Technical IGES Transfer

Using:

NADEP Cherry Point's Data

Supporting:

H-46 CNCS Air Frame Change #443

MIL-D-28000A (IGES)

Quick Short Test Report

27 July 1994
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MIL-D-28000A (IGES)

Quick Short Test Report
27 July 1994

Prepared By
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Air Force CALS Test Bed

Notification of Test Results

27 July 1994

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

NADEP Cherry Point

Identified as follows:

Title: Technical IGES Transfer
Program: H-46 CNCS Air Frame Change #443
Program Office: NADEP
Contract No.: N/A
QSTR No.: AFCTB-ID 94-101

Received on the following media: Electronic Transfer

The results of the QSTR Report evaluation are as follows:

MIL-STD-1840A Standard: N/A
MIL-STD-1840A Media Format: N/A
MIL-D-28000A IGES: FAIL
MIL-M-28001B SGML: N/A
MIL-R-28002A Raster: N/A
MIL-D-28003 CGM: N/A

Formal results with associated disclaimer are documented and available from the AFCTB.

Air Force CALS Test Bed
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Dayton, OH 45431-1672
Phone: 513-257-3085 FAX: 513-257-5881
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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.
1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze NADEP Cherry Point's interpretation and use of the CALS standards in transferring technical IGES data. NADEP used its Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff using an electronic transfer. The data is a sample from the NADEP CAD systems to determine CALS conformance. No MIL-STD-1840A data was included.
2. Test Parameters

Test Plan: AFCTB 94-101

Date of Evaluation: 26 July 1994

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: Sue Webster 35400
NADEP
Bldg 163
PSC Box 8021
MCAS Cherry Point NC 28533-0021
DSN 582-7354

Data Description: Technical IGES Test
2 Initial Graphics Exchange Specification (IGES) files

Data Source System:

IGES

HARDWARE
Sun 3/60

SOFTWARE
Computervision CADDs4

Evaluation Tools Used:

MIL-D-28000 (IGES)
HP 735
InterCAP X-Change v7.82
Island Software IslandDraw 3.0
Carberry Cadleaf 3.1.2
International TechneGroup Incorporated
(ITI) IGES/Works v2.0
SGI Indigo 2
   AUTODESK AutoCAD R12
   Cadkey Cadkey v6.0
   IGES Data Analysis (IDA) CALSView
Sun SparcStation 2
   Auto-trol S5000 IGES Converter R7.0.1
   IDA Parser/Verifier v94
   IDA IGESView v3.05
   Intergraph I/EMS 02.00.01.11
   Intergraph I/CIGES 02.00.01.03
   ITI IGES/Works v1.3
   Rosetta Technologies Preview v3.2
PC 486/50
   AUTODESK AutoCAD 386 R12
   IDA IGES Parser/Verifier v93
   IDA IGESView Windows

Standards Tested:
   MIL-D-28000A
3. 1840A Analysis

3.1 External Packaging

The files arrived at the Air Force CALS Test Bed (AFCTB) via an electronic transfer to the Internet server. No physical media was exchanged or evaluated.

3.2 Transmission Envelope

The files received by the AFCTB were not MIL-STD-1840A files. The files were not named per the standard conventions, as the stated purpose of the evaluation was only for the basic data structure.

3.2.1 Tape Formats

No tape was submitted for evaluation.

3.2.2 Declaration and Header Fields

The files were submitted for evaluation without the CALS headers or a Document Declaration file. The purpose of the evaluation was only for the basic data files.
4. IGES Analysis

The transfer contained two IGES 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 an indication of CALS capability. All operations were performed using the default settings.

These files were evaluated using IDA's parser/verifier set for basic IGES and CALS Class II. The CADDS4 does not have a CALS specific output so errors were expected. Both files reported the same type errors.

Entity 100 was reported in error for radii not being equal. The reported error while small, would be critical in a CNC application. An undefined font was also reported with this entity.

Entity 108 had a bounded plane error. The defined plane did not have a specified boundary.

A CALS specific error was reported for entity 212 where an illegal font was used. The fonts permitted in MIL-D-28000A are defined in Table II, Note 3. The permitted fonts are 1, 1001, 1002, and 1003.

File 2129-1i contained two drawings. It was noted throughout the evaluation by all software used, that the first drawing contained no information.

The text that appears to be upside down in the upper corner of file 399-2i was created that way.

Some lines in the models appeared to be missing. These entities were not found during an evaluation of the files. As an example, the thickening of the plate in model #399 was not inserted. Some of the right angle lines were present but the line defining the second edge was not created.

The files were converted using a utility available within the AFCTB with no reported errors. However file 2129-1i did not create a valid draw file. When specific views or drawings were selected the system reported a segment fault and did a core dump. The file created from 399-2i was read
into Island Software's IslandDraw, displayed and printed without a reported error. Additional files were created using the two views in the 399 file and displayed without a problem.

The files were read using AUTODESK's AutoCAD R12 with translator version 5.1. Both files had reported errors in the 100 entity. The reported errors relate to the radii problem noted above. Both files were displayed without a problem. Two drawing files were generated during the conversion process of file 2129-11. The first was noted as blank. The second contained two drawings. Sample dimension points were tested and found to match the drawing.

The files were converted using Cadkey's ig2c utility. The resulting files were read into Cadkey's Cadkey, displayed and printed. Both the 3-D model and drawing appeared in the same screen. It was noted that some entities, which were noted above, appeared to be missing. Sample dimension points were tested and found to match the drawing.

The files were read into Carberry's CADLeaf software without a reported error. The font was noted as being different than the remaining systems. Some thickening of circles was noted in both files.

The files were read using IDA's CALSView. File 2129 caused the system to crash every time it was read. Normally a core dump resulted. File 399 appeared to be complete. All lines appeared to be present, with some text over flow noted.

The files were read using IDA's IGESView for Windows. Some lines that were partly blanked were displayed and printed.

The files were read using InterCAPS' X-Change with no reported errors. When displayed and printed, the partly blanked lines were completely missing.

The IGES files were converted using Intergraph's I/CIGES utility without a reported error. The resulting files were read into Intergraph's I/EMS and displayed. The 3-D models appeared to be complete with the exception of some missing lines. These lines were not created in the original model and should not have been displayed.

The files were read using ITI's IGESWorks without a reported error. When the files were displayed and printed it was noted that many lines were missing from the drawing.
The IGES files were converted using Rosetta Technologies' Prepare with reported errors. The reported errors are due to a higher level of precision specified than can be used. The resulting files were read into Rosetta Technologies' Preview, displayed and printed. The partly blanked lines were completely displayed. A sample dimension was inserted and it matched the length specified in the drawing exactly.

Because CADDS4 does not have a CALS IGES output, it was not expected to generate valid CALS IGES files. This was found to be true during the evaluation.

Errors were reported in the basic IGES files during the evaluation.

5. SGML Analysis

No Standard Generalized Markup Language (SGML) files were included in this evaluation.

6. Raster Analysis

No Raster files were included in this evaluation.

7. CGM Analysis

No Computer Graphics Metafiles (CGM) were included in this evaluation.
8. Conclusions and Recommendations

The stated purpose of this evaluation was to determine the amount of data that could be transferred between CADD54 and other systems. It was found that the transfer of most data could be accomplished without a problem. The models appeared to be incomplete, and this was reflected by the reading systems.

The dimensional data appears to have been passed correctly. Sample data points were found to be the same as referenced on the drawing.

Problems were revealed in partially blanked lines. Some systems did not display these lines at all, and some displayed the complete lines including the blanked sections.

While the submitted files did not meet the CALS MIL-D-28000A, the systems in the AFCTB were able to read and display the information. Data that was missing does not appear to have been added during the creation of the files. All systems within the AFCTB were able to display usable amounts of information, which could be used to manufacture the defined parts. All part information located in the drawing information blocks was passed to all systems.
9. Appendix A - Detailed IGES Analysis

9.1 File 399-2i

9.1.1 Parser/Verifier Log

9.1.1.1 Basic IGES

****************************
*****  IGES PARSER/VERIFIER  *****
*****      MARCH 1994       *****
*****  IGES Data Analysis  *****
*****         (708) 344-1815 *****
****************************

Input file is 399-2i.igs

Checking conformance to Standard IGES

Today is July 26, 1994  3:58 PM

****************************
*****  CHECK FILE SYNTAX  *****
****************************

<table>
<thead>
<tr>
<th>Section</th>
<th>Records</th>
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</thead>
<tbody>
<tr>
<td>Start</td>
<td>1</td>
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<tr>
<td>Global</td>
<td>4</td>
</tr>
<tr>
<td>Directory</td>
<td>2700 ( 1350 Entities)</td>
</tr>
<tr>
<td>Parameter</td>
<td>1650</td>
</tr>
<tr>
<td>Terminate</td>
<td>1</td>
</tr>
</tbody>
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No syntax errors detected.

****************************
***** SUMMARY AND STATISTICS ****
****************************
*** File and Product Name Information ***

File name from sender = '399-2'
File creation Date.Time = '940719.155421'
Model change Date.Time = ''
Author = 'Sue Webster'
Department = '35400'
Product name from sender = 'h-46.eng.399-2'
Destination product name = 'h-46.eng.399-2'

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'

*** Originating System Data ***

System ID = 'COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM'
Preprocessor version = 'IGES VERSION 4.0 (06-OCT-88)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 14

*** Global Model Data ***

Model scale = 1.00000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 1.000000E-06
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 938
Blanked 412
Independence: Independent 820  
Physically Subordinate 516  
Logically Subordinate 0  
Totally Subordinate 14

Entity use: Geometry 721  
Annotation 489  
Definition 140  
Other 0  
Logical/Positional 0  
2D parametric 0  
Construction geometry 0  
Not Specified 0

Hierarchy: Structure DE applies 0  
Subordinate DE applies 1350  
Hierarchy property applies 0  
Not Specified 0

*** Entity Occurrence Counts ***

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<td>106</td>
<td>31</td>
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304 2 0 2 Line font definition - repeating pattern
314 0 0 1 Color definition
402 4 0 128 Views visible, Color, Line weight instance
404 0 0 1 Drawing
406 15 0 3 Property - Name
406 16 0 1 Property - Drawing size
406 17 0 1 Property - Drawing units
410 0 0 2 View - Orthographic parallel

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*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 1350

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<tr>
<td>87 - - 2 - - 409 - - Solid</td>
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<tr>
<td>- - - - - - - - - - - Dashed</td>
</tr>
<tr>
<td>- - - - - - - - - - - Phantom</td>
</tr>
<tr>
<td>- - - - - - - - - - - Center-line</td>
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<tr>
<td>- - - - - - - - - - - Dotted</td>
</tr>
<tr>
<td>- - - - - - - - - - - User defined</td>
</tr>
</tbody>
</table>

116 118 120 122 124 125 126 128

- - - - - 25 - - Undefinded
- - - - - - - - Solid
- - - - - - - - Dashed

<<<<<< PART OF LOG FILE REMOVED HERE >>>>>
*** Line Widths Used in Data ***

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<tr>
<td>User</td>
<td>253</td>
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</tbody>
</table>

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

*** Entity type: 100

ERROR 2242: Radii not equal at D 203; difference is 4.999840E-06.
WARNING 2492: Undefined line font value (0) specified for D 483.
WARNING 2492: Undefined line font value (0) specified for D 495.
WARNING 2492: Undefined line font value (0) specified for D 499.
WARNING 2492: Undefined line font value (0) specified for D 509.
ERROR 2242: Radii not equal at D 521; difference is 3.736742E-06.
WARNING 2492: Undefined line font value (0) specified for D 545.
ERROR 2242: Radii not equal at D 595; difference is 3.736742E-06.
WARNING 2492: Undefined line font value (0) specified for D 601.
WARNING 2492: Undefined line font value (0) specified for D 603.
WARNING 2492: Undefined line font value (0) specified for D 605.
WARNING 2492: Undefined line font value (0) specified for D 647.
WARNING 2492: Undefined line font value (0) specified for D 695.
WARNING 2492: Messages regarding undefined line font suppressed.
ERROR 2242: Radii not equal at D 823; difference is 3.736499E-06.
ERROR 2242: Radii not equal at D 855; difference is 3.736499E-06.
ERROR 2242: Radii not equal at D 1977; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1983; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1991; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1993; difference is 3.329138E-06.
ERROR 2242: Radii not equal at D 1997; difference is 1.503891E-06.
ERROR 2242: Messages regarding unequal radii suppressed.

*** Entity type: 102
*** Entity type: 106

NITPICK 2076: Entity does not have Annotation flag set at D 2209.
NITPICK 2076: Entity does not have Annotation flag set at D 2211.
NITPICK 2076: Messages regarding entity use (annotation) suppressed.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 2347.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 2349.

*** Entity type: 108

ERROR 2012: Bounded Plane defined without a boundary specified at D 53.
ERROR 2012: Bounded Plane defined without a boundary specified at D 55.
ERROR 2012: Bounded Plane defined without a boundary specified at D 57.
ERROR 2012: Bounded Plane defined without a boundary specified at D 59.
ERROR 2012: Bounded Plane defined without a boundary specified at D 67.
ERROR 2012: Bounded Plane defined without a boundary specified at D 69.
ERROR 2012: Bounded Plane defined without a boundary specified at D 71.
ERROR 2012: Bounded Plane defined without a boundary specified at D 73.

*** Entity type: 110

-- 697 lines averaging 1.167336E+00 units --

*** Entity type: 124

25 transformation matrices, 1 non-zero translations.
NOTE 2341: 1 matrices contain translation information.

*** Entity type: 210

*** Entity type: 212

200 text strings in data file.
Average text aspect ratio in file is 0.9874040.
Minimum text aspect ratio in file is 0.5000000.
Maximum text aspect ratio in file is 1.2000000.

FONTS USED IN FILE

<table>
<thead>
<tr>
<th>FONT</th>
<th>COUNT</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>108</td>
<td>Default ASCII Style</td>
</tr>
<tr>
<td>2</td>
<td>89</td>
<td>LeRoy</td>
</tr>
<tr>
<td>1002</td>
<td>3</td>
<td>Symbol Font 2</td>
</tr>
</tbody>
</table>
*** Entity type: 214

Average arrow aspect ratio in file is 3.0000000.
Minimum arrow aspect ratio in file is 3.0000000.
Maximum arrow aspect ratio in file is 3.0000000.

*** Entity type: 216

*** Entity type: 230

*** Entity type: 304

Default line font substitute at D 383 is Center-line.
Default line font substitute at D 473 is Dashed.

*** Entity type: 314

Color specified at D 47 has no name.
Default color substitute is cyan.

*** Entity type: 402

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 2699.
Drawing at D 2699 contains 2 views.
NITPICK 2289: View (D 75) is not logically subordinate to drawing at D 2699.
NITPICK 2289: View (D 61) is not logically subordinate to drawing at D 2699.
Drawing at D 2699 contains 443 annotation entities.

*** Entity type: 406

*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D 61.
Scale of view at D 61 is 1.0000000E+00.
CAUTION 2315: Matrix associated with view contains translation information at D 61.
Orthographic View entity at D 61 has 4 clipping planes specified.

\[
\begin{align*}
XMIN &= -0.739 & XMAX &= 11.910 \\
YMIN &= -1.930 & YMAX &= 2.669 \\
ZMIN &= \text{Not Set} & ZMAX &= \text{Not Set}
\end{align*}
\]
NITPICK 2073: Entity use flag must be 1 for View entity at D 75.
Scale of view at D 75 is 1.000000E+00.
Orthographic View entity at D 75 has 4 clipping planes specified.
XMIN = -0.739   XMAX = 12.115
YMIN = -1.807   YMAX = 2.423
ZMIN = Not Set  ZMAX = Not Set

*** Message Summary ***

2006: 8 Missing pointers.
2011: 2 Invalid subordinate relationships.
2015: 47 Mathematically incorrect definitions.
2016: 27 Invalid entity use flag.
2038: 809 Invalid Line font values.

*** Error Summary ***

0 fatal errors
0 severe errors
55 errors
809 warnings
4 cautions
29 nitpicks
1 notes

*** End of Analysis of 399-2i.igs ***
9.1.1.2 CALS IGES Class II

******************************************************************************
*****  IGES PARSER/VERIFIER   *****
*****    MARCH 1994     *****
*****  IGES Data Analysis  *****
*****    (708) 344-1815  *****
******************************************************************************

Input file is 399-2i.igs
Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)
Today is July 26, 1994  3:57 PM

******************************************************************************
*****  CHECK FILE SYNTAX   *****
******************************************************************************

Section     Records
Start        1
Global       4
Directory    2700  ( 1350 Entities)
Parameter    1650
Terminate    1

No syntax errors detected.

******************************************************************************
***** SUMMARY AND STATISTICS *****
******************************************************************************

*** File and Product Name Information ***

File name from sender   = '399-2'
File creation Date.Time = '940719.155421'
Model change Date.Time  = '
Author                = 'Sue Webster'
Department             = '35400'
Product name from sender = 'h-46.eng.399-2'
Destination product name = 'h-46.eng.399-2'

*** Parameter Delimiters ***

Delimiter    = ','
Terminator   = ';'
*** Originating System Data ***

System ID = 'COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM'
Preprocessor version = 'IGES VERSION 4.0 (06-OCT-88)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 14

*** Global Model Data ***

Model scale = 1.00000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 1.000000E-06
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 938
             Blanked 412

Independence: Independent 820
              Physically Subordinate 516
              Logically Subordinate 0
              Totally Subordinate 14

Entity use:  Geometry 721
              Annotation 489
              Definition 140
              Other 0
              Logical/Positional 0
              2D parametric 0
              Construction geometry 0
              Not Specified 0
Hierarchy:  
- Structure DE applies: 0
- Subordinate DE applies: 1350
- Hierarchy property applies: 0
- Not Specified: 0

*** Entity Occurrence Counts ***

<table>
<thead>
<tr>
<th>Entity</th>
<th>Form</th>
<th>Level</th>
<th>Count</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0</td>
<td>0</td>
<td>51</td>
<td>Circular arc</td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>3</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>4</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>5</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0</td>
<td>72</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>Composite curve</td>
</tr>
<tr>
<td>106</td>
<td>31</td>
<td>252</td>
<td>2</td>
<td>Section lines - General use, iron, brick,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>stone masonry</td>
</tr>
<tr>
<td>106</td>
<td>40</td>
<td>0</td>
<td>24</td>
<td>Witness line</td>
</tr>
<tr>
<td>108</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>Plane, Bounded</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>1</td>
<td>106</td>
<td>Line</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>4</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>5</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>252</td>
<td>147</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>Transformation matrix</td>
</tr>
<tr>
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<td>4</td>
<td>General label</td>
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<tr>
<td>212</td>
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<td>0</td>
<td>23</td>
<td>General note</td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>1</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>252</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>3</td>
<td>0</td>
<td>28</td>
<td>Leader arrow - Filled triangle</td>
</tr>
<tr>
<td>216</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>Linear dimension</td>
</tr>
<tr>
<td>230</td>
<td>0</td>
<td>252</td>
<td>2</td>
<td>Sectioned area (Standard Crosshatching)</td>
</tr>
<tr>
<td>304</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>Line font definition - repeating pattern</td>
</tr>
<tr>
<td>314</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Color definition</td>
</tr>
<tr>
<td>402</td>
<td>4</td>
<td>0</td>
<td>128</td>
<td>Views visible, Color, Line weight instance</td>
</tr>
<tr>
<td>404</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Drawing</td>
</tr>
<tr>
<td>406</td>
<td>15</td>
<td>0</td>
<td>3</td>
<td>Property - Name</td>
</tr>
<tr>
<td>406</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>Property - Drawing size</td>
</tr>
<tr>
<td>406</td>
<td>17</td>
<td>0</td>
<td>1</td>
<td>Property - Drawing units</td>
</tr>
<tr>
<td>410</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>View - Orthographic parallel</td>
</tr>
</tbody>
</table>
*** Entity Count by Level ***

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>492</td>
</tr>
<tr>
<td>1</td>
<td>187</td>
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<tr>
<td>3</td>
<td>112</td>
</tr>
<tr>
<td>4</td>
<td>67</td>
</tr>
<tr>
<td>5</td>
<td>253</td>
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<td>72</td>
<td>1</td>
</tr>
<tr>
<td>252</td>
<td>238</td>
</tr>
</tbody>
</table>

*** Labeling Information ***

0% of the entities are labeled.
Unlabeled    1350

*** Line Fonts Used in Data ***

<table>
<thead>
<tr>
<th></th>
<th>100</th>
<th>102</th>
<th>104</th>
<th>106</th>
<th>108</th>
<th>110</th>
<th>112</th>
<th>114</th>
</tr>
</thead>
<tbody>
<tr>
<td>149</td>
<td>2</td>
<td>24</td>
<td>8</td>
<td>249</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Undefined</td>
</tr>
<tr>
<td>87</td>
<td>-</td>
<td>-</td>
<td>409</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Dashed</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Phantom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Center-line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Dotted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39</td>
<td>-</td>
<td>User defined</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>116</th>
<th>118</th>
<th>120</th>
<th>122</th>
<th>124</th>
<th>125</th>
<th>126</th>
<th>128</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Undefined</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Dashed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

*** Line Widths Used in Data ***

<table>
<thead>
<tr>
<th>Weight</th>
<th>Count</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defaulted</td>
<td>1350</td>
<td>(0.0010)</td>
</tr>
</tbody>
</table>

*** Colors Used in Data ***

<table>
<thead>
<tr>
<th>Defaulted</th>
<th>Green</th>
<th>Yellow</th>
<th>Cyan</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>496</td>
<td>112</td>
<td>238</td>
<td>251</td>
<td>253</td>
</tr>
</tbody>
</table>
************ ENTITY ANALYSIS ************

*** Entity type: 100

ERROR 2242: Radii not equal at D 203; difference is 4.999840E-06.
WARNING 2492: Undefined line font value (0) specified for D 483.
WARNING 2492: Undefined line font value (0) specified for D 495.
WARNING 2492: Undefined line font value (0) specified for D 499.
WARNING 2492: Undefined line font value (0) specified for D 509.
ERROR 2242: Radii not equal at D 521; difference is 3.736742E-06.
WARNING 2492: Undefined line font value (0) specified for D 545.
ERROR 2242: Radii not equal at D 595; difference is 3.736742E-06.
WARNING 2492: Undefined line font value (0) specified for D 601.
WARNING 2492: Undefined line font value (0) specified for D 603.
WARNING 2492: Undefined line font value (0) specified for D 605.
WARNING 2492: Undefined line font value (0) specified for D 647.
WARNING 2492: Undefined line font value (0) specified for D 695.
WARNING 2492: Messages regarding undefined line font suppressed.
ERROR 2242: Radii not equal at D 823; difference is 3.736499E-06.
ERROR 2242: Radii not equal at D 855; difference is 3.736499E-06.
ERROR 2242: Radii not equal at D 1977; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1983; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1991; difference is 1.503891E-06.
ERROR 2242: Radii not equal at D 1993; difference is 3.329138E-06.
ERROR 2242: Radii not equal at D 1997; difference is 1.503891E-06.
ERROR 2242: Messages regarding unequal radii suppressed.

*** Entity type: 102

*** Entity type: 106

NITPICK 2076: Entity does not have Annotation flag set at D 2209.
NITPICK 2076: Entity does not have Annotation flag set at D 2211.
NITPICK 2076: Messages regarding entity use (annotation) suppressed.
CAUTION 2331: Use of section lines (Form 31–38) is not recommended at D 2347.
CAUTION 2331: Use of section lines (Form 31–38) is not recommended at D 2349.

*** Entity type: 108

ERROR 2012: Bounded Plane defined without a boundary specified at D 53.
ERROR 2012: Bounded Plane defined without a boundary specified at D 55.
ERROR 2012: Bounded Plane defined without a boundary specified at D 57.
ERROR 2012: Bounded Plane defined without a boundary specified at D 59.
ERROR 2012: Bounded Plane defined without a boundary specified at D 67.
ERROR 2012: Bounded Plane defined without a boundary specified at D 69.
ERROR 2012: Bounded Plane defined without a boundary specified at D 71.
ERROR 2012: Bounded Plane defined without a boundary specified at D 73.
*** Entity type: 110

-- 697 lines averaging 1.167336E+00 units --

*** Entity type: 124

25 transformation matrices, 1 non-zero translations.
NOTE 2341: 1 matrices contain translation information.

*** Entity type: 210

*** Entity type: 212

ERROR 4050: Illegal text font for CALS Class II specified for string 1 at D 2359.
ERROR 4050: Illegal text font for CALS Class II specified for string 1 at D 2361.
ERROR 4050: Messages regarding illegal text fonts suppressed.
200 text strings in data file.
Average text aspect ratio in file is 0.9874040.
Minimum text aspect ratio in file is 0.5000000.
Maximum text aspect ratio in file is 1.2000000.

FONTS USED IN FILE

<table>
<thead>
<tr>
<th>FONT</th>
<th>COUNT</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>108</td>
<td>Default ASCII Style</td>
</tr>
<tr>
<td>2</td>
<td>89</td>
<td>LeRoy</td>
</tr>
<tr>
<td>1002</td>
<td>3</td>
<td>Symbol Font 2</td>
</tr>
</tbody>
</table>

*** Entity type: 214

Average arrow aspect ratio in file is 3.0000000.
Minimum arrow aspect ratio in file is 3.0000000.
Maximum arrow aspect ratio in file is 3.0000000.

*** Entity type: 216

*** Entity type: 230

*** Entity type: 304

Default line font substitute at D 383 is Center-line.
Default line font substitute at D 473 is Dashed.
*** Entity type: 314

Color specified at D  47 has no name.
  Default color substitute is cyan.

*** Entity type: 402

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D  2699.
  Drawing at D  2699 contains 2 views.
NITPICK 2289: View (D   75) is not logically subordinate to drawing at D  2699.
NITPICK 2289: View (D   61) is not logically subordinate to drawing at D  2699.
  Drawing at D  2699 contains 443 annotation entities.

*** Entity type: 406

*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D  61.
  Scale of view at D  61 is 1.000000E+00.
CAUTION 2315: Matrix associated with view contains translation information at D  61.
  Orthographic View entity at D  61 has 4 clipping planes specified.
    XMIN =  -0.739  XMAX =  11.910
    YMIN =  -1.930  YMAX =  2.669
    ZMIN = Not Set  ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D  75.
  Scale of view at D  75 is 1.000000E+00.
  Orthographic View entity at D  75 has 4 clipping planes specified.
    XMIN =  -0.739  XMAX =  12.115
    YMIN =  -1.807  YMAX =  2.423
    ZMIN = Not Set  ZMAX = Not Set

*** Message Summary ***

2006: 8 Missing pointers.
2011: 2 Invalid subordinate relationships.
2015: 47 Mathematically incorrect definitions.
2016: 27 Invalid entity use flag.
2038: 809 Invalid Line font values.
4000: 89 Miscellaneous CALS messages
*** Error Summary ***

0 fatal errors
0 severe errors
144 errors
809 warnings
4 cautions
29 nitpicks
1 notes

*** End of Analysis of 399-2i.igs ***
9.1.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)
================================================================================================
File: C:/TMP/399-2I.xli
Date: Tue, Jul 26, 1994
Time: 16:26:46
================================================================================================

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750
Translating from IGES file: C:/TMP/399-2I.IGS
to AutoCAD Drawing: C:\399-2I.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 gothic
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 acad.lin
1 CONTINUOUS acad.lin
2 DASHED acad.lin
3 PHANTOM acad.lin
4 CENTER acad.lin
5 DOT acad.lin

================================================================================================
Parse phase

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 37, TF 124:0) Entity has a column which is not a unit vector.
Action taken: Unitized all vectors.

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 39, 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_PTR_108) ***
(DE 53, TF 108:1) Entity references DE 0. Pointer must reference a Closed Curve entity.
Action taken: The form number was changed from 1 to 0.

*** Warning (IEVM_BAD_PTR_108) ***
(DE 55, TF 108:1) Entity references DE 0. Pointer must reference a Closed Curve entity.
Action taken: The form number was changed from 1 to 0.

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

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***

Action taken: Start point moved 2.4999198e-006 units from 2.7254200e+001, 3.8816500e+000 to 2.7254198e+001, 3.8816487e+000. Terminate point moved 2.4999198e-006 units from 2.7168200e+001, 3.8816400e+000 to 2.7168198e+001, 3.8816412e+000.

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***

Action taken: Start point moved 1.8683709e-006 units from -4.8807400e+000, -1.4773700e+000 to -4.8807417e+000, -1.4773693e+000. Terminate point moved 1.8683709e-006 units from -4.8807400e+000, -1.4026400e+000 to -4.8807383e+000, -1.4026393e+000.

<<<< PART OF LOG FILE REMOVED HERE >>>>>
*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 2063, TF 100:0) Entity's radii are not equal. Start point radius:
1.1835267e-001. Terminate point radius: 1.1835712e-001.

Action taken: Start point moved 2.2264143e-006 units from 4.99650000e+000,
-1.3499900e-001 to 4.9965004e+000, -1.3500120e-001. Terminate point moved
2.2264143e-006 units from 5.06700000e+000, -9.4999300e-002 to 5.0669983e+000,
-9.4997857e-002.

============================================================================
Start Section:

Global Section:

Parameter Delimiter: ,
Record Delimiter: ;
Sending Product ID: h-46.eng.399-2
File Name: 399-2
System ID: COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM
Preprocessor Version: IGES VERSION 4.0 (06-OCT-88)
Size of Integer: 32
Sgl. Precision Mag: 38
Sgl. Precision Sig: 6
Db1. Precision Mag: 308
Db1. Precision Sig: 14
Receiving Product ID: h-46.eng.399-2
Model Space Scale: 1.000000
Unit Flag: 1
Unit String: INCH
# of Line Weights: 32767
Maximum Line Width: 32.767000
Creation Date: 07/19/94 15:54:21
Minimum Resolution: 0.000001
Maximum Coordinate: 0.000000
Author: Sue Webster
Organization: 35400
IGES Version Number: 6
Drafting Standard: 3
Entity Summary:

<table>
<thead>
<tr>
<th>Type</th>
<th>Form</th>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0</td>
<td>Circular Arc</td>
<td>236</td>
</tr>
<tr>
<td>102</td>
<td>0</td>
<td>Composite Curve</td>
<td>2</td>
</tr>
<tr>
<td>106</td>
<td>31</td>
<td>Section Entity</td>
<td>2</td>
</tr>
<tr>
<td>106</td>
<td>40</td>
<td>Witness Line</td>
<td>24</td>
</tr>
<tr>
<td>108</td>
<td>0</td>
<td>Plane (Unbounded)</td>
<td>8</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>Line</td>
<td>697</td>
</tr>
<tr>
<td>124</td>
<td>0</td>
<td>Transformation Matrix</td>
<td>25</td>
</tr>
<tr>
<td>210</td>
<td>0</td>
<td>General Label</td>
<td>4</td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>General Note (Simple)</td>
<td>171</td>
</tr>
<tr>
<td>214</td>
<td>3</td>
<td>Leader (Filled triangle)</td>
<td>28</td>
</tr>
<tr>
<td>216</td>
<td>0</td>
<td>Linear dim - undetermined form</td>
<td>12</td>
</tr>
<tr>
<td>230</td>
<td>0</td>
<td>Section Area (Standard Fill)</td>
<td>2</td>
</tr>
<tr>
<td>304</td>
<td>2</td>
<td>Line Font Definition (Pattern)</td>
<td>2</td>
</tr>
<tr>
<td>314</td>
<td>0</td>
<td>Color Definition</td>
<td>1</td>
</tr>
<tr>
<td>402</td>
<td>4</td>
<td>Views Visible, Color, Line wt.</td>
<td>128</td>
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<tr>
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<td>Drawing (form 0)</td>
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</tr>
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<td>16</td>
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</tr>
<tr>
<td>410</td>
<td>0</td>
<td>View</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 1350

Translation phase

Drawing Entity (404 Form 0) at DE 2699, with
name = 1,
size = 40.000000, 28.000000,
units = IN,
was processed in the AutoCAD drawing file: C:\399-2I.dwg
IGES Entity Summary:

<table>
<thead>
<tr>
<th>Type</th>
<th>Form</th>
<th>Description</th>
<th>Count</th>
<th>Processed</th>
<th>Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0</td>
<td>Circular Arc</td>
<td>236</td>
<td>236</td>
<td>0</td>
</tr>
<tr>
<td>102</td>
<td>0</td>
<td>Composite Curve</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>106</td>
<td>31</td>
<td>Section Entity</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>106</td>
<td>40</td>
<td>Witness Line</td>
<td>24</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>108</td>
<td>0</td>
<td>Plane (Unbounded)</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>110</td>
<td>0</td>
<td>Line</td>
<td>697</td>
<td>697</td>
<td>0</td>
</tr>
<tr>
<td>210</td>
<td>0</td>
<td>General Label</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>212</td>
<td>0</td>
<td>General Note (Simple)</td>
<td>171</td>
<td>171</td>
<td>0</td>
</tr>
<tr>
<td>214</td>
<td>3</td>
<td>Leader (Filled triangle)</td>
<td>28</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>216</td>
<td>0</td>
<td>Linear dim - undetermined form</td>
<td>12</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>230</td>
<td>0</td>
<td>Section Area (Standard Fill)</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>304</td>
<td>2</td>
<td>Line Font Definition (Pattern)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>314</td>
<td>0</td>
<td>Color Definition</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>402</td>
<td>4</td>
<td>Views Visible, Color, Line wt.</td>
<td>128</td>
<td>128</td>
<td>0</td>
</tr>
<tr>
<td>404</td>
<td>0</td>
<td>Drawing (form 0)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>406</td>
<td>15</td>
<td>Property (Name)</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>406</td>
<td>16</td>
<td>Property (Drawing Size)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>406</td>
<td>17</td>
<td>Property (Drawing Units)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>410</td>
<td>0</td>
<td>View</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Totals: 1324 1324 0

AutoCAD Entity Summary

<table>
<thead>
<tr>
<th>Entity</th>
<th>Created</th>
<th>Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>823</td>
<td>0</td>
</tr>
<tr>
<td>CIRCLE</td>
<td>146</td>
<td>0</td>
</tr>
<tr>
<td>TEXT</td>
<td>180</td>
<td>0</td>
</tr>
<tr>
<td>ARC</td>
<td>90</td>
<td>0</td>
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<tr>
<td>SOLID</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>INSERT</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>POLYLINE</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>DIMENSION</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>BLOCK</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Totals: 1281 0
Error Summary:

The following message was issued 47 time(s)
Entity's radii are not equal. Start point radius: %.7e. Terminate point radius: %.7e.

The following message was issued 8 time(s)
Entity references DE %ld%s. Pointer must must reference a Closed Curve entity.

The following message was issued 5 time(s)
Entity has a column which is not a unit vector.

Status: 0
Warning: 60
Error: 0
Fatal: 0

Elapsed Time:

Processor: 00:00:24
Clock: 00:00:25

============================================================================
9.1.3 Prepare Error Log

ERROR REPORT FOR FILE /novell/94101/399-2i.igs

>> File record length is 81 (1 record terminator used)

Terminate section report:

<table>
<thead>
<tr>
<th>File Section</th>
<th>#lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>START</td>
<td>1</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>4</td>
</tr>
<tr>
<td>DIRECTORY ENTRY</td>
<td>2700</td>
</tr>
<tr>
<td>PARAMETER DATA</td>
<td>1650</td>
</tr>
<tr>
<td>TERMINATE</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4356</td>
</tr>
</tbody>
</table>

(Expect 81 x 4356 = 352836 bytes)

------------- preliminary format scan complete -------------

>> WARNING: Cannot use maximum power of 10 requested.
  : Requested maximum power of 308 using 307.
  : Field 11 line 2 of GLOBAL section. (Max. Exp. for Double)
C SYSTEM,28HIGES VERSION 4.0 (06-OCT-88),32,38,6,308,14,14Hh-46.eng.399-G

-------------

Found 0 errors and 1 warnings
**9.1.4 Parser Log - IGESWorks**

**IGES/Works v1.4.1**  
International TechnoGroup Incorporated  
Validation Logfile

Date: July 28, 1994  
Model: 399-21

*************** Validation Parameters ***************

**TOLERANCE CONFIGURATION VALUES**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZERO_TOL</td>
<td>1.0000000e-13</td>
</tr>
<tr>
<td>MODEL_SPACE_PNT_COIN_TOL</td>
<td>1.000000e-03</td>
</tr>
<tr>
<td>PARM_SPACE_PNT_COIN_TOL</td>
<td>1.0000000e-08</td>
</tr>
<tr>
<td>ISO_PARM_CURVE_TOL</td>
<td>1.0000000e-08</td>
</tr>
<tr>
<td>NON_CONV_TOL</td>
<td>1.0000000e-12</td>
</tr>
<tr>
<td>KNOT_COIN_TOL</td>
<td>1.0000000e-10</td>
</tr>
<tr>
<td>SAME_INTER_TOL</td>
<td>1.0000000e-12</td>
</tr>
<tr>
<td>PARALLEL_LINES_TOL</td>
<td>1.0000000e-07</td>
</tr>
<tr>
<td>ANGLE_COIN_TOL</td>
<td>1.0000000e-05</td>
</tr>
<tr>
<td>PNT_PROJ_TOL</td>
<td>1.0000000e-07</td>
</tr>
<tr>
<td>COLIN_TOL</td>
<td>1.0000000e-07</td>
</tr>
<tr>
<td>COPLANAR_TOL</td>
<td>1.0000000e-08</td>
</tr>
<tr>
<td>ZERO_NORMAL_TOL</td>
<td>1.0000000e-06</td>
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<tr>
<td>SAME_TANGENT_TOL</td>
<td>1.0000000e-04</td>
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<tr>
<td>SAME_CURVATURE_TOL</td>
<td>1.0000000e-04</td>
</tr>
<tr>
<td>SAME_DERIVATIVE_TOL</td>
<td>1.0000000e-03</td>
</tr>
<tr>
<td>MODEL_LINEAR_APPROX_TOL</td>
<td>2.220446e-16</td>
</tr>
</tbody>
</table>

*************** Entity Listing Before Validation ***************

<table>
<thead>
<tr>
<th>Count</th>
<th>Type</th>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>236</td>
<td>100</td>
<td>0</td>
<td>Circular Arc</td>
</tr>
<tr>
<td>2</td>
<td>102</td>
<td>0</td>
<td>Composite Curve</td>
</tr>
<tr>
<td>2</td>
<td>106</td>
<td>31</td>
<td>Section Entity</td>
</tr>
<tr>
<td>24</td>
<td>106</td>
<td>40</td>
<td>Witness Line</td>
</tr>
<tr>
<td>8</td>
<td>108</td>
<td>1</td>
<td>Plane (Bounded)</td>
</tr>
<tr>
<td>697</td>
<td>110</td>
<td>0</td>
<td>Line</td>
</tr>
<tr>
<td>25</td>
<td>124</td>
<td>0</td>
<td>Transformation Matrix</td>
</tr>
<tr>
<td>4</td>
<td>210</td>
<td>0</td>
<td>General Label</td>
</tr>
<tr>
<td>171</td>
<td>212</td>
<td>0</td>
<td>General Note (Simple)</td>
</tr>
<tr>
<td>28</td>
<td>214</td>
<td>3</td>
<td>Leader (Filled triangle)</td>
</tr>
<tr>
<td>12</td>
<td>216</td>
<td>0</td>
<td>Linear dim - undetermined form</td>
</tr>
</tbody>
</table>
1350 - Number of entities in selection list

******************** Entity Validation *********************

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 37, TF 124:0) This Transformation Matrix entity (124) has a a column that
is not a unit vector within the stated tolerance.
Action taken: All vectors have been unitized.

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 39, TF 124:0) This Transformation Matrix entity (124) has a a column that
is not a unit vector within the stated tolerance.
Action taken: All vectors have been unitized.

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

*** Warning (IEVM_BAD_PTR_108) ***
(DE 53, TF 108:1) This Bounded Plane entity (108:1, 108:-1) references DE 0.
The pointer must reference a Closed Curve entity.
Action taken: The form number was changed from 1 to 0.

*** Warning (IEVM_BAD_PTR_108) ***
(DE 55, TF 108:1) This Bounded Plane entity (108:1, 108:-1) references DE 0.
The pointer must reference a Closed Curve entity.
Action taken: The form number was changed from 1 to 0.

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

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 203, TF 100:0) This circular arc entity's start point and end point radii
are not equal in length. Start point radius: 4.9654092e-02. Terminate point
radius: 4.9649093e-02.
Action taken: Start point moved 2.4999198e-06 units from 2.7254200e+01,
3.8816500e+00 to 2.7254198e+01, 3.8816487e+00. Terminate point moved
2.4999198e-06 units from 2.7168200e+01, 3.8816400e+00 to 2.7168198e+01,
3.8816412e+00.
*** Warning (IEVM_RADIUS_NOT_EQUAL_100) ***
(DE 521, TF 100:0) This circular arc entity's start point and end point radii are not equal in length. Start point radius: 9.9995397e-02. Terminate point radius: 9.9991660e-02.
Action taken: Start point moved 1.8683709e-06 units from -4.8807400e+00, -1.4773700e+00 to -4.8807417e+00, -1.4773693e+00. Terminate point moved 1.8683709e-06 units from -4.8807400e+00, -1.4026400e+00 to -4.8807383e+00, -1.4026393e+00.

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

Entity Validation Summary:

<table>
<thead>
<tr>
<th>Type</th>
<th>Form</th>
<th>Entity Count</th>
<th>Number Valid</th>
<th>Number of Corrected Warnings</th>
<th>Number of Uncorrected Warnings</th>
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</thead>
<tbody>
<tr>
<td>Global Section</td>
<td>100</td>
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<td>236</td>
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</tr>
<tr>
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<td>1</td>
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</tr>
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</tr>
<tr>
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<td>406</td>
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<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>410</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Totals: 1351 1291 0 60 0 0

The following message was issued and suppressed 42 times:

This circular arc entity's start point and end point radii are not equal in length. Start point radius: %7e. Terminate point radius: %7e.

The following message was issued and suppressed 3 times:
This Bounded Plane entity (108:1, 108:-1) references DE %ld%. The pointer must reference a Closed Curve entity.

A message is suppressed when it has been issued more than 5 times. This value is controlled by the 'MAX_MESSAGE' configuration parameter.

*******************************************************************************
9.1.5 Intergraph Log File

IGES Translator Log File
IGES to I/EMS processing
Command line used:
iges -d in -i /novell/94101/21291i.igs -o /novell/94101/21291i.dgn -s
/cals/ip32/ems/config/seed_file -1 /novell/94101/21291i.log

Processing started: Thu Jul 28 09:04:37 1994
Seed file used: /cals/ip32/ems/config/seed_file

** Generic Information **

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGES Version:</td>
<td>4.0</td>
</tr>
<tr>
<td>IGES File:</td>
<td>&quot;/novell/94101/21291i.igs&quot;</td>
</tr>
<tr>
<td>MODEL File:</td>
<td>&quot;/novell/94101/21291i.dgn&quot;</td>
</tr>
<tr>
<td>LOG File:</td>
<td>&quot;/novell/94101/21291i.log&quot;</td>
</tr>
<tr>
<td>Application Protocol:</td>
<td>ANSI IGES</td>
</tr>
<tr>
<td>Defaulted Values:</td>
<td>Chord Height tolerance of 0.010000 has been used</td>
</tr>
</tbody>
</table>

** Start Section **

** Global Section **

1. Parameter delimiter: ','
2. Record delimiter: ';' 
3. Product Identification of sending system: "h-46.eng.2129-1"
4. File Name: "2129-1"
5. System ID: "COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM"
6. Preprocessor Version: "IGES VERSION 4.0 (06-OCT-88)"
7. Number of bits for integer representation: 32
8. Maximum power of ten in single precision floating point: 38
9. Number of significant digits in single precision floating point: 6
10. Maximum power of ten in double precision floating point: 308
11. Number of significant digits in double precision floating point: 14
13. Model space scale: 1.000000
14. Unit flag: 1
15. Units: "INCH"
16. Maximum number of line weight gradations: 15
17. Size of maximum line width in units: 1077961261
18. Date and time of file generation: "940720.085344"
19. Minimum user intended resolution: 0.000001
20. Approximate maximum coordinate value: 0.000000
21. Name of author: Sue Webster
22. Author's organization: 35400 Cherry Point
23. Integer value corresponding to IGES version: 6
24. Drafting standard: 3

** Qualitative Analysis **

Warning: Form 2 not supported for IGES type 304. DE record #: 715
Warning: Form 2 not supported for IGES type 304. DE record #: 1079
Warning: File 1 already exists, renamed to 21291i.s01. DE record #: 6903
Warning: Font 2 has no I/EMS equivalent, output as default.
  DE record #: 5977
Warning: Font 2 has no I/EMS equivalent, output as default.
  DE record #: 5979
Warning: Font 2 has no I/EMS equivalent, output as default.
  DE record #: 5981

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

Warning: Font 2 has no I/EMS equivalent, output as default.
  DE record #: 6451

** Quantitative Diagnostics **

IGES entity types encountered:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 (IGES_ARC)</td>
<td>571</td>
</tr>
<tr>
<td>102 (IGES_COMPOSITE_CURVE)</td>
<td>8</td>
</tr>
<tr>
<td>106 (IGES_COMPOUS_DATA)</td>
<td>109</td>
</tr>
<tr>
<td>108 (IGES_PLAN)</td>
<td>32</td>
</tr>
<tr>
<td>110 (IGES_LINE)</td>
<td>2090</td>
</tr>
<tr>
<td>126 (IGES_B_SPLINE_CURVE)</td>
<td>20</td>
</tr>
<tr>
<td>210 (IGES_GENERAL_LABEL)</td>
<td>24</td>
</tr>
<tr>
<td>212 (IGES_GENERAL_NOTE)</td>
<td>408</td>
</tr>
<tr>
<td>214 (IGES_LEADER)</td>
<td>33</td>
</tr>
<tr>
<td>216 (IGES_LINEAR_DIMENSION)</td>
<td>3</td>
</tr>
<tr>
<td>230 (IGES_SECTIONED_AREA)</td>
<td>8</td>
</tr>
<tr>
<td>304 (IGES_LINE_FONT_DEF)</td>
<td>2</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
<td>8</td>
</tr>
<tr>
<td>402 (IGES_ASSOCIATIVITY_INST)</td>
<td>184</td>
</tr>
<tr>
<td>404 (IGES_DRAWING)</td>
<td>2</td>
</tr>
<tr>
<td>406 (IGES_PROPERTY)</td>
<td>8</td>
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Total: 3510
IGES entity types successfully translated:

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<td>100 (IGES_ARC)</td>
<td>571</td>
</tr>
<tr>
<td>102 (IGES_COMPOSITE_CURVE)</td>
<td>8</td>
</tr>
<tr>
<td>108 (IGES_PLANE)</td>
<td>32</td>
</tr>
<tr>
<td>110 (IGES_LINE)</td>
<td>2090</td>
</tr>
<tr>
<td>126 (IGES_B_SPLINE_CURVE)</td>
<td>20</td>
</tr>
<tr>
<td>212 (IGES_GENERAL_NOTE)</td>
<td>408</td>
</tr>
<tr>
<td>230 (IGES_SECTIONED_AREA)</td>
<td>8</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
<td>4</td>
</tr>
<tr>
<td>402 (IGES_ASSOCIATIVITY_INST)</td>
<td>184</td>
</tr>
<tr>
<td>404 (IGES_DRAWING)</td>
<td>2</td>
</tr>
<tr>
<td>406 (IGESPROPERTY)</td>
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</table>

Total: 3335

IGES entity types modified during translation:

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<tbody>
<tr>
<td>106 (IGES_COPIOUS_DATA)</td>
<td>109</td>
</tr>
<tr>
<td>210 (IGES_GENERAL_LABEL)</td>
<td>24</td>
</tr>
<tr>
<td>214 (IGES_LEADER)</td>
<td>33</td>
</tr>
<tr>
<td>216 (IGES_LINEAR_DIMENSION)</td>
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</table>

Total: 169

IGES entity types ignored during translation:

<table>
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<tr>
<th>Entity Type</th>
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<td>2</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
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Total: 6

IGES entity types failed during translation:

Total: 0

I/EMS elements successfully created:

<table>
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<tbody>
<tr>
<td>GR3dcircle</td>
<td>485</td>
</tr>
<tr>
<td>GR3dcirarc</td>
<td>86</td>
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<tr>
<td>GRCcompcurve</td>
<td>8</td>
</tr>
<tr>
<td>GRbsubbc</td>
<td>20</td>
</tr>
<tr>
<td>GR3dtext</td>
<td>441</td>
</tr>
<tr>
<td>I/EMS element type</td>
<td>Quantity</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------</td>
</tr>
<tr>
<td>GRgrgrp</td>
<td>109</td>
</tr>
<tr>
<td>GRaxhatch</td>
<td>8</td>
</tr>
<tr>
<td>GR3dlinestr</td>
<td>33</td>
</tr>
<tr>
<td>GR3dlineseg</td>
<td>2090</td>
</tr>
<tr>
<td>GRreffile</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 3284

Processing completed: Thu Jul 28 09:05:38 1994

Elapsed time: 00:01:01
9.1.6 Output AutoCAD R12
9.1.7 Output Cadkey v6.0 - Drawing
9.1.8 Output Cadkey v6.0 - Model
9.1.9 Output CADLeaf - Detail

#16 (.177) DIA THRU
#40 (.098) DIA THRU (2) PLACES
.189 DIA X 100 § CSK (FS)
(LOCATE USING MS21061L08 NUTPLATE)
MS21061L08 NUTPLATE (NS)
MS20426AD3-4 RIVET (2)
(4) PLACES MARKED A
9.1.10 Output CALSView
9.1.11 Output IGESView - Model
9.1.12 Output IGESWorks - Drawing
9.1.13 Output IGESWorks - Model
9.1.14 Output IslandDraw
9.1.15 Output Preview - Drawing
9.1.16 Output X-Change - Model

NOTE
1. BREAK SHARP EDGES
2. .012
3. APPLY MIL-C-51789, CLASS IIA CHROMATIC CONVERSION COATING PER MIL-C-51789
4. APPLY MIL-P-23377, TYPE 5, LOW INFRARED REFLECTIVE EPONY POLYURETHANE PRIMER P13
5. APPLY TWO COATS MIL-C-85595 (PREThinner) OR MIL-C-85595 ALUMINUM PILOSITIVETOPCOAT, FED-STD-595 COLOR NO. 5526 (Slate), PER NA 87-M-499
6. IDENTIFY AND MIL-STD-138

[Diagram of output x-change model with dimensions and notes]
9.2 File 2129-1i

9.2.1 Parser/Verifier Log

9.2.1.1 Basic IGES

******************************************************************************
***** IGES PARSER/VERIFIER *****
***** MARCH 1994 *****
***** IGES Data Analysis *****
***** (708) 344-1815 *****
******************************************************************************

Input file is 2129-1i.igs
Checking conformance to Standard IGES
Today is July 26, 1994  3:58 PM

******************************************************************************
***** CHECK FILE SYNTAX *****
******************************************************************************

Section Records
Start 1
Global 4
Directory 6904 (3452 Entities)
Parameter 4441
Terminate 1

No syntax errors detected.

******************************************************************************
***** SUMMARY AND STATISTICS *****
******************************************************************************

*** File and Product Name Information ***

File name from sender  = '2129-1i'
File creation Date.Time = '940720.085344'
Model change Date.Time = '
Author  = 'Sue Webster'
Department  = '35400 Cherry Point'
Product name from sender = 'h-46.eng.2129-1'
Destination product name = 'h-46.eng.2129-1'
*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'  

*** Originating System Data ***

System ID = 'COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM'
Preprocessor version = 'IGES VERSION 4.0 (06-OCT-88)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 14

*** Global Model Data ***

Model scale = 1.00000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 1.000000E-06
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 2724
Blanked 728

Independence: Independent 1998
Physically Subordinate 1398
Logically Subordinate 0
Totally Subordinate 56
Entity use:  
Geometry  1740  
Annotation  1502  
Definition  210  
Other  0  
Logical/Positional  0  
2D parametric  0  
Construction geometry  0  
Not Specified  0  

Hierarchy:  
Structure DE applies  0  
Subordinate DE applies  3452  
Hierarchy property applies  0  
Not Specified  0  

*** Entity Occurrence Counts ***

<table>
<thead>
<tr>
<th>Entity</th>
<th>Form</th>
<th>Level</th>
<th>Count</th>
<th>Type</th>
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<td>0</td>
<td>272</td>
<td>Circular arc</td>
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<tr>
<td>100</td>
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<td>6</td>
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<td></td>
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<td>0</td>
<td>8</td>
<td>Composite curve</td>
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<tr>
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<td>20</td>
<td>1</td>
<td>92</td>
<td>Centerline</td>
</tr>
<tr>
<td>106</td>
<td>31</td>
<td>0</td>
<td>1</td>
<td>Section lines - General use, iron, brick, stone masonry</td>
</tr>
<tr>
<td>106</td>
<td>31</td>
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<td>4</td>
<td></td>
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<tr>
<td>106</td>
<td>31</td>
<td>4</td>
<td>5</td>
<td></td>
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<tr>
<td>106</td>
<td>40</td>
<td>0</td>
<td>6</td>
<td>Witness line</td>
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<tr>
<td>108</td>
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<td>16</td>
<td>Plane, Bounded</td>
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<td>Line</td>
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110 0 5 39
110 0 6 71
110 0 7 104
110 0 8 48
110 0 9 129
110 0 10 18
110 0 11 44
110 0 12 57
110 0 13 34
110 0 14 35
110 0 15 84
110 0 16 179
110 0 20 26
110 0 25 25
110 0 35 34
110 0 50 45
110 0 72 6
110 0 73 1
110 0 252 304
124 0 0 12 Transformation matrix
126 0 0 4 Rational B-spline curve
126 0 2 12
126 0 72 4 General label
210 0 1 24 General note
212 0 0 27
212 0 1 217
212 0 2 16
212 0 252 148
214 3 0 33 Leader arrow - Filled triangle
216 0 1 3 Linear dimension
230 0 252 8 Sectioned area (Standard Crosshatching)
304 2 0 2 Line font definition - repeating pattern
314 0 0 4 Color definition
402 3 0 40 Views visible instance
402 4 0 144 Views visible, Color, Line weight instance
404 0 0 2 Drawing
406 15 0 6 Property - Name
406 16 0 2 Property - Drawing size
406 17 0 2 Property - Drawing units
410 0 0 4 View - Orthographic parallel

55
### *** Entity Count by Level ***

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### *** Labeling Information ***

0% of the entities are labeled.

Unlabeled 3452

### *** Line Fonts Used in Data ***

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<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

Undefined
Solid
Dashed
Phantom
Center-line
Dotted
User defined
116 118 120 122 124 125 126 128
--- --- --- --- --- --- ---
--- --- --- --- --- 12 --- --- Undefined
--- --- --- --- --- --- 20 Solid
--- --- --- --- --- --- --- Dashed
--- --- --- --- --- --- --- Phantom

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

*** Line Widths Used in Data ***

Weight Count Width

Defaulted 3440 (0.0010)
14 12 (0.0140)

*** Colors Used in Data ***

Defaulted 1957
Green 73
Yellow 460
Magenta 2
Cyan 626
White 93
User 241

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

*** Entity type: 100

ERROR 2242: Radii not equal at D 195; difference is 8.663394E-05.
ERROR 2242: Radii not equal at D 197; difference is 8.663394E-05.
ERROR 2242: Radii not equal at D 201; difference is 8.669726E-05.
WARNING 2492: Undefined line font value (0) specified for D 2137.
ERROR 2242: Radii not equal at D 2197; difference is 1.486456E-06.
WARNING 2492: Undefined line font value (0) specified for D 2197.
ERROR 2242: Radii not equal at D 2199; difference is 1.486456E-06.
WARNING 2492: Messages regarding undefined line font suppressed.
ERROR 2242: Radii not equal at D 2647; difference is 9.922906E-05.
ERROR 2242: Radii not equal at D 3541; difference is 4.412839E-06.
ERROR 2242: Messages regarding unequal radii suppressed.

*** Entity type: 102
*** Entity type: 106

NITPICK 2076: Entity does not have Annotation flag set at D 5893.
NITPICK 2076: Entity does not have Annotation flag set at D 5895.
NITPICK 2076: Entity does not have Annotation flag set at D 5905.
NITPICK 2076: Entity does not have Annotation flag set at D 5907.
NITPICK 2076: Entity does not have Annotation flag set at D 5917.
NITPICK 2076: Entity does not have Annotation flag set at D 5919.

CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 5923.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 5925.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 5927.
CAUTION 2331: Messages suppressed

*** Entity type: 108

ERROR 2012: Bounded Plane defined without a boundary specified at D 29.
ERROR 2012: Bounded Plane defined without a boundary specified at D 31.
ERROR 2012: Bounded Plane defined without a boundary specified at D 33.
ERROR 2012: Messages regarding bounded plane without boundary suppressed.

*** Entity type: 110

-- 2034 lines averaging 2.033674E+00 units --

*** Entity type: 124

12 transformation matrices, 0 non-zero translations.

*** Entity type: 126

*** Entity type: 210

*** Entity type: 212

477 text strings in data file.
Average text aspect ratio in file is 1.0446580.
Minimum text aspect ratio in file is 0.4469697.
Maximum text aspect ratio in file is 1.4000000.

FONTS USED IN FILE

<table>
<thead>
<tr>
<th>FONT</th>
<th>COUNT</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>389</td>
<td>Default ASCII Style</td>
</tr>
<tr>
<td>2</td>
<td>88</td>
<td>LeRoy</td>
</tr>
</tbody>
</table>
*** Entity type: 214

Average arrow aspect ratio in file is 3.0000000.
Minimum arrow aspect ratio in file is 3.0000000.
Maximum arrow aspect ratio in file is 3.0000000.

*** Entity type: 216

*** Entity type: 230

*** Entity type: 304

Default line font substitute at D 715 is Phantom.
Default line font substitute at D 1079 is Solid.

*** Entity type: 314

Color specified at D 17 has no name.
  Default color substitute is magenta.
Color specified at D 19 has no name.
  Default color substitute is magenta.
Color specified at D 21 has no name.
  Default color substitute is cyan.
Color specified at D 23 has no name.
  Default color substitute is white.

*** Entity type: 402

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 6895.
CAUTION 2325: No views in drawing at D 6895.
Drawing at D 6895 contains 0 annotation entities.
NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 6903.
Drawing at D 6903 contains 4 views.
NITPICK 2289: View (D 79) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 65) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 51) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 37) is not logically subordinate to drawing at D 6903.
Drawing at D 6903 contains 1346 annotation entities.

*** Entity type: 406
*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D  37.
   Scale of view at D  37 is 1.000000E+00.
Orthographic View entity at D  37 has 4 clipping planes specified.
   XMIN =  -0.414  XMAX =  16.984
   YMIN =  -5.001  YMAX =   2.835
   ZMIN = Not Set  ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D  51.
   Scale of view at D  51 is 1.000000E+00.
Orthographic View entity at D  51 has 4 clipping planes specified.
   XMIN =  -14.968  XMAX =  -1.620
   YMIN =  -2.753  YMAX =   7.075
   ZMIN = Not Set  ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D  65.
   Scale of view at D  65 is 1.000000E+00.
Orthographic View entity at D  65 has 4 clipping planes specified.
   XMIN =  -0.017  XMAX =  19.839
   YMIN =  -8.406  YMAX =   6.336
   ZMIN = Not Set  ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D  79.
   Scale of view at D  79 is 1.000000E+00.
Orthographic View entity at D  79 has 4 clipping planes specified.
   XMIN =  -0.727  XMAX =  16.727
   YMIN =   0.519  YMAX =  14.753
   ZMIN = Not Set  ZMAX = Not Set

*** Message Summary ***

2006: 16 Missing pointers.
2011: 4 Invalid subordinate relationships.
2015: 11 Mathematically incorrect definitions.
2016: 12 Invalid entity use flag.
2038: 1438 Invalid Line font values.

*** Error Summary ***

   0 fatal errors
   0 severe errors
   27 errors
   1438 warnings
   13 cautions
   16 nitpicks
   0 notes

*** End of Analysis of 2129-li.igs ***
9.2.1.2  CALS IGES Class II

******************************************************************************
*****  IGES PARSER/VERIFIER *****
*****        MARCH 1994        *****
*****  IGES Data Analysis *****
*****          (708) 344-1815  *****
******************************************************************************

Input file is 2129-li.igs
Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)
Today is July 26, 1994  3:57 PM

******************************************************************************
*****  CHECK FILE SYNTAX  *****
******************************************************************************

<table>
<thead>
<tr>
<th>Section</th>
<th>Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>1</td>
</tr>
<tr>
<td>Global</td>
<td>4</td>
</tr>
<tr>
<td>Directory</td>
<td>6904 ( 3452 Entities)</td>
</tr>
<tr>
<td>Parameter</td>
<td>4441</td>
</tr>
<tr>
<td>Terminate</td>
<td>1</td>
</tr>
</tbody>
</table>

No syntax errors detected.

******************************************************************************
*****  SUMMARY AND STATISTICS  *****
******************************************************************************

*** File and Product Name Information ***

File name from sender = '2129-li'
File creation Date.Time = '940720.085344'
Model change Date.Time = '
Author = 'Sue Webster'
Department = '35400 Cherry Point'
Product name from sender = 'h-46.eng.2129-1'
Destination product name = 'h-46.eng.2129-1'

*** Parameter Delimiters ***

Delimiter = ',
Terminator = ';'
*** Originating System Data ***

System ID = 'COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM'
Preprocessor version = 'IGES VERSION 4.0 (06-OCT-88)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 14

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'INCH'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 1.000000E-06
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 2724
Blanked 728

Independence: Independent 1998
Physically Subordinate 1398
Logically Subordinate 0
Totally Subordinate 56

Entity use: Geometry 1740
Annotation 1502
Definition 210
Other 0
Logical/Positional 0
2D parametric 0
Construction geometry 0
Not Specified 0
**Hierarchy:**
- Structure DE applies: 0
- Subordinate DE applies: 3452
- Hierarchy property applies: 0
- Not Specified: 0

**Entity Occurrence Counts**

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<thead>
<tr>
<th>Entity</th>
<th>Form</th>
<th>Level</th>
<th>Count</th>
<th>Type</th>
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<td>Composite curve</td>
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<td>Section lines - General use, iron, brick, stone masonry</td>
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</tbody>
</table>

Transformation matrix
Rational B-spline curve
General label
General note
Leader arrow - Filled triangle
Linear dimension
Sectioned area (Standard Crosshatching)
Line font definition - repeating pattern
Color definition
Views visible instance
Views visible, Color, Line weight instance
Drawing
Property - Name
Property - Drawing size
Property - Drawing units
View - Orthographic parallel

*** Entity Count by Level ***
- 34
- 48
- 92
- 283
- 34
- 49
- 10
- 3
- 460

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 3452

*** Line Fonts Used in Data ***

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<th>100</th>
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<th>104</th>
<th>106</th>
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</tr>
</tbody>
</table>

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

*** Line Widths Used in Data ***

<table>
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<tr>
<th>Weight</th>
<th>Count</th>
<th>Width</th>
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</thead>
<tbody>
<tr>
<td>Defaulted</td>
<td>3440</td>
<td>(0.0010)</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>(0.0140)</td>
</tr>
</tbody>
</table>
*** Colors Used in Data ***

Defaulted  1957  
Green       73   
Yellow      460  
Magenta     2    
Cyan        626  
White       93   
User        241  

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

*** Entity type: 100

ERROR 2242: Radii not equal at D 195; difference is 8.663394E-05.
ERROR 2242: Radii not equal at D 197; difference is 8.663394E-05.
ERROR 2242: Radii not equal at D 201; difference is 8.669726E-05.
WARNING 2492: Undefined line font value (0) specified for D 2137.
ERROR 2242: Radii not equal at D 2197; difference is 1.486456E-06.
WARNING 2492: Undefined line font value (0) specified for D 2197.
ERROR 2242: Radii not equal at D 2199; difference is 1.486456E-06.
WARNING 2492: Undefined line font value (0) specified for D 2203.
WARNING 2492: Undefined line font value (0) specified for D 2219.
WARNING 2492: Messages regarding undefined line font suppressed.
ERROR 2242: Radii not equal at D 2647; difference is 9.922906E-05.
ERROR 2242: Radii not equal at D 3541; difference is 4.412839E-06.
ERROR 2242: Messages regarding unequal radii suppressed.

*** Entity type: 102

*** Entity type: 106

NITPICK 2076: Entity does not have Annotation flag set at D 5893.
NITPICK 2076: Entity does not have Annotation flag set at D 5895.
NITPICK 2076: Entity does not have Annotation flag set at D 5905.
NITPICK 2076: Entity does not have Annotation flag set at D 5907.
NITPICK 2076: Entity does not have Annotation flag set at D 5917.
NITPICK 2076: Entity does not have Annotation flag set at D 5919.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 5923.
CAUTION 2331: Use of section lines (Form 31-38) is not recommended at D 5925.
CAUTION 2331: Messages suppressed
*** Entity type: 108

ERROR 2012: Bounded Plane defined without a boundary specified at D 29.
ERROR 2012: Bounded Plane defined without a boundary specified at D 31.
ERROR 2012: Bounded Plane defined without a boundary specified at D 33.
ERROR 2012: Messages regarding bounded plane without boundary suppressed.

*** Entity type: 110

--- 2034 lines averaging 2.033674E+00 units ---

*** Entity type: 124

12 transformation matrices, 0 non-zero translations.

*** Entity type: 126

*** Entity type: 210

*** Entity type: 212

ERROR 4050: Illegal text font for CALS Class II specified for string 1 at D 5977.
ERROR 4050: Illegal text font for CALS Class II specified for string 1 at D 5979.
ERROR 4050: Messages regarding illegal text fonts suppressed.
477 text strings in data file.
Average text aspect ratio in file is 1.0446580.
Minimum text aspect ratio in file is 0.4469697.
Maximum text aspect ratio in file is 1.4000000.

FONTS USED IN FILE

<table>
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<tr>
<th>FONT</th>
<th>COUNT</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>389</td>
<td>Default ASCII Style</td>
</tr>
<tr>
<td>2</td>
<td>88</td>
<td>LeRoy</td>
</tr>
</tbody>
</table>

*** Entity type: 214

Average arrow aspect ratio in file is 3.0000000.
Minimum arrow aspect ratio in file is 3.0000000.
Maximum arrow aspect ratio in file is 3.0000000.

*** Entity type: 216

*** Entity type: 230
*** Entity type: 304

Default line font substitute at D 715 is Phantom.
Default line font substitute at D 1079 is Solid.

*** Entity type: 314

Color specified at D 17 has no name.
  Default color substitute is magenta.
Color specified at D 19 has no name.
  Default color substitute is magenta.
Color specified at D 21 has no name.
  Default color substitute is cyan.
Color specified at D 23 has no name.
  Default color substitute is white.

*** Entity type: 402

*** Entity type: 404

NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 6895.
CAUTION 2325: No views in drawing at D 6895.
Drawing at D 6895 contains 0 annotation entities.
NITPICK 2074: Entity use flag must be 1 for Drawing entity at D 6903.
Drawing at D 6903 contains 4 views.
NITPICK 2289: View (D 79) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 65) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 51) is not logically subordinate to drawing at D 6903.
NITPICK 2289: View (D 37) is not logically subordinate to drawing at D 6903.
Drawing at D 6903 contains 1346 annotation entities.

*** Entity type: 406

*** Entity type: 410

NITPICK 2073: Entity use flag must be 1 for View entity at D 37.
Scale of view at D 37 is 1.000000E+00.
Orthographic View entity at D 37 has 4 clipping planes specified.
XMIN = -0.414         XMAX = 16.984
YMIN = -5.001         YMAX = 2.835
ZMIN = Not Set        ZMAX = Not Set
NITPICK 2073: Entity use flag must be 1 for View entity at D 51.
Scale of view at D 51 is 1.000000E+00.
Orthographic View entity at D 51 has 4 clipping planes specified.
XMIN = -14.968 XMAX = -1.620
YMIN = -2.753 YMAX = 7.075
ZMIN = Not Set ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D 65.
Scale of view at D 65 is 1.000000E+00.
Orthographic View entity at D 65 has 4 clipping planes specified.
XMIN = -0.017 XMAX = 19.839
YMIN = -8.406 YMAX = 6.336
ZMIN = Not Set ZMAX = Not Set

NITPICK 2073: Entity use flag must be 1 for View entity at D 79.
Scale of view at D 79 is 1.000000E+00.
Orthographic View entity at D 79 has 4 clipping planes specified.
XMIN = -0.727 XMAX = 16.727
YMIN = 0.519 YMAX = 14.753
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2006: 16 Missing pointers.
2011: 4 Invalid subordinate relationships.
2015: 11 Mathematically incorrect definitions.
2016: 12 Invalid entity use flag.
2038: 1438 Invalid Line font values.
4000: 88 Miscellaneous CALS messages

*** Error Summary ***

0 fatal errors
0 severe errors
115 errors
1438 warnings
13 cautions
16 nitpicks
0 notes

*** End of Analysis of 2129-11.igs ***
9.2.2 Parser Log - AutoCAD R12

Title: IGESIN Journal (v5.1 Nov 05 1992)
==================================================================================================
File: C:/TMP/2129-11.xli
Date: Tue, Jul 26, 1994
Time: 16:23:49
==================================================================================================
EVALUATION VERSION -- NOT FOR RESALE

Translator S/N: 117-10075750
Translating from IGES file: C:/TMP/2129-11.IGS
to AutoCAD Drawing: C:\2129-11.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  gothic
13  GOTHICI  gothic
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  acad.lin
2  DASHED  acad.lin
3  PHANTOM  acad.lin
4  CENTER  acad.lin
5  DOT  acad.lin

==================================================================================================

70
Parse phase

*** Warning (IEVM_BAD_PTR_108) ***
(DE 29, TF 108:1) Entity references DE 0. Pointer must must reference a Closed Curve entity.

Action taken: The form number was changed from 1 to 0.

*** Warning (IEVM_BAD_PTR_108) ***
(DE 31, TF 108:1) Entity references DE 0. Pointer must must reference a Closed Curve entity.

Action taken: The form number was changed from 1 to 0.

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

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***

Action taken: Start point moved 4.3316971e-005 units from 8.8423200e+001, 3.8616000e+001 to 8.8423162e+001, 3.8615978e+001. Terminate point moved 4.3316971e-005 units from 8.8507500e+001, 3.8616000e+001 to 8.8507462e+001, 3.8616022e+001.

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 197, TF 100:0) Entity's radii are not equal. Start point radius: 4.8609670e-002. Terminate point radius: 4.8696304e-002.

Action taken: Start point moved 4.3316971e-005 units from 8.8423200e+001, 3.8616000e+001 to 8.8423238e+001, 3.8616022e+001. Terminate point moved 4.3316971e-005 units from 8.8338900e+001, 3.8616000e+001 to 8.8338938e+001, 3.8615978e+001.

<<< PART OF LOG FILE REMOVED HERE >>>>
*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 5791, TF 100:0) Entity's radii are not equal. Start point radius:
1.5472348e-001. Terminate point radius: 1.5478358e-001.

Action taken: Start point moved 3.0048748e-005 units from 1.09968800e+001,
7.07500000e-002 to 1.0996818e+001, 7.0773986e-002. Terminate point moved
3.0048748e-005 units from 1.08103000e+001, 7.0749800e-002 to 1.0810318e+001,
7.0725824e-002.

===============================================
Start Section:

Global Section:

Parameter Delimiter: ,
Record Delimiter: ;
Sending Product ID: h-46.eng.2129-1
File Name: 2129-11
System ID: COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM
Preprocessor Version: IGES VERSION 4.0 (06-OCT-88)
Size of Integer: 32
Sgl. Precision Mag: 38
Sgl. Precision Sig: 6
Dbl. Precision Mag: 308
Dbl. Precision Sig: 14
Receiving Product ID: h-46.eng.2129-1
Model Space Scale: 1.000000
Unit Flag: 1
Unit String: INCH
# of Line Weights: 32767
Maximum Line Width: 32.767000
Creation Date: 07/20/94 08:53:44
Minimum Resolution: 0.000001
Maximum Coordinate: 0.000000
Author: Sue Webster
Organization: 35400 Cherry Point
IGES Version Number: 6
Drafting Standard: 3
Entity Summary:

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Total 3452

Translation phase

Drawing Entity (404 Form 0) at DE 6895, with
- name = 2,
- size = 22.000000, 17.000000,
- units = IN,
was processed in the AutoCAD drawing file: C:\2129-11.dwg

Drawing Entity (404 Form 0) at DE 6903, with
- name = 1,
- size = 140.000000, 70.000000,
- units = IN,
was processed in the AutoCAD drawing file: C:\2129-111
IGES Entity Summary

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Totals 3439  3439  0

AutoCAD Entity Summary

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</table>

Totals 4646  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 16 time(s)
Entity references DE %ld%s. Pointer must must reference a Closed Curve entity.

Status: 0
Warning: 27
Error: 0
Fatal: 0

Elapsed Time:

Processor: 00:02:52
Clock: 00:02:53

==========================================================================================================
9.2.3 Prepare Error Log

ERROR REPORT FOR FILE /novell/94101/2129-1i.igs

>> File record length is 81 (1 record terminator used)

Terminate section report:

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</table>

(Expect 81 x 11351 = 919431 bytes)

-------------- preliminary format scan complete --------------

>> WARNING: Cannot use maximum power of 10 requested.
  : Requested maximum power of 308 using 307.
  : Field 11 line 2 of GLOBAL section. (Max. Exp. for Double)

PHIC SYSTEM,28HGES VERSION 4.0 (06-OCT-88),32,38,6,308,14,15Hh-46.eng.2G

Found 0 errors and 1 warnings
9.2.4 Parser Log - IGESWorks

IGES/Works v1.4.1
International TechnoGroup Incorporated
Validation Logfile

Date: July 28, 1994
Model: 21291i

*************************** Validation Parameters ***************************

TOLERANCE CONFIGURATION VALUES

-------------

ZERO_TOL = 1.000000e-13
MODEL_SPACE_PNT_COIN_TOL = 1.000000e-03
PARM_SPACE_PNT_COIN_TOL = 1.000000e-08
ISO_PARM_CURVE_TOL = 1.000000e-08
NON_CONV_TOL = 1.000000e-12
KNOT_COIN_TOL = 1.000000e-10
SAME_INTER_TOL = 1.000000e-12
PARALLEL_LINES_TOL = 1.000000e-07
ANGLE_COIN_TOL = 1.000000e-05
PNT_PROJ_TOL = 1.000000e-07
COLIN_TOL = 1.000000e-07
COPLANAR_TOL = 1.000000e-08
ZERO_NORMAL_TOL = 1.000000e-06
SAME_TANGENT_TOL = 1.000000e-04
SAME_CURVATURE_TOL = 1.000000e-04
SAME_DERIVATIVE_TOL = 1.000000e-03
MODEL_LINEAR_APPROX_TOL = 2.220446e-16

************** Entity Listing Before Validation **************

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<th>Form</th>
<th>Description</th>
</tr>
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<td>Plane (Bounded)</td>
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</tbody>
</table>
33  214  3  Leader (Filled triangle)
 3  216  0  Linear dim - undetermined form
 8  230  0  Section Area (Standard Fill)
 2  304  2  Line Font Definition (Pattern)
 4  314  0  Color Definition
40  402  3  Views Visible
144  402  4  Views Visible, Color, Line wt.
 2  404  0  Drawing (form 0)
 6  406  15 Property (Name)
 2  406  16 Property (Drawing Size)
 2  406  17 Property (Drawing Units)
 4  410  0  View

3452 - Number of entities in selection list

**************************************** Entity Validation ****************************************

*** Warning (IEVM_BAD_PTR_108) ***
(DE 29, TF 108:1) This Bounded Plane entity (108:1, 108:-1) references DE 0.
The pointer must reference a Closed Curve entity.
Action taken: The form number was changed from 1 to 0.

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

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 195, TF 100:0) This circular arc entity's start point and end point radii
are not equal in length. Start point radius: 4.8609670e-02. Terminate point
radius: 4.8696304e-02.
Action taken: Start point moved 4.3316971e-05 units from 8.8423200e+01,
3.8616000e+01 to 8.8423162e+01, 3.8615978e+01. Terminate point moved
4.3316971e-05 units from 8.8507500e+01, 3.8616000e+01 to 8.8507462e+01,
3.8616022e+01.

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 197, TF 100:0) This circular arc entity's start point and end point radii
are not equal in length. Start point radius: 4.8609670e-02. Terminate point
radius: 4.8696304e-02.
Action taken: Start point moved 4.3316971e-05 units from 8.8423200e+01,
3.8616000e+01 to 8.8423238e+01, 3.8616022e+01. Terminate point moved
4.3316971e-05 units from 8.8338900e+01, 3.8616000e+01 to 8.8338938e+01,
3.8615978e+01.

<<<<<< PART OF LOG FILE REMOVED HERE >>>>>
*** Warning (IEV_M_BAD_PLANAR_FLAG_126) ***
(DE 5847, TF 126:0) This Rational B-Spline Curve entity's (126) Planar/
Nonplanar property flag (Index 3 of Parameter Data) incorrectly specifies the
entity as nonplanar. The entity is planar within the specified tolerance.
Action taken: The entity's property flag has been changed from 0 to 1.

*** Warning (IEV_M_BAD_PLANE_NORMAL_126) ***
(DE 5847, TF 126:0) This Rational B-Spline Curve entity's (126) Unit Normal
index (in the Parameter Data) for the plane of the curve is incorrect within
the stated tolerance.
Action taken: The value in the Unit Normal index has been fixed.

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

Entity Validation Summary:

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<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>410</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Totals: 3453 3406 20 47 0 0
The following message was issued and suppressed 6 times:

This circular arc entity's start point and end point radii are not equal in length. Start point radius: %.7e. Terminate point radius: %.7e.

The following message was issued and suppressed 11 times:

This Bounded Plane entity (108:1, 108:-1) references DE %ld%s. The pointer must reference a Closed Curve entity.

The following message was issued and suppressed 15 times:

This Rational B-Spline Curve entity's (126) Planar/Nonplanar property flag (Index 3 of Parameter Data) incorrectly specifies the entity as nonplanar. The entity is planar within the specified tolerance.

The following message was issued and suppressed 15 times:

This Rational B-Spline Curve entity's (126) Unit Normal index (in the Parameter Data) for the plane of the curve is incorrect within the stated tolerance.

A message is suppressed when it has been issued more than 5 times. This value is controlled by the 'MAX_MESSAGE' configuration parameter.

**************************************************************************
9.2.5 Intergraph Import Log

IGES Translator Log File
IGES to I/EMS processing

Command line used:
iges -d in -i /novell/94101/21291i.igs -o /novell/94101/21291i.dgn -s
/cals/ip32/ems/config/seed_file -l /novell/94101/21291i.log

Processing started: Thu Jul 28 09:04:37 1994
Seed file used: /cals/ip32/ems/config/seed_file

** Generic Information **

| IGES Version:    | 4.0        |
| IGES File:       | "/novell/94101/21291i.igs" |
| MODEL File:      | "/novell/94101/21291i.dgn" |
| LOG File:        | "/novell/94101/21291i.log" |
| Application Protocol: | ANSI IGES |
| Defaulted Values: |            |
| Chord Height tolerance of 0.010000 has been used |

** Start Section **

** Global Section **

1. Parameter delimiter: ','
2. Record delimiter: ';'
3. Product Identification of sending system: "h-46.eng.2129-1"
4. File Name: "2129-1"
5. System ID: "COMPUTERVISION CADDStation REV 4.0 GRAPHIC SYSTEM"
6. Preprocessor Version: "IGES VERSION 4.0 (06-OCT-88)"
7. Number of bits for integer representation: 32
8. Maximum power of ten in single precision floating point: 38
9. Number of significant digits in single precision floating point: 6
10. Maximum power of ten in double precision floating point: 308
11. Number of significant digits in double precision floating point: 14
13. Model space scale: 1.000000
14. Unit flag: 1
15. Units: "INCH"
16. Maximum number of line weight gradations: 15
17. Size of maximum line width in units: 1077961261
18. Date and time of file generation: "940720.085344"
19. Minimum user intended resolution: 0.000001
20. Approximate maximum coordinate value: 0.000000
21. Name of author: Sue Webster
22. Author's organization: 35400 Cherry Point
23. Integer value corresponding to IGES version: 6
24. Drafting standard: 3

** Qualitative Analysis **

Warning: Form 2 not supported for IGES type 304. DE record #: 715
Warning: Form 2 not supported for IGES type 304. DE record #: 1079
Warning: File 1 already exists, renamed to 21291i.s01. DE record #: 6903
Warning: Font 2 has no I/EMS equivalent, output as default.
    DE record #: 5977
Warning: Font 2 has no I/EMS equivalent, output as default.
    DE record #: 5979

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

Warning: Font 2 has no I/EMS equivalent, output as default.
    DE record #: 6451

** Quantitative Diagnostics **

IGES entity types encountered:
---------------------------------
<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 (IGES_ARC)</td>
<td>571</td>
</tr>
<tr>
<td>102 (IGES_COMPOSITE_CURVE)</td>
<td>8</td>
</tr>
<tr>
<td>106 (IGES_COPIOUS_DATA)</td>
<td>109</td>
</tr>
<tr>
<td>108 (IGES_PLANE)</td>
<td>32</td>
</tr>
<tr>
<td>110 (IGES_LINE)</td>
<td>2090</td>
</tr>
<tr>
<td>126 (IGES_B_SPLINE_CURVE)</td>
<td>20</td>
</tr>
<tr>
<td>210 (IGES_GENERAL_LABEL)</td>
<td>24</td>
</tr>
<tr>
<td>212 (IGES_GENERAL_NOTE)</td>
<td>408</td>
</tr>
<tr>
<td>214 (IGES_LEADER)</td>
<td>33</td>
</tr>
<tr>
<td>216 (IGES_LINEAR_DIMENSION)</td>
<td>3</td>
</tr>
<tr>
<td>230 (IGES_SECTIONED_AREA)</td>
<td>8</td>
</tr>
<tr>
<td>304 (IGES_LINE_FONT_DEF)</td>
<td>2</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
<td>8</td>
</tr>
<tr>
<td>402 (IGES_ASSOCIATIVITY_INST)</td>
<td>184</td>
</tr>
<tr>
<td>404 (IGES_DRAWING)</td>
<td>2</td>
</tr>
<tr>
<td>406 (IGESPROPERTY)</td>
<td>8</td>
</tr>
</tbody>
</table>

Total: 3510
IGES entity types successfully translated:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 (IGES_ARC)</td>
<td>571</td>
</tr>
<tr>
<td>102 (IGES_COMPOSITE_CURVE)</td>
<td>8</td>
</tr>
<tr>
<td>108 (IGES_PLANE)</td>
<td>32</td>
</tr>
<tr>
<td>110 (IGES_LINE)</td>
<td>2090</td>
</tr>
<tr>
<td>126 (IGES_B_SPLINE_CURVE)</td>
<td>20</td>
</tr>
<tr>
<td>212 (IGES_GENERAL_NOTE)</td>
<td>408</td>
</tr>
<tr>
<td>230 (IGES_SECTIONED_AREA)</td>
<td>8</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
<td>4</td>
</tr>
<tr>
<td>402 (IGES_ASSOCIATIVITY_INST)</td>
<td>184</td>
</tr>
<tr>
<td>404 (IGES_DRAWING)</td>
<td>2</td>
</tr>
<tr>
<td>406 (IGES_PROPERTY)</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total:</strong> 3335</td>
<td></td>
</tr>
</tbody>
</table>

IGES entity types modified during translation:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>106 (IGES_COPIOUS_DATA)</td>
<td>109</td>
</tr>
<tr>
<td>210 (IGES_GENERAL_LABEL)</td>
<td>24</td>
</tr>
<tr>
<td>214 (IGES_LEADER)</td>
<td>33</td>
</tr>
<tr>
<td>216 (IGES_LINEAR_DIMENSION)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total:</strong> 169</td>
<td></td>
</tr>
</tbody>
</table>

IGES entity types ignored during translation:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>304 (IGES_LINE_FONT_DEF)</td>
<td>2</td>
</tr>
<tr>
<td>314 (IGES_COLOR_DEF)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total:</strong> 6</td>
<td></td>
</tr>
</tbody>
</table>

IGES entity types failed during translation:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total:</strong> 0</td>
<td></td>
</tr>
</tbody>
</table>
I/EMS elements successfully created:

<table>
<thead>
<tr>
<th>I/EMS element type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR3dcircle</td>
<td>485</td>
</tr>
<tr>
<td>GR3dcirarc</td>
<td>86</td>
</tr>
<tr>
<td>GRcompcurve</td>
<td>8</td>
</tr>
<tr>
<td>GRbcsubbc</td>
<td>20</td>
</tr>
<tr>
<td>GR3dtext</td>
<td>441</td>
</tr>
<tr>
<td>GRgrp</td>
<td>109</td>
</tr>
<tr>
<td>GRaxhatch</td>
<td>8</td>
</tr>
<tr>
<td>GR3dlinestr</td>
<td>33</td>
</tr>
<tr>
<td>GR3dlineseg</td>
<td>2090</td>
</tr>
<tr>
<td>GRreffile</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 3284

Processing completed: Thu Jul 28 09:05:38 1994

Elapsed time: 00:01:01

---


9.2.6 Output AutoCAD R12
9.2.7 Output Cadkey v6.0 - Drawing
9.2.8 Output Cadkey v6.0 - Drawing/Model
9.2.9 Output CADLeaf - Detail
9.2.10  Output IGESView - Drawings
9.2.11 Output IGESWorks - Drawing
9.2.12 Output IGESWorks - Model
9.2.13 Output IslandDraw
9.2.14 Output Preview
9.2.15 Output X-Change