

FAA National Software Conference, May 2002

Software Mega Order Overview

Overview of draft FAA Order: *Software Approval Guidelines*

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Presentation Overview

- ❖ **FAA Software Notices**
- ❖ **FAA Draft Software Order**
 - **Status**
 - **Document Overview**
 - **Section Highlights**
 - **Schedule**



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FAA Software Notices

- ◆ 8110.77 -> 8110.95 Field Loadable Software (FLS), '02
- ◆ 8110.78 -> 8110.89 Legacy Software, '02
- ◆ 8110.79 -> 8110.93 PMA of FLS, '02
- ◆ 8110.81 -> 8110.90 Software Review Process, '02
- ◆ 8110.82 -> 8110.92 Previously Developed Software, '02
- ◆ 8110.83 -> 8110.91 Software Tool Qualification, '02
- ◆ 8110.84 -> 8110.94 User Modifiable Software, '02
- ◆ 8110.85 Software Change Impact Analysis, '01
- ◆ 8110.86 Software Conformity, '01
- ◆ 8110.87 Level of FAA Involvement, '01
- ◆ 8110.97 Reused Software Life Cycle Data, '03

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**Software Order
Status & Highlights**

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Software Order Status

- ◆ **Title: “Software Approval Guidelines”**
- ◆ **Coordinated within FAA – 2/02**
- ◆ **Disposition of FAA comments - 4/02**
- ◆ **Request for public comments via Federal Register – 5/02**
- ◆ **Aiming for October, 2002 Completion**

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Software Order Overview

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|---|---|
| ◆ Chap 1- Introduction | ◆ Chap 10- SW Changes in Legacy Systems |
| ◆ Chap 2- Software Review Process | ◆ Chap 11- SW Change Impact Analysis |
| ◆ Chap 3- Determining LOFI in SW Projects | ◆ Chap 12- Reused SW Life Cycle Data |
| ◆ Chap 4- SW Conformity | ◆ Appendix 1- LOFI Worksheet |
| ◆ Chap 5- Approval of FLS | ◆ Appendix 2- LOFI Example 1 |
| ◆ Chap 6- PMA of FLS | ◆ Appendix 3- LOFI Example 2 |
| ◆ Chap 7- Approval of UMS | ◆ Appendix 4- LOFI Example 3 |
| ◆ Chap 8- Previously Developed Software | ◆ Appendix 5- Feedback Form |
| ◆ Chap 9- Qualification of SW Tools | |

* = *To be discussed further*

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Significant Changes

- ◆ **General**
 - Made chapters consistent (format, style and content)
 - (e.g., used “certification authority” instead of “ACO engineer” or “ASE”, etc.)
- ◆ **Chap 4: Rewrite of information from Notice on SW Conformity**
- ◆ **Chap 5: Added information on Field Loadable Software and TSO'd Significant changes**
- ◆ **Chap 6: Added information on type design for PMA software**
- ◆ **Chap 8: Significant edits (and a few content changes) on Previously Developed Software info**
- ◆ **Chap9: Added info to address service history for tool qualification**

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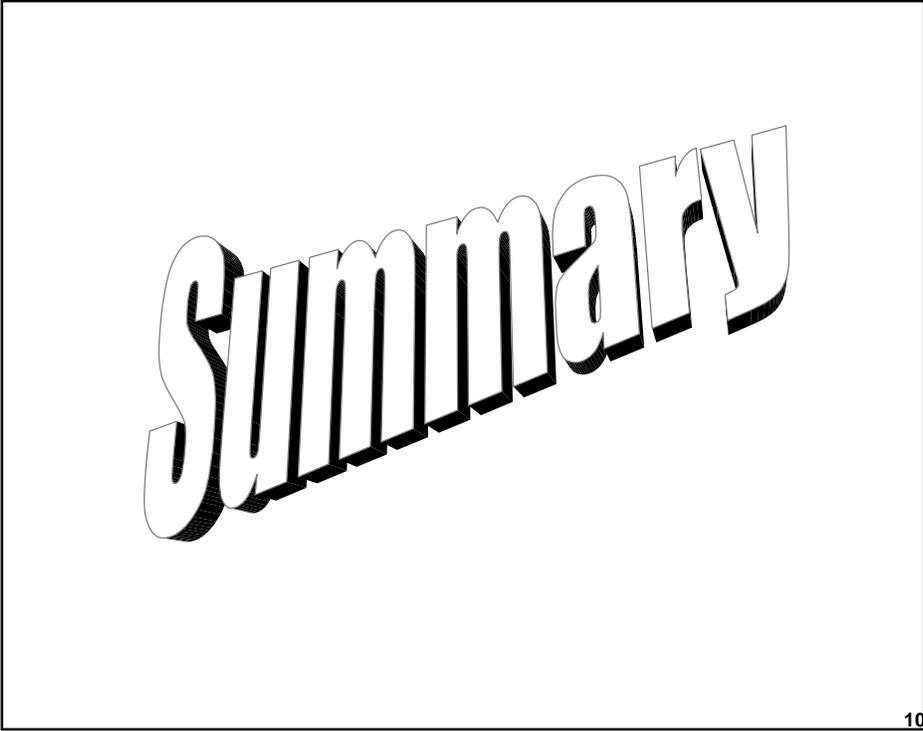
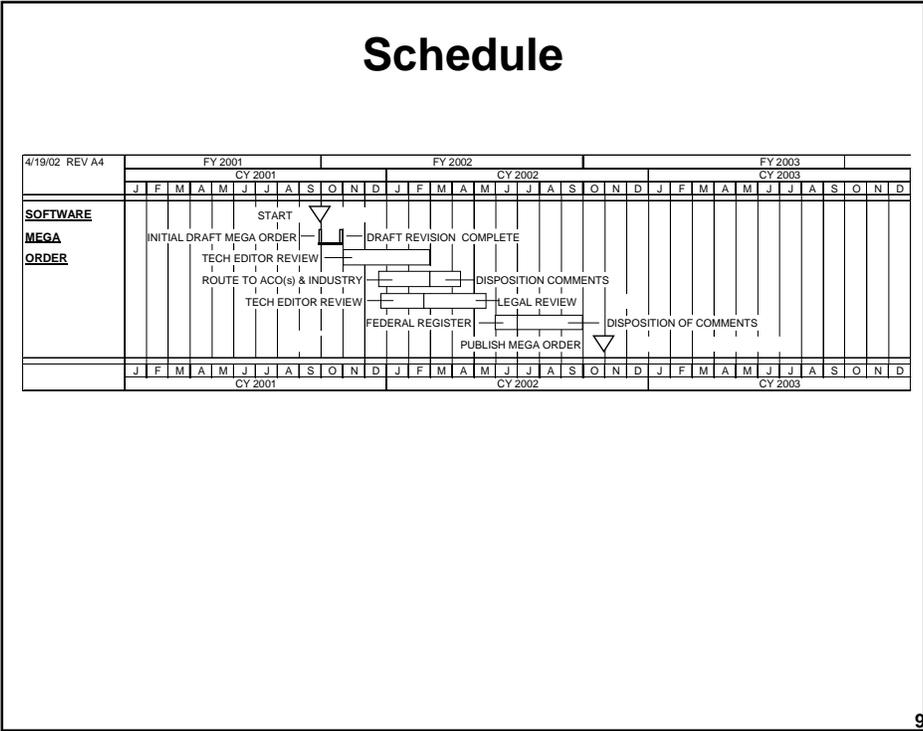
Significant Changes (cont)

- ◆ **Chap 10: Changed “small, simple” to “minor” since we now have change impact analysis chapter**
- ◆ **Chap 12: Incorporation of info from new Notice on Approving Reused Software Life Cycle Data**

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Summary

- ❖ **Software Order to incorporate the 10 existing software Notices**
 - Draft has been coordinated within FAA
 - Draft incorporates some significant changes
- ❖ **Request for public comments via FR**
- ❖ **All comments are welcome:**
 - Send to: john.lewis@faa.gov
- ❖ **Thanks to all of you who have provided input!**

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