



# AFCTN Test Report 94-125

AFCTB-ID  
94-066



## TMSS Parsing Test



## MIL-M-87929A, Appendix C, Aircraft Power Package

## Document Type Definition



## MAXIMA Corporation

DISA Contract #DCA100-93-D-0065



## Quick Short Test Report

02 June 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

19960321 118

**DISTRIBUTION STATEMENT A.** Approved for public release; distribution is unlimited.

DTIC QUALITY INSPECTED 1

# DISCLAIMER NOTICE



**THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.**

**AFCTN Test Report  
94-125**

**AFCTB-ID  
94-066**

---

**TMSS Parsing Test  
MIL-M-87929A, Appendix C, Aircraft Power Package  
Document Type Definition**

**For:  
MAXIMA Corporation  
DISA Contract #DCA100-93-D-0065**

**Quick Short Test Report**

**02 June 1994**

---

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

**AFCTB Contact**  
Gary Lammers  
(513) 427-2295

**AFCTN Contact**  
Mel Lammers  
(513) 427-2295

## DISCLAIMER

This document was prepared as an account of the work sponsored by the Air Force. Neither the United States Government, the Air Force, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the Air Force. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the Air Force, and shall not be used for advertising or product endorsement purposes.

Available to the public from the  
National Technical Information Service  
U.S. Department of Commerce  
5285 Port Royal Road  
Springfield, VA 22161

This report and those involved in its preparation do not endorse any product, process, or company stated herein. Use of these means by anyone does not imply certification by the Air Force CALS Test Network (AFCTN).

---

# **Air Force CALS Test Bed**

## ***Notification of Test Results***

**02 June 1994**

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

### **MAXIMA Corporation**

Identified as follows:

Title:	<b>MIL-M-87929A, Appendix C, Aircraft Power Package, DTD Parsing Test</b>
Program:	<b>DISA</b>
Program Office:	<b>DISA</b>
Contract No.:	<b>DCA100-93-D-0065</b>
QSTR No.:	<b>AFCTB-ID 94-066</b>

Received on the following media:   **3.5" Diskette**

The results of the QSTR evaluation are as follows:

MIL-STD-1840A Media Format:	<b>N/A</b>
MIL-D-28000A IGES:	<b>N/A</b>
MIL-M-28001B SGML:	<b>Fail</b>
MIL-R-28002A Raster:	<b>N/A</b>
MIL-D-28003 CGM:	<b>N/A</b>

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

**Air Force CALS Test Bed  
HQ ESC/AV-2P  
4027 Colonel Glenn Highway, Suite 300  
Dayton, OH 45431-1672  
Phone: 513-257-3085      FAX: 513-257-5881**

## Contents

1.	Introduction.....	1
1.1.	Background.....	1
1.2.	Purpose.....	2
2.	Test Parameters.....	3
3.	1840A Analysis.....	4
3.1.	External Packaging.....	4
4.	SGML Analysis.....	4
4.1.	Exoterica Validator.....	5
4.2.	Exoterica XGML Normalizer.....	6
4.3.	Public Domain sgmls.....	7
4.4.	Sema Mark-it.....	7
5.	Conclusions and Recommendations.....	8
6.	Appendix A - Detailed SGML Analysis.....	9
6.1.	Exoterica Validator.....	9
6.2.	Exoterica XGMLNormalizer Parser.....	15
6.3.	Public Domain sgmls Log.....	15
6.4.	Sema Mark-it Log.....	18

---

## 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 this informal test is to analyze Air Force Document Type Definitions (DTDs) for Standard Generalized Markup Language (SGML) syntax, using several commercial and public domain SGML parsers, prior to placing them in the Defense Information Systems Agency (DISA) Asset Source for Software Engineering Technology (ASSET) repository.



## 2. Test Parameters

**Test Plan:** AFCTB 94-066

**Date of Evaluation:** 02 June 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:** Kay Hill  
MAXIMA Corporation  
2372 Lakeview Drive  
Beavercreek OH 45431  
(513) 427-5888

**Data Description:** Technical Manual Test  
1 DTD

**Data Source System:**  
Text/SGML  
SOFTWARE  
Unknown

**Evaluation Tools Used:**  
MIL-M-28001 (SGML)  
PC 486/50  
Exoterica XGMLNormalizer v1.2e3.2  
Exoterica Validator v2.2 ex1  
McAfee & McAdam Sema Mark-it v2.3  
Public Domain sgmls 1.1

**Standards Tested:** MIL-M-28001B

---

### 3. 1840A Analysis

#### 3.1 External Packaging

The 3.5" diskette was hand delivered to the Air Force CALS Test Bed (AFCTB). It was not enclosed in any type of container.

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

### 4. 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 goal was to configure the DTD under analysis as it would normally be used. However, for this analysis it was necessary to modify the DTD adding the "DOCTYPE doc [" statement to the start and the companion "]">" to the end of the DTD under evaluation, as stated in the comments of the DTD. If the parser did not support a formal file pointing to the location of the ISO character sets, this was added.

The DTD under evaluation MIL-M-87929A, Appendix C, Aircraft Power Package, called for a sequence of companion DTDs, each in turn, as illustrated by the diagram below. These DTDs were delivered on the same diskette as the DTD to be evaluated. The DTDs were not changed except to point to the succeeding DTD in the sequence and to insert the location of the ISO character set files in the D784CB0.A3 DTD.

---

<!-- MIL-M-87929A Aircraft Power Package DTD -->

D929CA0.ORG --> D929AA0.ORG —> D807BA0.A1

└─> D784CB0.A3

The following notes apply to the parsing analysis as indicated in the ensuing paragraphs.

Note 1. Entity parameters defined more than once is a valid SGML construct. The duplicate definition errors and/or warnings in this analysis do not indicate any problems.

Note 2. The occurrences of warnings "references defined, but not used," appeared because portions of the called DTD, i.e., MIL-M38784C, were not used. They were not used because the entity definitions of the DTD under analysis altered the execution path in the called DTD. The warnings in this analysis do not indicate any problems.

## 4.1 Exoterica Validator

The DTD file was evaluated using the *Exoterica Validator* exl parser. The basic DTD was modified by placing the concrete syntax file and "<!DOCTYPE doc [" at the start and the "]">" at the end. The parser reported 144 errors which related to the missing instance and are not considered errors for this analysis. The TOTAL CAPACITY was increased to 250000 for this set of DTDs.

The parser reported 59 total warnings of three types. The first type warning was a parameter entity declared more than once. See Note 1 above.

```
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%frnt".
      <!ENTITY % frnt "(idinfo, lep, verstat?, contents)" >
      ****
-->
```

The second type of warning related to elements defined but not used in any content model. See note 2 above.

```
<!-- **Warning** in "\xgml\9466.dtd", line 159:  
  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 "APPENDIX".  
-->
```

The third type warning was an element used but not defined. This warning indicates an error in the DTD syntax.

```
<!-- **Warning** in "\xgml\9466.dtd", line 159:  
  An element name specified in a USEMAP declaration, ATTLIST declaration or  
  content model is not defined by an ELEMENT declaration.  
  The element name is "UNIT".  
-->
```

## 4.2 Exoterica XGML Normalizer

The DTD file was parsed using the Exoterica *XGMLNormalizer* parser. The concrete syntax and "`<!DOCTYPE doc ["` were added to the start and "`"]>`" to the end of the file. One warning was issued by this utility for an element used but not defined. This warning indicates an error in the DTD syntax.

```
C:\XGML\XGMLNORM.EXE --  
Warning on line 159 in file 9466.dtd:  
An undeclared element name was used in a content model.  
The element is 'UNIT'.
```

Also reported was a TOTCAP exceeded warning. The TOTCAP was reset to 250000 for the DTD.

### 4.3 Public Domain sgmls

The DTD file was evaluated using the Public Domain *sgmls* parser version 1.1. The file was modified by adding the "<!DOCTYPE doc [" to the start and "]">" to the end of the file as stated in the comments in the DTD. The D929AA0.ORG, D807BA0.A1 and D784CB0.A3 files were used as the point to files. One error, a TOTCAP exceeded, was reported as 233216.

Twenty-two warnings were reported by the parser of two types. The first type warning was duplicate definitions. See Note 1 above.

```
sgmls: In file included at \ws\9466.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       Warning at c:\ws\807b.dtd, line 31 in declaration parameter 4:
       Duplicate specification occurred for "%frnt"; duplicate ignored
```

The second type warning related to an element used but not defined. This warning indicates an error in the DTD syntax.

```
sgmls: Warning at \ws\9466.dtd, line 86 at record end:
       Element "UNIT" used in DTD but not defined.
```

### 4.4 Sema Mark-it

The DTD file was evaluated using McAfee & McAdam's *Sema Mark-it* v2.3 parser. The file was modified by adding the concrete syntax and "<!DOCTYPE doc [" to the start and "]">" to the end of the file. The parser appeared to get lost while processing the file. The files used were the base line files provided with no modifications.

---

## 5. Conclusions and Recommendations

The file D929CA0.ORG, MIL-M-87929A, Appendix C, Aircraft Power Package, does not conform to the SGML syntax of ISO Standard 8879, as required by the CALS MIL-M-28001B specification. This conclusion is derived from the parser test warnings which indicate elements are used that are not defined.

---

## 6. Appendix A - Detailed SGML Analysis

### 6.1 Exoterica Validator

```
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%frnt".
      <!ENTITY % frnt "(idinfo, lep, verstat?, contents)" >
          ^^^^^
-->
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 45,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%yesorno".
      <!ENTITY % yesorno "NUMBER" >
          ^^^^^^^
-->
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 88,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%ipbforwd".
      <!ENTITY % ipbforwd "{modelcover, serialization?, finding?, simassem?,
          ^^^^^^^^^
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 18,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%math".
      <!ENTITY % math "IGNORE" >
          ^^^^^
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 33,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%mathtxt".
      <!ENTITY % mathtxt " " >
          ^^^^^^^
-->
```

---

---

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 37,  
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,  
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,  
    used in "\xgml\9466.dtd", line 103:
```

```
A parameter entity name has been declared more than once.  
The entity is "%shortitleuse".
```

```
<!ENTITY % shortitleuse "IGNORE" >  
    .....
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 45,  
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,  
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,  
    used in "\xgml\9466.dtd", line 103:
```

```
A parameter entity name has been declared more than once.  
The entity is "%shortitle".
```

```
<!ENTITY % shortitle " " >  
    .....
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 47,  
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,  
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,  
    used in "\xgml\9466.dtd", line 103:
```

```
A parameter entity name has been declared more than once.  
The entity is "%yesorno".
```

```
<!ENTITY % yesorno "NUMBER" >  
    .....
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 50,  
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,  
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,  
    used in "\xgml\9466.dtd", line 103:
```

```
A parameter entity name has been declared more than once.  
The entity is "%itemid".
```

```
<!ENTITY % itemid  
    .....
```

```
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 62,  
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,  
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,  
    used in "\xgml\9466.dtd", line 103:
```

```
A parameter entity name has been declared more than once.  
The entity is "%content".
```

```
<!ENTITY % content  
    .....
```

```
-->
```



---

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 71,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%bodyatt".
      <!ENTITY % bodyatt
      .....
```

```
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 82,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%list".
      <!ENTITY % list "(seqlist | randlist | deflist)" >
      .....
```

```
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 86,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%spcpara".
      <!ENTITY % spcpara "(warning?, caution?, note?)" >
      .....
```

```
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 107,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%frnt".
      <!ENTITY % frnt "(idinfo, warnpage?, chginsst?, lep, verstat?,
      .....
```

```
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 117,
      used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
      used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
      used in "\xgml\9466.dtd", line 103:
      A parameter entity name has been declared more than once.
      The entity is "%fpi".
      <!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect |
      .....
```

```
-->
```

---

---

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 126,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
    used in "\xgml\9466.dtd", line 103:
    A parameter entity name has been declared more than once.
    The entity is "%titles".
    <!ENTITY % titles "title %shortitle;" >
    ~~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 133,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
    used in "\xgml\9466.dtd", line 103:
    A parameter entity name has been declared more than once.
    The entity is "%fig".
    <!ENTITY % fig "(%titles;, (subfig+ | (graphic | macrograph |
    ~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 165,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
    used in "\xgml\9466.dtd", line 103:
    A parameter entity name has been declared more than once.
    The entity is "%bodyele".
    <!ENTITY % bodyele "(chapter, chapter+, ddchapter?)" >
    ~~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 190,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
    used in "\xgml\9466.dtd", line 103:
    A parameter entity name has been declared more than once.
    The entity is "%graphatt".
    <!ENTITY % graphatt
    ~~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 228,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
    used in "\xgml\9466.dtd", line 103:
    A parameter entity name has been declared more than once.
    The entity is "%entryatt".
    <!ENTITY % entryatt
    ~~~~~

-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 248,
    used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
    used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
```

---

used in "\xgml\9466.dtd", line 103:  
A parameter entity name has been declared more than once.  
The entity is "%lrp".  
<!ENTITY % lrp "(tmidno, title)+>  
^^^

-->  
<!-- \*\*Warning\*\* in "\xgml\9466.dtd", line 159:  
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 "APPENDIX".

-->

<<<< PART OF MESSAGE FILE RMEOVED HERE >>>>

The element is "BODY".  
The element is "CHAPTER".  
The element is "CHGINSSHT".  
The element is "CHGLIST".  
The element is "CHGREC".  
The element is "DATE".  
The element is "DATEINC".  
The element is "DDCHAPTER".  
The element is "DDDESC".  
The element is "DDINDEX".  
The element is "DDINTRO".  
The element is "DDLIST".  
The element is "DOC".  
The element is "DOCIPB".  
The element is "DOCPART".  
The element is "DOCWP".  
The element is "ECPNO".  
The element is "FOREWORD".  
The element is "GLOSSARY".  
The element is "INDEX".  
The element is "INSERTPG".  
The element is "INTRO".  
The element is "PENAPP".  
The element is "PGNO".  
The element is "PREFACE".  
The element is "RATD".  
The element is "REAR".  
The element is "REINTEST".  
The element is "REMOVEPG".  
The element is "REPTTEST".  
The element is "SECTION".  
The element is "SHORTTITLE".  
The element is "TYPENO".

-->

---

---

```
<!-- **Warning** in "\xgml\9466.dtd", line 159:
  An element name specified in a USEMAP declaration, ATTLIST declaration or
  content model is not defined by an ELEMENT declaration.
  The element name is "UNIT".
-->
  The element is "VOLUME".
  The element is "WARNPAGE".
  The element is "WP".
-->
<<<< ERRORS FROM THIS POINT ON RELATE TO NO DOCUMENT INSTANCE AND ARE NOT CONSIDERED
FOR THIS REPORT >>>>

<!-- **Error** in "\xgml\9466.dtd", line 160:
  The document instance must consist of at least one tag or data character.
  The following element can start: "DOCAPP".
-->

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

<!-- **Error** in "\xgml\9466.dtd", line 160:
  An end tag that has been declared inomissible ("-") must not be omitted.
  The element is "DOCAPP".
-->
<!-- Capacity points/limits:
  TOTALCAP =236496/250000
  ENTCAP   =13536/200000
  ENTCHCAP =20345/70000
  ELEMCAP  =8896/70000
  GRPCAP   =68992/70000
  EXGRPCAP =1760/70000
  EXNMCAP  =4640/70000
  ATTCAP   =83424/200000
  ATTCHCAP =2004/70000
  AVGRPCAP =32640/70000
  NOTCAP   =96/70000
  NOTCHCAP =163/70000
  IDCAP    =0/70000
  IDREFCAP =0/70000
  MAPCAP   =0/70000
  LKSETCAP =0/70000
  LKNMCAP  =0/70000
-->
<!-- 144 errors and 59 warnings reported. -->
```

---

---

## 6.2 Exoterica XGMLNormalizer Parser

```
C:\XGML\XGMLNORM.EXE --  
Warning on line 159 in file 9466.dtd:  
An undeclared element name was used in a content model.  
The element is 'UNIT'.
```

## 6.3 Public Domain sgmls Log

```
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
Warning at c:\ws\807b.dtd, line 31 in declaration parameter 4:  
Duplicate specification occurred for "%frnt"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
Warning at c:\ws\807b.dtd, line 45 in declaration parameter 4:  
Duplicate specification occurred for "%yesorno"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
Warning at c:\ws\807b.dtd, line 90 in declaration parameter 4:  
Duplicate specification occurred for "%ipbforwd"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 18 in declaration parameter 4:  
Duplicate specification occurred for "%math"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 33 in declaration parameter 4:  
Duplicate specification occurred for "%mathtxt"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 37 in declaration parameter 4:  
Duplicate specification occurred for "%shorttitleuse"; duplicate ignored  
sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 45 in declaration parameter 4:  
Duplicate specification occurred for "%shorttitle"; duplicate ignored
```

---

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 47 in declaration parameter 4:  
Duplicate specification occurred for "%yesorno"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 60 in declaration parameter 4:  
Duplicate specification occurred for "%itemid"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 69 in declaration parameter 4:  
Duplicate specification occurred for "%content"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 80 in declaration parameter 4:  
Duplicate specification occurred for "%bodyatt"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 82 in declaration parameter 4:  
Duplicate specification occurred for "%list"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 86 in declaration parameter 4:  
Duplicate specification occurred for "%spcpara"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 109 in declaration parameter 4:  
Duplicate specification occurred for "%frnt"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 118 in declaration parameter 4:  
Duplicate specification occurred for "%fpi"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 126 in declaration parameter 4:  
Duplicate specification occurred for "%titles"; duplicate ignored

---

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 134 in declaration parameter 4:  
Duplicate specification occurred for "%fig"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 165 in declaration parameter 4:  
Duplicate specification occurred for "%bodyele"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 204 in declaration parameter 4:  
Duplicate specification occurred for "%graphatt"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 238 in declaration parameter 4:  
Duplicate specification occurred for "%entryatt"; duplicate ignored

sgmls: In file included at \ws\9466.dtd, line 30:  
In file included at c:\ws\929a.dtd, line 205:  
In file included at c:\ws\807b.dtd, line 103:  
Warning at i:\dtd\784c.dtd, line 248 in declaration parameter 4:  
Duplicate specification occurred for "%lrp"; duplicate ignored

sgmls: Warning at \ws\9466.dtd, line 86 at record end:  
Element "UNIT" used in DTD but not defined

sgmls: SGML error:  
Capacity limit TOTALCAP exceeded by 33216 points

## 6.4 Sema Mark-it Log

<!--\*\*\* file:\xgml\9466.dtd line:114 pos:3544  
Unknown parameter entity name (wptext) used in reference.  
If name is spelt correctly check that the entity declaration in the DTD  
contains a PERO (e.g. %) symbol followed by a space.-->

<!--\*\*\* file:\xgml\9466.dtd line:114 pos:3547  
Syntax error. Valid tokens at this point are: Ee s pero dtgo name grpo rniPCDATA .-->

<!--\*\*\* file:\xgml\9466.dtd line:115 pos:3579  
Illegal end of entity within a delimited text (e.g. a declaration).  
ISO 8879 prohibits declarations that start in one entity and end in another.-->

ATTCNT --100-- 47  
ATTSPLEN --960-- 0  
BSEQLEN --960-- 0  
DTAGLEN --16-- 0  
DTEMPLN --16-- 0  
ENTLVL --16-- 3  
GRPCNT --32-- 22  
GRPGTCNT --96-- 27  
GRPLVL --16-- 5  
LITLEN --3048-- 730  
NAMELEN --32-- 13  
NORMSEP --2-- 0  
PILEN --240-- 0  
TAGLEN --960-- 0  
TAGLVL --24-- 0  
MSDLVL --24-- 1  
TOTALCAP --250000-- 154559  
ENTCAP --200000-- 16224  
ENTCHCAP --70000-- 11575  
ELEMCAP --70000-- 5984  
GRPCAP --70000-- 42688  
EXGRPCAP --70000-- 864  
EXNMCAP --70000-- 1408  
ATTCAP --200000-- 52960  
ATTCHCAP --70000-- 1320  
AVGRPCAP --70000-- 21280  
NOTCAP --70000-- 96  
NOTCHCAP --70000-- 160  
IDCAP --70000-- 0  
IDREFCAP --70000-- 0  
MAPCAP --70000-- 0  
LKSETCAP --70000-- 0  
LKNMCP --70000-- 0