

## AFCTN Test Report 93-062

**AFCTB-ID 93-016** 









**Technical Publication Transfer** 

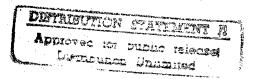
Using:

Northrop Corporation's Data

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

**Quick Short Test Report** 

03 March 1993



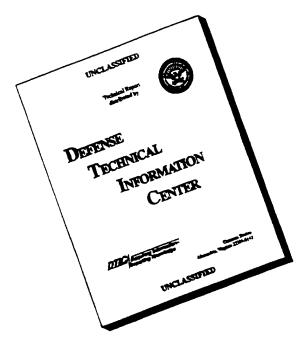


Prepared for

Electronic Systems Center

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## Technical Publication Transfer Using: Northrop Corporation's Data

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

Quick Short Test Report
3 March 1993

Prepared By

Air Force CALS Test Bed Wright-Patterson AFB, OH 45433

## **AFCTB Contact**

Gary Lammers (513) 427-2295

## **AFCTN Contact**

Mel Lammers (513) 427-2295

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## **Contents**

1.	Introduction	1					
	1.1. Background	1					
	1.2. Purpose	2					
2.	Test Parameters						
3.	1840A Analysis	6					
	3.1. External Packaging	6					
	3.2. Transmission Envelope	6					
	3.2.1. Tape Formats	6					
	3.2.2. Declaration and Header Fie	lds6					
4.	IGES Analysis						
5.	SGML Analysis						
6.	Raster Analysis	9					
7.	CGM Analysis	10					
8.	Conclusions and Recommendations	Conclusions and Recommendations					
9.	Appendix A - Tapetool Report Logs	13					
	9.1. Tape Catalog	13					
	9.2. Tape Evaluation Log	14					
	9.3. Tape File Set Validation Log	18					
10.	Appendix B - Detailed IGES Analysis						
	10.1. File Q204						
	10.1.1. Parser/Verifier Log						
	10.1.2. Output AutoCAD R12						

		10.1.3. Output IGESView31
	10.2.	File Q20532
		10.2.1. Parser/Verifier Log32
		10.2.2. Output AutoCAD R1238
		10.2.3. Output IGESView39
		10.2.4. Output iges2draw/IslandDraw40
	10.3.	File Q20641
		10.3.1. Parser/Verifier Log41
		10.3.2. Output AutoCAD R1247
		10.3.3. Output IGESView48
		10.3.4. Output iges2draw/IslandDraw49
	10.4.	File Q20750
v.		10.4.1. Parser/Verifier Log50
		10.4.2. Output AutoCAD R1256
		10.4.3. Output IGESView57
		10.4.4. Output iges2draw/IslandDraw58
11.	Append	dix C - Detailed SGML Analysis59
	11.1.	Datalogics Parser Log59
		11.1.1. DTD Parser Log59
12.	Append	lix D - Detailed Raster Analysis61
	12.1.	File R10461
		12.1.1. Output Preview61
		12.1.2. Output HiJaak for Windows62

13.	Append	dix E - Detailed CGM Analysis63
	13.1.	File C20463
		13.1.1. Parser Log MetaCheck63
		13.1.2. validcgm Log63
		13.1.3. Output Harvard Graphics65
		13.1.4. Output IslandDraw66
		13.1.5. Output cgm2draw/IslandDraw67
	13.2.	File C20568
		13.2.1. Parser Log MetaCheck68
		13.2.2. validcgm Log69
		13.2.3. Output Harvard Graphics71
		13.2.4. Output IslandDraw72
		13.2.5. Output cgm2draw/IslandDraw73
	13.3.	File C20674
		13.3.1. Parser Log MetaCheck74
		13.3.2. validcgm Log
		13.3.3. Output Harvard Graphics77
		13.3.4. Output IslandDraw
		13.3.5. Output cgm2draw/IslandDraw79
	13.4.	File C20780
		13.4.1. Parser Log MetaCheck80
		13.4.2. validcgm Log81
		13.4.3. Output Harvard Graphics83
		13.4.4. Output IslandDraw84

	13.4.5.	Output	cgm2dra	w/IslandD	raw	• • • •			. <b></b>	. 85
13.5.	File C2	08		• • • • • • • •						86
	13.5.1.	Parser	Log Meta	aCheck		• • • •			· • •	86
	13.5.2.	validc	gm Log						, <b></b>	87
	13.5.3.	Output	Harvard	Graphics		• • •			• •	89
	13.5.4.	Output	IslandD:	raw						90
	13.5.5.	Output	cgm2drav	w/IslandD	raw					91
13.6.	File C2	09		• • • • • • •						92
	13.6.1.	Parser	Log Meta	aCheck			• •	· • •		92
	13.6.2.	validc	gm Log							93
	13.6.3.	Output	Harvard	Graphics	• • • •					95
	13.6.4.	Output	IslandD	caw					٠.	96
	13.6.5.	Output	cgm2drav	v/IslandD	raw			-		97

#### 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 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 The results of informal tests are reported in in them. 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 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 a 9-track magnetic tape.

### 2. Test Parameters

Test Plan:

AFCTB 93-016

Date of

Evaluation:

3 March 1993

Evaluators:

George Elwood

Air Force CALS Test Bed

DET 2 HQ ESC/ENCP

Suite 300

4027 Colonel Glenn Hwy Dayton OH 45431-1672

Data

Originator:

John P. Kent

Northrop Corporation

B-2 Division

L591/GK

8900 East Washington Blvd Pico Rivera CA 90660

(310) 948-0624

Data

Description:

Technical Manual Test

3 Document Declaration files

3 Document Type Definitions (DTD)

8 Initial Graphics Exchange Specification

(IGES) files

3 Text files

2 Raster files

7 Computer Graphics Metafile (CGM) files

Data

Source System:

**IGES** 

HARDWARE

Unknown

SOFTWARE

Unknown

#### Text/Standard Generalized Markup Language (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 v1.2.8 UNIX

Texas Instruments (TI) Tapetool v1.0.1

#### MIL-D-28000 (IGES)

Sun SparcStation 2

ArborText iges2draw

IGES Data Analysis (IDA) Parser/Verifier v92

IDA IGESView v3.05

Cheetah Gold 486

AUTODESK AutoCAD 386 R12

#### MIL-M-28001 (SGML)

Cheetah Gold 486

Datalogics ParserStation v3.36

Exoterica XGMLNormalizer v1.2e3.2

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

Cheetah

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

Advance Technology Center

Corel Ventura Publisher

Cheetah Gold 486

(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
Micrografx Designer v3.1
Micrografx Charisma v2.1

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 box in accordance with ASTM D 3951. The exterior of the box was marked with the magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tape were enclosed in a barrier bag as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed the label indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the box was a packing list showing all files 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 tape was run through the AFCTB Tapetool v1.2.8 utility. No errors were encountered while evaluating the contents of the tape labels.

The tape was also evaluated using TI's version of Tapetool. No errors were reported from this program.

#### 3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration file or data file headers.

### 4. IGES Analysis

This tape contained four IGES files. These files were evaluated using IDA's *Parser* and *Verifier* set for CALS Class I. This software reported no errors in the files.

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 and indication of meeting CALS standards. All operations were performed using the default settings.

The four files were converted using ArborText's iges2draw utility with no reported errors. When the resulting files were imported into Island Graphics' IslandDraw, file Q304 displayed the right edge with nothing printing except one line. File Q305 displayed and printed two heavy lines. Files Q306 and Q307 displayed and printed without a problem.

The four files were converted using the AUTODESK's IGES Translator 5.1 with no reported problems. The resulting files were displayed and printed using AUTODESK's AutoCAD R12. The images appear to be complete.

The four files were imported into IDA's *IGESView* without a reported problem. The files displayed and printed without a problem. All files appear to be complete.

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

## 5. SGML Analysis

The tape contained three DTDs and three Text files. The DTDs were the same except for the graphic references. To save time, all of the graphic references were placed in one DTD and this file was used during all operations.

The Text files on this tape were short and only called the graphics files.

EXNMCAP 992/200000

The DTD was parsed using Exotercia's XGMLNormalizer with no reported errors. When the DTD was use to parse all three Text files the same errors were reported.

C:\XGML\XGMLNORM.EXE -Error on line 1 in file i:\9316-1\d001t001:
A REQUIRED attribute is missing.
For start tag 'DOC': For REQUIRED CDATA attribute 'FOSICITE'.

The DTD was parsed using the Datalogics' ParseStation software with no reported errors. This software did use non used elements. See the Appendix for the log file. When the DTD was used to parse the Text files, the missing tag was also reported. See the Appendix for the log.

The DTD was parsed using the Public Domain sgmls parser. This parser reported two errors in the DTD. When the DTD and Text files were parsed together several error message were generated. The boardno errors are not errors because they were commented out of the DTD before parsing. This parser also reported the missing tag.

sgmls: Warning at 9316.dtd, line 451 in declaration parameter 4: End-tag minimization should be "O" for EMPTY element sgmls: Warning at 9316.dtd, line 533 in declaration parameter 4: End-tag minimization should be "O" for EMPTY element sgmls: SGML error at i:\9316-1\d001t001, line 1 at """: Required FOSICITE attribute was not specified; may affect processing sqmls: SGML error at i:\9316-1\d001t001, line 5 at """: BOARDNO = "test1" ENTITY attribute not general entity; may affect processing Element structure: DOC BODY PARAO FIGURE sgmls: SGML error at i:\9316-1\d001t001, line 8 at """: BOARDNO = "test2" ENTITY attribute not general entity; may affect processing Element structure: DOC BODY PARAO FIGURE TOTALCAP 162821/200000 ENTCAP 11552/200000 ENTCHCAP 6821/200000 ELEMCAP 5696/200000 GRPCAP 59200/200000 EXGRPCAP 448/200000

ATTCAP 44192/200000 ATTCHCAP 756/200000 AVGRPCAP 32608/200000 NOTCAP 192/200000 NOTCHCAP 364/200000

The DTD and Text files do not meet the CALS MIL-D-28001A specification.

## 6. Raster Analysis

The tape contained two Raster files with both Type I and Type II files. The AFCTB currently does not have the ability to evaluate Type II Raster files.

The Type I file was checked using the AFCTN validg4 utility. No errors were reported. This file was read into the AFCTN calstb.475 viewer and displayed. The image appear to be scanned at a slight angle.

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.

The file was imported into IDA's *IGESView* without a problem and viewed. The angle was noted.

The file was converted using Rosetta Technologies' Prepare and viewed using Preview. The angle was noted.

The file was converted using Inset Systems' HiJaak without a problem. The resulting file was read into Corel's Ventura Publisher and viewed.

The Raster file was imported and viewed using Inset Systems' HiJaak for Windows without a problem.

The Type I Raster file, R104, meets the CALS MIL-R-28002A specification.

#### 7. CGM Analysis

This tape contained six CGM files. All files were evaluated using ATC's *MetaCheck* software with CALS options. The version in use is not the most current version of the software. This utility reported that all files meet the CALS MIL-D-28003 specification.

The files were evaluated using the AFCTN beta validcgm utility. This program reported errors in all files.

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 meeting CALS standards. All operations were performed using the default settings.

The files were converted using ArborText's cgm2draw utility. No errors were reported during this procedure. The resulting files were read into Island Graphics' IslandDraw. With the exception of font problems and misplaced lines, the files all displayed and printed correctly.

The files were directly imported into Island Graphics' *IslandDraw*. File C204 was missing the boxes around the restricted text. File C205 had most of the entities placed in the lower right corner. They over laid other entities. File C209 had some text over flow.

The files were imported into SPC's Harvard Graphics 3.05 with all files except C209 reporting errors. The errors were line style, non-CGM entities, and non-converted entities. Files C204 and C205 were the same with missing polygon sets and cell arrays. The text font was also incorrect. File C206 had missing entities. File C207 had many entities missing. Most of the lines in file C208 did not display or print. File C209 had many text over flows.

Attempts to read the files with the Micrografx Designer and Inset Systems' HiJaak for Windows did not work. This was due to software and hardware problems combined.

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

#### 8. Conclusions and Recommendations

In summary, the tape from Northrop Corporation is correct. The tape could be read properly using the AFCTN Tapetool and TI version without any reported errors. The physical structure of the tape meets the CALS MIL-STD-1840A requirements.

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

Because of reported errors in the Text file, the SGML part of this tape does not meet the CALS MIL-M-28001A specification.

The Type I Raster file meets the CALS MIL-R-28002A specification.

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

Due to minor errors in the text file, the tape submitted by Northrop Corporation does not 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 Number 8

#### 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

Wed Mar 3 14:25:25 1993 MIL-STD-1840A File Catalog

File Set Directory: /cals/tapetool8/Set068

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration		02048/000001	Extracted
D002	Document Declaration		02048/000001	Extracted
D003	Document Declaration	D/00260	02048/000001	Extracted
D001T001	Text	D/00260	02048/000001	Extracted
D001G002	DTD	D/00260	02048/000034	Extracted
D001H003	Output Specification	D/00260	02048/000001	Extracted
D001R004	Raster	F/00128	02048/000016	Extracted
D001R005	Raster	F/00128	02048/000008	Extracted
D002T001	Text	D/00260	02048/000001	Extracted
D002G002	DTD	D/00260	02048/000034	Extracted
D002H003	Output Specification	D/00260	02048/000001	Extracted
D002C004	CGM	F/00080	00800/000004	Extracted
	<><< PART OF LOG 1	REMOVED A	HERE >>>>	
D002C009	CGM	F/00080	00800/000002	Extracted
D003T001	Text	D/00260	02048/000001	Extracted
D003G002	DTD	D/00260	02048/000034	Extracted
D003H003	Output Specification	D/00260	02048/000001	Extracted
D003Q004	IGES	F/00080	02000/000016	Extracted
	<<<<< PART OF LOG 1	REMOVED I	IERE >>>>	
D003Q007	IGES	F/00080	02000/000047	Extracted

Catalog Process terminated normally.

4

#### 9.2 Tape Evaluation Log

Air Force 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

Wed Mar 3 14:24:44 1993

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1ITDS01

CONTROLLER

Label Identifier: VOL1
Volume Identifier: ITDS01
Volume Accessibility:
Owner Identifier:
Label Standard Version: 4

\*\*\* ERROR (ANSI X3.27; 8.3.1.1) - Columns 12-24 are reserved for future standardization and must be spaces.

HDR1D001

ITDS0100010001000100 93057 93057 000000 CONTROLLER

Label Identifier: HDR1 File Identifier: D001

File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00

Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000000

Implementation Identifier: CONTROLLER

HDR2D0204800260

00

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

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

\*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*\*

EOF1D001

ITDS0100010001000100 93057 93057 000001 CONTROLLER

Label Identifier: EOF1
File Identifier: D001
File Can Identifier T

File Set Identifier: ITDS01 File Section Number: 0001 File Sequence Number: 0001 Generation Number: 0001 Generation Version Number: 00

Creation Date: 93057 Expiration Date: 93057 File Accessibility: Block Count: 000001

Implementation Identifier: CONTROLLER

EOF2D0204800260

00

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

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

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

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

HDR1D003Q007

ITDS0100010024000100 93057 93057 000000 CONTROLLER

Label Identifier: HDR1
File Identifier: D003Q007
File Set Identifier: ITDS01
File Section Number: 0001

File Sequence Number: 0024 Generation Number: 0001

Generation Version Number: 00

Creation Date: 93057 Expiration Date: 93057 File Accessibility: Block Count: 000000

Implementation Identifier: CONTROLLER

HDR2F0200000080

00

Label Identifier: HDR2
Recording Format: F
Block Length: 02000
Record Length: 00080
Offset Length: 00

\*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

Actual Block Size Found = 2000 Bytes.

Number of data blocks read = 47.

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

EOF1D003Q007

ITDS0100010024000100 93057 93057 000047 CONTROLLER

Label Identifier: EOF1
File Identifier: D003Q007
File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0024
Generation Number: 0001
Generation Version Number: 00

Creation Date: 93057 Expiration Date: 93057 File Accessibility: Block Count: 000047

Implementation Identifier: CONTROLLER

EOF2F0200000080

00

Label Identifier: EOF2
Recording Format: F
Block Length: 02000
Record Length: 00080
Offset Length: 00

#### 9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release Number 8 Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information MIL-R-28002 (1989) - Raster Graphics Representation In Binary Format, Requirements For

Wed Mar 3 14:25:26 1993

MIL-STD-1840A File Set Evaluation Log

File Set: Set068

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: STPRO25.10

srcrelid: NONE
chglvl: ORIGINAL
dteisu: 19930126

dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT, Techne

4027 Col. Glenn Highway, Dayton, OH 45431-1601

dstdocid: CALS\_RAS\_TEST

dstrelid: NONE dtetrn: 19930226 dlvacc: NONE

filcnt: T1, H1, G1, R2 ttlcls: UNCLASSIFIED doccls: UNCLASSIFIED doctyp: JOB GUIDE docttl: graphics test

Found file: D001T001

Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: STPRO25.10
dstdocid: CALS RAS TEST

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: STPRO25.10
dstdocid: CALS\_RAS\_TEST

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: STPRO25.10
dstdocid: CALS\_RAS\_TEST

notes: NONE

Saving Output Specification Header File: D001H003\_HDR Saving Output Specification Data File: D001H003 OS

Found file: D001R004

Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: STPRO25.10
dstdocid: CALS RAS TEST

txtfilid: W
figid: NONE
srcgph: test1

doccls: UNCLASSIFIED

rtype: 1

rorient: 090,270

rpelcnt: 001728,002200

rdensty: 0200 notes: NONE

Saving Raster Header File: D001R004\_HDR Saving Raster Data File: D001R004\_GR4

Found file: D001R005

Extracting Raster Header Records...

#### Evaluating Raster Header Records...

srcdocid: STPRO25.10 dstdocid: CALS RAS TEST

txtfilid: W figid: NONE srcgph: test2

doccls: UNCLASSIFIED

rtype: 2

rorient: 000,270

rpelcnt: 002560,003584

rdensty: 0300 . notes: NONE

Saving Raster Header File: D001R005 HDR Saving Raster Data File: D001R005\_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.

Found file: D002

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: STPRO25.6 srcrelid: NONE chglvl: ORIGINAL dteisu: 19930126

dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT, Techne

4027 Col. Glenn Highway, Dayton, OH 45431-1601

dstdocid: CALS\_CGM\_TEST

dstrelid: NONE dtetrn: 19930226 dlvacc: NONE

filcnt: T1, H1, G1, C6 ttlcls: UNCLASSIFIED doccls: UNCLASSIFIED doctyp: JOB GUIDE

docttl: graphics test

Found file: D002T001

Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: STPRO25.6
dstdocid: CALS\_CGM\_TEST

txtfilid: W

doccls: UNCLASSIFIED

notes: NONE

Saving Text Header File: D002T001\_HDR Saving Text Data File: D002T001\_TXT

Found file: D002G002

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: STPRO25.6
dstdocid: CALS\_CGM\_TEST

notes: NONE

Saving DTD Header File: D002G002\_HDR Saving DTD Data File: D002G002\_DTD

Found file: D002H003

Extracting Output Specification Header Records... Evaluating Output Specification Header Records...

srcdocid: STPRO25.6
dstdocid: CALS\_CGM\_TEST

notes: NONE

Saving Output Specification Header File: D002H003\_HDR Saving Output Specification Data File: D002H003 OS

Found file: D002C004

Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: STPRO25.6
dstdocid: CALS\_CGM\_TEST

txtfilid: W
figid: NONE

srcgph: allint.cgm.

doccls: UNCLASSIFIED

notes: NONE

Saving CGM Header File: D002C004 HDR Saving CGM Data File: D002C004\_CGM

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

Found file: D002C009

Extracting CGM Header Records... Evaluating CGM Header Records...

srcdocid: STPRO25.6 dstdocid: CALS CGM TEST

txtfilid: W figid: NONE srcgph: text.cgm doccls: UNCLASSIFIED

notes: NONE

Saving CGM Header File: D002C009\_HDR Saving CGM Data File: D002C009\_CGM

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 D002.

Found file: D003

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: STPRO25.8 srcrelid: NONE chglvl: ORIGINAL

dteisu: 19930126

dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT, Techne

4027 Col. Glenn Highway, Dayton, OH 45431-1601

dstdocid: CALS\_IGES\_TEST

dstrelid: NONE

dtetrn: 19930226 dlvacc: NONE

filcnt: T1, H1, G1, Q4 ttlcls: UNCLASSIFIED doccls: UNCLASSIFIED doctyp: JOB GUIDE docttl: graphics test

Found file: D003T001

Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: STPRO25.8
dstdocid: CALS\_IGES\_TEST

txtfilid: W

doccls: UNCLASSIFIED

notes: NONE

Saving Text Header File: D003T001\_HDR Saving Text Data File: D003T001\_TXT

Found file: D003G002

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: STPRO25.8
dstdocid: CALS\_IGES\_TEST

notes: NONE

Saving DTD Header File: D003G002\_HDR Saving DTD Data File: D003G002\_DTD

Found file: D003H003

Extracting Output Specification Header Records... Evaluating Output Specification Header Records...

srcdocid: STPRO25.8
dstdocid: CALS\_IGES\_TEST

notes: NONE

Saving Output Specification Header File: D003H003\_HDR Saving Output Specification Data File: D003H003 OS

Found file: D003Q004

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: STPRO25.8

dstdocid: CALS\_IGES\_TEST

txtfilid: W
figid: NONE

srcgph: apple2d.igs
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D003Q004\_HDR Saving IGES Data File: D003Q004\_IGS

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

Found file: D003Q007

Extracting IGES Header Records... Evaluating IGES Header Records...

srcdocid: STPRO25.8

dstdocid: CALS\_IGES\_TEST

txtfilid: W figid: NONE

srcgph: lgtable.igs
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D003Q007\_HDR Saving IGES Data File: D003Q007\_IGS

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 D003.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

G

#### 10. Appendix B - Detailed IGES Analysis

## 10.1 File Q204

#### 10.1.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
                   MARCH 1992
               IGES Data Analysis
                                     ***
                 (708) 449-3430
 Input file is /novell/9316-1/q304.igs
 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
 Today is March 4, 1993 9:01 AM
*** File and Product Name Information ***
   File name from sender = 'apple2d.igs'
  File creation Date.Time = '880614.154805'
  Model change Date.Time = ''
  Author
                           = 'tom'
                           = 'GRAPHICS'
  Department
  Product name from sender = 'ALIAS-Version2.4'
  Destination product name = 'Unknown'
*** Parameter Delimiters ***
  Delimiter = ','
   Terminator = ';'
*** Originating System Data ***
   System ID
                        = 'Iris-2400 Turbo'
   Preprocessor version = '1'
   Specification version = 6 (IGES 4.0)
*** Precision levels ***
   Integer bits =
   Floating point - Exponent = 38 Mantissa =
  Double precision - Exponent = 308 Mantissa =
*** Global Model Data ***
```

Model scale = 1.0000E+00

Unit flag = 1 Units = 'INCH'

Line weights = 3

Maximum line thickness = 1.000000E-02
Minimum line thickness = 3.33333E-03
Granularity = 1.000000E-03
Maximum coordinate = 2.342081E+01

Drafting standard applicable to original data is not specified.

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

Blank status:	Visible	41
	Blanked	0
Independence:	Independent	39
	Physically Subordinate	0
	Logically Subordinate	2
	Totally Subordinate	0
Entity use:	Geometry	39
-	Annotation	2
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	3
_	Subordinate DE applies	38
	Hierarchy property applies	0
	Not Specified	0

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

Entity	Form	Level	Count	Type
106 path)	11	0	32	Copious data - Piecewise planar, linear string(2D
110	0	0	6	Line
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
410	0	0	1	View - Orthographic parallel

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

```
Level Count
      0 41
*** Labeling Information ***
100% of the entities are labeled.
  Unlabeled
                  0
    Label
             Count
 P. SURF
              41
*** Line Fonts Used in Data ***
100 102 104 106 108 110 112 114
                                     Undefined
               32
                                     Solid
                                     Dashed
                                     Phantom
                                  - Center-line
                                     Dotted
                                     User defined
116
    118
         120
              122
                  124
                       125 126 128
                                     Undefined
                                     Solid
                                     Dashed
                                     Phantom
                                     Center-line
                                     Dotted
                                  - User defined
130
    132 134 136
                 138
                       140
                            142 144
                                     Undefined
                                     Solid
                                     Dashed
                                     Phantom
                                     Center-line
                                     Dotted
```

\*\*\* Message Summary \*\*\*

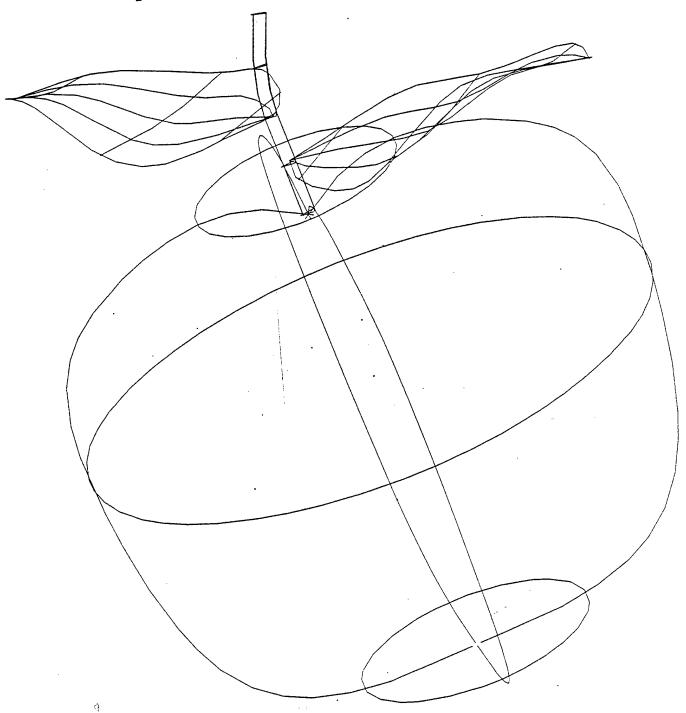
```
- - User defined
 *** Line Widths Used in Data ***
    Weight
               Count
                       Width
  Defaulted
               31
                      (0.0033)
               10
      2
                      (0.0067)
 *** Colors Used in Data ***
  Defaulted
       Red
                8
     Green
               33
 ********
 ***** ENTITY ANALYSIS *****
 *******
 *** Entity type: 106
 *** Entity type: 110
        6 lines averaging 1.362773E-01 units --
 *** Entity type: 404
Drawing at D 77 contains 1 views.
Drawing at D 77 contains 0 annotation entities.
 *** Entity type: 406
 *** Entity type: 410
 Scale of view at D 79 is 1.000000E+00.
Orthographic View entity at D 79 has 0 clipping planes specified.
  XMIN = Not Set XMAX = Not Set
  YMIN = Not Set
                    YMAX = Not Set
  ZMIN = Not Set
                   ZMAX = Not Set
```

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

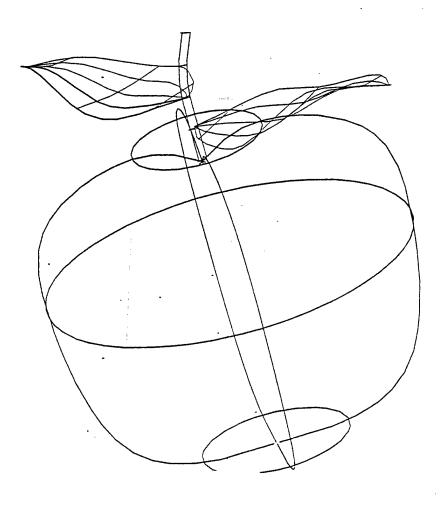
- 0 fatal errors
- 0 severe errors
- 0 errors
- 0 warnings
- 0 cautions
- 0 nitpicks
- 0 notes

\*\*\* End of Analysis of /novell/9316-1/q304.igs \*\*\*

# 10.1.2 Output AutoCAD R12



# 10.1.3 Output IGESView



### 10.2 File Q205

## 10.2.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
                  MARCH 1992
                                     ***
                IGES Data Analysis
                 (708) 449-3430
 Input file is /novell/9316-1/q305.igs
 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
 Today is March 4, 1993 9:01 AM
*** File and Product Name Information ***
   File name from sender = 'classic2d.igs'
   File creation Date.Time = '900621.112443'
  Model change Date.Time = ''
                           = 'Boardhead'
  Author
                           = 'WINDY'
  Department
   Product name from sender = 'classic_mech.part'
  Destination product name = 'classic_mech.part'
*** Parameter Delimiters ***
  Delimiter = ','
  Terminator = ';'
*** Originating System Data ***
                        = 'generic CAD system'
  Preprocessor version = '1.00'
  Specification version = 6 (IGES 4.0)
*** Precision levels ***
  Integer bits =
                   32
  Floating point - Exponent = 38 Mantissa =
  Double precision - Exponent = 308 Mantissa =
*** Global Model Data ***
  Model scale
                      = 1.0000E+00
  Unit flag
```

Units = 'MM' Line weights = 3

Maximum line thickness = 1.000000E+00
Minimum line thickness = 3.33333E-01
Granularity = 9.000000E-03
Maximum coordinate = 0.000000E+00

CAUTION 2316: Maximum intended coordinate value of 0.000000E+00 will be defaulted to zero.

Drafting standard applicable to original data is ANSI.

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

Blank status:	Visible	2764
	Blanked	0
Independence:	Independent	2760
	Physically Subordinate	1
	Logically Subordinate	3
	Totally Subordinate	0
Entity use:	Geometry	977
	Annotation	1786
•	Definition	0
	Other	1
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	1209
	Subordinate DE applies	1555
	Hierarchy property applies	0
	Not Specified	0

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

Entity	Form	Level	Count	Type
				·
100	0	0	242	Circular arc
104	1	0	15	Conic arc - ellipse
106 path)	11	0	205	Copious data - Piecewise planar, linear string(2D
110	0	0	2038	Line
112	0	0	16	Parametric spline curve
124	0	21	11	Transformation matrix

124	0	22	4	
212	0	0	152	General note
212	6	0	67	General note - multiple stack/left justified
212	7	0	1	General note - multiple stack/center justified
212	8	0	10	General note - multiple stack/right justified
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
410	0	0	1	View - Orthographic parallel

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

Level Count
0 2749
21 11
22 4

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

0% of the entities are labeled.

Unlabeled 2764

\*\*\* Line Fonts Used in Data \*\*\* 100 102 104 106 108 110 112 114 Undefined 237 15 205 1779 16 Solid Dashed 97 Phantom 1 145 17 Center-line Dotted User defined 116 118 120 122 124 125 126 128 Undefined 15 Solid Dashed Phantom Center-line Dotted

130 132 134 136 138 140 142 144

User defined

-	-	-	-	-	-	-	-	Undefined
-		-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

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

Weight	Count	Width		
Defaulted	•	(0.3333)		
1	556	(0.3333)		
2	2208	(0.6667)		

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

Defaulted	0
Red	976
Green	8
Blue	96
Yellow	1563
Magenta	57
White	64

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

\*\*\* Entity type: 100

\*\*\* Entity type: 104

\*\*\* Entity type: 106

\*\*\* Entity type: 110

CAUTION 2336: Zero length line at D 2177.

-- 2038 lines averaging 1.682598E+01 units --

\*\*\* Entity type: 112

```
*** Entity type: 124
```

15 transformation matrices, 15 non-zero translations.

NOTE 2341: 15 matrices contain translation information.

#### \*\*\* Entity type: 212

468 text strings in data file. Average text aspect ratio in file is 1.0159094. Minimum text aspect ratio in file is 0.7623553. Maximum text aspect ratio in file is 1.1000000.

#### FONTS USED IN FILE

#### FONT COUNT NAME

1 468 Default ASCII Style

#### \*\*\* Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 5523.

Drawing at D 5523 contains 1 views.

NITPICK 2289: View (D 5525) is not logically subordinate to drawing at D

5523.

Drawing at D 5523 contains 0 annotation entities.

#### \*\*\* Entity type: 406

#### \*\*\* Entity type: 410

Scale of view at D 5525 is 1.000000E+00.

Orthographic View entity at D 5525 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 \*\*\*

2011: 1 Invalid subordinate relationships.
2015: 1 Mathematically incorrect definitions.

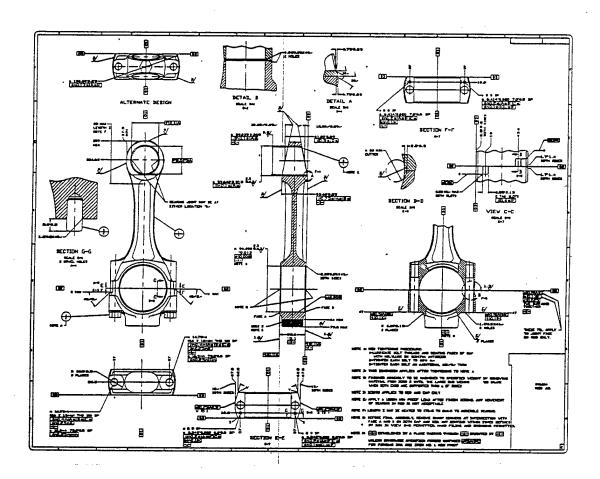
2016: 1 Invalid entity use flag.

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

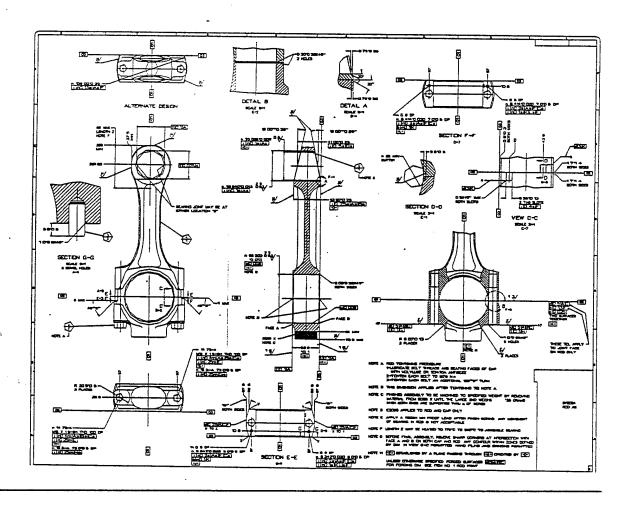
- 0 fatal errors
- 0 severe errors
- 0 errors
- 0 warnings
- 2 cautions
- 2 nitpicks
- 1 notes

\*\*\* End of Analysis of /novell/9316-1/q305.igs \*\*\*

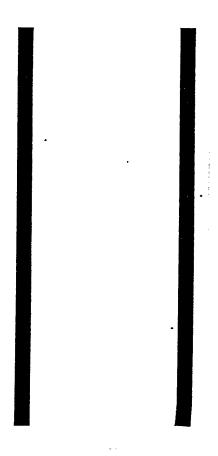
# 10.2.2 Output AutoCAD R12



## 10.2.3 Output IGESView



# 10.2.4 Output iges2draw/IslandDraw



## 10.3 File Q206

### 10.3.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
          ***
                   MARCH 1992
                                  * ***
               IGES Data Analysis
                 (708) 449-3430
 Input file is /novell/9316-1/q306.igs
 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
 Today is March 4, 1993 9:01 AM
*** File and Product Name Information ***
   File name from sender = 'IENTITY'
   File creation Date.Time = '891031.080000'
  Model change Date.Time = ''
  Author
                           = 'KASSEL'
   Department
                           = 'Air Force CALS Test Network'
   Product name from sender = 'IENTITY'
  Destination product name = 'IENTITY'
*** Parameter Delimiters ***
  Delimiter = ','
   Terminator = ';'
*** Originating System Data ***
   System ID
                        = 'NONE'
  Preprocessor version = 'TEST'
  Specification version = 6 (IGES 4.0)
*** Precision levels ***
  Integer bits =
                   32
  Floating point - Exponent = 38 Mantissa =
  Double precision - Exponent = 308 Mantissa =
*** Global Model Data ***
  Model scale
                      = 1.0000E+00
  Unit flag
```

Units = 'INCH'

Line weights = 8

Maximum line thickness = 1.600000E-02
Minimum line thickness = 2.000000E-03
Granularity = 1.000000E-02
Maximum coordinate = 2.200000E+01

Drafting standard applicable to original data is not specified.

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

Blank status:	Visible Blanked	148 0
Independence:	Independent Physically Subordinate Logically Subordinate Totally Subordinate	125 20 3 0
Entity use:	Geometry Annotation Definition Other Logical/Positional 2D parametric Not Specified	84 54 10 0 0 0
Hierarchy:	Structure DE applies Subordinate DE applies Hierarchy property applies Not Specified	6 142 0 0

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

Entity	Form	Level	Count	Type
0	0	0	. 37	Null entity
100	0	0	3	Circular arc
102	0	0	2	Composite curve
104	0	0	1	Conic arc - general form
104	1	0	1	Conic arc - ellipse
104	2	0	1	Conic arc - hyperbola
104	3	0	1	Conic arc - parabola
106 path)	11	0	1	Copious data - Piecewise planar, linear string(2D

	•			
106	63	0	1	Simple closed planar curve
110	<b>,</b> 0	0	27	Line
112	0	0	2	Parametric spline curve
124	0	0	5	Transformation matrix
126	0	0	1	Rational B-spline curve
126	1	0	1	Rational B-spline curve - Line
126	2	0	1	Rational B-spline curve - Circular arc
126	3	0	1	Rational B-spline curve - Elliptical arc
126	4	0	1	Rational B-spline curve - Parabolic arc
126	5	0	1	Rational B-spline curve - Hyperbolic arc
212	0	0	38	General note
212	1	. 0	1	General note - dual stack dimension
212	2	0	2	General note - imbedded font change dimension
212	3	0	1	General note - superscripted dimension
212	4	0	1	General note - subscripted dimension
212	5	0	1	General note - super-/sub-scripted dimension
212	6	0	1	General note - multiple stack/left justified
212	7	0	1	General note - multiple stack/center justified
212	8	0	1	General note - multiple stack/right justified
212	100	0	1	General note - simple fractional dimension
212	101	0	1	General note - dual stack fractional dimension
212	102	0	1	General note - imbedded font change/double fractio
dimens	sion			
212	105	0	1	General note - super-/sub-scripted fractional dime
230	0	0	1	Sectioned area (Standard Crosshatching)
308	0	0	1	Subfigure definition
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	1	Property - Intercharacter spacing
408	0	0	1	Single subfigure instance
410	0	0	1	View - Orthographic parallel
412	0	0	1	Rectangular subfigure instance
414	0	0	1	Circular subfigure instance

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

Level Count 0 148

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

25% of the entities are labeled.

Unlabeled 111

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

100	102	104	106	108	110	112	114	
, _	-	_	-	_	-	_		Undefined
3	2	4	2	_	27	2	_	Solid
			-	_	-	-	-	Dashed
_	_	-	_	_	_	-	_	Phantom
_	_		_	_	-	_	-	Center-line
_	_	_	_	•	-	_	_	Dotted
_	_	_	_	_	-	-	_	User defined
_	-	•	_	_	_	_	_	oser derined
116	118	120	122	124	125	126	128	
-	-	-	-	5	-	-	-	Undefined
-	-	-	-	-	-	6	-	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
-	_	_	_	_	_	_	_	oser derined
***	Line \	Width	s Use	d in	Data	***		
1	Weigh	t	Cou	nt	Wid	th		•
Defa	aulte	đ	111		(0.0	020)		
*** (	Color	s Used	d in 1	Data	***			
Defa	aulte	đ	15					
	Red		96					
****	****	****	****	****	****	**		•
****	** দা	مسلسم	בדממב	ZSTS	****	**		
	ـ د ننــ بـ مدد مد مد مد مد مد							

Subfigure name at D

Number of included entities = 6.

```
*** Entity type: 0
        2307: Entity type not checked.
 *** Entity type: 100
 *** Entity type: 102
 *** Entity type: 104
 *** Entity type: 106
 *** Entity type: 110
       27 lines averaging 7.156251E+00 units --
 *** Entity type: 112
 *** Entity type: 124
5 transformation matrices, 5 non-zero translations.
NOTE
       2341: 5 matrices contain translation information.
 *** Entity type: 126
 *** Entity type: 212
      129 text strings in data file.
      Average text aspect ratio in file is 0.9982875.
      Minimum text aspect ratio in file is 0.7978667.
      Maximum text aspect ratio in file is 1.4857143.
      FONTS USED IN FILE
      FONT
            COUNT NAME
               127 Default ASCII Style
      1002
                 2
                    Symbol Font 2
*** Entity type: 230
 *** Entity type: 308
```

25: 'PERSON'.

```
*** Entity type: 404
Drawing at D 287 contains 1 views.
Drawing at D 287 contains 0 annotation entities.
 *** Entity type: 406
 *** Entity type: 408
 Subfigure instance at D 263 references subfigure at D
                                                            25.
 *** Entity type: 410
 Scale of view at D 55 is 1.000000E+00.
                                55 has 0 clipping planes specified.
Orthographic View entity at D
  XMIN = Not Set XMAX = Not Set
  YMIN = Not Set
                      YMAX = Not Set
  ZMIN = Not Set
                      ZMAX = Not Set
*** Entity type: 412
 Rectangular subfigure instance at D 291 references entity at D 25.
*** Entity type: 414
 Circular subfigure instance at D 293 references entity at D
                                                                  25.
*** Message Summary ***
*** Error Summary ***
    0 fatal errors
    0 severe errors
    0 errors
    0 warnings
    0 cautions
    0 nitpicks
    2 notes
*** End of Analysis of /novell/9316-1/q306.igs ***
```

# 10.3.2 Output AutoCAD R12

CIRCLA ARC ((00)	DOMPOSITE DURVE ONE)	COMIC ARC - GENERAL	COME ANC - ELLIPSE GISH FORM I)	COMIC ARC - INFORMULA	CONIC ARC - PARAGOLA	LINE AR PLANAR CURVE	SDM-L 0.00(D AREA (106 / CH+ 6.3)
Lis≪ CHO	PARAMETRIC IPLOSE	TRANSFORMATION B	SATURAL 3-DU-PAC CURVE GGG FDRH D	RATIDAL 3-SPINE CHAVE	RATEMAL 8-FLIME CHAVE ENDLAR AND USE FORM E	endified areals form's	EATIDMA 2-59-34 CURVE PARABOLIC AND LIZE FORM 5)
>	21MPLE MOSEN	DUAL STACK	IM+A3DED	<sup>2</sup> ZUPER	EU2 <sup>2</sup>	250B 250B	M STACK LEFT
ANTIBOUL A-SHIPE CHAY  PPERBLIC ARC USE FORM 3:  M.  STACK  CENTER  CONT. ART USE FORM 7:	CONTRACTOR STARLE  M STACK RIGHT  MOTE - MAIN STACK REGHT STACK	SFRAC STION	DUAL - DO STACK TUM	IM BED ≠FR ACT	FR SUB- BO TT  BO TT  BO TT  BO TT  BO TT  BO TT  BOTT  BOTT	SECTIDES MEA	SPACING  Interconnector spacing
SMOOT BURNISHED		CHICLAGE BARFACTERS					CALS TEST NETWORK MIL-D-28000 REFERENCE DRAWING

# 10.3.3 Output IGESView

CROLLAR ARC (00)	COMPOSITE CURVE (VO2)	COME FOR THE	ماد ماد آن الله الله الله الله الله الله الله الل	CONC ASC TON TOWN	CONE ARC - PARAGOLA (50 FDM 3)	LINEAR PLANAR CLEVE	SMPLE QUOSED AREA (TOS FORM 63)
LPE (1D)	PARAMETRIC SPLINE	TRANSTRAATION (I) MATRIX ON (US FORM (I)	RATIONS B-SPLAS CURVE	RATONAL B-SPLINE CLAVE LINE (COS FORM 1)	RATONAL 8-SPLINE CURVE CROLLAR ARC (USE FORM 2)	RATONAL B-SPINE CURVE BLEFTCAL ARC (US FORM 3)	RATIONAL B-SPLINE CLEVE PAMEDLE ARE (CE FORM 8)
PRATECULE SIZE LAS COMPANY SA	SIMPLE NOTE - SMALE	DUAL STACK	IM+Ab(DE)	SSUPER	SLB NOTE: SUBSCRIPT	SUPER SUB SUB SORTE OF FORM SU	M STACK LEFT LEFT LET (ZE FORM 6)
M STACK CENTER	STACK RIGHT	SFRAC STION	DUAL -ID STACK FOTT	M BER - FR ACT	т -В-	SETTONE AREA	SPACING
SPOLE SEFFERE	○	CEDIAN SEPTEMBE				(230)	CALS TEST NETWORK ML-0-28000 CLASS REFERENCE DRAWING I-ENTITY

# 10.3.4 Output iges2draw/IslandDraw

	·	•					
				· >			
GROJLAR ARC (100)	COMPOSITE CURVE (102)	CONIC ARC - GENERAL (104 FORM 0)	CONIC ARC - ELLIPSE (104 FORM 1)	CONIC ARC - HYPERBOLA (104 FORM 2)	CONIC ARC - PARABOLA (104 FORM 3)	LINEAR PLANAR CURVE (106 FORM 11)	SIMPLE CLOSED AREA (108 FORM 63)
LINE (110)	PARAMETRIC SPLINE CURVE (112)	TRANSFORMATION MATRIX Dat (122 FORM 0)	RATIONAL B-SPLINE CURVE (128 FORM 0)	RATIONAL B-SPLINE CURVE LINE (128 FORM 1)	RATIONAL B-SPLINE CURVE CPICULAR ARC (126 FORM 2)	RATIONAL BAPLINE CURVE ELLIPTICAL ARC (128 FORM)	PATIONAL B-SPLINE CURVE PARABOLIC ARC (128 FORM 4)
RATIONAL B-SPLINE CURVE	SIMPLE MARIE	DUAL STACK NOTE - DUAL STACK (212 FORM 1)	IM+A>DED  NOTE - IMBEDDED FONT OUNDE (212 FORM 2)	SSUPER SUPERSCRIPT (212 FORM 9)	SSUB	SUPER SUB NOTE - SUPERISUB SCRIPT (212 FORM 6)	M STACK LEFT NOTE - MULTI STACK LEFT JUST (212 PORM 6)
M STACK CENTER CENTER MOTE - MULTI STACK CENT JUST (212 FORM 7)	M STACK RIGHT NOTE - MULTI STACK RIGHT JUST (212 FORM 9)	SFRAC STION NOTE - SIMPLE FRACTION (212 FORM 109)	DUAL TO DUAL TO STACK BOT TOM  NOTE: DUAL STACK FRACTION (212 FORM 101)	IM BED FR ACT TON  NOTE: FONT/DOUBLE FRACTION (212 FORM 102)	T -0- FR SUB BO TT BO TM NOTE-SUPERSUB FRACTION (212 FORM 106)	SECTIONED AREA (230)	SPACING  NTERCHARACTER SPAGNO (100 FORM 19)
THE SUPPLE (ADD)	0			-			CALS TEST NETWORK MIL-D-28500 CLASS REFERENCE DRAWING FENTITY

## 10.4 File Q207

## 10.4.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
                  MARCH 1992
               IGES Data Analysis
                (708) 449-3430
 Input file is /novell/9316-1/q307.igs
 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
 Today is March 4, 1993 9:02 AM
*** File and Product Name Information ***
  File name from sender = 'LGTABLE'
  File creation Date.Time = '890707.090000'
  Model change Date.Time = ''
                          = 'FARRELL'
  Author
  Department
                          = 'Air Force CALS Test Network'
  Product name from sender = 'LGTABLE'
  Destination product name = 'LGTABLE'
*** Parameter Delimiters ***
  Delimiter = ','
  Terminator = ';'
*** Originating System Data ***
  System ID
                        = 'NONE'
  Preprocessor version = 'TEST'
  Specification version = 6 (IGES 4.0)
*** Precision levels ***
  Integer bits =
  Floating point - Exponent = 38 Mantissa =
  Double precision - Exponent = 308 Mantissa =
*** Global Model Data ***
                     = 1.0000E+00
  Model scale
  Unit flag
```

Units = 'IN' Line weights = 25

Maximum line thickness = 1.000000E-01
Minimum line thickness = 4.000000E-03
Granularity = 1.000000E-04
Maximum coordinate = 2.000000E+01

Drafting standard applicable to original data is not specified.

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

Blank status:	Visible Blanked	<b>27</b> 2 0
Independence:	Independent Physically Subordinate Logically Subordinate Totally Subordinate	259 11 2 0
Entity use:	Geometry Annotation Definition Other Logical/Positional 2D parametric Not Specified	218 54 0 0 0
Hierarchy:	Structure DE applies Subordinate DE applies Hierarchy property applies Not Specified	1 271 0 0

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

Entity	Form	Level	Count	Type
0	0	0	4	Null entity
100	0	0	85	Circular arc
102	0	0	2	Composite curve
104	0	0	5	Conic arc - general form
110	0	0	116	Line
112	0	0	12	Parametric spline curve
124	0	0	3	Transformation matrix
212	0	0	3 <b>7</b>	General note
230	0	0	5	Sectioned area (Standard Crosshatching)

404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
410	0	0	1	View - Orthographic parallel

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

Level Count 0 272

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

99% of the entities are labeled.

Unlabeled 1

Label	Count	Label	Count	Label	Count
VIEW	1*	DRAWING	1*	TX0044	5*
TX0045	5*	LN0141	1*	LN0142	1*
LN0143	1*	LN0144	1*	LN0145	1*
		<<<< PART	OF LOG	FILE REMOVED	HERE >>>>
TX0080	1*	CC0001	1*	CC0002	1*
SA0001	1*	SA0002	1*	SA0003	1*
SA0004	1*	SA0005	1*		

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

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

100 102 104 106 108 110 112 114

- - - 3 - - 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	58	(0.0040)
3	22	(0.0120)
2	126	(0.0080)
4	62	(0.0160)

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

Defaulted	184
Blue	22
Cvan	62

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

\*\*\* Entity type: 0

NOTE 2307: Entity type not checked.

\*\*\* Entity type: 100

\*\*\* Entity type: 102

\*\*\* Entity type: 104

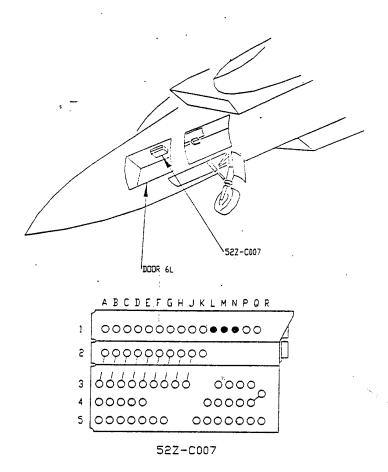
```
*** Entity type: 110
  -- 116 lines averaging 5.327616E-01 units --
 *** Entity type: 112
 *** Entity type: 124
3 transformation matrices, 3 non-zero translations.
        2341: 3 matrices contain translation information.
 *** Entity type: 212
       47 text strings in data file.
       Average text aspect ratio in file is 0.7899535.
       Minimum text aspect ratio in file is 0.7579661.
      Maximum text aspect ratio in file is 1.0525425.
       FONTS USED IN FILE
       FONT
              COUNT
                     NAME
                47 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 ***
```

```
*** Error Summary ***
```

- 0 fatal errors
- 0 severe errors
- 0 errors
- 0 warnings
- 0 cautions
- 1 nitpicks
- 2 notes

\*\*\* End of Analysis of /novell/9316-1/q307.igs \*\*\*

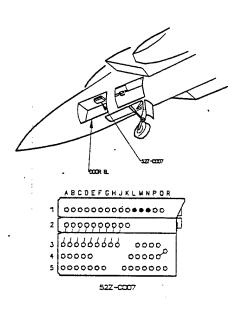
## 10.4.2 Output AutoCAD R12



52Z-C007 ESSENTIAL CIRCUIT BREAKER PANEL NO. 1 (24-50-12) REF DES ZONE NUMENCLATURE BUS 41CBC033 L1 R MLG VOV PVR 28\DC 28\DC 41CBC034 M1 L MLG VOV PVR S8ADC EZZ SBADC 42CBC005 LDG GR POS IND SBADC E22 58ADC

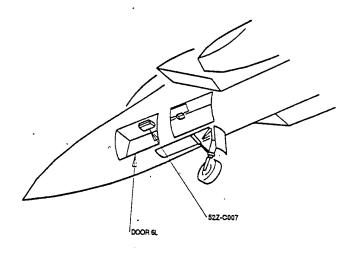
CALS Test Network LGTABLE Reference Hustration

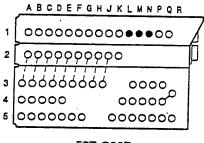
# 10.4.3 Output IGESView



52Z-0007	ES	SENTIAL CROUIT BREAKER PANEL NO. 1	(24-50-12)
REF DCS	ZONE	NOMEDIATIVE	8.5
41080003	L1	R MLG WOW PWR 28V0C	ESS 28VCC
41CBC034	M	L HLS NOW PAR 25/00	ESS 28V00
42CBC005	N1	LDC DR POS NO 26M2C	£35 25VCC

# 10.4.4 Output iges2draw/IslandDraw





52Z-C007

52Z-C007	E	SSENTIAL CIRCUIT BREAKER F	PANEL NO. 1	(24-50-12)
REF DES	ZONE	NOMENCLATURE	T.	BUS
41CBC033 41CBC034 42CBC005	L1 M1 N1	R MLG WOW PWR LMLG WOW PWR LDG GR POS IND	28VDC 28VDC 28VDC	ESS 28VDC ESS 28VDC ESS 28VDC

CALS Test Network LGTABLE Reference Illustration

## 11. Appendix C - Detailed SGML Analysis

## 11.1 Datalogics Parser Log

## 11.1.1 DTD Parser Log

SGML Document Type Definition Parser
Version 3.36
Copyright (c) Datalogics 1988, 1989, 1990, 1991
An SGML System Conforming to
International Standard ISO 8879
Standard Generalized Markup Language

Log file: '9316.LOG' SDO File: 'ctndecl.sdo' Namecase General is yes. Namecase Entity is no. Parsing DTD file: '9316.dtd'

DTD0095: Start tag for element 'DATABASE' cannot be omitted if the element had declared content (CDATA, RCDATA, EMPTY).

DTD0095: Start tag for element 'MEDIUM' cannot be omitted if the element had declared content (CDATA, RCDATA, EMPTY).

DTD0096: The generic ID SHORTTITLE has not been used in any content model, inclusion, or as a doctype element.

DTD0096: The generic ID CONTASSURPG has not been used in any content

model, inclusion, or as a doctype element. DTD0096: The generic ID REFDOC has not been used in any content

model, inclusion, or as a doctype element.

DTD0096: The generic ID CFGPGE has not been used in any content model, inclusion, or as a doctype element.

DTD0096: The generic ID COVERINDEX has not been used in any content model, inclusion, or as a doctype element.

DTD0096: The generic ID STALOC has not been used in any content model, inclusion, or as a doctype element.

DTD0096: The generic ID TESTCODE has not been used in any content model, inclusion, or as a doctype element.

This DTD conforms to the ISO 8879 standard

DTO file '9316.DTO' created

closing statistics:

Capacity points: 71912 Bytes of DTO file string space: 12664 SGML descriptor blocks:

7101

Document Type Definition is compliant and parsed normally.

Program status code: 0.

## 12. Appendix D - Detailed Raster Analysis

## 12.1 File R104

## 12.1.1 Output Preview

REDSILONE_ARSENLE_ALA_ALA_ALA_ALA_ALA_ALA_ALA_ALA_ALA_A	NE ARSENAL, AL					PARTS	IS	굽	10677287	187
USA-WIGON 63343   DATE 16 NOV 70 REV		ABAMA				S	<b>L</b>	00	188 188	слтон но. 76
100   101	CILLATOR , VOLTA	GE CONTROLLED-COH			DATE	16 NO	V 70REV	<del></del>	30.	
07 10181751 RESISTOR 08 10181751 RESISTOR 10 10181751 RESISTOR 11 10181751 RESISTOR 12 10181751 RESISTOR 13 10181751 RESISTOR 14 10181751 RESISTOR 15 10181752 RESISTOR 16 10181752 RESISTOR 17 10181752 RESISTOR 18 10181752 RESISTOR 10 10181752 RESISTOR 10 10181751 RESISTOR	FART OR IDENTIFICATION NO.	SPECIFICATION NO.	NON	ENCLATURE	OUANTITY			FECTIVITY •	ZONE	NOTES OR
10181751   RESISTOR   RESISTOR   10181752   RESISTOR	0181751-207	10181751	RESISTOR			+.			-	
10181751   RESISTOR	10181751-208	1371810:	RESISTOR	•			_	_		
10 10181751 RESISTOR 11 10181751 RESISTOR 113 10181751 RESISTOR 114 10181751 RESISTOR 115 10181751 RESISTOR 116 10181752 RESISTOR 118 10180306 RESISTOR 118 10180328 RESISTOR 118 10180328 RESISTOR 118 10181752 RESISTOR 118 10181751 RESISTOR 118 11751 RESISTOR	0181751-209	10181751	RESISTOR	•		<del>-</del>			_	
12	10181751-210 10181751-211	10181751	RESISTOR							
12   10181751   RESISTOR   10181751   RESISTOR   10181751   RESISTOR   10181751   RESISTOR   10181752   RESISTOR   RESISTOR   10181752   RESISTOR   RESISTOR   10181751   RESISTOR   RESISTOR   RESISTOR   RESISTOR   RESISTOR   10181752   RESISTOR   RESISTOR   RESISTOR   10181752   RESISTOR   RESISTOR   RESISTOR   10181752   RESISTOR   RESISTOR   RESISTOR   RESISTOR   10181751   RESISTOR   RESISTOR   RESISTOR   RESISTOR   RESISTOR   RESISTOR   10181751   RESISTOR   RESI						 	_			
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15 10181751 RESISTOR 10181752 RESISTOR 10181752 RESISTOR 39 10181751 RESISTOR 39 10181751 RESISTOR 39 10181751 RESISTOR 39 10181752 RESISTOR 30 10181751 RESISTOR	1181751-213	10181751	RESISION DECISION				_		<u>.</u>	
57 10181752 RESISTOR 47 10181751 RESISTOR 10180306 RESISTOR 10181751 RESISTOR 83 10181751 RESISTOR 84 10181752 RESISTOR 85 10181752 RESISTOR 86 10181752 RESISTOR 10181752 RESISTOR 10181752 RESISTOR 10181752 RESISTOR 10181751 RESISTOR	0181751-214	10181751	RESISION						_	
10181752   RESISTOR   10181751   RESISTOR   10180306   RESISTOR   10181751   RESISTOR   10181751   RESISTOR   RESISTOR   10181752   RESISTOR   10181751   RESISTOR   RESISTOR   10181751   RESISTOR   10181751   RESISTOR	10181752-261	10181752	RESISTOR			_				
10181751 RESISTOR RES			-							
10181751 RESISTOR RES	0161/52-55/	76/18101	RESISTOR	•	·	<b></b>			· 	
10181751 RESISTOR 10181751 RESISTOR 10181752 RESISTOR 10181751 RESISTOR	0180306-239	10180306	RESISTOR		-	_				
10181751   RESISTOR	0181751-133	10181751	RESISTOR							
18 10180328 RESISTOR	0181751-166	13718161	RESISTOR					•		
83 10181752 RESISTOR 96 10181752 RESISTOR 10181752 RESISTOR 87 10181752 RESISTOR 10181752 RESISTOR 10181752 RESISTOR 10181751 RESISTOR	0180328-418	10180328	RESISTOR			-				
96 10181752 RESISTOR 97 10181752 RESISTOR 89 10181752 RESISTOR 71 10181752 RESISTOR 10181752 RESISTOR 10181751 RESISTOR	10181752-283	10181752	RESISTOR			_			:	
10181752   RESISTOR   RESISTOR   10181752   RESISTOR   10181752   RESISTOR   10181752   RESISTOR   10181751	0181752-298	10161752	RESISTOR	•	-					
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10181752   RESISTOR   10181752   RESISTOR   10181751   RESISTOR	187-76/1816	76/18101	RESISTOR		٦ 			•		
10 1081752 RESISTOR 10 10181752 RESISTOR 10181751 RESISTOR 1018175	10181752-289	. 25718101	RESISTOR.			_		<b>-</b>		
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	181751-6	10181751	RESISTOR		•					
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# 12.1.2 Output HiJaak for Windows

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FIAD NO.	PART OR IDENTIFICATION NO.	DRAWING OR SPECIFICATION NO.		OMENCIATURE		OUANTITY	1 1	MI 1	EFFEC	TIVITY -	ZONE	NOTES D
	10181751-207	10181751	RESISTOR				-		FROM	TO	ZUME	REMARK
	10181751-208	10181751	RESISTOR		.1		:				1 1	
	10181751-209	10181751	RESISTOR		i		li	,	:		,	
	10181751-210	10181751	RESISTOR		- 1		1		ļ			
	10181751-211	10181751	RESISTOR		- 1				- 1		1	
	10181751-212	10181751	RESISTOR		į	i	İ	:	· i			
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2	10181752-261	10181752	RESISTOR		ŀ	1			i			
3	10181752-357	10181752	RESISTOR			, !		i			!	
4	10181751-147	10181751	RESISTOR		1	÷ ;	ı	-	į.		1 .	
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6		10181751	RESISTOR		- 1	í	- 1		i		1 [-	
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8	10180328-418	10180328	RESISTOR		!	, 1	. 1	i	- 1		1	
.91	10181752-283	10181752	RESISTOR			51		- !				
10	10181752-298	10181752	RESISTOR		. '	î,	- 1	- 1	i.		1	
11	10181752-306	10181752	RESISTOR		7. m. 1	3	- 1	İ	ľ			
12	10181752-297	10181752	RESISTOR			ī,	•	ļ	i	82.	1 '	
13	10181752-289	10181752	RESISTOR			1	ı	i			1 1	
14	10181752-271	10181752	RESISTOR	•	ì	, i	- [	- 1	1			
15	10181752-310	10181752	RESISTOR			,	- 1		į		1	
16 j	10181751-55	10181751	RESISTOR		- 1	51	•		. 1		1. '	1
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## 13. Appendix E - Detailed CGM Analysis

### 13.1 File C204

### 13.1.1 Parser Log MetaCheck

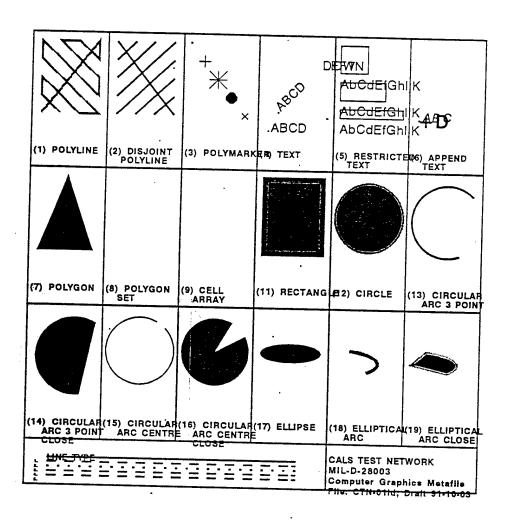
### 13.1.2 validcgm Log

```
Analysis for file c204.cgm using table table
MILSPEC 28003 error: illegal hatch index
(132, 1392)
                  (5, 24, 2)
                                 Hatch Index 6
(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, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 11) occurred 1 time
(1, 13) occurred 1 time
(2, 2) 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) occurred 1 time
(4, 1) occurred 15 times
(4, 2) occurred 1 time
(4, 3) occurred 5 times
(4, 4) occurred 46 times
(4, 5) occurred 3 times
(4, 6) occurred 1 time
(4, 7) occurred 1 time
(4, 8) occurred 1 time
(4, 9) occurred 1 time
(4, 11) occurred 4 times
(4, 12) occurred 1 time
(4, 13) occurred 1 time
```

(4, 14) occurred 1 time (4, 15) occurred 1 time (4, 16) occurred 1 time (4, 17) occurred 1 time (4, 18) occurred 1 time (4, 19) occurred 1 time (5, 2) occurred 10 times (5, 3) occurred 6 times (5, 4) occurred 4 times (5, 6) occurred 5 times (5, 7) occurred 5 times (5, 8) occurred 5 times (5, 10) occurred 4 times (5, 11) occurred 1 time (5, 12) occurred 3 times (5, 13) occurred 3 times (5, 14) occurred 8 times (5, 15) occurred 7 times (5, 16) occurred 5 times (5, 17) occurred 4 times (5, 22) occurred 3 times (5, 23) occurred 8 times (5, 24) occurred 8 times

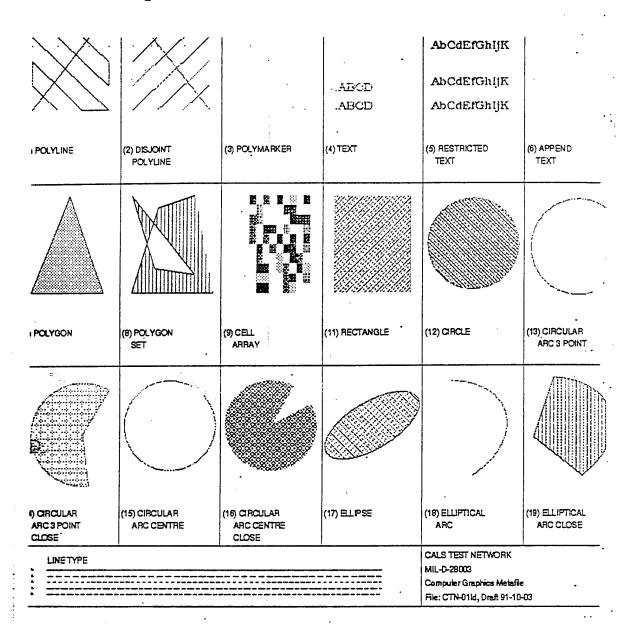
(5, 28) occurred 7 times (5, 29) occurred 7 times (5, 30) occurred 3 times (5, 34) occurred 1 time

# 13.1.3 Output Harvard Graphics

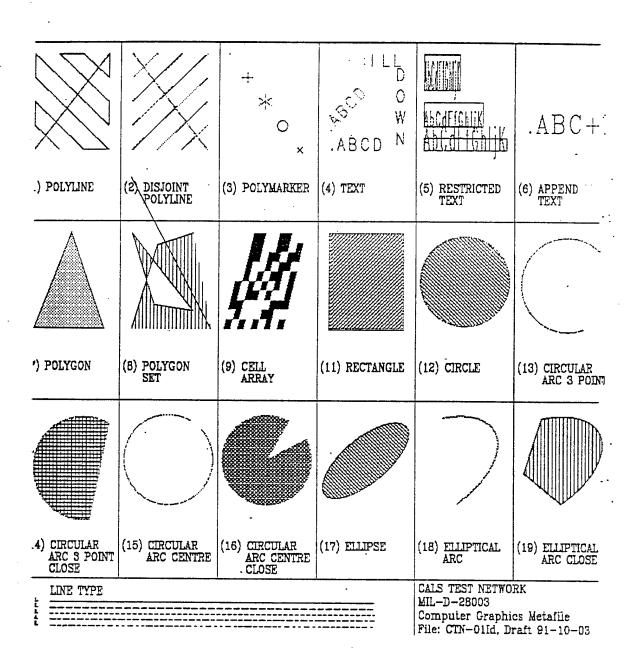


HG305 - C204 - 9316

# 13.1.4 Output IslandDraw



## 13.1.5 Output cgm2draw/IslandDraw



#### 13.2 File C205

Primitive Elements"

## 13.2.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 03/04/93 Time: 07:44:53 Metafile Examined : i:\9316-1\c205.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: 03/04/93 Time: 07:44:56 Name of CGM under test: i:\9316-1\c205.cgm Encoding : Binary Pictures Examined : All Elements Examined Bytes Examined : All BEGIN METAFILE string : "AFCTN-01Rd" METAFILE DESCRIPTION : "AFCTN-01Rd, 91-10-03, MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 162; string contains: "All Graphical

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 213 Elements Tested 3252 Octets Tested

No Errors Were Detected |

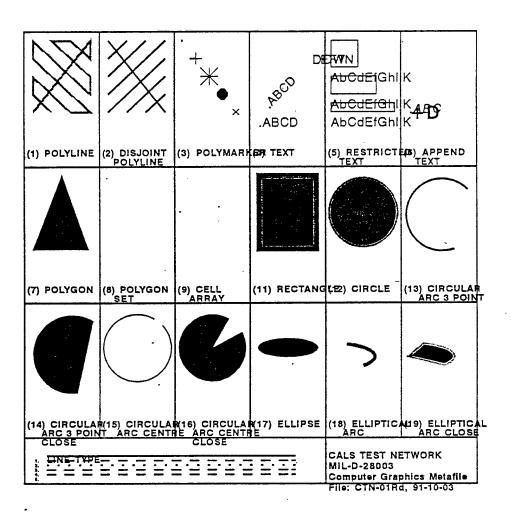
========= End of Conformance Report ============

## 13.2.2 validcgm Log

Analysis for file c205.cgm using table table MILSPEC 28003 error: illegal hatch index (132, 1834) (5, 24, 2)Hatch Index 6 (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, 5) occurred 1 time (1, 7) occurred 1 time (1, 8) occurred 1 time (1, 9) occurred 1 time (1, 11) occurred 1 time (1, 13) occurred 1 time (2, 2) 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) occurred 1 time (4, 1) occurred 15 times (4, 2) occurred 1 time (4, 3) occurred 5 times (4, 4) occurred 46 times

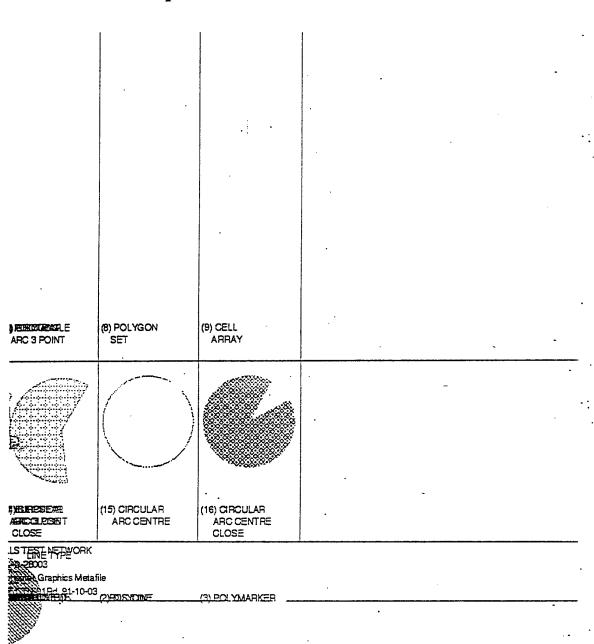
- (4, 5) occurred 3 times
- (4, 6) occurred 1 time
- (4, 7) occurred 1 time
- (4, 8) occurred 1 time
- (4, 9) occurred 1 time
- (4, 11) occurred 4 times
- (4, 12) occurred 1 time
- (4, 13) occurred 1 time
- (4, 14) occurred 1 time
- (4, 15) occurred 1 time
- (4, 16) occurred 1 time
- (4, 17) occurred 1 time
- (4, 18) occurred 1 time
- (4, 19) occurred 1 time
- (5, 2) occurred 10 times
- (5, 3) occurred 6 times
- (5, 4) occurred 4 times
- (5, 6) occurred 5 times
- (5, 7) occurred 5 times
- (5, 8) occurred 5 times
- (5, 10) occurred 4 times
- (5, 11) occurred 1 time
- (5, 12) occurred 3 times
- (5, 13) occurred 3 times
- (5, 14) occurred 8 times
- (5, 15) occurred 7 times
- (5, 16) occurred 5 times
- (5, 17) occurred 4 times
- (5, 22) occurred 3 times
- (5, 23) occurred 8 times
- (5, 24) occurred 8 times
- (5, 28) occurred 7 times
- (5, 29) occurred 7 times
- (5, 30) occurred 3 times
- (5, 34) occurred 1 time

# 13.2.3 Output Harvard Graphics

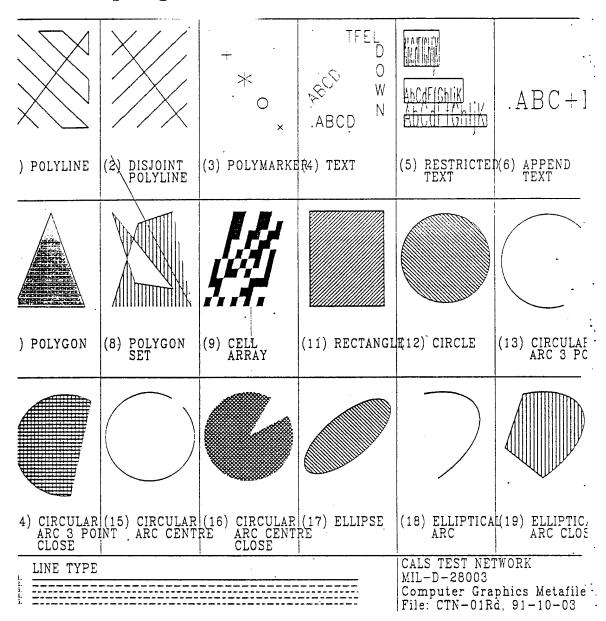


HG305 - C205 - 9316

# 13.2.4 Output IslandDraw



# 13.2.5 Output cgm2draw/IslandDraw



#### 13.3 File C206

#### 13.3.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 03/04/93 Time: 07:45:03 Metafile Examined : i:\9316-1\c206.cgm Pictures Examined : All Elements Examined : All Examined : All Bytes 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: 03/04/93 Time: 07:45:05 Name of CGM under test: i:\9316-1\c206.cgm : Binary Encoding Pictures Examined : All Elements Examined : All Bytes Examined : All BEGIN METAFILE string : "arcs.cgm" METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"

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

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 62 Elements Tested 942 Octets Tested

No Errors Were Detected

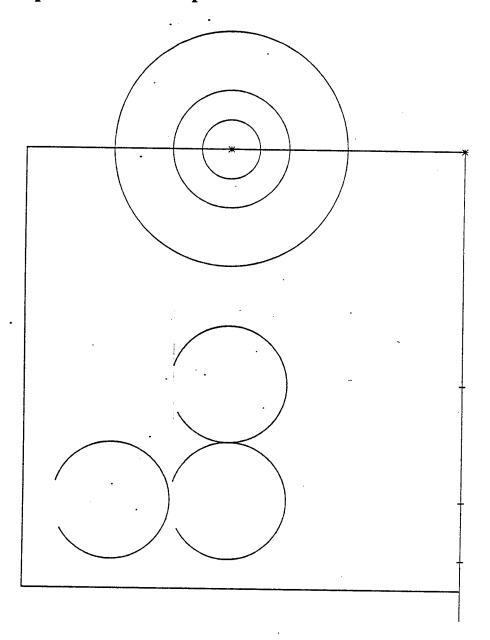
======== End of Conformance Report ============

## 13.3.2 validegm Log

Analysis for file c206.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

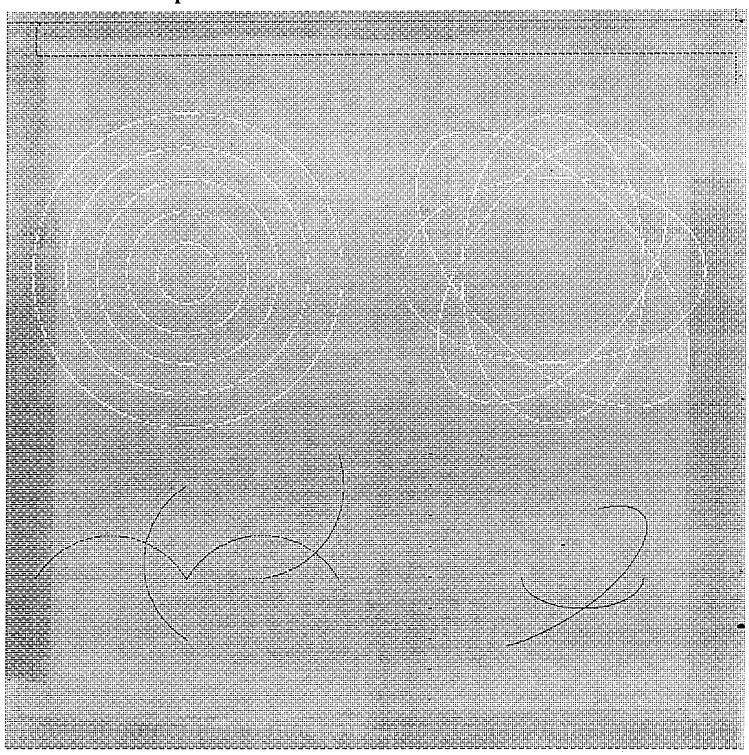
- (3, 6) occurred illegally 1 time
- (4, 1) occurred 2 times
- (4, 3) occurred 3 times
- (4, 12) occurred 5 times
- (4, 15) occurred 4 times
- (4, 17) occurred 4 times
- (4, 18) occurred 2 times
- (5, 2) occurred 5 times
- (5, 3) occurred 5 times
- (5, 4) occurred 4 times
- (5, 6) occurred 2 times
- (5, 7) occurred 1 time
- (5, 8) occurred 1 time
- (5, 22) occurred 1 time
- (5, 23) occurred 1 time
- (5, 34) occurred 1 time

# 13.3.3 Output Harvard Graphics

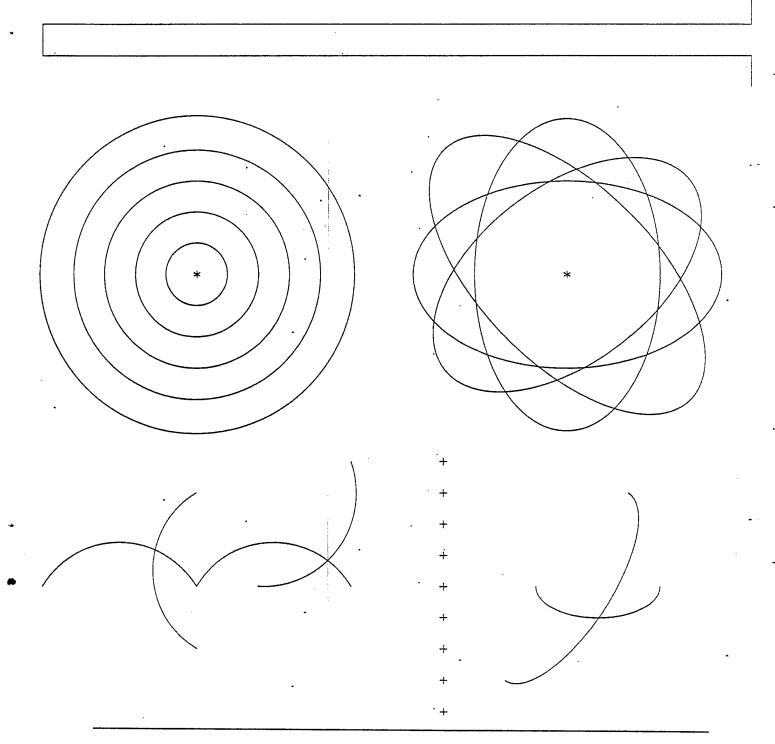


HG305 - C206 - 9316

# 13.3.4 Output IslandDraw



# 13.3.5 Output cgm2draw/IslandDraw



#### 13.4 File C207

## 13.4.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 03/04/93 Time: 07:45:13 Metafile Examined : i:\9316-1\c207.cgm : All Pictures Examined Elements Examined : All Bytes Examined : All 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: 03/04/93 Time: 07:45:15 Name of CGM under test: i:\9316-1\c207.cgm Encoding : Binary Pictures Examined : All : All Elements Examined Examined : All BEGIN METAFILE string : "fills.cgm" METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"

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

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 56 Elements Tested 856 Octets Tested

No Errors Were Detected |

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

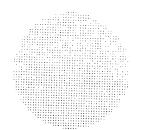
## 13.4.2 validcgm Log

Analysis for file c207.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 1 time
- (4, 7) occurred 2 times
- (4, 12) occurred 2 times
- (4, 16) occurred 2 times
- (4, 17) occurred 2 times
- (4, 19) occurred 2 times
- (5, 2) occurred 1 time
- (5, 3) occurred 1 time
- (5, 4) occurred 1 time
- (5, 22) occurred 6 times
- (5, 23) occurred 6 times
- (5, 24) occurred 1 time
- (5, 30) occurred 6 times
- (5, 31) occurred 1 time
- (5, 34) occurred 1 time

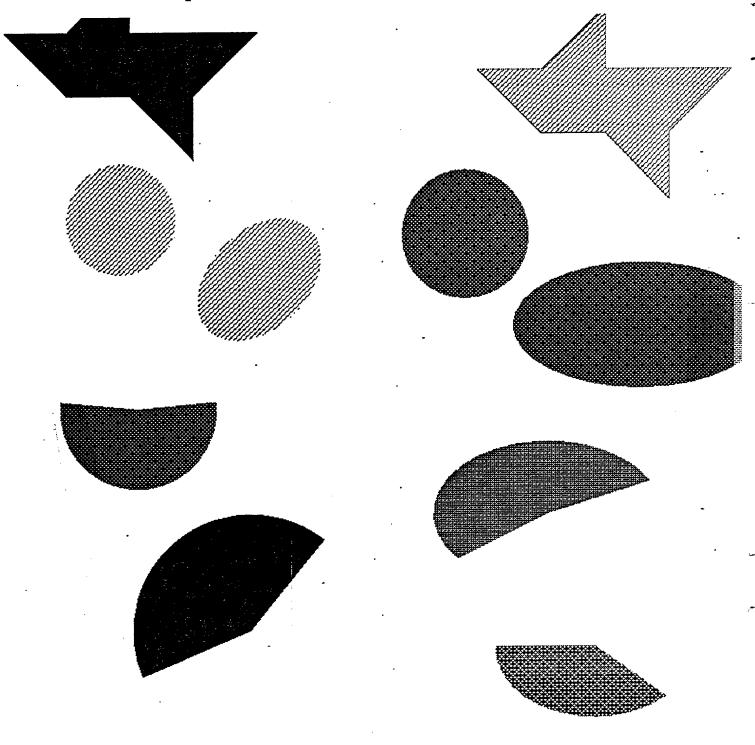
# 13.4.3 Output Harvard Graphics



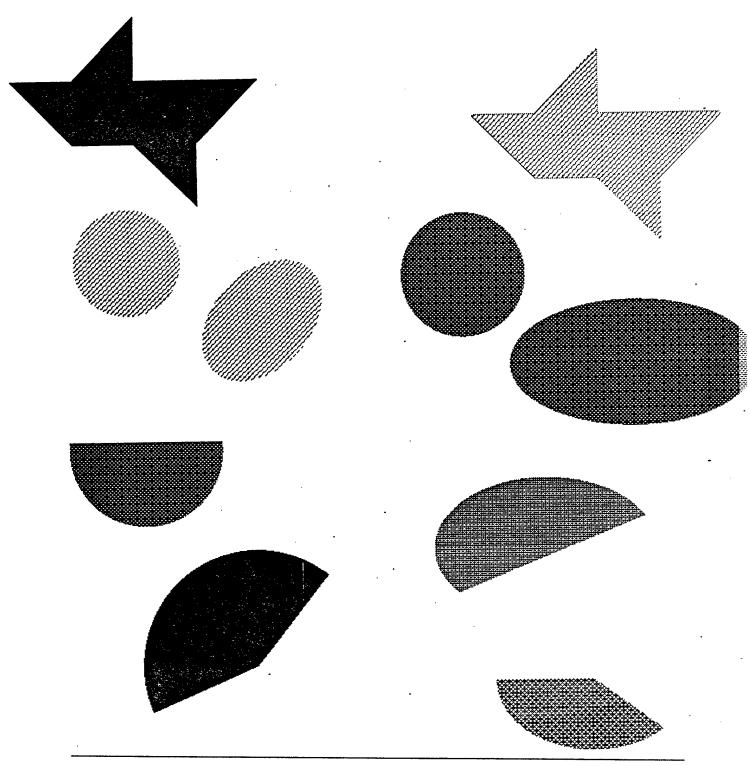


HG305 - C207 - 9316

13.4.4 Output IslandDraw



# 13.4.5 Output cgm2draw/IslandDraw



#### 13.5 File C208

## 13.5.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 03/04/93 Time: 07:45:22 Metafile Examined : i:\9316-1\c208.cgm Pictures Examined : All : All Elements Examined Bytes Examined : All 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: 03/04/93 Time: 07:45:24 Name of CGM under test: i:\9316-1\c208.cgm Encoding : Binary Pictures Examined : All Elements Examined : All Bytes Examined : All BEGIN METAFILE string : "lines.cgm" METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 130; 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 71 Elements Tested 664 Octets Tested

No Errors Were Detected |

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

#### 13.5.2 validegm Log

Analysis for file c208.cgm using table table ERROR: illegal in this state (2), std B ERROR: required precursor (0, 4) not yet seen (13.1, 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 (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 14 times
- (5, 2) occurred 12 times
- (5, 3) occurred 12 times
- (5, 4) occurred 12 times
- (5, 34) occurred 1 time

# 13.5.3 Output Harvard Graphics

HG305 - C208 - 9316

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13.3.3	Output cgm2draw/IslandDraw			
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#### 13.6 File C209

## 13.6.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 03/04/93 Time: 07:45:32 Metafile Examined : i:\9316-1\c209.cgm Pictures Examined : All Elements Examined : All Bytes Examined : All 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: 03/04/93 Time: 07:45:33 Name of CGM under test: i:\9316-1\c209.cgm Encoding : Binary : All Pictures Examined Elements Examined : All Bytes Examined : All BEGIN METAFILE string : "text.cgm" METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1" Picture 1 starts at octet offset 178; string contains: "Picture 1"

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 67 Elements Tested 896 Octets Tested

No Errors Were Detected |

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

## 13.6.2 validcgm Log

Analysis for file c209.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, 4) occurred 17 times
- (5, 10) occurred 3 times
- (5, 12) occurred 3 times
- (5, 13) occurred 3 times
- (5, 14) occurred 2 times
- (5, 15) occurred 4 times
- (5, 16) occurred 5 times
- (5, 17) occurred 4 times
- (5, 18) occurred 4 times
- (5, 34) occurred 1 time

# 13.6.3 Output Harvard Graphics

RIGHCENERER BRANKTEXT

# BOLD .15

SPACING 2

EXPANSION FACTOR 1.5
TEXT COLOR RED

1).

DOWN TEXTTEXT

# 13.6.4 Output IslandDraw

#### RIGHT TEXT

ABCD

EFG

HIJK

**LMOP** 

**QRST** 

UVW

XYZ

X

COLD

**TEXT** .12

BOLD .15

SPACING 2

3

**EXPANSION FACTOR 1.5** 

TEXT COLOR RED

## 13.6.5 Output cgm2draw/IslandDraw

CENTER TEXT

RIGHT TEXT

ABCD EFG HIJK LMOP QRST UVYZ

8010

D T X E T P U

TEXT .12

BOLD .15

SPACING 2

EXPANSION FACTOR 1.5

TEXT COLOR RED