



AGENDA

Federal Aviation Administration
Composite Damage Tolerance and Maintenance
July 19 – July 21, 2006

Wednesday, July 19, 2006
PM

- 1:00 - 1:15 *FAA Composites Overview*
 - Curtis Davies (FAA)
- 1:15 - 1:45 *Training Developments for Critical Composite Maintenance and Repair Issues*
 - Charles Seaton (Edmonds CC)
- 1:45 - 2:25 *Composite Damage Tolerance & Maintenance Safety Issues*
 - Larry Ilcewicz (FAA)
- 2:25 - 3:00 *Safety Management*
 - Bjorn Backman (Structured Research)
- 3:00 - 3:15 Break

Session 1: Applications and Service Experiences: Transport Aircraft

- 3:15 - 4:00 *Airbus Composites - Damage Tolerance Methodology*
 - Chantal Fualdes (Airbus)
- 4:00 - 4:45 *Boeing Transport Experience with Composite Damage Tolerance & Maintenance*
 - Allen Fawcett & Gary Oakes (Boeing)
- 4:45 - 5:15 *FAA/EASA/Boeing/Airbus Damage Tolerance & Maintenance WG*
 - Tom Walker (NSE Composites)

Thursday, July 20, 2006
AM

Session 1: Applications & Service Experiences: Small Airplanes + Rotorcraft

- 8:00 - 8:30 *Staying Ahead Of The Game: Keeping a Composite Airplane Fleet Airworthy*
- Paul Brey, Tim Timmerman & Andrew Rokala (Cirrus Design Corp.)
- 8:30 - 9:00 *Composites in Rotorcraft Industry and Damage Tolerance Requirements*
- D.J. Reddy, consultant
- 9:00 - 9:10 Break

Session 2: Substantiation of Structural Damage Tolerance

- 9:10 - 9:40 *Damage Tolerance Considerations in Composite Aircraft Structure*
- Joe Soderquist, consultant
- 9:40 - 10:10 *Effect of Damage on Performance of Composite Structures - Applications to Static and Fatigue Strength Predictions*
- Christos Kassapaglou, consultant
- 10:10 - 10:40 *NASA Langley Damage Tolerance Experiences*
- Ivantury Raju (NASA)
- 10:40 - 10:50 Break

Session 3: Structural Test Protocol

- 10:50 - 11:20 *FAA R&D in Composite Sandwich Structures*
- Peter Shyprykevich (FAA)
- 11:20 - 11:50 *Load Enhancement Factor for Composite Test Spectra*
- Ric Abbott (Abbott Aerospace Composites, LLC.)
- 11:50 - 12:20 *FAA Research on Large-Scale Test Substantiation*
- John Tomblin (WSU)

Thursday, July 20, 2006
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12:20 - 1:15 Lunch – Sponsored by Wichita State University

Session 4: Substantiation of Maintenance Inspection & Repair Methods

- 1:15 - 1:45 *MRO Repair of Composites, A 20 Year History: Where have we been? Where are we today? Where are we headed?*
- Jim Epperson (Nordam)
- 1:45 - 2:15 *United Airline Composite Maintenance Experiences*
- Eric Chesmar (United Airlines)
- 2:15 - 2:45 *Safe Composite Repairs - Substantiation Database Framework*
- Mike Borgman & John Welch (Spirit)
- 2:45 - 3:15 *Composites at Airbus - Maintenance & Repairs*
- Roland Thevenin (Airbus)
- 3:15 - 3:30 Break

Session 5: Damage/Defect Types and Inspection Technology

- 3:30 - 4:00 *FAA Inspection Research Activities for Composite Materials*
- Dave Galella (FAA)
- 4:00 - 4:30 *Damage/Defect Types and Inspection - Some Regulatory Concerns*
- Simon Waite (EASA)
- 4:30 - 5:00 *Unified Treatment for Impact - Probabilistic & Deterministic*
- John Halpin (JCH Consultants), Keith Kedward (UCSB), Paolo Feraboli (Univ. of Washington), and Hyonny Kim (Purdue Univ.)
- 5:00 - 5:15 Closure (review tomorrow's breakout sessions)

Friday, July 21, 2006
AM

Session 6: Technical Breakout Sessions

- 8:00 - 10:00 *Substantiation of Structural Damage Tolerance*
- Tom Walker (NSE) and Larry Ilcewicz (FAA)
- Structural Test Protocol*
- John Tomblin (WSU) & Peter Shyprykevich (FAA)
- Substantiation of Maintenance Inspection & Repair Methods*
- Gary Oakes (Boeing) & Mike Borgman (Spirit Aero)
- Damage/Defect Types and Inspection Technology*
- Curtis Davies (FAA) & Larry Gintert (Concurrent Tech. Inc.)
- 10:00-10:20 Break

Session 7: Technical Breakout Summaries and Workshop Recap

- 10:20-10:45 *Brainstorm subjects desired at 2007 Workshop*
- Kristin Strole (WSU)
- 10:45 - 11:45 Technical Breakout Summaries
- Substantiation of Structural Damage Tolerance*
- Tom Walker (NSE) and Larry Ilcewicz (FAA)
- Structural Test Protocol*
- John Tomblin (WSU) & Peter Shyprykevich (FAA)
- Substantiation of Maintenance Inspection & Repair Methods*
- Gary Oakes (Boeing) & Mike Borgman (Spirit Aero)
- Damage/Defect Types and Inspection Technology*
- Curtis Davies (FAA) & Larry Gintert (Concurrent Tech. Inc.)
- 11:45-12:00 *Recap/Actions/Closure*
- Larry Ilcewicz & Curtis Davies (FAA)