



AGENDA

Federal Aviation Administration
Joint Advanced Materials & Structures (JAMS) Center of Excellence
2nd Annual Technical Review Meeting

Hosted by AMTAS
University of Washington
Kane Hall 220
June 20 – June 22, 2006

Tuesday, June 20, 2006

PM

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| 12:15 | Registration: Kane Hall 220 |
| 1:00 | Welcome and Opening Remarks (Curtis Davies, FAA and Mark Tuttle, AMTAS Director, University of Washington) |
| 1:10 | Welcome (Dan Schwartz, Acting Associate Dean for New Initiatives, University of Washington College of Engineering) |
| 1:15 | Introduction to FAA Research (Curtis Davies, FAA) |
| 1:45 | Industry Presentation: Jim Brown, Toray Composites (America), Inc. |
| 2:00 | Industry Presentation: Shreeram Raj, Cytec Engineered Materials |
| 2:15 | Industry Presentation: Jason Scharf, C&D Zodiac |
| 2:30 | "Composite Education in the UK" (Andrew Walker, University of Manchester) |
| 2:45 | Break |
| 3:00 | Course Development: Maintenance of Composite Aircraft Structures (Larry Ilcewicz, FAA) |
| 3:40 | Crashworthiness Certification by Analysis: Numerical Model Preparation and Analysis Guidelines (Gerardo Olivares, Wichita State University) |
| 4:20 | Damage Tolerance and Durability of Adhesively Bonded Composite Structures (Hyonny Kim, Purdue University) |
| 5:00 | Adjourn |

Wednesday, June 21, 2006

AM

- 8:00 VARTM Variability and Substantiation (Dirk Heider, University of Delaware)
- 8:40 Development of Reliability-Based Damage Tolerant Structural Design Methodology (Kuen Y. Lin, University of Washington)
- 9:20 Structural Health Monitoring for Life Management of Aircraft (Sridhar Krishnaswamy, Northwestern University)
- 10:00 Break
- 10:20 Full-Scale Damage Tolerance of Sandwich Structures (Suresh (Raju) Keshavanarayana, Wichita State University)
- 11:00 Damage Tolerance and Durability of Fiber Metal Laminates for Aircraft Structures (J.M. Yang, UCLA)

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- 11:40 Lunch — sponsored by ABAQUS, Inc.
Presentation by Kyle Indermuehle, "Simulating Composite Damage from Tool-drop Accidents with ABAQUS"

PM

- 12:45 Combined Global/Local Variability and Uncertainty in Integrated Aeroservoelasticity of Composite Aircraft (Eli Livne, University of Washington)
- 1:25 Quantifying Methods for the Evaluation of the Fitness of Fiber Reinforced Composite Surfaces for Subsequent Adhesive Bonding (Bill Stevenson, Wichita State University)
- 2:05 Improving Adhesive Bonding of Composites through Surface Characterization (Brian Flinn, University of Washington)
- 2:45 Break
- 3:00 The Effect of Surface Treatment on the Degradation of Composite Adhesives (Prashanthi Pothakamuri, Washington State University)
- 3:40 Identification and Validation of Analytical Chemistry Methods for Detecting Composite Surface Contamination and Moisture (Xiangyang Zhou, Florida International University)
- 4:20 Effects of Repair Procedures Applied to Composite Airframe Structures (Lamia Salah, Wichita State University)
- 5:00 Adjourn
- 6:00–9:00 Barbecue & Water Activities — sponsored by Toray Composites (America), Inc. ,
University of Washington Waterfront Activities Center

Thursday, June 22, 2006

AM

- 8:00 Production Control Effect on Composite Material Quality and Stability
(Yeow Ng, Wichita State University)
- 8:40 Aging Effects Evaluation of a Beechcraft Starship and a Decommissioned
Boeing CRFP 737-200 Horizontal Stabilizer (Lamia Salah, Wichita State
University)
- 9:20 Crashworthiness of Composite Fuselage Structures—Material Dynamic
Properties (Suresh (Raju) Keshavanarayana, Wichita State University)
- 10:00 Break
- 10:15 Evaluation of Friction Stir Weld Process and Properties for Aerospace
Application (Christian Widener, Wichita State University)

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- 10:55 Industry Feedback: Andy Thomas, Bell Helicopter Textron
- 11:20 Industry Feedback: George Miller, Spirit AeroSystems
- 11:45 Industry Feedback: Jim Krone, Cessna Aircraft Company
- 12:05 Industry Feedback: John Quinlivan, The Boeing Company

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- 12:30 Concluding Comments and Wrap-up
- 12:45 Adjourn



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