AFCTN Test Report 94-075

AFCTB-ID 94-026

Technical Publication Transfer Using:

Texas Instruments' Data Supporting:

U.S. Army Missile Command's TOW ITAS Program

(Contract #DAAH01-93-C-0206)

MIL-STD-1840A
MIL-M-28001A (SGML)
MIL-D-28003 (CGM)

Quick Short Test Report

20 April 1994

Prepared for
Electronic Systems Center
Air Force CALS Program Office
HQ ESC/AV-2
4027 Colonel Glenn Hwy Suite 300
Dayton OH 45431-1672

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20 April 1994

Prepared By
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Air Force CALS Test Bed

Notification of Test Results

20 April 1994

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

Texas Instruments

Identified as follows:

Title:	**Technical Publication Transfer**
Program:	**TOW ITAS**
Program Office:	**U. S. Army Missile Command**
Contract No.:	**DAAH01-93-C-0206**
QSTR No.:	**AFCTB-ID 94-026**

Received on the following media: **9-Track Tape**

The results of the QSTR evaluation are as follows:

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

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

Air Force CALS Test Bed
HQ ESC/AV-2P
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Dayton, OH 45431-1672
Phone: 513-257-3085 FAX: 513-257-5881

Contents

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 Texas Instrument's interpretation and use of the CALS standards in transferring technical publication data. Texas Instruments used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on a 9-track magnetic tape.

2. Test Parameters

Test Plan: AFCTB 94-026

Date of Evaluation: 20 April 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:
Leigh Taylor
Texas Instruments
2501 W. University
MS 8030
McKinney TX 75070
(214) 952-5239

Data Description: Technical Manual Test

7 Document Declaration files
7 Document Type Definitions (DTDs)
7 Text/Standard Generalized Markup Language (SGML) files
25 Computer Graphics Metafile (CGM) files

Data Source System:

1840

HARDWARE

Sun Workstation
Hewlett Packard Tape Drive

SOFTWARE

Interleaf

Text/SGML

HARDWARE

Sun Workstation

SOFTWARE

Interleaf

CGM

HARDWARE

Sun Workstation

SOFTWARE

Interleaf

Evaluation Tools Used:

MIL-STD-1840A (TAPE)

SUN 3/280

AFCTN *Tapetool v1.2.10 UNIX*
XSoft *CAPS/CALS v40.4*

MIL-M-28001 (SGML)

HP 735
SUN SparcStation 2

ArborText *ADEPT v4.2.1*

PC 486/50

Exoterica *XGMLNormalizer v1.2e3.2*
Exoterica *Validator v2.0 ex1*
McAfee & McAdam *Sema Mark-it v2.3*
Public Domain *sgmls v1.0*

MIL-D-28003 (CGM)

HP 735

InterCAP *X-Change v7.82*

SGI Indigo 2

IGES Data Analysis (IDA) *CALSView*

SUN SparcStation 2

ArborText *cgm2draw*
Carberry *CADLeaf Plus v3.1*
Island Software *IslandDraw v3.0*
Island Software *IslandDraw v4.0*

PC 486/50
Advanced Technology Center
(ATC) *MetaCheck R 2.10*
Software Publishing Corporation
(SPC) *Harvard Graphics v3.05*
Inset Systems *HiJaak Pro*
Lotus *Freelance v2.01*
Micrografx *Designer v4.0*
Corel *Ventura Publisher*

Standards Tested:

MIL-STD-1840A
MIL-M-28001A
MIL-D-28003

3. 1840A Analysis

3.1 External Packaging

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

The tape was enclosed in a barrier bag as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed the label indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the box was a packing list showing all files recorded on the tape.

3.2 Transmission Envelope

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

3.2.1 Tape Formats

The tape was run through the AFCTN *Tapetool v1.2.10* utility. No errors were encountered while evaluating the contents of the tape labels.

The tape was read using the XSoft *CAPS read1840A* utility without any reported errors in the media. Only one of the seven documents was read off the tape.

The physical structure of the tape meets the requirements defined in CALS MIL-STD-1840A and ANSI x3.27.

3.2.2 Declaration and Header Fields

Forty-two errors and 79 notes were reported in the Document Declaration files and data file headers. All document sets on the tape had similar errors.

The first type error was in the numbering of the files. The tape started with file D001T001, D001G001 and D001H001 followed by D001C001. The file numbers start with D001?001 and increment from there. The first CGM file should have been named D001C004.

```
Evaluating numbering scheme...
*** ERROR (MIL-STD-1840A; 5.1.3) - The data files for Document D001
    were not numbered properly.
*** NOTE (MIL-STD-1840A; 5.1.3) - The first data file for a
    Document shall use "001" and the number shall increment
    sequentially for each file of the Document so that each
    file has a unique file name.
```

All document sets, with the exception of the first one, had an error in the chglvl record. The words "ORIGINAL" and "OUTLINE" were inserted as the value of this record, which is incorrect.

```
chglvl: ORIGINAL OUTLINE
 *** ERROR (MIL-STD-1840A; 5.1.1.2) - Invalid change level encountered.
*** NOTE (MIL-STD-1840A; 5.1.1.2) - Change level should be the word ORIGINAL
    or a Revision Number followed by a Change Level Number followed by
    a Change Level Date.  They should be separated by a comma or space.
```

All CGM files starting in document set two had an error reported in the dstdocid record. This record must have the same value as reported in the dstdocid in the declaration file.

```
dstdocid: TM 9-XXXX-XXX-12
*** ERROR (MIL-STD-1840A; 5.1.4.5) - Invalid value for 'dstdocid:'.
    Expected => dstdocid: TM 9-XXXX-XX-12
*** NOTE (MIL-STD-1840A; 5.1.4.5) - The value must match the value
    in the Document Declaration File.
*** NOTE - Correction made in new CGM Header File.
```

This portion of the tape does not meet the CALS MIL-STD-1840A requirements.

4. IGES Analysis

No Initial Graphics Exchange Specification (IGES) files were included in this evaluation.

5. SGML Analysis

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

The tape contained seven document sets. Each set was made up of one tagged instance text file, one DTD file, and one Format Output Specification Instance (FOSI) file. Inspection of the files revealed the DTDs as the TEMPLATE DTD. All DTDs were the same with the exception of the graphic references. All DTD and text files were parsed, and the results were the same for all submitted files. Only one document set, set number two, was completely analyzed by the five parsers as described below.

The text and DTD files were evaluated using a parser available within the AFCTB. No errors were reported in any of the SGML files. All DTDs had nine entities which were referenced and not used.

The text and DTD files were evaluated using Exoterica's *Validator exl* parser. Ten warnings were issued for each DTD and text file. The warnings relate to entities defined and not used.

The text and DTD files were tested using Exoterica's *XGML-Normalizer* parser. No errors or warnings were reported in any of the SGML files.

The text and DTD files were evaluated using McAfee & McAdam's *Sema Mark-it v2.3* parser. No errors or warnings were reported in the SGML files.

The text and DTD files were evaluated using the Public Domain *sgmls* parser. No errors or warnings were reported.

Doucment set number one was imported into ArborText's *Adept* software. The text and DTD parsed without a reported error. The FOSI parsed without a reported error but did not meet the requirements of the ArborText software. This prevented the document from being published.

According to Chris Moffett of ArborText, "This (or These) warning(s) may be due to a syntax error in the DTD."

The DTD and text files parsed without a reported error through several commercial parsers. The FOSI in document set one parsed but could not be used by the ArborText software, available within the AFCTB. The SGML files meet the CALS MIL-M-28001A specification.

6. Raster Analysis

No Raster files were included in this evaluation.

7. CGM Analysis

The tape contained 25 CGM files. The files were evaluated using ATC's *MetaCheck* with CALS options. No errors were reported in any of the files.

The CGM files were evaluated using the beta AFCTN *validcgm* utility. This utility reported errors in all files. Note, this utility is a beta test and not used for pass or fail.

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

Because of the number of files submitted, not all files were evaluated using all available tools. Files D004C002 (C402) and D005C001 (C501) were selected for detailed inspection. All files were viewed using at least three difference software tools. During this inspection, it was noted only two type graphics files were displayed with the rest being simple text indicating that graphics would be inserted at a later time.

The CGM files were converted using ArborText's *cgm2draw* utility. No errors were reported during this process. Both files appeared to be complete with no noted errors.

All files were read into Carberry's *CADLeaf* software and displayed. No errors were reported during this process. The resulting images appeared to be correct with no noted errors. The letter "I" in a box in file C501 touched the next letter.

The files were read into IDA's *CALSView* with no reported errors. The font on the top line of file C501 was different from the bottom line.

The files were imported into the Micrografx *Designer* without a reported error. The displayed and printed images appear to be complete with no apparent errors.

The files were imported into Lotus' *Freelance* and displayed with no reported errors. The text font in file C501 was smaller than displayed in other applications.

The files were imported into SPC's *Harvard Graphics v3.05* without a reported error. The files appear to be complete and correct. It was necessary to change the background color in order to display the image, and file C501 still had some entities missing.

While trying to read the files into Inset Systems' *HiJaak Pro*, a real precision error was reported on both files, and nothing displayed.

The files were imported directly into Island Software's *IslandDraw v4.0* without a reported error. The displayed and printed images appear to be complete and with no apparent errors.

The files were read into InterCAP's *X-Change* without a reported error. In file C501, the letter "I" touched the next letter. This may be the result of the selected font.

The files were imported into Corel's *Ventura Publisher* without a reported error. The text block located on the top of file C501 printed as a solid black block.

The files meet the CALS MIL-D-28003 specification.

8. Conclusions and Recommendations

The tape from Texas Instruments had errors in the CALS headers and document declaration files. The "chglvl" and "dstdocid" records had invalid values. Additionally, the files were not named per the MIL-STD-1840A. The tape structure does not meet the CALS MIL-STD-1840A requirements.

The SGML files parsed without a reported error using several commercial products. Document set one would not compile on the ArborText system because of errors in the FOSI, however, the FOSI did parse without a reported error. The SGML files meet the MIL-M-28001A specification.

No errors were reported in any of the 25 CGM files. These files meet the CALS MIL-D-28003 specification.

The tape does not meet the CALS MIL-STD-1840A requirements, due to the errors in the CALS headers.

9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

```
CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

  Standards referenced:
    MIL-STD-1840A (1987) - Automated Interchange of Technical Information
    ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes
                        for Information Interchange
    ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Sat Apr 16 12:04:33 1994

MIL-STD-1840A File Catalog

File Set Directory: /cals/u1210/Set060

Page: 1
```

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Extracted
D001H001	Output Specification	D/00260	02048/000033	Extracted
D001C002	CGM	F/00080	00800/000014	Extracted
D001C003	CGM	F/00080	00800/000098	Extracted
D001T002	Text	D/00260	02048/000018	Extracted
D001G003	DTD	D/00260	02048/000027	Extracted
D002	Document Declaration	D/00260	02048/000001	Extracted
D002H001	Output Specification	D/00260	02048/000033	Extracted
D002C008	CGM	F/00080	00800/000002	Extracted
	<<<<< PART OF LOG FILE REMOVED HERE >>>>>			
D002T002	Text	D/00260	02048/000021	Extracted
D002G003	DTD	D/00260	02048/000028	Extracted
D003	Document Declaration	D/00260	02048/000001	Extracted
D003H001	Output Specification	D/00260	02048/000033	Extracted
D003C001	CGM	F/00080	00800/000014	Extracted
D003C002	CGM	F/00080	00800/000002	Extracted
D003T002	Text	D/00260	02048/000017	Extracted
D003G003	DTD	D/00260	02048/000027	Extracted
D004	Document Declaration	D/00260	02048/000001	Extracted
D004H001	Output Specification	D/00260	02048/000033	Extracted

D004C001	CGM	F/00080 00800/000014	Extracted
D004C002	CGM	F/00080 00800/000098	Extracted
D004C003	CGM	F/00080 00800/000002	Extracted
D004T002	Text	D/00260 02048/000017	Extracted
D004G003	DTD	D/00260 02048/000027	Extracted
D005	Document Declaration	D/00260 02048/000001	Extracted
D005H001	Output Specification	D/00260 02048/000033	Extracted
D005C001	CGM	F/00080 00800/000015	Extracted
D005C002	CGM	F/00080 00800/000098	Extracted
D005T002	Text	D/00260 02048/000024	Extracted
D005G003	DTD	D/00260 02048/000027	Extracted
D006	Document Declaration	D/00260 02048/000001	Extracted
D006H001	Output Specification	D/00260 02048/000033	Extracted
D006C008	CGM	F/00080 00800/000003	Extracted

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

D006T002	Text	D/00260 02048/000059	Extracted
D006G003	DTD	D/00260 02048/000028	Extracted
D007	Document Declaration	D/00260 02048/000001	Extracted
D007H001	Output Specification	D/00260 02048/000033	Extracted
D007C001	CGM	F/00080 00800/000003	Extracted
D007T002	Text	D/00260 02048/000005	Extracted
D007G003	DTD	D/00260 02048/000027	Extracted

Catalog Process terminated normally.

9.2 Tape Evaluation Log

```
CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)
  Standards referenced:
    ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes
                        for Information Interchange
    ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Sat Apr 16 12:03:24 1994

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1CALS01                                                              4

  Label Identifier: VOL1
  Volume Identifier: CALS01
  Volume Accessibility:
  Owner Identifier:
  Label Standard Version: 4

HDR1D001              CALS0100010001000100 94086 00000 000000ILEAF VER 1.7

  Label Identifier: HDR1
  File Identifier: D001
  File Set Identifier: CALS01
  File Section Number: 0001
  File Sequence Number: 0001
  Generation Number: 0001
  Generation Version Number: 00
  Creation Date:  94086
  Expiration Date:  00000
  File Accessibility:
  Block Count: 000000
  Implementation Identifier: ILEAF VER 1.7

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

############ End of Volume CALS01 ###############
############ End Of Tape File Set ###############

Deallocating /dev/rmt0...

Tape Import Process terminated normally.
```

9.3 Tape File Set Validation Log

```
CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

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

Sat Apr 16 12:04:34 1994

MIL-STD-1840A File Set Evaluation Log

File Set: Set060

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

srcsys: Interleaf Inc., Waltham, Ma.
srcdocid: TM 9-XXXX-XXX-40
srcrelid: TM 9-XXXX-XXX-40
chglvl: ORIGINAL
dteisu: 19931220
dstsys: MICOM ArborText
dstdocid: TM 9-XXXX-XXX-40
dstrelid: TBD
dtetrn: 19931220
dlvacc: ITAS, DAAH01-93-C-0206, A059
filcnt: T1, G1, H1, C2
ttlcls: Unclass
doccls: Unclass
doctyp: Technical Manual Outline
docttl: ITAS System General Support Maintenance

Found file: D001H001
Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: TM 9-XXXX-XXX-40
dstdocid: TM 9-XXXX-XXX-40
notes: This FOSI is known to be bad.  A new FOSI will be used with 38784C deliveries.

Saving Output Specification Header File: D001H001_HDR
Saving Output Specification Data File: D001H001_OS
```

```
Found file: D001C002
Extracting CGM Header Records...
Evaluating CGM Header Records...
srcdocid: TM 9-XXXX-XXX-40
dstdocid: TM 9-XXXX-XXX-40
txtfilid: W
figid: 01
srcgph: COVER
doccls: Unclass
notes: Preliminary cover art

Saving CGM Header File: D001C002_HDR
Saving CGM Data File: D001C002_CGM

Found file: D001C003
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: TM 9-XXXX-XXX-40
dstdocid: TM 9-XXXX-XXX-40
txtfilid: W
figid: 02
srcgph: ITAS
doccls: Unclass
notes: Preliminary ITAS Major Components art

Saving CGM Header File: D001C003_HDR
Saving CGM Data File: D001C003_CGM

Found file: D001T002
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: TM 9-XXXX-XXX-40
dstdocid: TM 9-XXXX-XXX-40
txtfilid: W
doccls: Unclass
notes: ITAS System General Support (GS) Maintenance

Saving Text Header File: D001T002_HDR
Saving Text Data File: D001T002_TXT

Found file: D001G003
Extracting DTD Header Records...
Evaluating DTD Header Records...
```

```
srcdocid: TM 9-XXXX-XXX-40
dstdocid: TM 9-XXXX-XXX-40
notes: 38784-B DTD

Saving DTD Header File: D001G003_HDR
Saving DTD Data File: D001G003_DTD

Evaluating numbering scheme...
*** ERROR (MIL-STD-1840A; 5.1.3) - The data files for Document D001
    were not numbered properly.
*** NOTE (MIL-STD-1840A; 5.1.3) - The first data file for a
    Document shall use "001" and the number shall increment
    sequentially for each file of the Document so that each
    file has a unique file name.
Renumbering data files...
Renumbering Text File from => D001T002 to => D001T005
Renumbering Output Specification File from => D001H001 to => D001H004
Renumbering CGM File from => D001C003 to => D001C001
Updating Map File for Document D001
*** NOTE - 3 file(s) were renumbered.
Numbering scheme evaluation complete.

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

A total of 1 error(s), 0 warning(s), and 2 note(s) were
encountered in Document D001.

Found file: D002 Extracting Document Declaration Header Records...
Evaluating Document Declaration Header Records...

srcsys: Interleaf Inc., Waltham, Ma.
srcdocid: TM 9-XXXX-XXX-12
srcrelid: TBD
chglvl: ORIGINAL OUTLINE
*** ERROR (MIL-STD-1840A; 5.1.1.2) - Invalid change level encountered.
*** NOTE (MIL-STD-1840A; 5.1.1.2) - Change level should be the word ORIGINAL
    or a Revision Number followed by a Change Level Number followed by
    a Change Level Date.  They should be separated by a comma or space.
dteisu: 19931217
dstsys: MICOM-ArborText
dstdocid: TM 9-XXXX-XX-12
dstrelid: TBD
dtetrn: 19931220
dlvacc: ITAS, DAAH01-93-C-0206, A059
filcnt: T1, G1, H1, C8
ttlcls: Unclass
```

```
doccls: Unclass
doctyp: TECHNICAL MANUAL
docttl: OPERATOR MANUAL FOR TOW ITAS Support Equipment

1 error(s), 0 warning(s), and 1 note(s) were encountered
in Document Declaration File D002.

Found file: D002H001
Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: TM 9-XXXX-XXX-12
dstdocid: TM 9-XXXX-XX-12
notes: Known problems with this FOSI

Saving Output Specification Header File: D002H001_HDR
Saving Output Specification Data File: D002H001_OS

Found file: D002C008
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: TM 9-XXXX-XXX-12
dstdocid: TM 9-XXXX-XXX-12
*** ERROR (MIL-STD-1840A; 5.1.4.5) - Invalid value for 'dstdocid:'.
    Expected => dstdocid: TM 9-XXXX-XX-12
*** NOTE (MIL-STD-1840A; 5.1.4.5) - The value must match the value
    in the Document Declaration File.
*** NOTE - Correction made in new CGM Header File.
txtfilid: W
figid: 08
srcgph: COVER
doccls: Unclass
notes: Preliminary cover art

1 error(s), 0 warning(s), and 2 note(s) were encountered
 in CGM File D002C008.
Saving CGM Header File: D002C008_HDR
Saving CGM Data File: D002C008_CGM

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

A total of 10 error(s), 0 warning(s), and 19 note(s) were
encountered in Document D002.

Found file: D003

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

A total of 2 error(s), 0 warning(s), and 3 note(s) were
encountered in Document D003.

Found file: D004

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

A total of 8 error(s), 0 warning(s), and 15 note(s) were
encountered in Document D004.

Found file: D005

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

A total of 2 error(s), 0 warning(s), and 4 note(s) were
encountered in Document D005.

Found file: D006

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

A total of 13 error(s), 0 warning(s), and 25 note(s) were
encountered in Document D006.

Found file: D007

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

Updating Map File for Document D007
*** NOTE - 3 file(s) were renumbered.
Numbering scheme evaluation complete.

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

A total of 6 error(s), 0 warning(s), and 11 note(s) were
encountered in Document D007.

A grand total of 42 error(s), 0 warning(s), and 79 note(s) were
encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

9.4 Other Tape Reading Logs

```
/cals/caps/Bin/read1840A: --- Read declaration file 'D001     ' ---
/cals/caps/Bin/read1840A: writing data file '94026/TM9-XXXX-XXX-40/
TM9XXXXXXX40.H.out'.
/cals/caps/Bin/read1840A: writing data file '94026/TM9-XXXX-XXX-40/
COVER.C.cgm'.
/cals/caps/Bin/read1840A: writing data file '94026/TM9-XXXX-XXX-40/
ITAS.C.cgm'.
/cals/caps/Bin/read1840A: writing data file '94026/TM9-XXXX-XXX-40/
W.T.sgm'.
/cals/caps/Bin/read1840A: writing data file '94026/TM9-XXXX-XXX-40/
TM9XXXXXXX40.G.dtd'.
-- declaration file indicates 1 files of type T
-- declaration file indicates 1 files of type G
-- declaration file indicates 1 files of type H
-- declaration file indicates 0 files of type Q
-- declaration file indicates 0 files of type R
-- declaration file indicates 2 files of type C
-- declaration file indicates 0 files of type X
-- declaration file indicates 0 files of type P
-- declaration file indicates 0 files of type Z
```

10. Appendix B - Detailed SGML Analysis

10.1 Parser Log

10.1.1 9426-2 DTD

```
            SGML Document Type Definition Parser
                An SGML System Conforming to
              International Standard ISO 8879
            Standard Generalized Markup Language

Log file: '9426-2.LOG'
SDO File: 'ctndecl.sdo'
Namecase General is yes.
Namecase Entity is no.
Parsing DTD file: '9426-2.dtd'
Parsing DOCTYPE DOC

DTD0096: The generic ID ARBTEXT has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID HRULE has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID SHORTTITLE has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID CONTASSURPG has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID REFDOC has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID CFGPGE has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID COVERINDEX has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID STALOC has not been used in any content
         model, inclusion, or as a doctype element.
DTD0096: The generic ID TESTCODE has not been used in any content
         model, inclusion, or as a doctype element.
This DTD conforms to the ISO 8879 standard

DTO file '9426-2.DTO' created

closing statistics:
    Capacity points:                  62296
    Bytes of DTO file string space:   11295
    SGML descriptor blocks:           6430
```

Document Type Definition is compliant and parsed normally.

Program status code: 0.

10.1.2 9426-2 Text

```
IPA0108:        *** SGML Instance Parser Log File ***
Source Document File:  'i:\94026\9426-2.txt'.
Job File:              '9426-2.jbf'.
DTD File:              ''.
SGML Declaration File: ''.

Reading File '9426-2.jbf', File Type 'JOB FILE'.

     Concrete Syntax Settings In Effect For This Parse:
         NAMECASE GENERAL: YES.
         NAMECASE ENTITY:  NO.
         NAMELEN:          32.
         SHORTTAG:         YES.
Closed '9426-2.jbf', File Type 'JOB FILE'.
Reading File 'i:\94026\9426-2.txt', File Type 'DIRECT INPUT FILE'.
   --> Scanned Up To Line 100 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 200 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 300 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 400 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 500 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 600 In i:\94026\9426-2.txt.
   --> Scanned Up To Line 700 In i:\94026\9426-2.txt.
Closed 'i:\94026\9426-2.txt', File Type 'DIRECT INPUT FILE'.
Document Parsed Successfully, No Errors or Warnings.
```

10.2 Exoterica Validator

10.2.1 9427-2 DTD/Text

```
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "ARBTEXT".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CFGPGE".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CONTASSURPG".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "COVERINDEX".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "HRULE".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "REFDOC".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "SHORTTITLE".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "STALOC".
-->
<!-- **Warning** in "\xgml\9426-2.sgm", line 1:
   An element is not allowed in the document instance because it does not
```

```
   appear in any accessible content model or it is completely excluded.
   The element is "TESTCODE".
-->
<!-- **Warning** in "i:\94026\9426-2.txt", line 1:
   There is no element with an IDREF or IDREFS attribute value equal to a
   specified ID value.
   The unreferenced ID attribute value is "LBWH3C4W".
-->
<!-- 10 warnings reported. -->
```

10.3 Exoterica XGMLNormalizer Parser

No reported errors or warnings.

10.4 Sema Mark-it Log

No reported errors or warnings.

10.5 sgmls Log

No reported errors or warnings.

11. Appendix C - Detailed CGM Analysis

11.1 File D004C002

11.1.1 Parser Log MetaCheck

```
MetaCheck Version 2.10 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-93 CGM Technology Software
Execution Date: 04/18/94     Time:  17:19:22

Metafile Examined    : i:\94026\c402.cgm

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

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

Tracing not selected.

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

No Errors Detected

========== CALS CGM Profile (MIL-D-28003) Report ============

No profile discrepancies detected.

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

MetaCheck Version 2.10 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-93 CGM Technology Software
Execution Date: 04/18/94     Time:  17:19:35

Name of CGM under test: i:\94026\c402.cgm
Encoding              : Binary

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

BEGIN METAFILE string : >Version 5.42, ITAS_cgm.sty, 12/20/93<
                        > 13:57:47<
METAFILE DESCRIPTION  : >Interleaf Inc. MDL/G CGM 1992 *** MI<
                        >L-D-28003/BASIC-1<
```

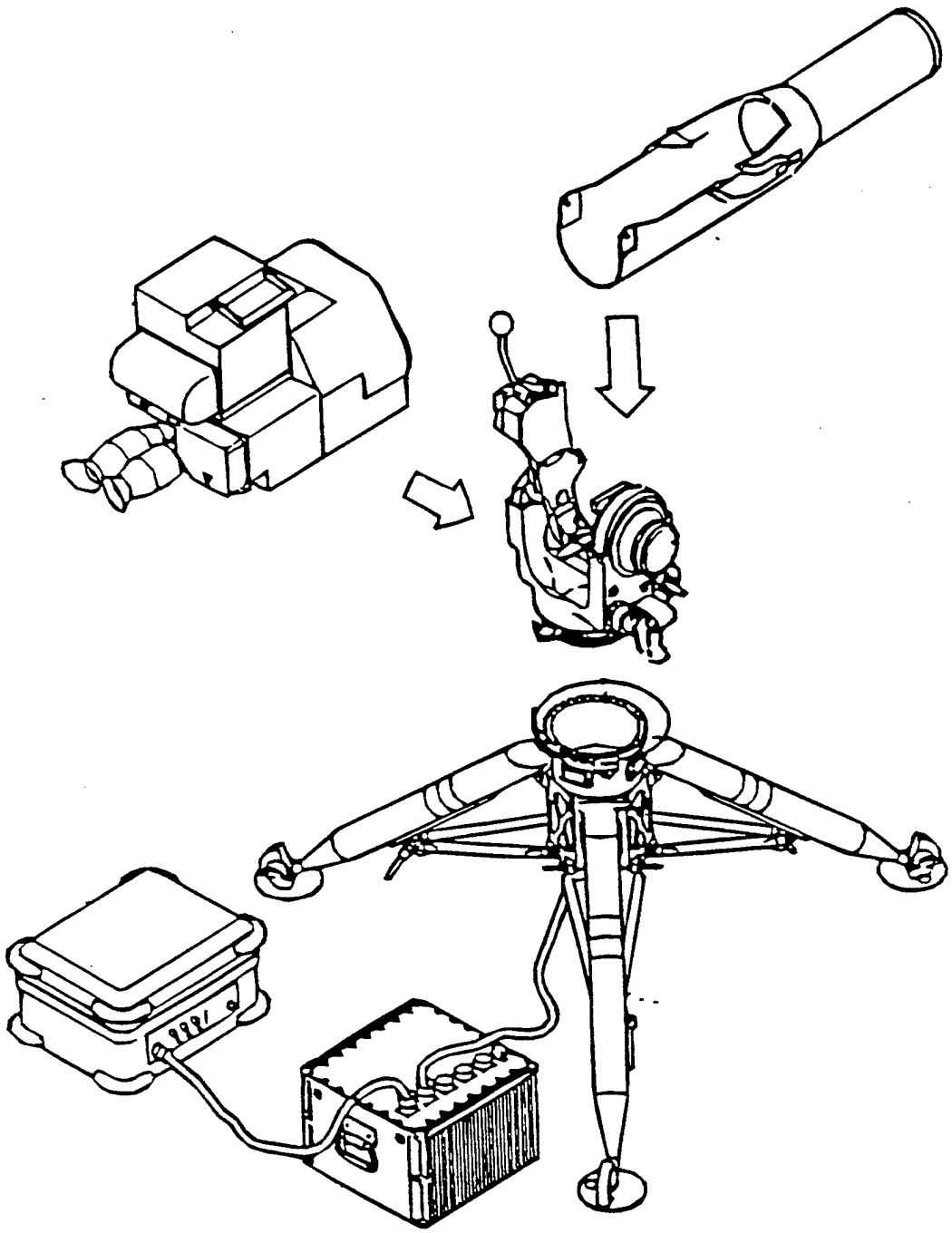
```
Picture 1 starts at octet offset 394: >ITAS<

Conformance Summary  :  This file conforms to the CGM specification.
                        This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

          1 Pictures Tested
       5097 Elements Tested
      77532 Octets Tested

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

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

11.1.2 validcgm Log

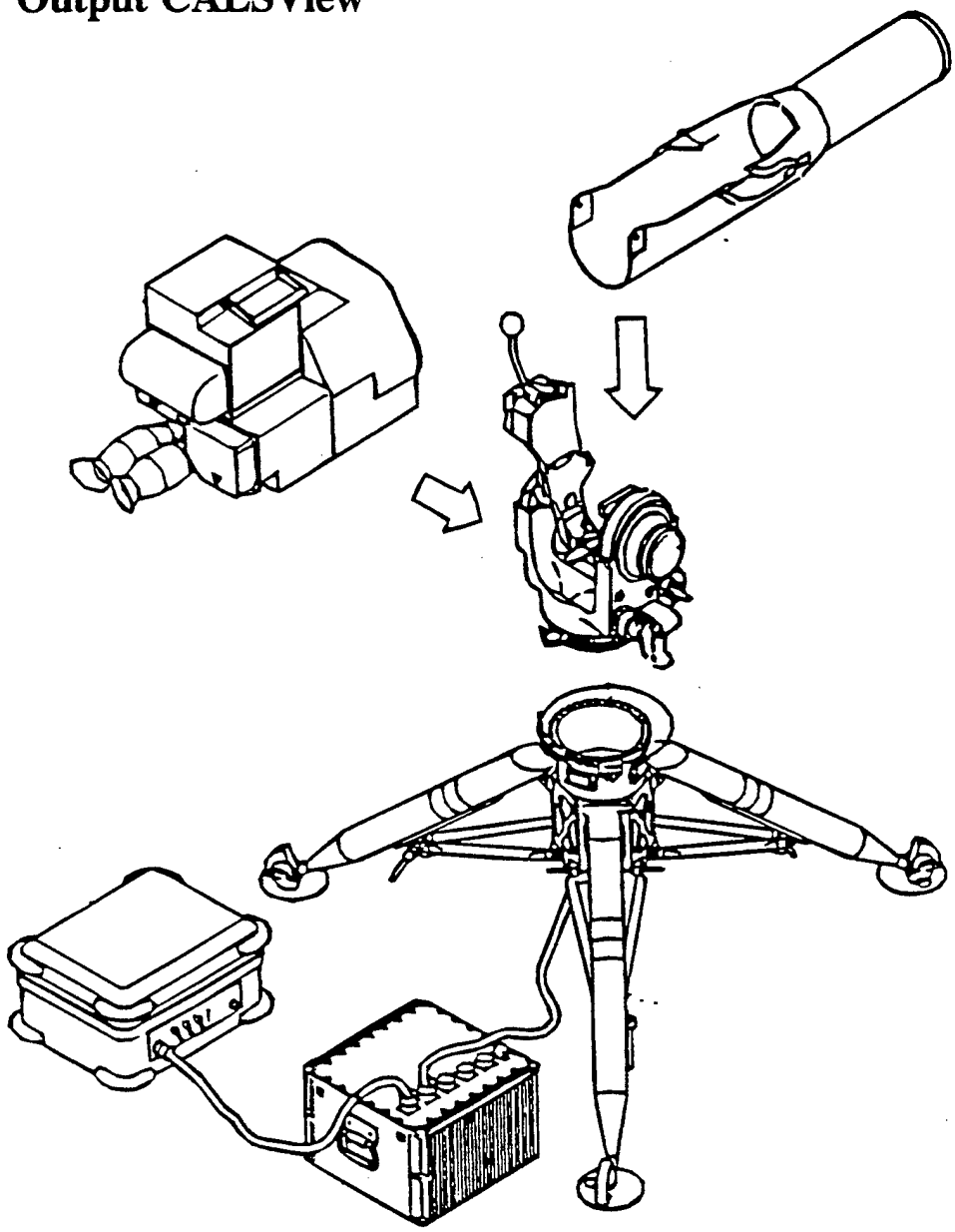
```
Analysis for file c402.cgm using table table
ERROR: invalid times used per CGM (2), std B
ERROR: invalid times used per Picture (2), std B
(14, 262)         (1, 12, 12)     Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 3) not yet seen
(14.1, 0)         (2, 6, 8)       VDC Extent (0, 0) (32767, 32767)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
(15, 278)         (1, 12, 6)      Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
(15.1, 0)         (5, 11, 2)      Text Precision  Stroke
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
```

(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 3 times
(1, 12) occurred illegally 2 times
(1, 13) occurred 1 time
(1, 15) occurred 1 time
(2, 1) occurred 1 time
(2, 2) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 2 times
(2, 6) occurred illegally 1 time
(2, 7) occurred 1 time
(3, 1) occurred 1 time
(4, 1) occurred 4583 times
(4, 7) occurred 392 times
(5, 3) occurred 1 time
(5, 4) occurred 30 times
(5, 11) occurred 1 time
(5, 11) occurred illegally 1 time
(5, 22) occurred 1 time
(5, 23) occurred 30 times
(5, 28) occurred 1 time
(5, 29) occurred 30 times
(5, 34) occurred 1 time

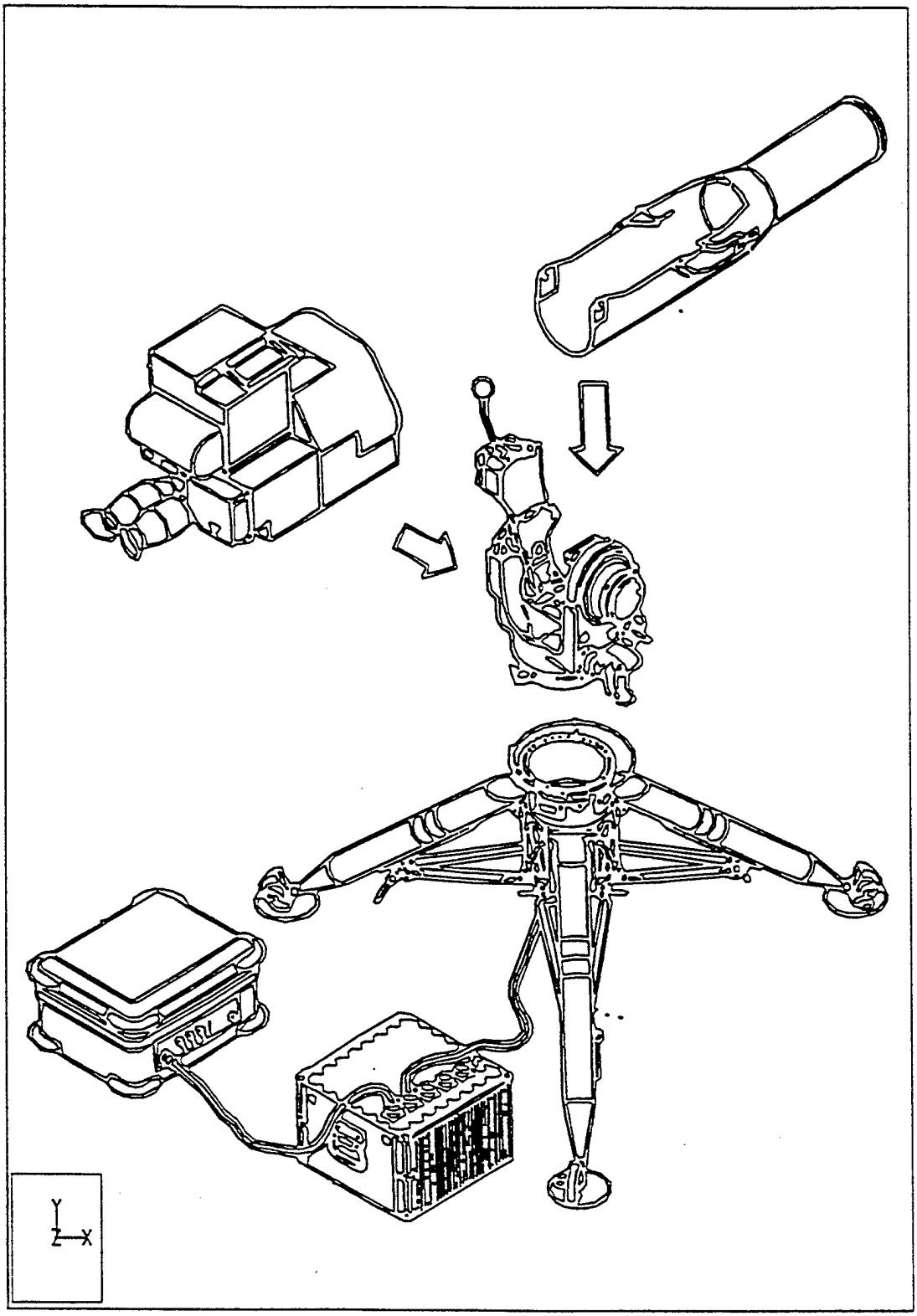
11.1.3 Output CADLeaf



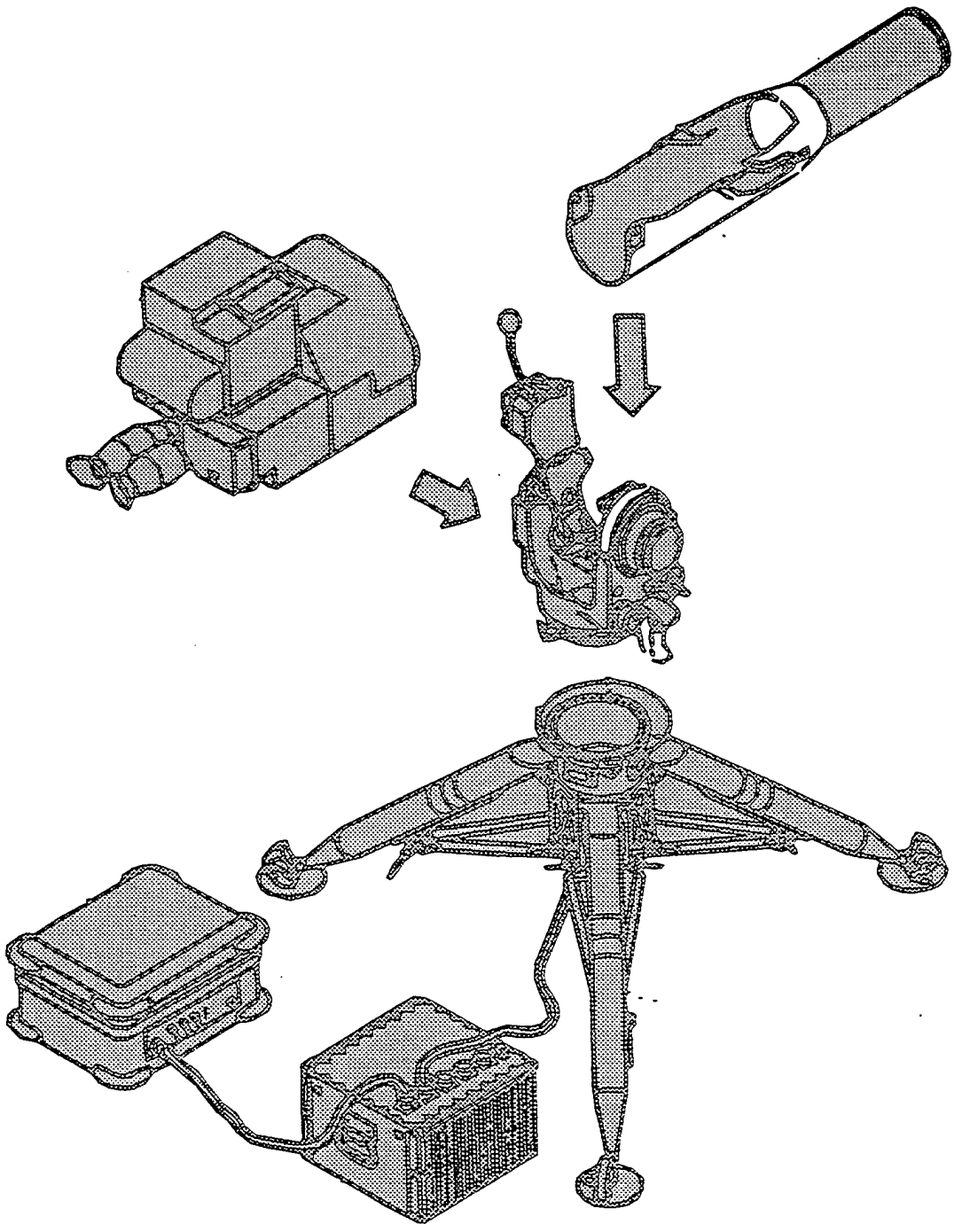
11.1.4 Output CALSView



11.1.5 Output cgm2draw/IslandDraw

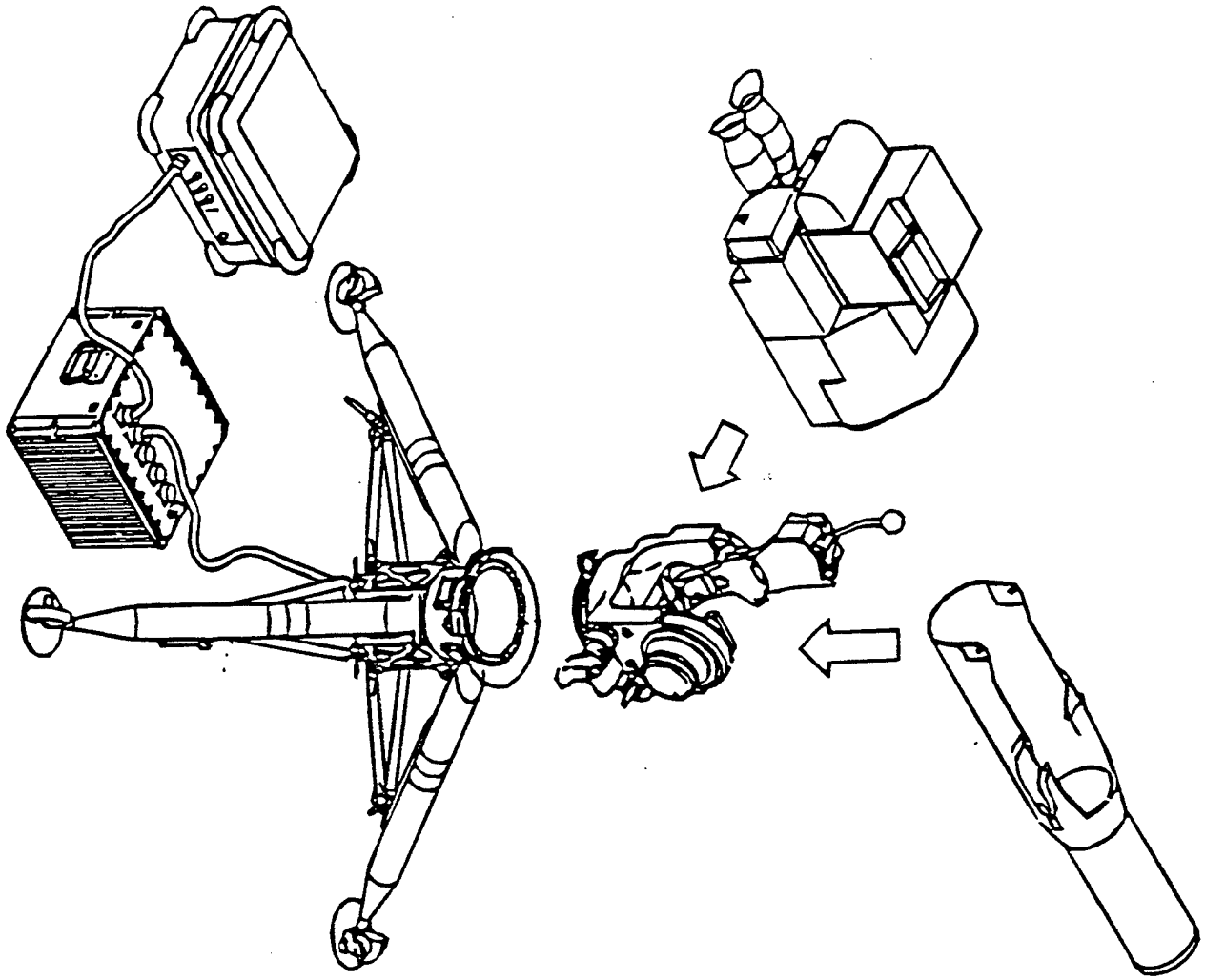


11.1.6 Output Designer

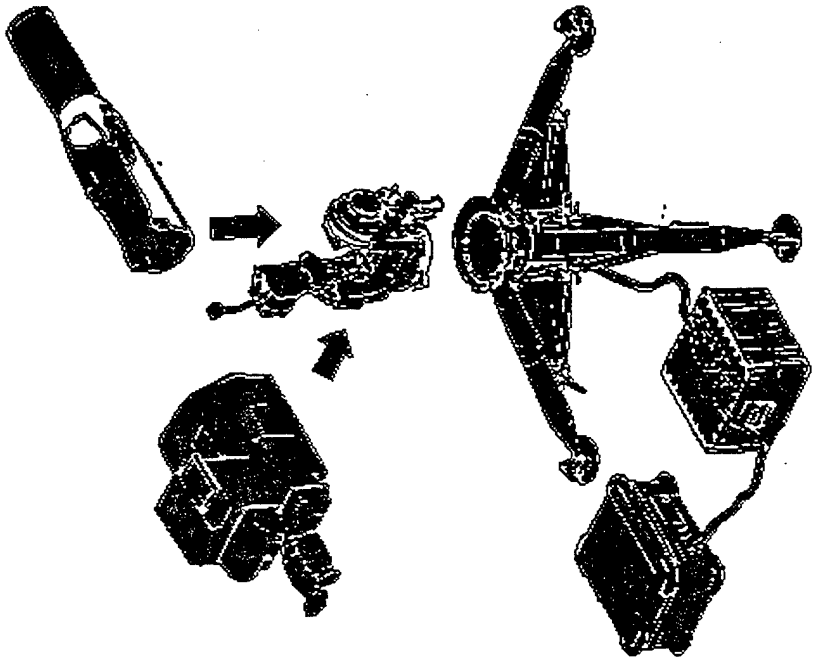


Freelance-C402

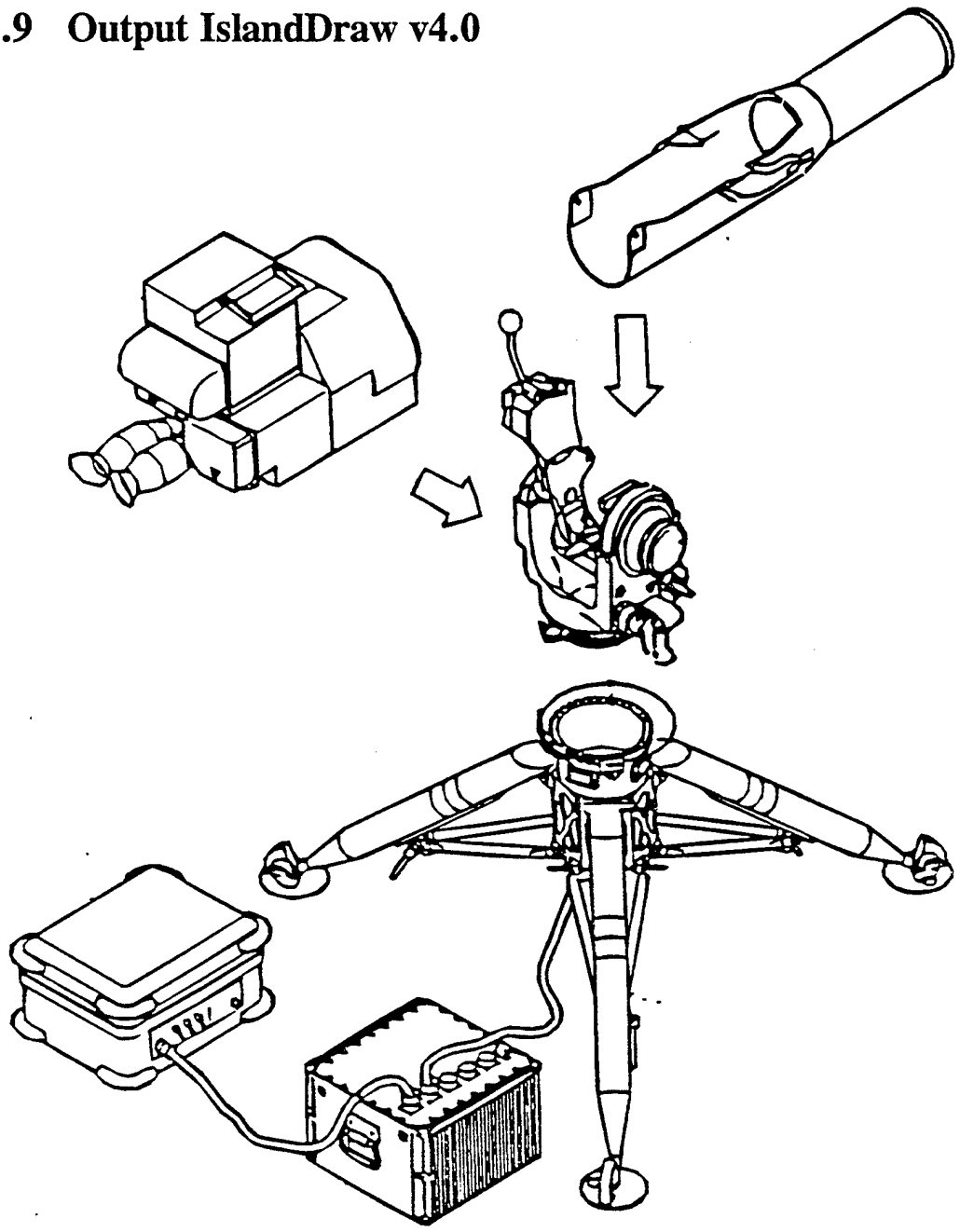
11.1.7 Output Freelance



11.1.8 Output Harvard Graphics

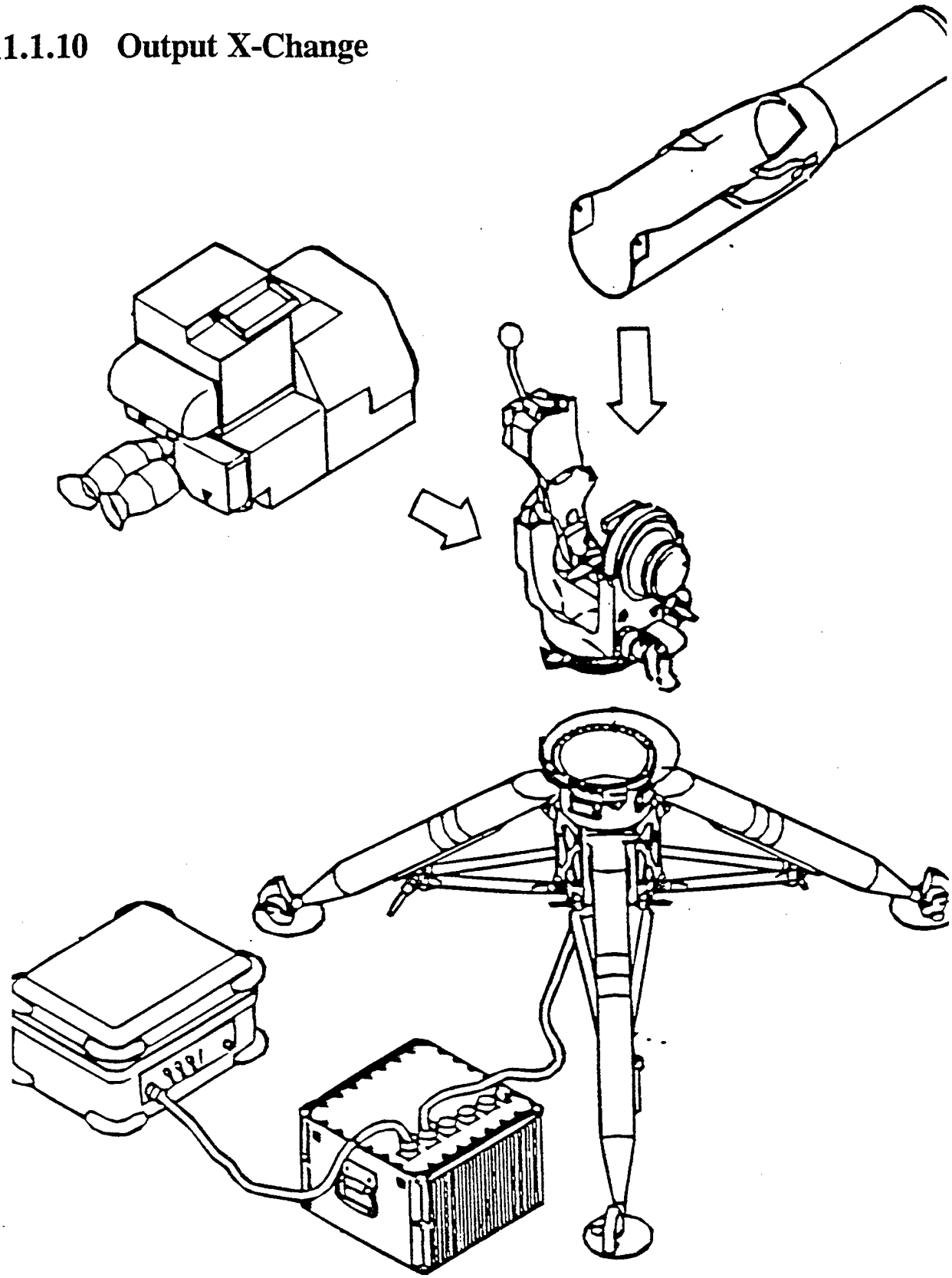


11.1.9 Output IslandDraw v4.0

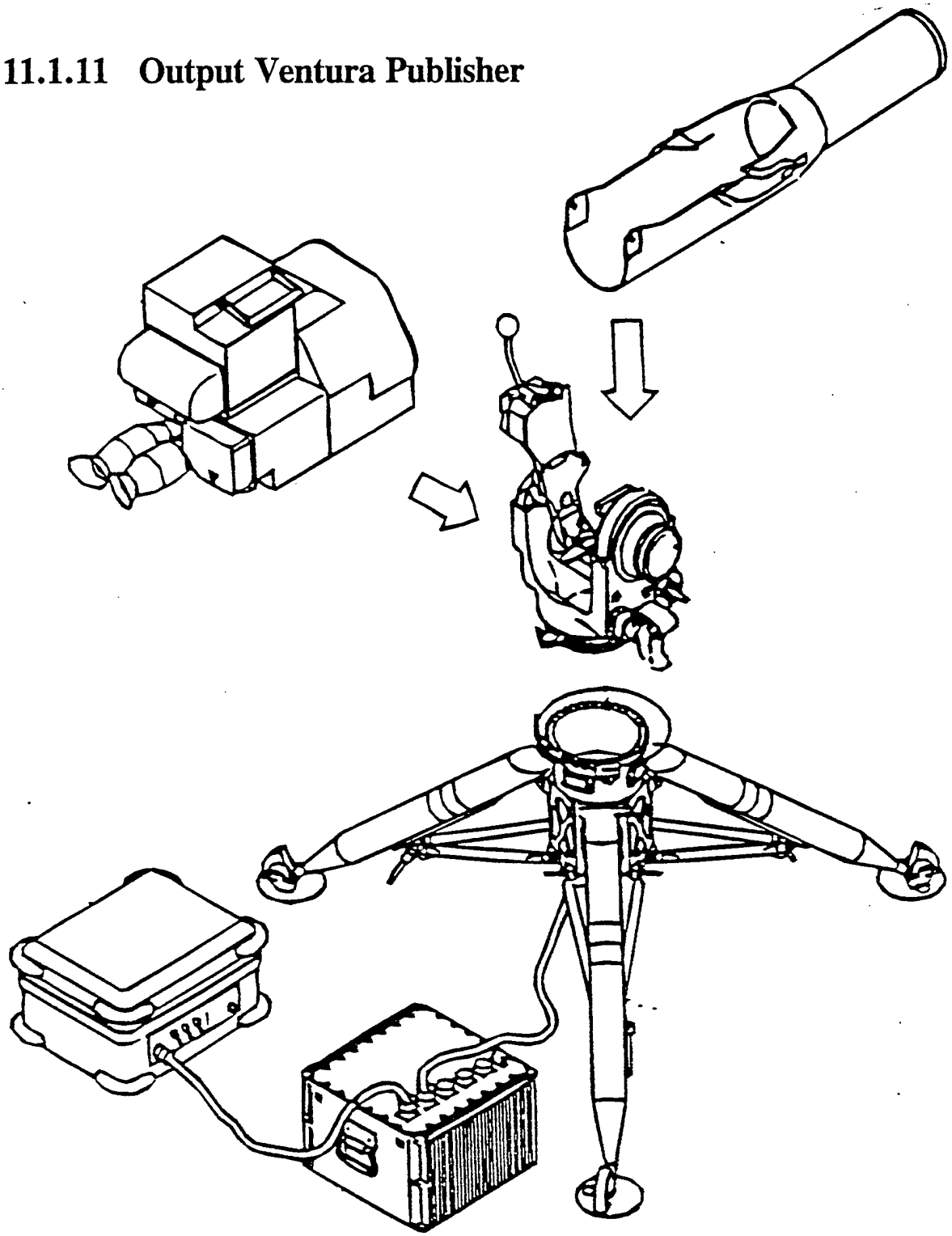


IslandDraw
C402

11.1.10 Output X-Change



11.1.11 Output Ventura Publisher



C402

VP

11.2 File D005C001

11.2.1 Parser Log MetaCheck

```
MetaCheck Version 2.10 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-93 CGM Technology Software
Execution Date: 04/18/94     Time:  17:19:22

Metafile Examined    : i:\94026\c402.cgm

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

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

Tracing not selected.

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

No Errors Detected

========== CALS CGM Profile (MIL-D-28003) Report ============

No profile discrepancies detected.

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

MetaCheck Version 2.10 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-93 CGM Technology Software
Execution Date: 04/18/94     Time:  17:19:35

Name of CGM under test: i:\94026\c402.cgm
Encoding              : Binary

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

BEGIN METAFILE string : >Version 5.42, ITAS_cgm.sty, 12/20/93<
                        > 13:57:47<
METAFILE DESCRIPTION  : >Interleaf Inc. MDL/G CGM 1992 *** MI<
                        >L-D-28003/BASIC-1<

Picture 1 starts at octet offset 394: >ITAS<
```

```
Conformance Summary  :  This file conforms to the CGM specification.
                        This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

          1 Pictures Tested
       5097 Elements Tested
      77532 Octets Tested

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

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

11.2.2 validcgm Log

```
Analysis for file c501.cgm using table table
ERROR: invalid times used per CGM (2), std B
ERROR: invalid times used per Picture (2), std B
(14, 262)         (1, 12, 12)     Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 3) not yet seen
(14.1, 0)         (2, 6, 8)       VDC Extent (0, 0) (32767, 32767)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
(15, 278)         (1, 12, 6)      Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
(15.1, 0)         (5, 11, 2)      Text Precision  Stroke
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
```

(1, 12) occurred 3 times
(1, 12) occurred illegally 2 times
(1, 13) occurred 1 time
(1, 15) occurred 1 time
(2, 1) occurred 1 time
(2, 2) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 2 times
(2, 6) occurred illegally 1 time
(2, 7) occurred 1 time
(3, 1) occurred 1 time
(4, 1) occurred 4 times
(4, 4) occurred 39 times
(4, 7) occurred 160 times
(5, 3) occurred 1 time
(5, 4) occurred 1 time
(5, 10) occurred 1 time
(5, 11) occurred 1 time
(5, 11) occurred illegally 1 time
(5, 14) occurred 1 time
(5, 15) occurred 1 time
(5, 16) occurred 1 time
(5, 18) occurred 1 time
(5, 22) occurred 1 time
(5, 23) occurred 44 times
(5, 28) occurred 4 times
(5, 29) occurred 42 times
(5, 34) occurred 1 time

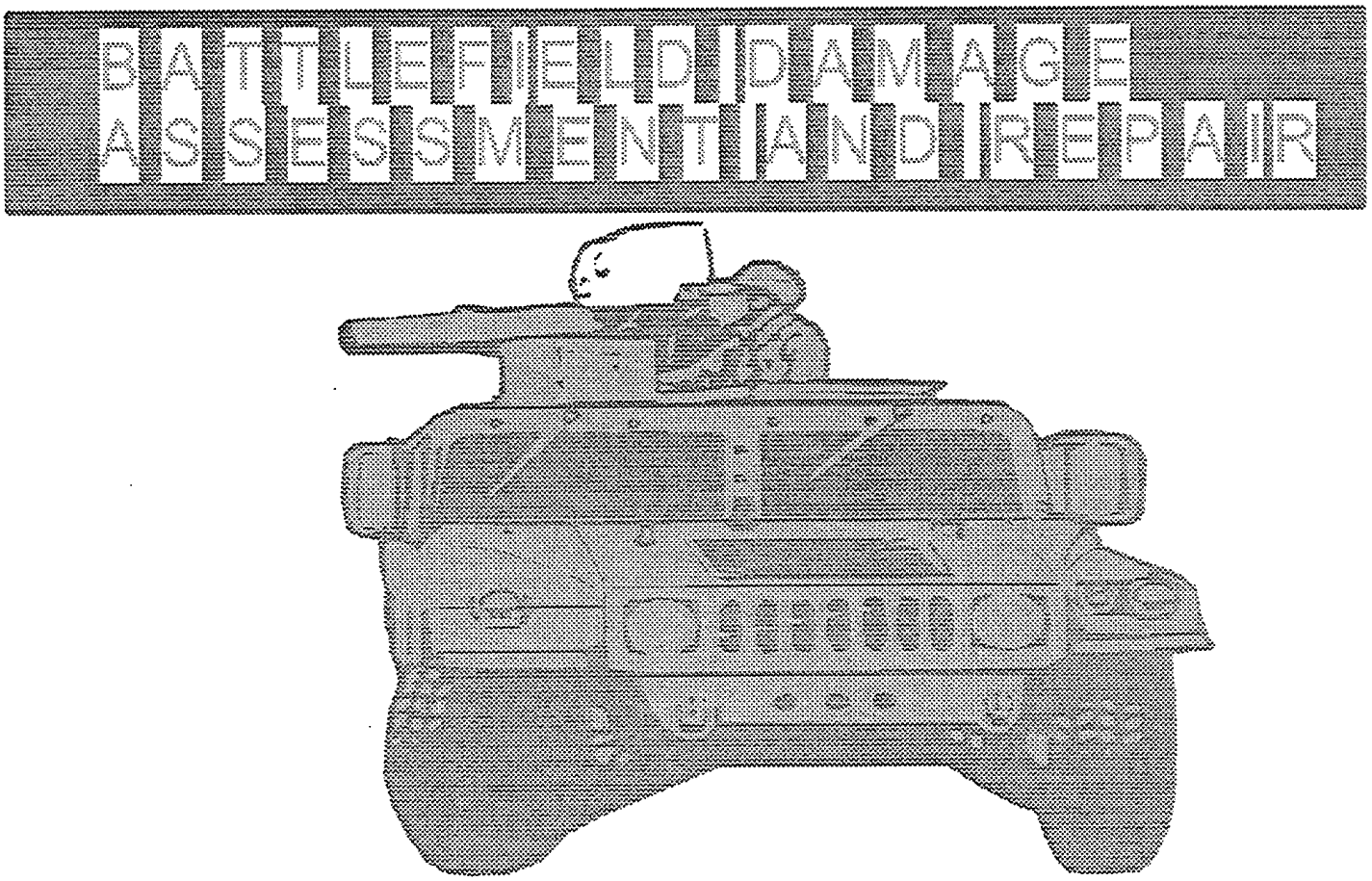
11.2.3 Output CADLeaf

11.2.4 Output CALSView

11.2.5 Output cgm2draw/IslandDraw

c2d/ID3
C501

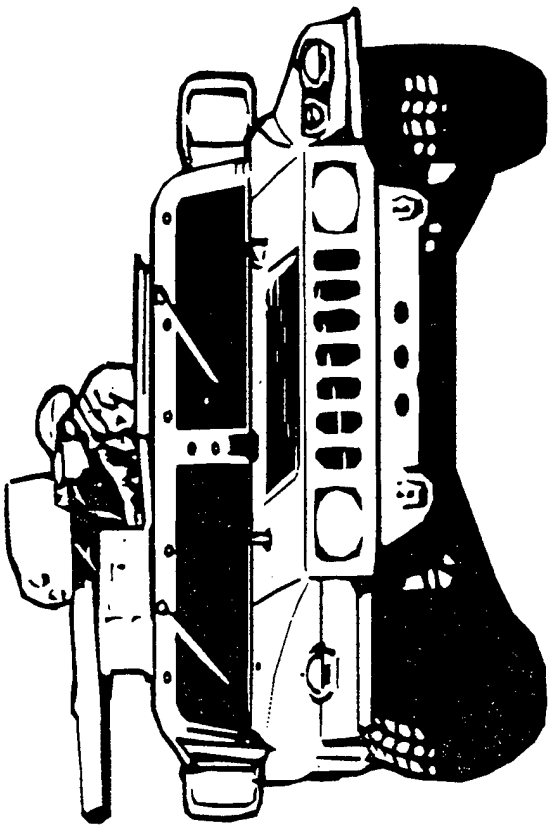
11.2.6 Output Designer



Designer 4.0
C501

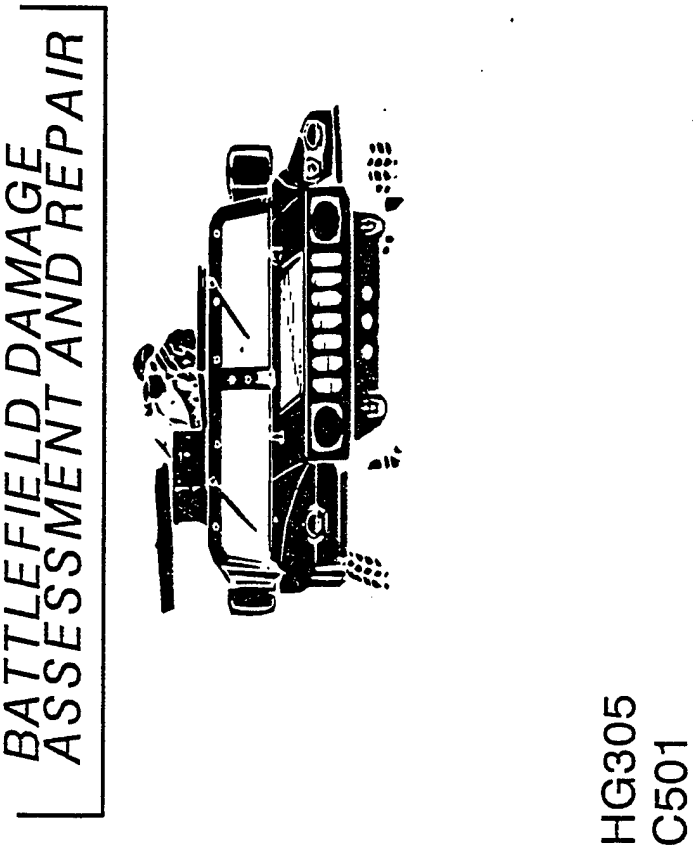
11.2.7 Output Freelance

BATTLEFIELD DAMAGE ASSESSMENT AND REPAIR



Freelance-C501

11.2.8 Output Harvard Graphics

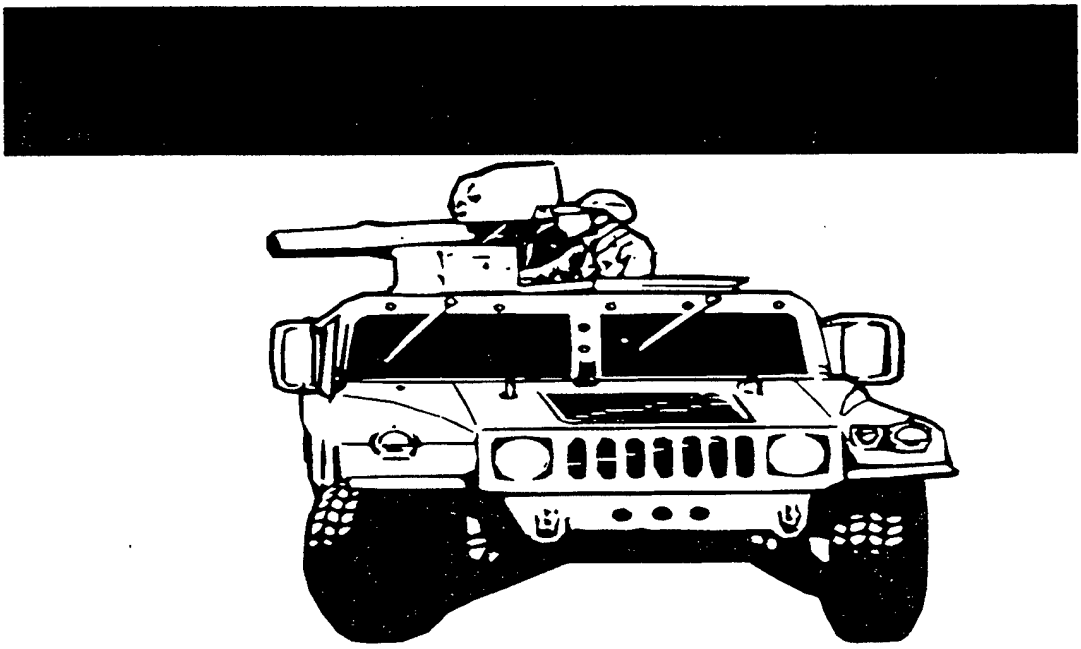


11.2.9 Output IslandDraw v4.0

IslandDraw
C501

11.2.10 Output X-Change

11.2.11 Output Ventura Publisher



C501

Vp