

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**

