AMTAS Structural Analysis Industry Feedback

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Technical Challenges

- **Demand for Analysis of Composite Structure**
  - Numerous design options
  - Complexity of design/ mixed modes
- **Management of Analysis**
  - Data Statistical tools
  - Optimization
- **Risk Quantification (robustness, design efficiency)**
  - Engineering education
- **Multi-scale -atoms to airplanes (Computational Materials)**
  - Progressive damage analysis capability
- **Increasing Complexity & Model Size**

Feedback

- **Certification of Discontinuous Composite Material Forms for Aircraft Structures (UW)**
- **Development of a Test/Analysis Certification Protocol for Crashworthiness of Composite-intensive Commercial (UW)**
- **Composite Thermal Damage Measurement with Handheld FT-IR (UW)**
- **Update on Optimal Thermal Repair Project (UW)**
- **FAA Safety Awareness Course Developments (FAA)**