

AFCTN Test Report 94-129

AFCTB-ID 94-076









TMSS Parsing Test

MIL-M-87929A, Appendix G, Aircraft Structural Integrity Program

Document Type Definition

MAXIMA Corporation

DISA Contract #DCA100-93-D-0065

Quick Short Test Report

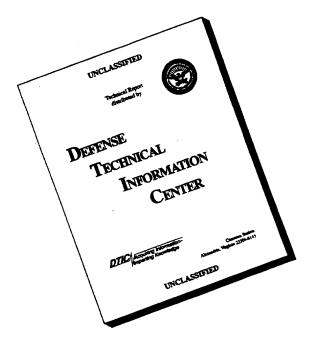
21 June 1994



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 114

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Aircraft Structural Integrity Program,
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For:
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Quick Short Test Report
21 June 1994

Prepared By

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Air Force CALS Test Bed

Notification of Test Results

21 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:

MIL-M-87929A, Appendix G, Aircraft Structural

Integrity Program, DTD Parsing Test

Program:

DISA

Program Office:

DISA

Contract No.:

DCA100-93-D-0065

QSTR No.:

AFCTB-ID 94-076

Received on the following media:

3.5" Diskette

The results of the QSTR evaluation are as follows:

MIL-STD-1840A Media Format:

N/A

MIL-D-28000A IGES:

N/A

MIL-M-28001B SGML:

Fail

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 HQ ESC/AV-2P

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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. pants 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 94-076

Date of

Evaluation:

21 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 files. The files 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 G, Aircraft Structural Integrity Program, called for a companion MIL-M-38784C DTD. MIL-M-38784C, Amendment Three DTD, delivered on the same diskette as the DTD to be evaluated, was used. This DTD was used without change except to insert the location of the ISO character set files. See diagram below.

MIL-M-87929A Aircraft Structural Integrity Program DTD

D929AGO.ORG --> D929AAO.ORG ---> D807BAO.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 vaild 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 no errors. The TOTAL CAPACITY was increased to 250000 for this set of DTDs after receiving messages about exceeding capacities.

The parser reported a total of 108 warnings of three types. The first type of warnings were parameter entities declared more than once. See Note 1 above.

<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 83, used in "\xgml\9476.dtd", line 114:

A parameter entity name has been declared more than once.

The entity is "%list".

<!ENTITY % list "(seqlist | randlist | deflist)" >

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

<!-- **Warning** in "\xgml\9476.dtd", line 161:

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 of warnings were elements used but not defined. This warning indicates an error in the DTD syntax.

<!-- **Warning** in "\xgml\9476.dtd", line 161:
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 161 in file 9476.dtd:
An undeclared element name was used in a content model.
The element is 'UNIT'.

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 D929AAO.ORG, D807BAO.A1 and D784CBO.A3 files were used as the point to files. The parser reported one error. The reported error was an exceeded TOTCAP. The TOTCAP was reported as 227168.

sgmls: SGML error:

Capacity limit TOTALCAP exceeded by 27168 points

The parser reported a total of 25 warnings. The first type warning was for duplicate definitions. See Note 1 above.

sgmls: In file included at \ws\9476.dtd, line 43:
Warning at c:\ws\929a.dtd, line 83 in declaration parameter 4:
Duplicate specification occurred for "%list"; duplicate ignored

The second type warning related to elements used but not defined. This warning indicates an error inthe DTD syntax.

sgmls: Warning at \ws\9476.dtd, line 90 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 reported errors that did not appear to be consistent with the rest of the parsers. The files used were the exact files parsed by the Exoterica parsers.

It was noted that the parser got lost and stopped. Shown below is the error message and the part of the DTD it relates to. From the capacities, it appears that the entire DTD and subset were not parsed.

```
<!--*** file:\xgml\9476.dtd line:118 pos:3703
Unknown parameter entity name (wp) 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.-->
```

5. Conclusions and Recommendations

The file D929AGO.ORG, MIL-M-87929A, Appendix G, 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\929a.dtd" (entity "%m87929a"), line 83,
     used in "\xgml\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%list".
   <!ENTITY % list "(seqlist | randlist | deflist)" >
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 85,
     used in "\xgml\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%spcpara".
   <!ENTITY % spcpara "(warning?, caution?, note?)" >
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 87,
     used in "\xgml\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%fpi".
   <!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect | %spcpara;)*,
-->
<!-- **Warning** in "c:\ws\929a.dtd" (entity "%m87929a"), line 90,
     used in "\xgml\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%forwp".
   <!ENTITY % forwp "(wpidinfo, contents, illuslist?, tablelist?, purpose, sco
-->
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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 "\xyml\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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 "\xqml\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%frnt".
   <!ENTITY % frnt "(idinfo, warnpage?, chginssht?, 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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   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\9476.dtd", line 114:
   A parameter entity name has been declared more than once.
   The entity is "%lrp".
   <!ENTITY % lrp "(tmidno, title)+" >
-->
<!-- **Warning** in "\xgml\9476.dtd", line 161:
   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 TEXT REMOVED HERE >>>>

```
The element is "BODY".
The element is "CHAPTER".
The element is "CHGINSSHT".
The element is "CHGLIST".
The element is "CHGREC".
The element is "CONTLIST".
The element is "CUBE".
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 "DESC".
The element is "DIM".
The element is "DOC".
The element is "DOCIPB".
The element is "DOCPART".
The element is "DOCWP".
The element is "ECPNO".
The element is "EMPTYWT".
The element is "EQPLIST".
The element is "ESDS".
The element is "FIGINDEX".
The element is "FINDING".
The element is "FOREWORD".
The element is "GLOSSARY".
The element is "HCI".
The element is "INDEX".
The element is "INSERTPG".
The element is "INTRO".
The element is "IPBFORWORD".
The element is "IPBWP".
The element is "LEADPARTIC".
The element is "LOADWT".
The element is "MFRLIST".
The element is "MODELCOVER".
The element is "NUMINDX".
The element is "PARTNAME".
The element is "PARTSTD".
The element is "PENAPP".
The element is "PGNO".
The element is "PL".
The element is "PLO".
The element is "PL1".
```

```
The element is "PL2".
   The element is "PL3".
   The element is "PL4".
   The element is "PL5".
   The element is "PL6".
   The element is "PL7".
   The element is "PREFACE".
   The element is "QUICKCHGEXPL".
   The element is "RATD".
   The element is "REAR".
   The element is "REFDES".
   The element is "REINTEST".
   The element is "REMARKS".
   The element is "REMOVEPG".
   The element is "REPTEST".
   The element is "RFDSINDX".
   The element is "SECTION".
   The element is "SERIALIZATION".
   The element is "SERTABLE".
   The element is "SHORTTITLE".
   The element is "SHTNOEXPL".
   The element is "SIMASSEM".
   The element is "SMRCODE".
   The element is "SMREXPL".
   The element is "SSSN".
   The element is "STTECWP".
   The element is "TOOLLIST".
   The element is "TYPENO".
<!-- **Warning** in "\xgml\9476.dtd", line 161:
   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 "UNITS".
   The element is "USEONCODE".
   The element is "USEONCODELIST".
   The element is "USEONEXPL".
   The element is "VOLUME".
   The element is "WARNPAGE".
   The element is "WP".
```

```
<!-- Capacity points/limits:
     TOTALCAP =230704/250000
     ENTCAP =13536/200000
     ENTCHCAP =20605/70000
     ELEMCAP =8960/70000
     GRPCAP =66624/70000
     EXGRPCAP =1632/70000
     EXNMCAP =4192/70000
     ATTCAP =80352/200000
     ATTCHCAP =1968/70000
     AVGRPCAP =32576/70000
     NOTCAP =96/70000
     NOTCHCAP =163/70000
     IDCAP
            =0/70000
     IDREFCAP =0/70000
     MAPCAP =0/70000
     LKSETCAP =0/70000
     LKNMCAP =0/70000
--><!-- 0 errors and 108 warnings reported. -->
```

6.2 Exoterica XGMLNormalizer Parser

C:\XGML\XGMLNORM.EXE -Warning on line 161 in file 9476.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\9476.dtd, line 43:
       Warning at c:\ws\929a.dtd, line 83 in declaration parameter 4:
       Duplicate specification occurred for "%list"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       Warning at c:\ws\929a.dtd, line 85 in declaration parameter 4:
       Duplicate specification occurred for "%spcpara"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       Warning at c:\ws\929a.dtd, line 88 in declaration parameter 4:
       Duplicate specification occurred for "%fpi"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       Warning at c:\ws\929a.dtd, line 92 in declaration parameter 4:
       Duplicate specification occurred for "%forwp"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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 "%shortitleuse"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       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 "%shortitle"; duplicate ignored
sgmls: In file included at \ws\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 43:
       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\9476.dtd, line 90 at record end:
      Element "UNIT" used in DTD but not defined
sgmls: SGML error:
      Capacity limit TOTALCAP exceeded by 27168 points
```

TOTALCAP 227168 **ENTCAP 13536** ENTCHCAP 17037 ELEMCAP 8960 GRPCAP 66624 EXGRPCAP 1664 EXNMCAP 4192 **ATTCAP 80352** ATTCHCAP 1968 AVGRPCAP 32576 NOTCAP 96 NOTCHCAP 163 IDCAP 0 IDREFCAP 0 MAPCAP 0 LKSETCAP 0 LKNMCAP 0

6.4 Sema Mark-it Log

```
<!--*** file:\xqml\9476.dtd line:118 pos:3703
Unknown parameter entity name (wp) 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\9476.dtd line:118 pos:3706
Syntax error. Valid tokens at this point are: Ee s pero dtgo name grpo rniPCDATA .-->
<!--*** file:\xgml\9476.dtd line:119 pos:3771
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9476.dtd line:119 pos:3780
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9476.dtd line:119 pos:3799
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9476.dtd line:121 pos:3869
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
DTEMPLEN --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-- 154139
ENTCAP --200000-- 16256
ENTCHCAP --70000-- 11878
ELEMCAP --70000-- 5952
GRPCAP --70000-- 42080
```

EXGRPCAP --70000-- 832

EXNMCAP --70000-- 1344

ATTCAP --200000-- 53536

ATTCHCAP --70000-- 1301

AVGRPCAP --70000-- 20704

NOTCAP --70000-- 96

NOTCHCAP --70000-- 160

IDCAP --70000-- 0

IDREFCAP --70000-- 0

LKSETCAP --70000-- 0

LKNMCAP --70000-- 0

6.5 D929AG0.DTD

```
<!-- SUPPLEMENT NOTICE: This file is made available to provide the user with
a digital representation of the DTD found in Appendix G of MIL-M-87929A.
This file is incomplete without MIL-M-87929A. -->
<!-- NOTE: The start and end of this file are marked with a row of asterisks.
If these rows are not present the file may not be complete! -->
<!-- MIL-M-87929A Aircraft Structural Integrity Program DTD -->
<!-- The following set of declarations may be referred to by using a
public entity as follows:
<!ENTITY % m87929asp PUBLIC "-//USA-DOD//DTD MIL-M-87929A ASIP//EN" >
%m87929asp;
-->
<!-- NOTE: In order to parse the following DTD subset alone, append
the following statement to the beginning of the file:
     <!DOCTYPE docasip [
and the associated "]>" to the end of the file. -->
<!-- ENTITY DECLARATIONS -->
<!ENTITY % m87929a PUBLIC "-//USA-DOD//DTD MIL-M-87929A//EN" >
<!ENTITY % list "(seqlist | randlist | deflist)" >
<!ENTITY % spcpara "(warning?, caution?, note?)" >
<!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect | %spcpara;)*,
internatlstd?, lrp?, tctolist?)" >
<!ENTITY % forwp "(wpidinfo, contents, illuslist?, tablelist?, purpose, scope,
%fpi;, manstru, coverage?, indexscheme, locinfo, maintcon?, envcont?,
warrprov?, progobj, tasks, interaction, para0*, tmimprep?)" >
%m87929a;
<!-- ELEMENT and ATTRIBUTE LIST DECLARATIONS -->
```

```
<!ELEMENT asipwp
                  -- (%wp;, wpforewd, safesum?, techinfo, swp*)
                       +(figure | table | foldout) >
                  chgno NUMBER "0"
<!ATTLIST asipwp
                  %bodyatt;
                  %secur; >
<!ELEMENT docasip
                  -- (front, aiwp, forewordwp, asipwp, progopwp,
                        ddwp?, foldsect?) +(pgbrk | brk) >
                   service %service; 'AF'
<!ATTLIST docasip
                   %docatt;
                   %secur; >
<!ELEMENT interaction - o (para0+) >
<!ATTLIST interaction %secur; >
<!ELEMENT progobj
                  - o (para0+) >
                  %secur; >
<!ATTLIST progobj
<!ELEMENT progopwp
                   -- (%wp;, wpforewd, safesum?, techinfo, swp*)
                        +(figure | table | foldout) >
                    chqno NUMBER "0"
<!ATTLIST progopwp
                    %bodyatt;
                    %secur; >
<!ELEMENT task1
                 - o (subparal+) >
<!ATTLIST task1
                 %secur; >
                 - o (subparal+) >
<!ELEMENT task2
<!ATTLIST task2
                 %secur; >
<!ELEMENT task3
                 - o (subparal+) >
<!ATTLIST task3
                 %secur; >
<!ELEMENT task4
                 - o (subpara1+) >
<!ATTLIST task4
                 %secur; >
<!ELEMENT task5
                 - o (subparal+) >
<!ATTLIST task5
                 %secur; >
<!ELEMENT tasks
                 - o (para0, task1, task2, task3, task4, task5) >
<!ATTLIST tasks
                 %secur; >
```