

# INFORMATION STRUCTURE TO SUPPORT DOCUMENT DATABASES

*... Oh, And How To Actually Get It Done!*

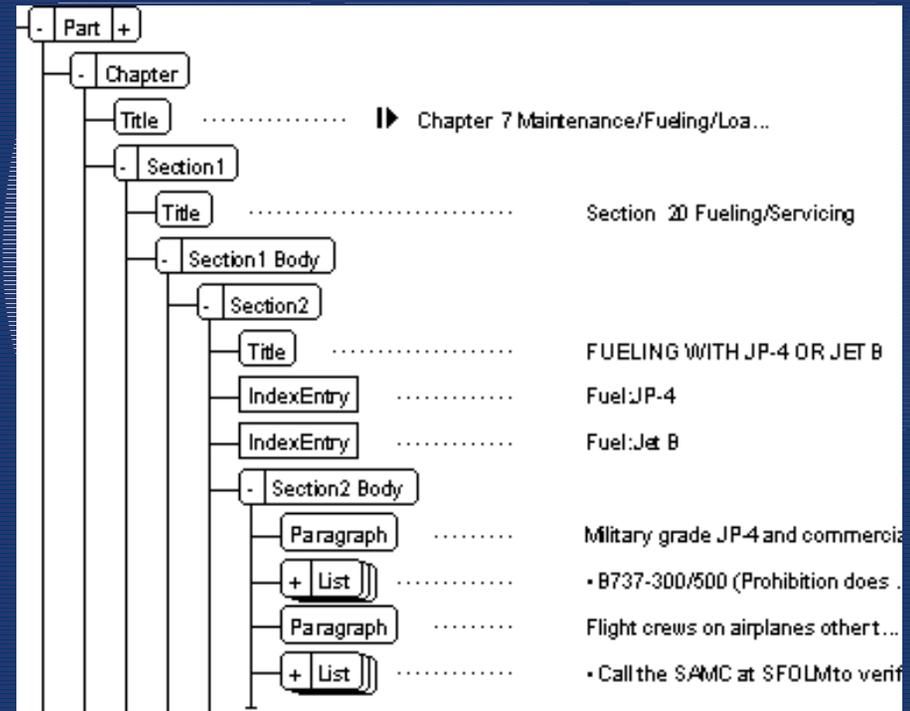
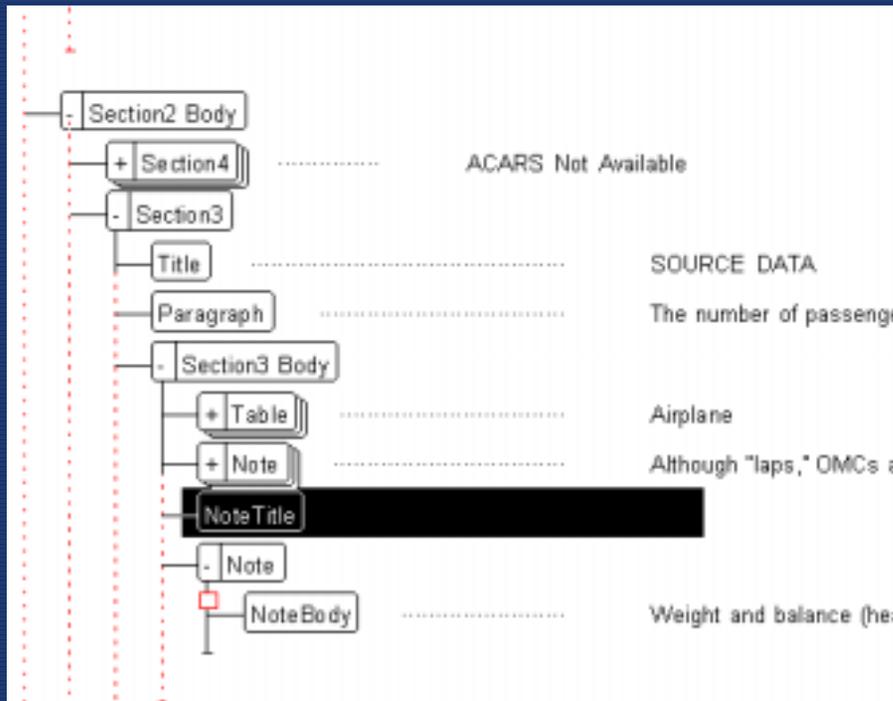
## Again, Why Structure Information?

- **Ensures Information is Reusable (Single-Source Multi-Use Objects)**
- **Ensures Information is Easily Exchangeable Between Media and Users**

- **Allows Data to Be Stored Within an Object Repository, Not Imprisoned Within a Document**



- Helps Protect Documents/Data from Being Adversely Impacted by Stakeholders with Varying Publishing Skills



## Attributes of An Effective Structure

- Intuitiveness - Content Is Logically Constructed to Achieve Maximum User-Friendliness
- Patterns - Information is Organized Within Levels of Hierarchy That Establish Data Relationships
- Consistency - Using Standardized Conventions and Rules to Prevent Arbitrary Authoring

## Applying Structure to Information

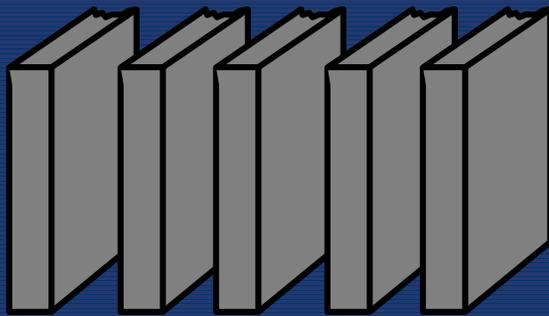
- **Must Conduct Thorough Analysis to Determine:**
  - The Correct Organization and Sequencing of Information (“Parent/Child” Relationships)
  - Appropriate Elements (Title, Paragraph, List, Table, Procedural Step, Note, etc)

## *RESOURCES REQUIRED:*

- Content Subject Matter Experts (SMEs)
- Structure-Savvy Publishing SME

- Create Intuitive Outline, Applying Patterns and Consistency

### Course or Series of Volumes



Chapters  
within  
Volumes

Sections of Chapters  
Major Areas within Sections  
Subjects within Areas  
Topics within Subjects  
Items within Topics

**Chapter**



## *RESOURCES REQUIRED:*

- Content Subject Matter Expert (SME)
- Structure-Savvy Publishing SME
- End User Rep to Validate User-Friendliness

- Convert Unstructured Documents/Data To Structured (Markup Language-based) Information

*RESOURCES REQUIRED:*

- EDD/DTD SME
- Structure-Savvy Publishing SME
- Expenditures for Structured Information Infrastructure, Including Tools, Training, and Data Conversion

Meanwhile . . .

Create and Apply Well-Designed and -Defined Formatting Standards in Each Medium to Support Structure When Information is Published

*RESOURCES REQUIRED:*

- Document Designer SME
- Structure-Savvy Publishing SME
- End User Rep to Validate User-Friendliness

## Structuring Workgroups to Support Shared Database

- **New Stakeholder Paradigm Required Since Data is Shared**
  - **Development and Quality of Shared Data Benefit from Collaboration Between Stakeholders**
  - **Less Overlapping Efforts Such as Validation Occur With Dedicated Data Ownership**
  - **Workload is Lessened and More Manageable**

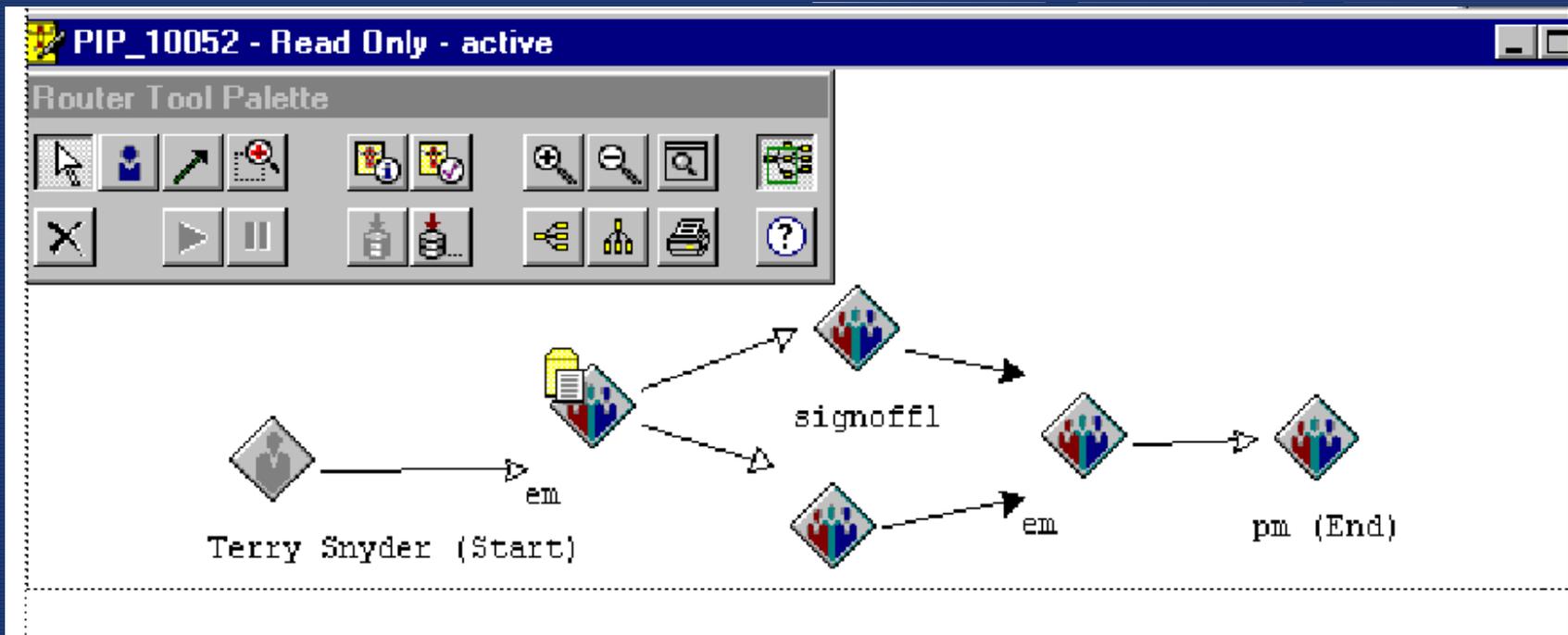
## *But Watch Out . . .*

- Wrong Information Is No Longer Limited to One Document (It Goes Out to Everyone *quick!*)
- Careless Stakeholders Can Adversely Affect the Database and Workflow for Many
- All Stakeholders Share Increased Responsibility to Ensure Quality Control

- Well-Designed Workflow Process Required
  - Ensures Required Tasks are Accomplished by Stakeholders Identified by Job Description

Data Topics	Data Ownership Tasks																	
	Task A	Task B	Task C	Task D	Task E	Task F	Task G	Task H	Task I	Task J	Task K	Task L	Task M	Task N	Task O	Task P	Task	
1 Exterior Inspection (3)	FTS	FTS	FMO	FMO	FTS	FTS	FMO	FTW	FTW		FTS	FTW	FTW	FTW	FTW	FTW	CSA	
	PSC	PSC	OEG		PSC	PSC	FAA	PSC	PSC		FTW	PSC	PSC	PSC	PSC	PSC	MEC	
	FTW	FTW	FAA		FTW	FTW			ART		FMO	ART	ART		ART	ART	JEP	
	FMO	FMO			FMO	FMO			MED			MED	MED		MED	MED	PUB	
	FMT	FMT			FMT	FMT												
		ART																
		MED																
	OEG																	
2 Cockpit Preflight (12)	FTS	FTS	FMO	FMO	FTS	FTS	FMO	FTW	FTW		FTS	FTW	FTW	FTW	FTW	FTW	CSA	
	PSC	PSC	FAA		PSC	PSC	FAA	PSC	PSC		FTW	PSC	PSC	PSC	PSC	PSC	PGR	
	FTW	FTW	OEG		FTW	FTW			PGR		FMO	ART	ART		ART	ART	JEP	
	FMO	FMO			FMO	FMO						PGR	PGR		PGR	PGR	PUB	
	FMT	FMT			FMT	FMT											MED	
		ART																
		PGR																
	OEG																	
3 Engine	FTS	FTS	FMO	FMO	FTS	FTS	FMO	FTW	FTW		FTS	FTW	FTW	FTW	FTW	FTW	JEP	
	PSC	PSC	FAA		PSC	PSC	FAA	PSC	PSC		FTW	PSC	PSC	PSC	PSC	PSC	PUB	
	FTW	FTW	OEG		FTW	FTW					FMO							
	FMO	FMO			FMO	FMO												
	FMT	FMT			FMT	FMT												

- Automating Workflow Streamlines Processes, Enables Measurement of Process Effectiveness and Facilitates Migration to Paperless Processes
- Electronic Signatures Help Ensure Accountability and Enforce Standards/quality Checks



## *RESOURCES REQUIRED TO DEVELOP AND MAINTAIN QUALITY WORKFLOW PROCESS AND PRODUCTS:*

- Publishing Process SMEs
- Upper Management Champions for Quality Processes and Products
- Stakeholder Reps to Validate User-Friendliness
- Skilled, Qualified Stakeholders Dedicated to Quality and Functioning as SMEs
- Expenditures for Automated Workflow Including Tools and Training

*THE BOTTOM LINE . . .*

*ESTABLISH QUALITY PUBLISHING SOPs  
AND FAITHFULLY FOLLOW THEM*