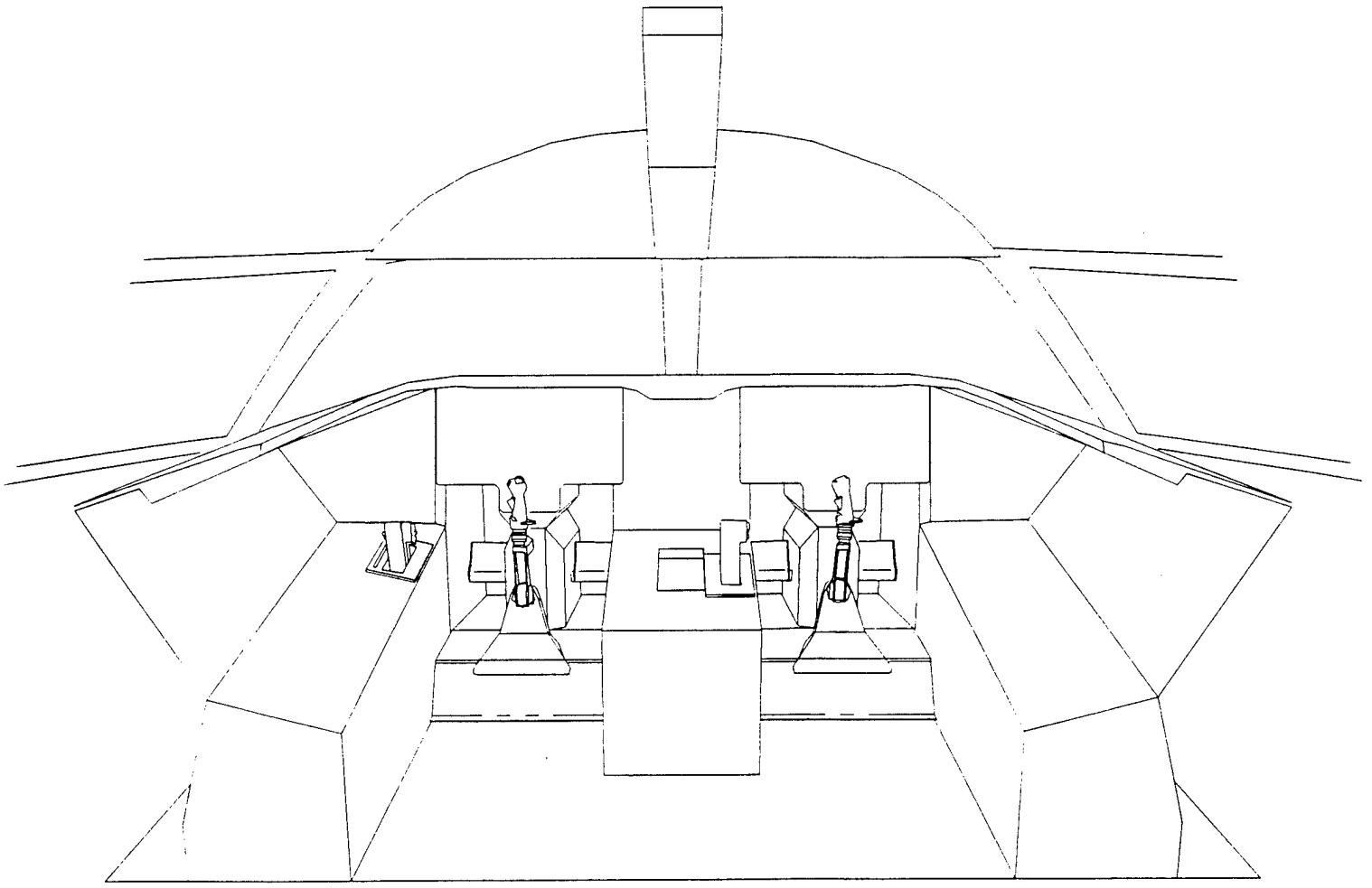
The following message was issued 1 time(s)  
A new view volume has been generated for the view with:  
XMIN (%lf), XMAX (%lf),  
YMIN (%lf), YMAX (%lf),  
ZMIN (%lf), ZMAX (%lf).

Status: 0  
Warning: 486  
Error: 0  
Fatal: 0

Elapsed Time:

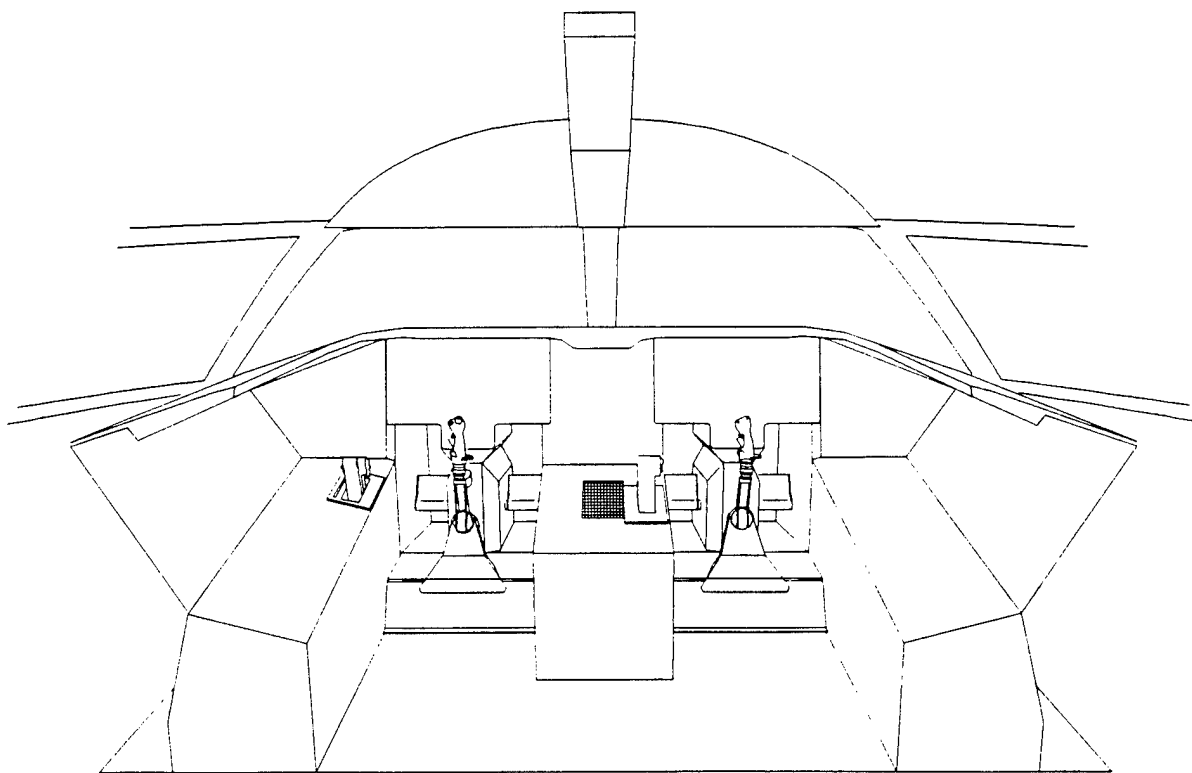
Processor: 00:00:43  
Clock: 00:00:44

### 10.2.3 Output AutoCAD R12



B2AJG2112-0101A

## 10.2.4 Output IGESView



R2A 102112-0101A

## 10.3 File D001Q006

### 10.3.1 Parser/Verifier Log

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

Input file is /novell/9349/d001q006.igs

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

Today is May 17, 1993 1:30 PM

\*\*\* File and Product Name Information \*\*\*

```
File name from sender      = '0109C.gef.igs'  
File creation Date.Time   = '930218.130525'  
Model change Date.Time   = ''  
Author                    = 'NORTHROP B2 ITDS CTB'  
Department                = ''  
Product name from sender  = '0109C.gef.igs'  
Destination product name = '0109C.gef.igs'
```

\*\*\* Parameter Delimiters \*\*\*

```
Delimiter = ','  
Terminator = ';' 
```

\*\*\* Originating System Data \*\*\*

```
System ID          = 'ITDS CONVERTER: GEF_IGES'  
Preprocessor version = '1.0'  
Specification version = 6 (IGES 4.0)
```

\*\*\* Precision levels \*\*\*

```
Integer bits = 32  
Floating point - Exponent = 38  Mantissa = 6  
Double precision - Exponent = 308  Mantissa = 15
```

\*\*\* Global Model Data \*\*\*

```
Model scale          = 1.0000E+00  
Unit flag            = 1
```

---

Units = 'IN'  
 Line weights = 1  
 Maximum line thickness = 6.300000E-03  
 Minimum line thickness = 6.300000E-03

CAUTION 2317: Maximum line thickness equal to minimum thickness.

Granularity = 1.000000E-03  
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

\*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	1432
	Blanked	0
Independence:	Independent	1422
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	15
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1432
	Hierarchy property applies	0
	Not Specified	0

\*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	7	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

\*\*\* Entity Count by Level \*\*\*

Level	Count
0	1432

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled 1432

\*\*\* Line Fonts Used in Data \*\*\*

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

---

\*\*\* Line Widths Used in Data \*\*\*

Weight	Count	Width
Defaulted	1432	(0.0063)

\*\*\* Colors Used in Data \*\*\*

Defaulted	647
Black	778
White	7

\*\*\*\*\*  
\*\*\*\*\* ENTITY ANALYSIS \*\*\*\*\*  
\*\*\*\*\*

\*\*\* Entity type: 100

\*\*\* Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D 953.  
WARNING 2039: End point off conic by 4.023317E-03 at D 953.

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

WARNING 2265: Messages regarding invalid start point suppressed.  
WARNING 2039: Messages regarding conic end points suppressed.

\*\*\* Entity type: 106

\*\*\* Entity type: 110

-- 676 lines averaging 1.383460E-01 units --

\*\*\* Entity type: 112

WARNING 2238: Polynomial segment (0) at D 1345 is degenerate.  
WARNING 2238: Polynomial segment (1) at D 1423 is degenerate.  
WARNING 2238: Polynomial segment (1) at D 1561 is degenerate.  
WARNING 2238: Polynomial segment (0) at D 1563 is degenerate.  
WARNING 2238: Polynomial segment (0) at D 1645 is degenerate.

\*\*\* Entity type: 124

266 transformation matrices, 266 non-zero translations.  
NOTE 2341: 266 matrices contain translation information.

\*\*\* Entity type: 212

7 text strings in data file.  
Average text aspect ratio in file is 0.9608803.  
Minimum text aspect ratio in file is 0.8928572.  
Maximum text aspect ratio in file is 0.9923470.

FONTs USED IN FILE

FONT	COUNT	NAME
1	7	Default ASCII Style

\*\*\* Entity type: 230

\*\*\* Entity type: 404

Drawing at D 5 contains 1 views.  
Drawing at D 5 contains 0 annotation entities.

\*\*\* Entity type: 406

\*\*\* Entity type: 410

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 \*\*\*

2015: 39 Mathematically incorrect definitions.  
2018: 1 Problems with line weight/width display information.

\*\*\* Error Summary \*\*\*

0 fatal errors  
0 severe errors  
0 errors  
39 warnings  
1 cautions  
0 nitpicks  
1 notes

\*\*\* End of Analysis of /novell/9349/d001q006.igs \*\*\*

---

---

## 10.3.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)

=====  
File: I:/9349/D001Q006.xli

Date: Mon, May 17, 1993

Time: 16:05:19  
=====

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750

Translating from IGES file: I:/9349/D001Q006.IGS

to AutoCAD Drawing: I:\9349\D001Q006.dwg  
=====

Options obtained from: default settings

Curves Approximated to Tolerance of 0.01

Surfaces Approximated to Tolerance of 0.01

Text Font/Style mapping:

IGES Text font	Style Name	ACAD Font
0	SYMBOL0	iges0
1	STANDARD	txt
2	LEROY	txt
3	FUTURA	txt
6	COMP80	txt
12	GOTHICE	gothice
13	GOTHICI	gothici
14	ROMANS	romans
17	ROMANT	romant
18	ROMAND	romand
19	OCR	txt
1001	SYMBOL1	iges1001
1002	SYMBOL2	iges1002
1003	SYMBOL3	iges1003
2001	KANJI	bigfont

IGES Linefont/AutoCAD Linetype mapping

IGES Line Font	AutoCAD linetype	Shape file
0	BYLAYER	
1	CONTINUOUS	
2	DASHED	acad.lin
3	PHANTOM	acad.lin

---

4	CENTER	acad.lin
5	DOT	acad.lin

=====  
Parse phase

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 893, TF 100:0) Entity's radii are not equal. Start point radius:  
2.8024447e-003. Terminate point radius: 3.3702065e-003.

Action taken: Start point moved 2.8388087e-004 units from -2.5695066e+000,  
5.6756716e+000 to -2.5697890e+000, 5.6756419e+000. Terminate point moved  
2.8388087e-004 units from -2.5668151e+000, 5.6725955e+000 to -2.5668071e+000,  
5.6728793e+000.

\*\*\* Warning (IEVM\_BAD\_VECTOR\_124) \*\*\*

(DE 895, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

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

\*\*\* Warning (IEVM\_BAD\_CONTINUITY\_112) \*\*\*

(DE 1327, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.  
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

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

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 2213, TF 100:0) Entity's radii are not equal. Start point radius:  
1.4855999e-002. Terminate point radius: 1.5315735e-002.

Action taken: Start point moved 2.2986790e-004 units from -1.9915709e+000,  
3.8937991e+000 to -1.9913455e+000, 3.8938438e+000. Terminate point moved  
2.2986790e-004 units from -2.0204101e+000, 3.8853395e+000 to -2.0201959e+000,  
3.8854231e+000.

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

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 2231, TF 100:0) Entity's radii are not equal. Start point radius:  
1.4816048e-002. Terminate point radius: 1.5270259e-002.

Action taken: Start point moved 2.2710550e-004 units from -1.5851316e+000,

---

3.9949281e+000 to -1.5849080e+000, 3.9949678e+000. Terminate point moved  
2.2710550e-004 units from -1.6139707e+000, 3.9868531e+000 to -1.6137588e+000,  
3.9869347e+000.

=====  
Start Section:

CONFORMANCE:

MIL-D-28000 Amendment1, 20 December 1988  
Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:

0109C.gef.igs

Global Section:

Parameter Delimiter: ,  
Record Delimiter: ;  
Sending Product ID: 0109C.gef.igs  
File Name: 0109C.gef.igs  
System ID: ITDS CONVERTER: GEF\_IGES  
Preprocessor Version: 1.0  
Size of Integer: 32  
Sgl. Precision Mag: 38  
Sgl. Precision Sig: 6  
Dbl. Precision Mag: 308  
Dbl. Precision Sig: 15  
Receiving Product ID: 0109C.gef.igs  
Model Space Scale: 1.000000  
Unit Flag: 1  
Unit String: IN  
# of Line Weights: 1  
Maximum Line Width: 0.006300  
Creation Date: 02/18/93 10:05:25  
Minimum Resolution: 0.001000  
Maximum Coordinate: 7.243750  
Author: NORTHROP B2 ITDS CTB  
Organization:  
IGES Version Number: 6  
Drafting Standard: 0

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	11
104	1	Ellipse	266

106	63	Simple Closed Planar Curve	6
110	0	Line	676
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	266
212	0	General Note (Simple)	7
230	0	Section Area (Standard Fill)	6
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1
-----			
Total			1432
=====			

Translation phase

Drawing Entity (404 Form 0) at DE 5, with

name = ,  
size = 3.937500, 6.300000,  
units = IN,

was processed in the AutoCAD drawing file: I:\9349\D001Q006.dwg

\*\*\* Warning (ACAD\_NEW\_VIEW\_VOLUME\_GENERATED) \*\*\*

( DE: 1 TF: 410:0 )

A new view volume has been generated for the view with:

XMIN (-4.641312), XMAX (0.395926),  
YMIN (0.452713), YMAX (7.727481),  
ZMIN (-0.692911), ZMAX (0.692911).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
=====	=====	=====	=====	=====	=====
100	0	Circular Arc	11	11	0
104	1	Ellipse	266	266	0
106	63	Simple Closed Planar Curve	7	7	0
110	0	Line	676	676	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	7	7	0
230	0	Section Area (Standard Fill)	6	6	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
			=====	=====	=====
Totals			1165	1165	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	2
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
LINE	857	0
TEXT	7	0
ARC	11	0
SOLID	5	0
INSERT	1	0
POLYLINE	288	0
BLOCK	1	0
Totals	1170	0

Error Summary:

The following message was issued 11 time(s)  
Entity's radii are not equal. Start point radius: %.7e. Terminate point radius: %.7e.

The following message was issued 265 time(s)  
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 266 time(s)  
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 161 time(s)  
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of Continuity calculated to be %d.

The following message was issued 261 time(s)  
Entity has a column which is not a unit vector.

The following message was issued 1 time(s)  
A new view volume has been generated for the view with:  
XMIN (%lf), XMAX (%lf),  
YMIN (%lf), YMAX (%lf),  
ZMIN (%lf), ZMAX (%lf).

AFCTN Test Report  
94-017

AFCTB Test Report  
93-049

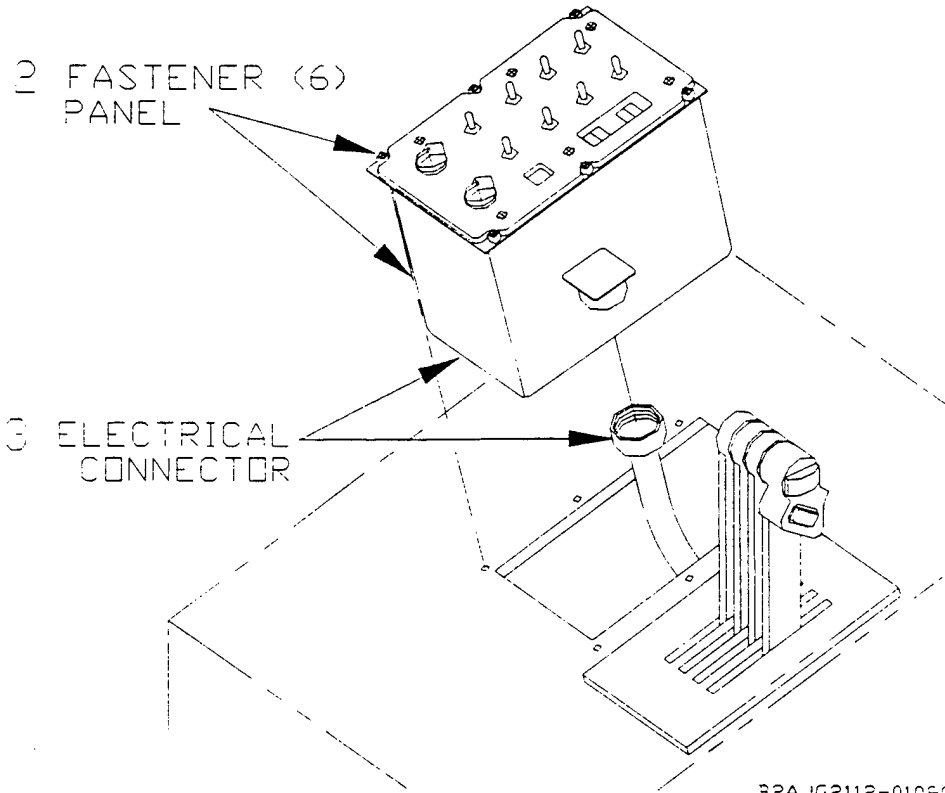
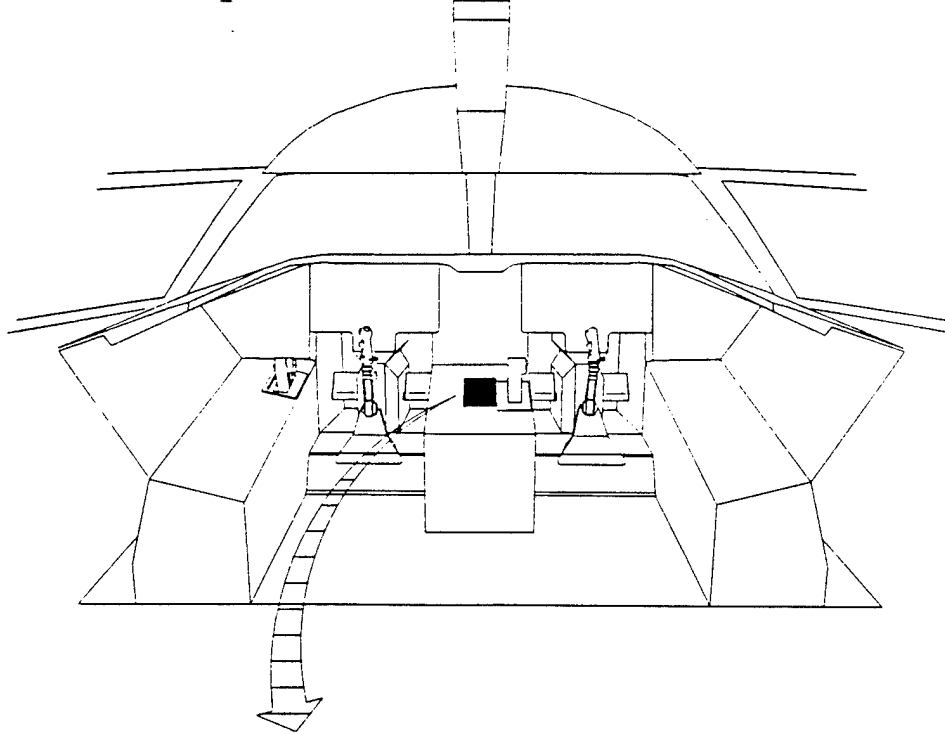
---

Status: 0  
Warning: 965  
Error: 0  
Fatal: 0

Elapsed Time:

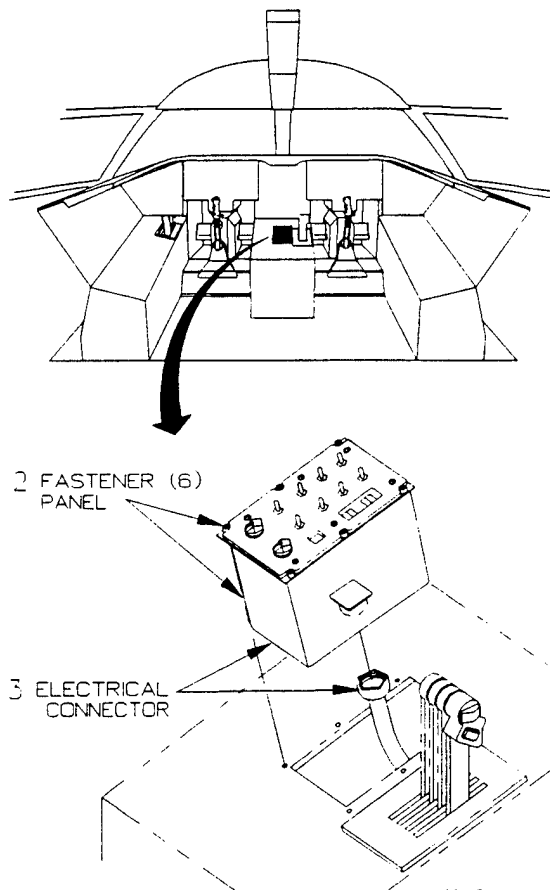
Processor: 00:01:03  
Clock: 00:01:04

### 10.3.3 Output AutoCAD R12



32AJG2112-0109C

### 10.3.4 Output IGESView



## 10.4 File D001Q007

### 10.4.1 Parser/Verifier Log

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

Input file is /novell/9349/d001q007.igs

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

Today is May 17, 1993 1:31 PM

\*\*\* File and Product Name Information \*\*\*

```
File name from sender      = '0110B.gef.igs'  
File creation Date.Time   = '930218.130543'  
Model change Date.Time    = ''  
Author                    = 'NORTHROP B2 ITDS CTB'  
Department                = ''  
Product name from sender  = '0110B.gef.igs'  
Destination product name = '0110B.gef.igs'
```

\*\*\* Parameter Delimiters \*\*\*

```
Delimiter = ','  
Terminator = ';' 
```

\*\*\* Originating System Data \*\*\*

```
System ID          = 'ITDS CONVERTER: GEF_IGES'  
Preprocessor version = '1.0'  
Specification version = 6 (IGES 4.0)
```

\*\*\* Precision levels \*\*\*

```
Integer bits = 32  
Floating point - Exponent = 38  Mantissa = 6  
Double precision - Exponent = 308  Mantissa = 15
```

\*\*\* Global Model Data \*\*\*

```
Model scale          = 1.0000E+00  
Unit flag           = 1
```

---

Units = 'IN'  
 Line weights = 1  
 Maximum line thickness = 6.300000E-03  
 Minimum line thickness = 6.300000E-03  
 CAUTION 2317: Maximum line thickness equal to minimum thickness.  
 Granularity = 1.000000E-03  
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

\*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	1433
	Blanked	0
Independence:	Independent	1423
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	16
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1433
	Hierarchy property applies	0
	Not Specified	0

\*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
-----	----	-----	-----	----
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	8	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

\*\*\* Entity Count by Level \*\*\*

Level	Count
0	1433

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled 1433

\*\*\* Line Fonts Used in Data \*\*\*

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

---

\*\*\* Line Widths Used in Data \*\*\*

Weight	Count	Width
Defaulted	1433	(0.0063)

\*\*\* Colors Used in Data \*\*\*

Defaulted	647
Black	778
White	8

\*\*\*\*\*  
\*\*\*\*\* ENTITY ANALYSIS \*\*\*\*\*  
\*\*\*\*\*

\*\*\* Entity type: 100

\*\*\* Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D 955.

WARNING 2039: End point off conic by 4.023317E-03 at D 955.

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

WARNING 2265: Messages regarding invalid start point suppressed.

WARNING 2039: Messages regarding conic end points suppressed.

\*\*\* Entity type: 106

\*\*\* Entity type: 110

-- 676 lines averaging 1.380248E-01 units --

\*\*\* Entity type: 112

WARNING 2238: Polynomial segment (0) at D 1351 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1421 is degenerate.

WARNING 2238: Polynomial segment (0) at D 1467 is degenerate.

WARNING 2238: Polynomial segment (1) at D 1567 is degenerate.

WARNING 2238: Polynomial segment (0) at D 1627 is degenerate.

\*\*\* Entity type: 124

266 transformation matrices, 266 non-zero translations.

NOTE 2341: 266 matrices contain translation information.

\*\*\* Entity type: 212

8 text strings in data file.  
Average text aspect ratio in file is 0.9635382.  
Minimum text aspect ratio in file is 0.8928572.  
Maximum text aspect ratio in file is 0.9923470.

FONTS USED IN FILE

FONT	COUNT	NAME
1	8	Default ASCII Style

\*\*\* Entity type: 230

\*\*\* Entity type: 404

Drawing at D 5 contains 1 views.  
Drawing at D 5 contains 0 annotation entities.

\*\*\* Entity type: 406

\*\*\* Entity type: 410

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 \*\*\*

2015: 39 Mathematically incorrect definitions.  
2018: 1 Problems with line weight/width display information.

\*\*\* Error Summary \*\*\*

0 fatal errors  
0 severe errors  
0 errors  
39 warnings  
1 cautions  
0 nitpicks  
1 notes

\*\*\* End of Analysis of /novell/9349/d001q007.igs \*\*\*

---

---

## 10.4.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)

=====  
File: I:/9349/D001Q007.xli

Date: Mon, May 17, 1993

Time: 16:06:29  
=====

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750

Translating from IGES file: I:/9349/D001Q007.IGS  
to AutoCAD Drawing: I:\9349\D001Q007.dwg

=====  
Options obtained from: default settings

Curves Approximated to Tolerance of 0.01

Surfaces Approximated to Tolerance of 0.01

Text Font/Style mapping:

IGES Text font	Style Name	ACAD Font
0	SYMBOL0	iges0
1	STANDARD	txt
2	LEROY	txt
3	FUTURA	txt
6	COMP80	txt
12	GOTHICE	gothice
13	GOTHICI	gothici
14	ROMANS	romans
17	ROMANT	romant
18	ROMAND	romand
19	OCR	txt
1001	SYMBOL1	iges1001
1002	SYMBOL2	iges1002
1003	SYMBOL3	iges1003
2001	KANJI	bigfont

IGES Linefont/AutoCAD Linetype mapping

IGES Line Font	AutoCAD linetype	Shape file
0	BYLAYER	
1	CONTINUOUS	
2	DASHED	acad.lin
3	PHANTOM	acad.lin
4	CENTER	acad.lin

5

DOT

acad.lin

=====  
Parse phase

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 895, TF 100:0) Entity's radii are not equal. Start point radius:  
2.8024447e-003. Terminate point radius: 3.3702065e-003.

Action taken: Start point moved 2.8388087e-004 units from -2.5695066e+000,  
5.6756716e+000 to -2.5697890e+000, 5.6756419e+000. Terminate point moved  
2.8388087e-004 units from -2.5668151e+000, 5.6725955e+000 to -2.5668071e+000,  
5.6728793e+000.

\*\*\* Warning (IEVM\_BAD\_VECTOR\_124) \*\*\*

(DE 897, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

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

\*\*\* Warning (IEVM\_BAD\_CONTINUITY\_112) \*\*\*

(DE 1329, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.  
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

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

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 2215, TF 100:0) Entity's radii are not equal. Start point radius:  
7.4272813e-001. Terminate point radius: 7.4310435e-001.

Action taken: Start point moved 1.8810613e-004 units from -1.4974608e+000,  
2.2745790e+000 to -1.4976433e+000, 2.2745335e+000. Terminate point moved  
1.8810613e-004 units from -1.3636473e+000, 1.9984925e+000 to -1.3634988e+000,  
1.9986079e+000.

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

\*\*\* Warning (IEVM\_RADII\_NOT\_EQUAL\_100) \*\*\*

(DE 2233, TF 100:0) Entity's radii are not equal. Start point radius:  
1.5103175e-002. Terminate point radius: 1.5428022e-002.

Action taken: Start point moved 1.6242327e-004 units from -2.1480713e+000,  
3.7761354e+000 to -2.1479120e+000, 3.7761672e+000. Terminate point moved

---

1.6242327e-004 units from -2.1772947e+000, 3.7676759e+000 to -2.1771430e+000,  
3.7677338e+000.

=====  
Start Section:

CONFORMANCE:

MIL-D-28000 Amendment1, 20 December 1988  
Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:

0110B.gef.igs

Global Section:

Parameter Delimiter: ,  
Record Delimiter: ;  
Sending Product ID: 0110B.gef.igs  
File Name: 0110B.gef.igs  
System ID: ITDS CONVERTER: GEF\_IGES  
Preprocessor Version: 1.0  
Size of Integer: 32  
Sgl. Precision Mag: 38  
Sgl. Precision Sig: 6  
Dbl. Precision Mag: 308  
Dbl. Precision Sig: 15  
Receiving Product ID: 0110B.gef.igs  
Model Space Scale: 1.000000  
Unit Flag: 1  
Unit String: IN  
# of Line Weights: 1  
Maximum Line Width: 0.006300  
Creation Date: 02/18/93 13:05:43  
Minimum Resolution: 0.001000  
Maximum Coordinate: 7.243750  
Author: NORTHROP B2 ITDS CTB  
Organization:  
IGES Version Number: 6  
Drafting Standard: 0

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	11
104	1	Ellipse	266
106	63	Simple Closed Planar Curve	6

110	0	Line	676
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	266
212	0	General Note (Simple)	8
230	0	Section Area (Standard Fill)	6
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1

-----  
Total 1433  
 =====

Translation phase

Drawing Entity (404 Form 0) at DE 5, with

name = ,  
 size = 3.937500, 6.300000,  
 units = IN,

was processed in the AutoCAD drawing file: I:\9349\D001Q007.dwg

\*\*\* Warning (ACAD\_NEW\_VIEW\_VOLUME\_GENERATED) \*\*\*  
 ( DE: 1 TF: 410:0 )

A new view volume has been generated for the view with:

XMIN (-4.657909), XMAX (0.396758),  
 YMIN (0.451881), YMAX (7.728314),  
 ZMIN (-0.693743), ZMAX (0.693743).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
100	0	Circular Arc	11	11	0
104	1	Ellipse	266	266	0
106	63	Simple Closed Planar Curve	7	7	0
110	0	Line	676	676	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	8	8	0
230	0	Section Area (Standard Fill)	6	6	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	-	1	0
Totals			1166	1166	0

Unsupported IGES Entity Summary

---

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	2
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
LINE	858	0
TEXT	8	0
ARC	11	0
SOLID	5	0
INSERT	1	0
POLYLINE	287	0
BLOCK	1	0
Totals	1171	0

Error Summary:

The following message was issued 11 time(s)  
Entity's radii are not equal. Start point radius: %.7e. Terminate point radius: %.7e.

The following message was issued 265 time(s)  
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 265 time(s)  
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 161 time(s)  
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of Continuity calculated to be %d.

The following message was issued 261 time(s)  
Entity has a column which is not a unit vector.

The following message was issued 1 time(s)  
A new view volume has been generated for the view with:  
XMIN (%lf), XMAX (%lf),  
YMIN (%lf), YMAX (%lf),  
ZMIN (%lf), ZMAX (%lf).

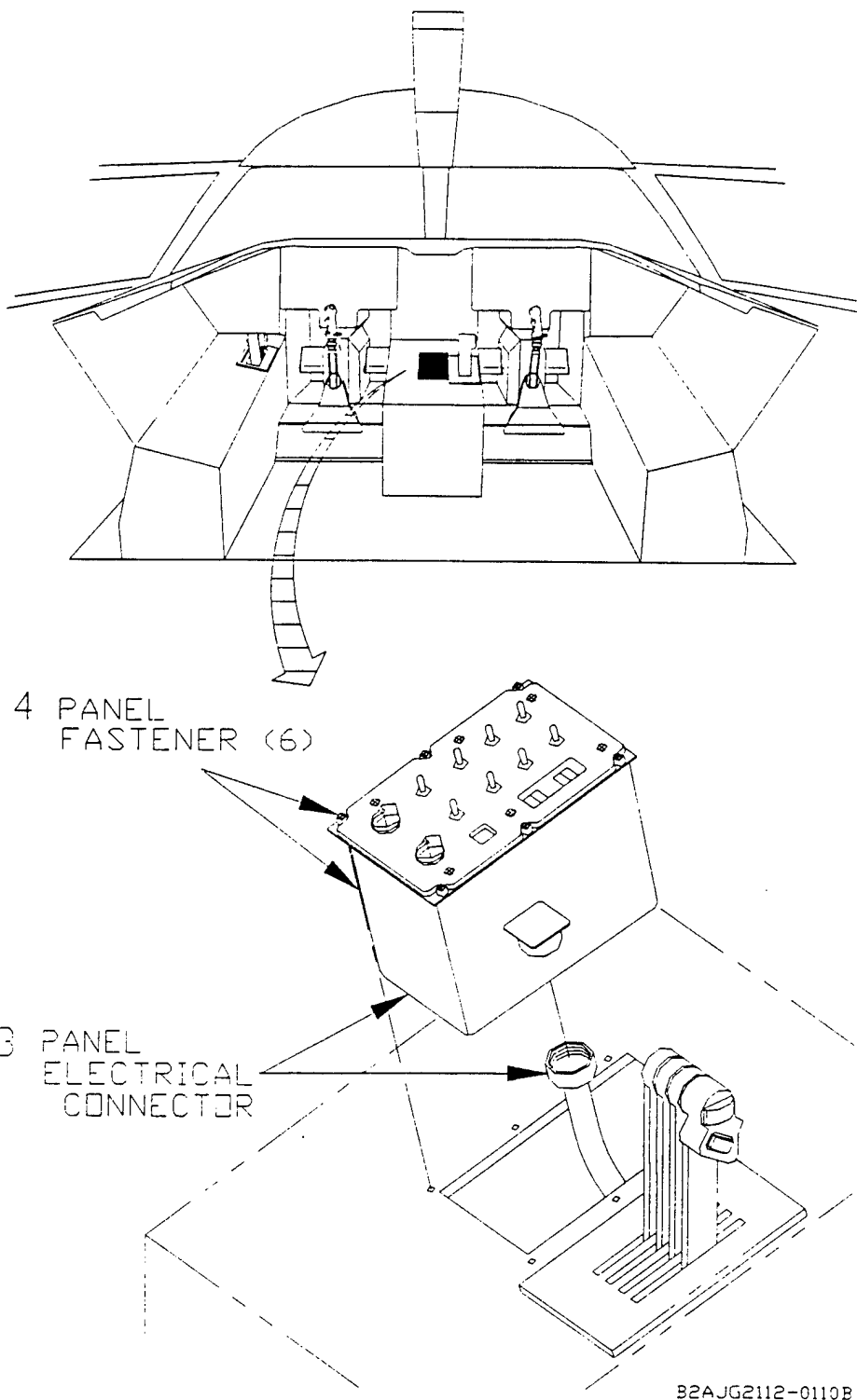
Status: 0

Warning: 964  
Error: 0  
Fatal: 0

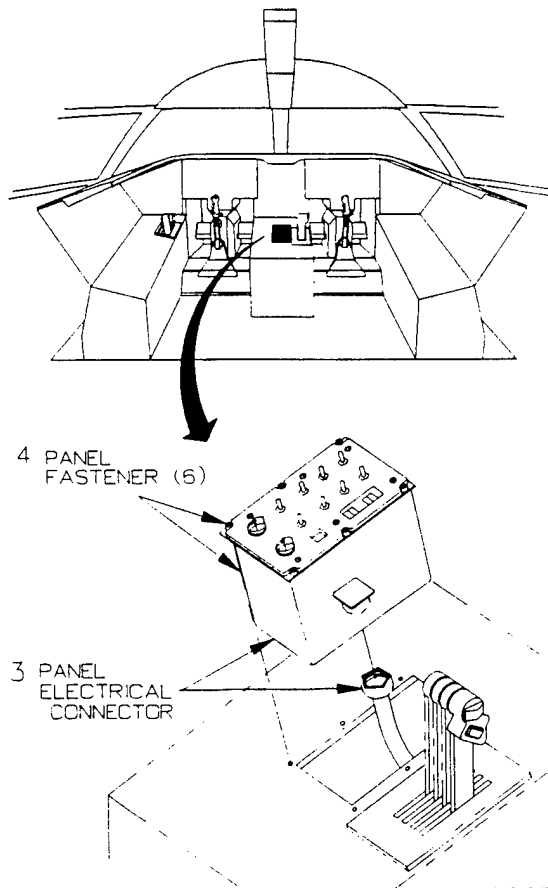
Elapsed Time:

Processor: 00:01:03  
Clock: 00:01:04

### 10.4.3 Output AutoCAD R12



### 10.4.4 Output IGESView



## 11. Appendix C - Detailed SGML Analysis

### 11.1 ArbortText Parser Log

Reported errors are the same as reported by the Exoterica xvalid parser.

### 11.2 Exoterica Validator Parser

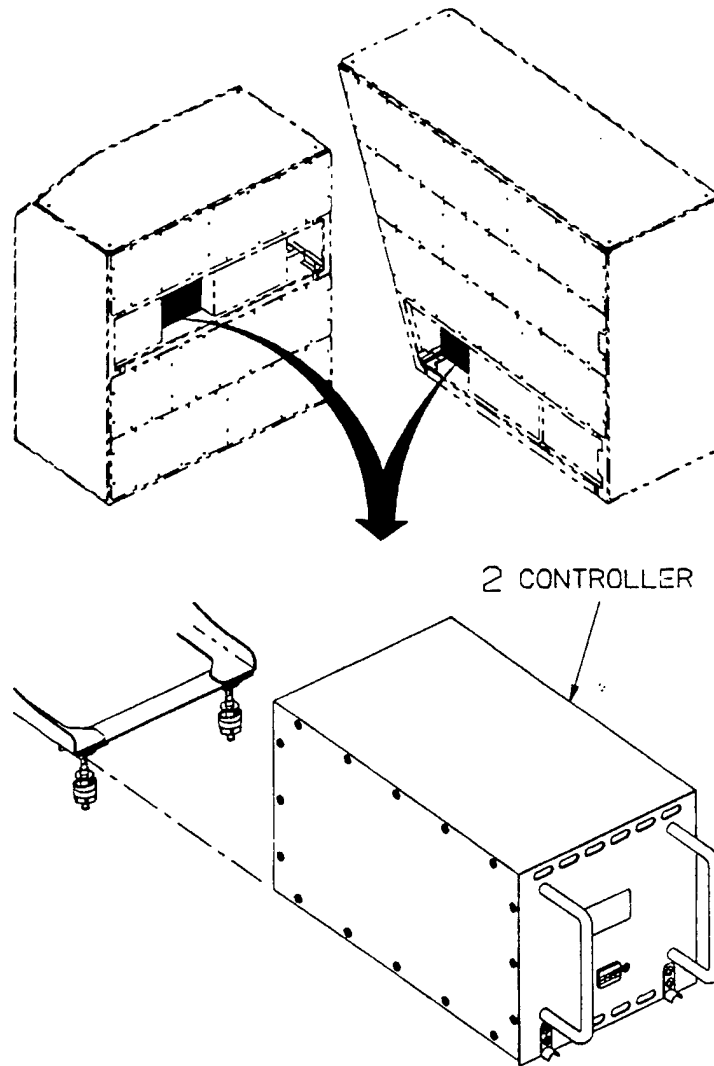
```
<!-- Entity has no name, system id or public id in formal file -->.
<!-- **Warning**:
  An element with mixed content should permit data characters ("#PCDATA")
  everywhere.
  The element being declared is "ENTRY".
  (((#PCDATA|xref|change|emphasis|hcp|hci|ocp|
  ^^^^^^
-->
<!-- **Warning**:
  An element with mixed content should permit data characters ("#PCDATA")
  everywhere.
  The element being declared is "NOTICE".
  (((#PCDATA|xref|change|emphasis|hcp|hci|ocp|
  ^^^^^^
-->
<!-- **Warning** in "9349.sgm", line 424:
  An element with mixed content should permit data characters ("#PCDATA")
  everywhere.
  The element being declared is "RESULT".
  <!ELEMENT result      - o (%text; ,faultcode?)>
                                     /\
-->
<!-- **Warning** in "9349.sgm", line 1158:
  There is no element with an IDREF or IDREFS attribute value equal to a
  specified ID value.
  The unreferenced ID attribute value is "TOC".
-->
<!-- 4 warnings reported. -->
```

---

## 12. Appendix D - Detailed Raster Analysis

### 12.1 File D001R009

#### 12.1.1 Output HiJaak for Windows



(TYPICAL)

B2AJG2111-01040

## 13. Appendix E - Detailed CGM Analysis

### 13.1 File D001C008

#### 13.1.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer  
Copyright 1988-91 CGM Technology Software  
Execution Date: 05/17/93 Time: 12:04:43

Metafile Examined : i:\9349\d001c008.cgm

Pictures Examined : All  
Elements Examined : All  
Bytes Examined : All

=====  
Trace Report  
=====

Tracing not selected.

=====  
CGM Conformance Violation Report  
=====

No Errors Detected

=====  
CALC 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: 05/17/93 Time: 12:04:49

Name of CGM under test: i:\9349\d001c008.cgm  
Encoding : Binary

Pictures Examined : All  
Elements Examined : All  
Bytes Examined : All

BEGIN METAFILE string : "0103D.cgm"  
METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 154; string contains: "Picture 1"

Private values encountered in 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  
2192 Elements Tested  
48616 Octets Tested

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

===== End of Conformance Report =====

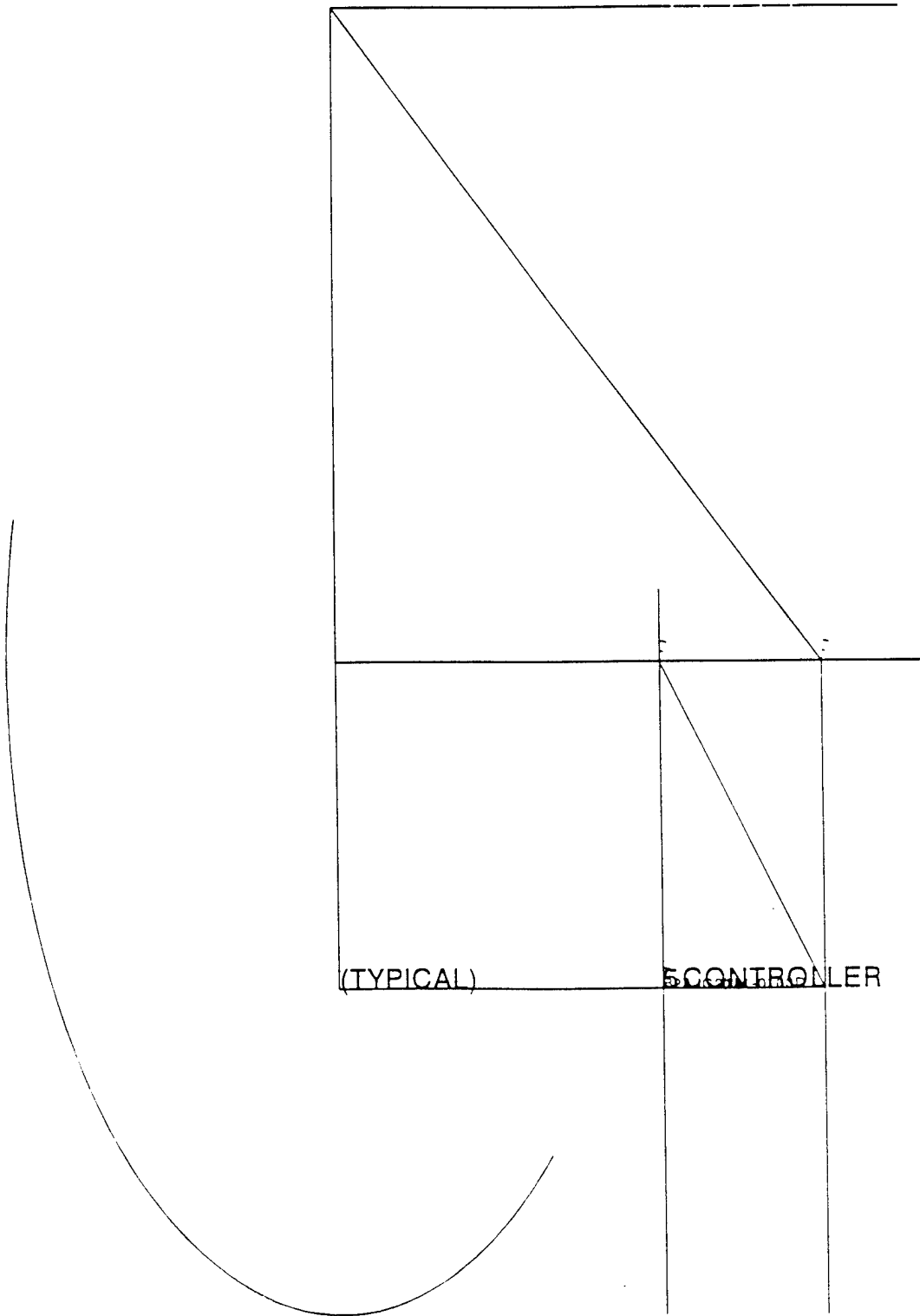
### 13.1.2 validegmm Log

Analysis for file c008.cgm using table table  
ERROR: illegal in this state (2), std B  
ERROR: required precursor (0, 4) not yet seen  
(14.1, 0) (3, 6, 2) Clip Indicator OFF  
(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, 3) occurred 1 time  
(1, 4) occurred 1 time  
(1, 5) occurred 1 time  
(1, 6) occurred 1 time  
(1, 7) occurred 1 time  
(1, 8) occurred 1 time  
(1, 9) occurred 1 time  
(1, 10) occurred 1 time  
(1, 11) occurred 1 time  
(1, 12) occurred 1 time  
(1, 13) occurred 1 time  
(2, 2) occurred 1 time

---

(2, 6) occurred 1 time  
(2, 7) occurred 1 time  
(3, 2) occurred 1 time  
(3, 6) occurred 1 time  
(3, 6) occurred illegally 1 time  
(4, 1) occurred 624 times  
(4, 4) occurred 5 times  
(4, 7) occurred 5 times  
(4, 15) occurred 20 times  
(4, 17) occurred 165 times  
(4, 18) occurred 565 times  
(5, 2) occurred 99 times  
(5, 3) occurred 99 times  
(5, 4) occurred 99 times  
(5, 10) occurred 1 time  
(5, 12) occurred 3 times  
(5, 13) occurred 3 times  
(5, 14) occurred 1 time  
(5, 15) occurred 4 times  
(5, 16) occurred 4 times  
(5, 17) occurred 1 time  
(5, 18) occurred 1 time  
(5, 22) occurred 95 times  
(5, 23) occurred 2 times  
(5, 27) occurred 93 times  
(5, 28) occurred 93 times  
(5, 29) occurred 93 times  
(5, 30) occurred 95 times  
(5, 34) occurred 1 time

### 13.1.3 Output Harvard Graphics



### 13.1.4 Output cgm2draw/IslandDraw

