

S1000D


ATA e-BUSINESS PROGRAM


AEROSPACE AND DEFENSE
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The Transformation to S1000D: Best Practices in Legacy Data Conversion

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Legacy Data Converted to S1000D

The transformation from ATA, Mil-Standard, or “other” specifications to an S1000D Standard begins with the conversion of the legacy data.

This presentation will cover an overview of the S1000D conversion process looking at the various stages and outlining a number of options to consider and pitfalls to watch out for when planning a conversion project.



Getting Started

Preliminary Up-Front Information:

- What is the legacy data owners knowledge of S1000D?
- What Issue of the S1000D?
- What type of conversion?
 - “One time conversion”
 - “Initial conversion with revision updates”

Getting Started

Preliminary Up-Front Information: (Cont.)

- The legacy data can be in a variety of formats (i.e. SGML, PDF, Word, etc.), and with graphics often in a mixture of raster images, photographs, etc.
- What is the delivery?
 - Interactive Electronic Technical Publication (IETP) Class I, II, III, or IV?
 - Is the ability to “print” a requirement?

“Book-Oriented” Class I, Class II, and Class III IETPs

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST
RUDDER CONTROL RATIO CHANGER ASSEMBLY
 PART NUMBER 251T3600-11, -5

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RUDDER CONTROL RATIO CHANGER ASSEMBLY — ASSEMBLY

Table of contents

- 1 Procedure
- 2 General
- 3 Assembly

CAUTION
 USE EXTREME CARE WHEN INSTALLING TORSION SPRING (60A).
 SPRINGS ARE HEAVILY LOADED.

General

- This procedure contains the data necessary to assemble the rudder control ratio changer assembly.
- Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- Refer to **RUDDER CONTROL RATIO CHANGER ASSEMBLY-ILLUSTRATED PARTS LIST** Figure 1 for the item numbers.

RUDDER CONTROL RATIO CHANGER ASSEMBLY — ILLUSTRATED PARTS LIST

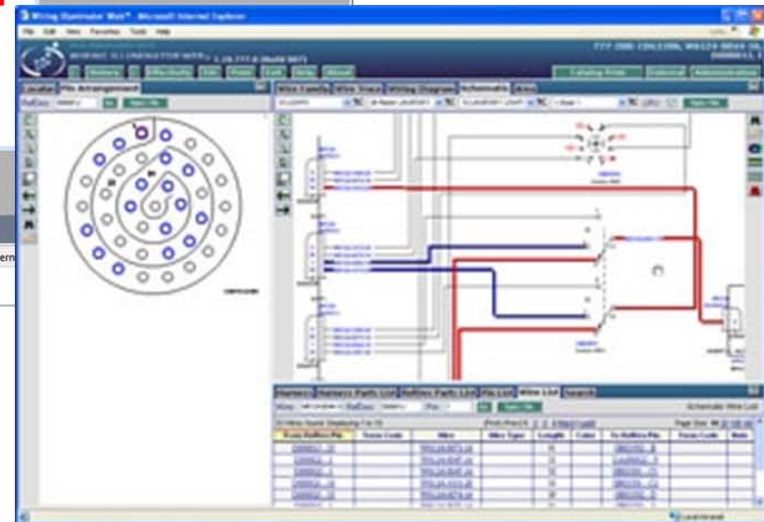
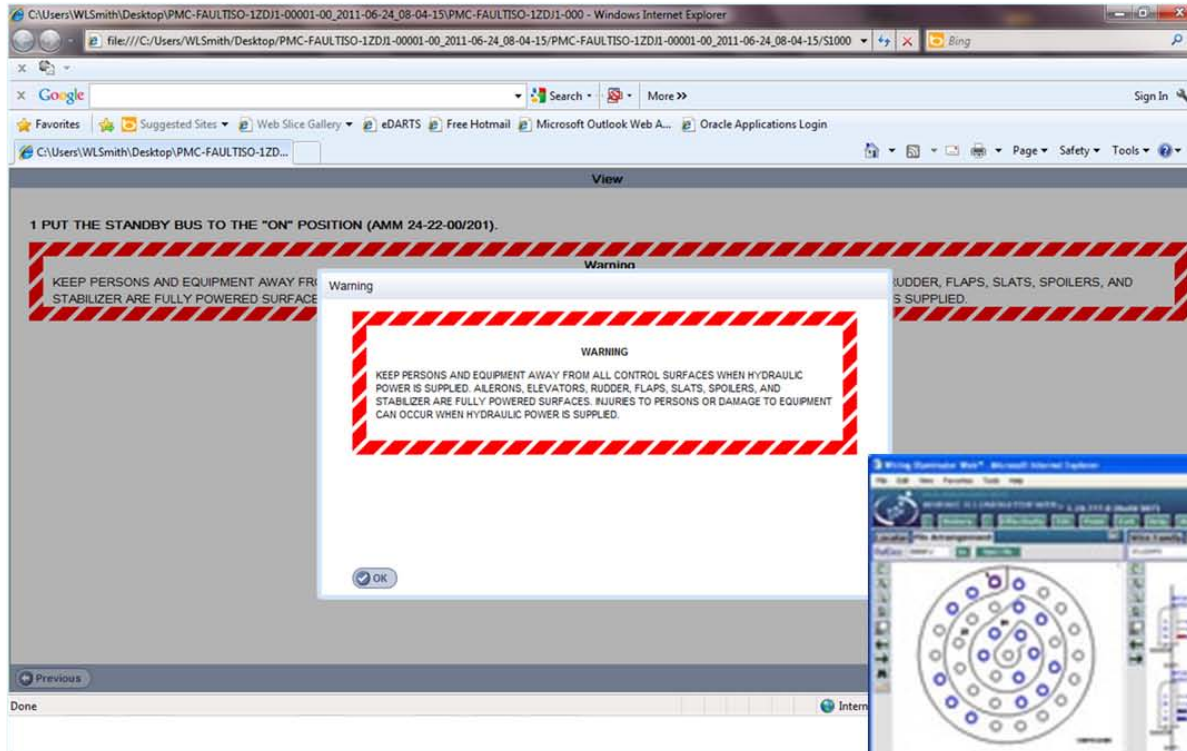
Sheet 1 of 5

Figure 1 Rudder Control Ratio Changer Assembly (5 sheets)

Fig Item	Units Per Assembly / Unit of Issue	NCAGE Part no.	NATO stock no.	Nomenclature	*Usable on code assy	ICV	SMR Code
01/0							
- 1		L1877	251T3600-2	DELETED			
- 1A		L1877	251T3600-4	DELETED			
- 1B	RF	L1877	251T3600-5	CHANGER ASSY-RUD CONT RATIO (PRE SB 767-27-20)			
- 1C	RF	L1877	251T3600-11	CHANGER ASSY-RUD CONT RATIO (POST SB 767-27-20)			
3	2	L1877	BMN4122AD3-10	* NUT			
10	1	L1877	AN960P1016	* WASHEE			

- First level IETMs are still book-oriented
- Page-turning functionality
- Some hyperlinks added

Interactive, Database-Driven Class IV IETPs



- Departure from traditional book-oriented page structures
- Fully database-driven, with dynamic content
- Content elements generated and displayed "on-the-fly"
- Underlying structured databases are standards-based (such as S1000D™)

Getting Started

Preliminary Up-Front Information: (Cont.)

Who is supplying or creating the.....

- Business Rules
- Data Module Requirements List (DMRL)



Starting the Conversion

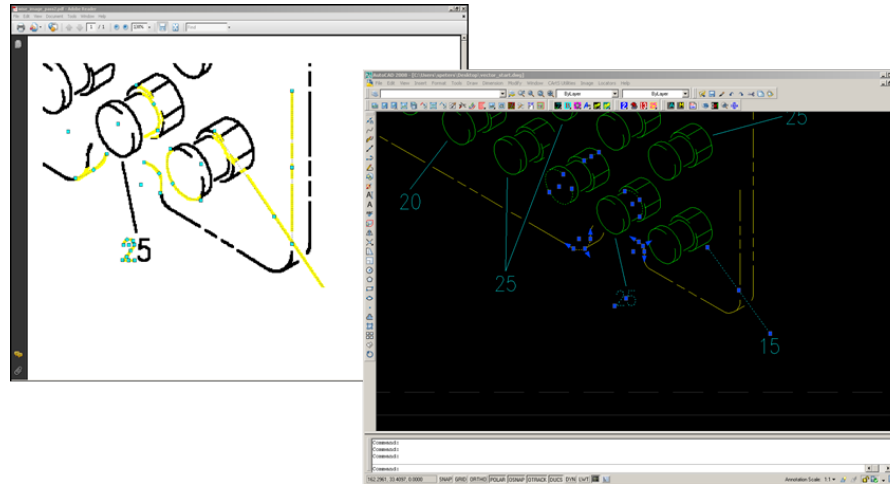
Analyze the Legacy Data:

- Steps if using an automated conversion tool:
 - Building the conversion rule sets.
 - Looking for inconsistencies.
 - What links and data calls are required and where?
 - Setting up the links through rules placing “hooks” for Data Module references, tables, etc.
 - Establishing a placeholder for graphics.

Starting the Conversion

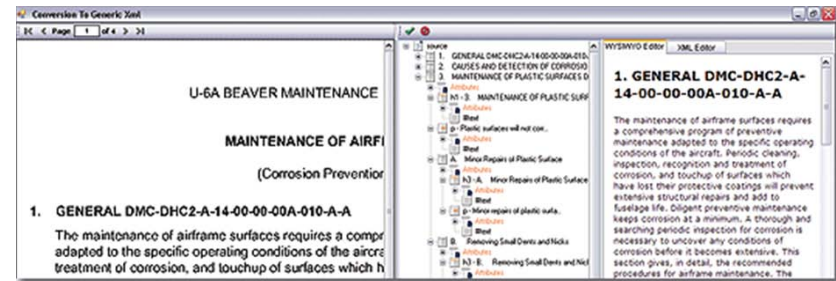
Graphics

- What is the format of the Legacy Graphics?
 - Is a Raster to Vector CGM Conversion required?



- Building a Graphics Repository

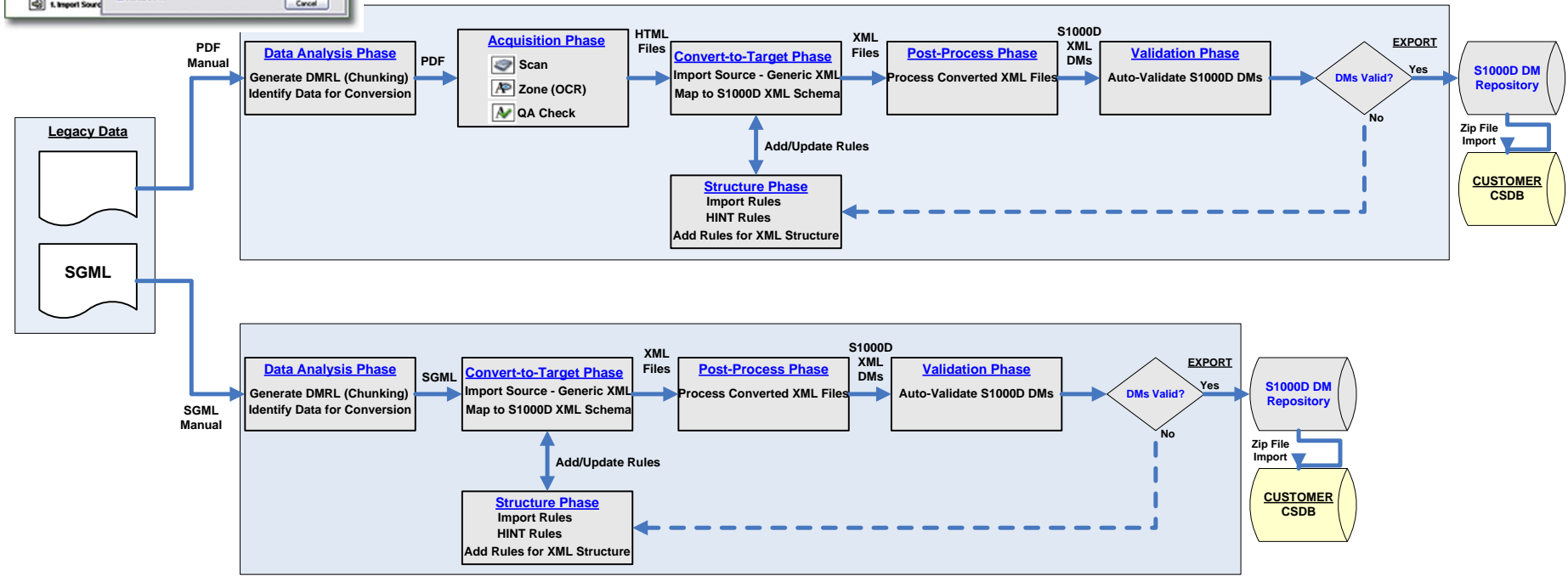
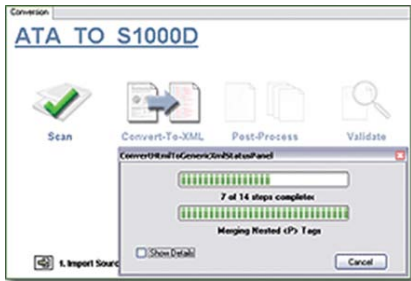
Starting the Conversion



Quality Requirements:

- Do you have a requirement to prove all data provided converted successfully to S1000D?
 - Does the conversion tool produce a traceability file?
- Data Validation and Functional Testing:
 - Developing Test Scripts

Physical Conversion



Variety of S1000D IETP Viewers

S1000D IETP Viewers may behave differently depending on the publishing engine, but it's all S1000D data.

The screenshot displays a complex technical document viewer interface. On the left, there's a search and navigation pane with a search bar and various filters. The main content area is divided into several sections:

- Warnings:** A red-bordered box with a warning icon and text: "The paragraph was unchanged. The paragraph was modified and there is a change for update." Below it, another warning: "The paragraph was unchanged." A search filter is set to "Page must contain any word".
- Table of contents:** A list of sections including "References", "LOCATION AND DESCRIPTION OF MAJOR COMPONENTS", "Control Unit", "Release Unit", "Processing Unit", and "Battery".
- List of figures:** A list of figures, all labeled "GENERAL".
- Technical Description:** A detailed text block titled "GENERAL" describing the CYPRES (1) parachute system. It includes a "Data word publication" section with codes like "CQC-CYP 00-004-1" and "CQC-CYP 00-004-2".
- Table 2 Common Technical Data for Military CYPRES (1) Models and Export CYPRES (1) Model:** A table with columns for "Identification" and "Models".

The bottom right corner of the screenshot shows a table with the following data:

Identification	Cybernetic Parachute Release System (CYPRES) 1 automatic activation Device
Models	1000 35 A, 1500 35 A, 2000 29 A, Export

Conclusion

Spend the time up-front understanding.....

- Customer Expectations
- The Data
- How will the deliverable be used?