FAA Perspectives on AMTAS Research & Educational Developments

- Emphasis on safety and certification issues
 - Involvement of industry experts give AMTAS research
 educational developments relevance and utility
 - Most FAA research projects need a near-term focus (some results that can be used in the field within 1 to 2 years)
 - Longer-term projects still emphasize safety & certification
- The FAA process proposing new research requirements is on a three-year cycle
 - Some freedom to start new projects linked to previously approved areas (using current year earmarks and base budget)
 - "Pop-up" funds are also used for immediate safety needs
- Current year budget is limited

Areas of Composite Research Given Priority in Most Recent FAA Process

Damage Tolerance

- Damage threat assessments (e.g., high energy blunt impact)
- Structural test and analysis protocol
- Long-term degradation mechanisms

Maintenance Practices

- Effects of human factors in bonded & bolted repair
- Engineering protocol for structural substantiation

Structural Integrity of Adhesive Joints

- Bond process controls
- Structural test and analysis protocol
- Long-term durability testing (NTSB Safety Recommendation)

Educational developments in all areas

Highlights of Ongoing FAA Composite Safety and Certification Initiatives

- "Revision G" to Composite Material Handbook (CMH-17) to be released from 2009-2011
- Training initiative started to outline FAA and industry composite course needs
 - Joint development to address the safety and certification issues for expanding applications to aircraft
- Third Composite Damage Tolerance and Maintenance Workshop (Tokyo, June 4-5, 2009)
- AC 20-107B (Composite Aircraft Structure) drafted and ready for final review