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 similar to last year but earmarks are uncertain with changing politics
Areas of Composite Research Given Priority in Most Recent FAA Process

• **Damage Tolerance**
  – Damage threat assessments (e.g., high energy blunt impact)
  – Structural test & analysis for sandwich disbond growth

• **Maintenance Practices/long-term aging**
  – Effects of human factors in bonded & bolted repair
  – Engineering protocol for structural substantiation
  – Sandwich repair AD teardown (improper major repair)

• **Crashworthiness**
  – Industry/regulatory WG to benchmark industry practice

• **Structural Integrity of Adhesive Joints**
  – Bond process controls
  – Long-term metal bond durability testing (NTSB Safety Rec)

• **Educational developments in all areas**
Highlights of 2011 FAA Composite Safety and Certification Initiatives

- “Revision G” to Composite Material Handbook (CMH-17) to be released from 2011-2013
- Structural Eng. and Mfg. Safety Awareness courses to support FAA and industry needs
  - Joint development to address the safety and certification issues for expanding applications to aircraft
- Composite Damage Tolerance/Maintenance and Crashworthiness Workshop (US TBD, 2011)
- AC 20-107B industry reviews
- AC 145-6 (Composite & Bonded Repair Stations) to be updated for late 2011 release