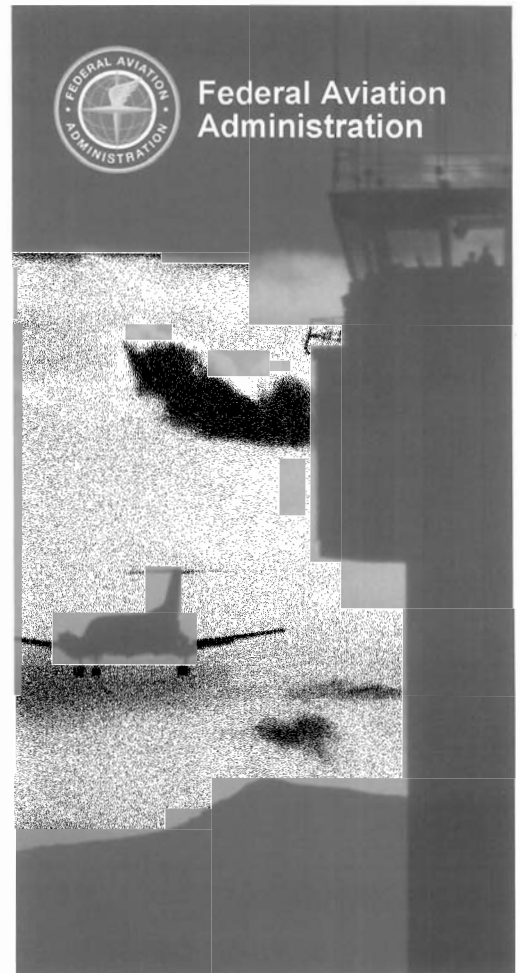


Enhanced Airworthiness Program for Airplane Systems (EAPAS) and Fuel Tank Safety (FTS)

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Federal Aviation Administration



EAPAS/FTS

- Introduction
- The FAA Approach to EAPAS/FTS
- What the Rules Changes Do
- Advantages of the New Rules
- Summary



EAPAS/FTS

- **Introduction**

- What is EAPAS/FTS
- Airplane Wiring Concerns
- Safety Record of Present Wiring
- History Leading to Rules Changes



Factors Affecting Wiring

- Design
- Maintenance
- Operation
- Training
- Repair
- Installation
- Environment
- Abuse
- Awareness
-and **TIME** (AGB)



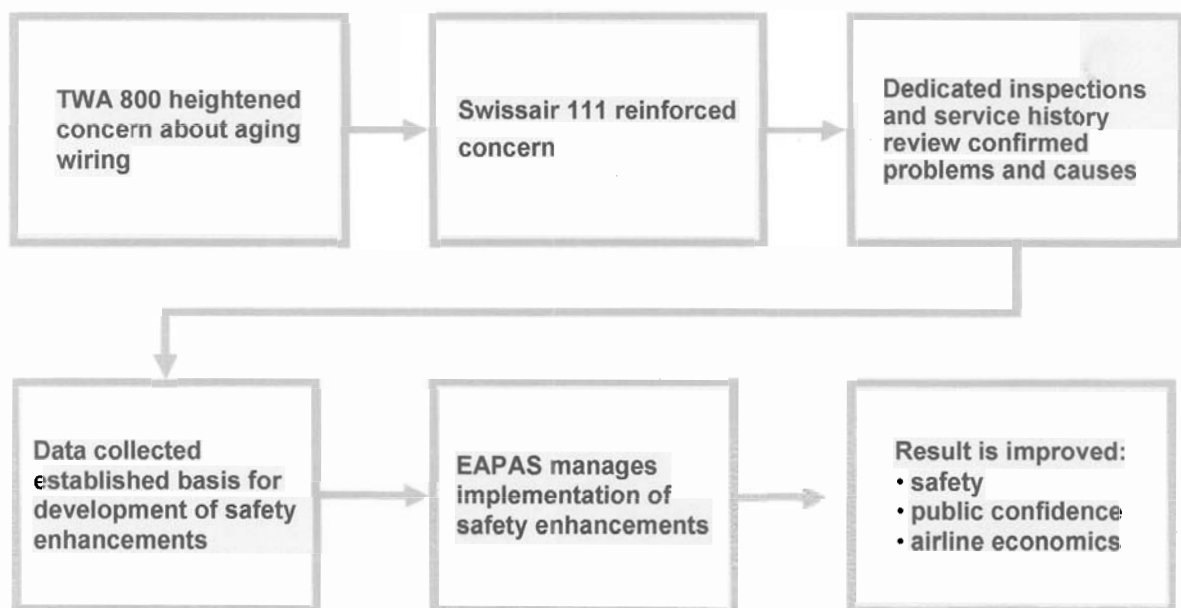
EAPAS/FTS

- The FAA Approach to EAPAS/FTS

- EAPAS/FTS Philosophy
- Implementation Plan
- Raising the Oversight Bar



Why EAPAS?



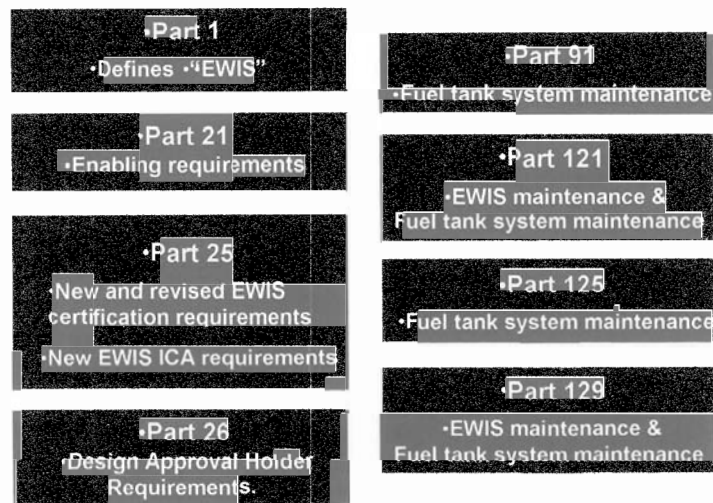
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- **What the Rules Changes do**

- Adds and Revises Rules for Airplane Wiring
- Requires OEM, STC Holders and Operators to make changes
- Address Continued Airworthiness Tasks retroactively



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- **Advantages of the New Rules**

- Reduces Incidents of Wire Failure events
- Reduces Airline Operating Costs
- Increases Airplane Safety

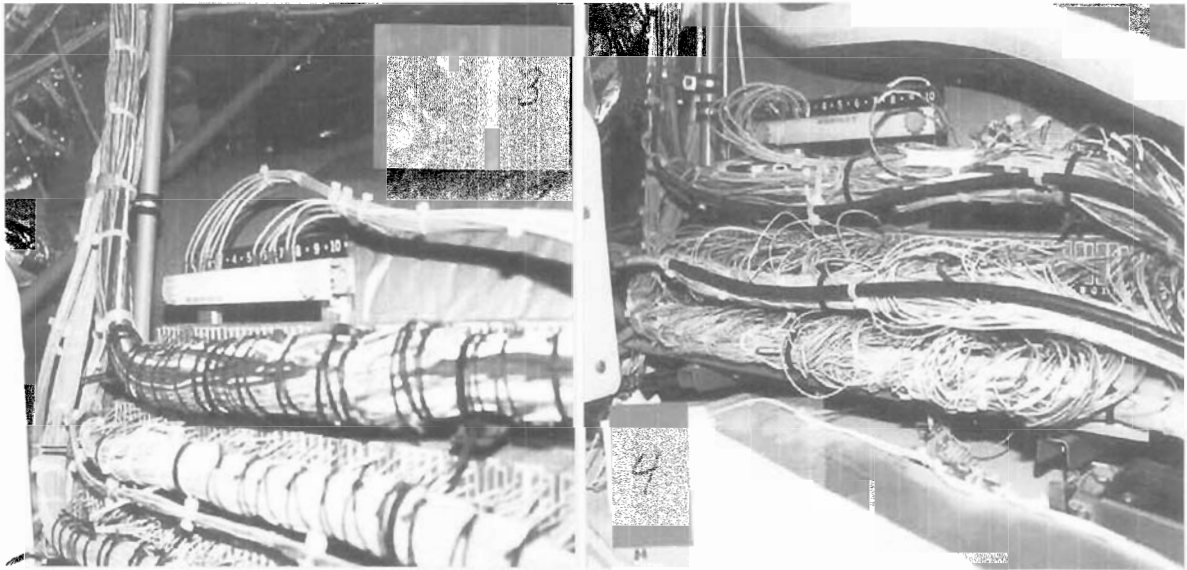


Aircraft Wiring – Simple System in Theory

- Conductor + insulators
- Connections
- Circuit breakers, switches, relays, ...
- Supports such as clamp, bracket, conduit, ...



In-Service Wiring Clamping and Tie-wrap Problem – Example



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Aircraft Wiring – Complex System in Reality

- Many miles of wiring
- Virtually every function of aircraft controlled by wire
- Treated with “fit and forget” attitude
- Affected by multiple stressors
- Failure poses potentially catastrophic functional and/or physical hazards

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EAPAS/FTS

- **Summary**

- The FAA Approach to EAPAS/FTS
- What the Rules Changes Do
- Advantages of the New Rules



EAPAS/FTS

Title in Subpart H	Final Rule
Definition	25.1701
Functions and Installation: EWIS	25.1703
Systems and Functions: EWIS	25.1705
System Separation: EWIS	25.1707
System Safety: EWIS	25.1709
Component Identification: EWIS	25.1711



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Title in Subpart H	Final Rule
Powerplants: EWIS	25.1725
Flammable fluid shutoff means: EWIS	25.1727
Instructions for Continued Airworthiness -- EWIS	25.1729
Powerplant and APU fire detector system: EWIS	25.1731
Fire detector systems, general: EWIS	25.1733



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Title in Subpart H	Final Rule
Fire Protection: EWIS	25.1713
Electrical Bonding and Protection against Static Electricity: EWIS	25.1715
Circuit Protective Devices: EWIS	25.1717
Accessibility Provisions: EWIS	25.1719
Protection of EWIS	25.1721
Flammable Fluid Protection: EWIS	25.1723

