AGENDA
Federal Aviation Administration
Joint Advanced Materials & Structures (JAMS) Center of Excellence
8th Annual Technical Review Meeting
April 5, 2012
Hosted by AMTAS
In concurrence with AA&S 2012

Thursday, April 5, 2012

7:00 AM  Registration                                  Grand Ballroom Registration Area, 3rd Floor
7:00 AM  Continental Breakfast                        4th Floor Foyer
7:00 AM  Speakers' Breakfast                          Laurel D, 4th Floor
8:00 AM  Call to Order/Welcome                        Harborside C, 4th Floor
          (Curtis Davies, JAMS Program Manager; Mark Tuttle, AMTAS Director; John Tomblin, CECAM Director)

SESSION 1: TESTING and ANALYSIS

8:05 AM  Failure of Notched Laminates under Out-of-Plane Bending (John Parmigiani, Oregon State University)
8:30 AM  Development and Evaluation of Fracture Mechanics Test Methods for Sandwich Composites (Dan Adams and Zachary Bluth, University of Utah)
9:00 AM  Damage Tolerance Test Method Development for Sandwich Composites (Dan Adams and Brad Kuramoto, University of Utah)
9:30 AM  Break                                         4th Floor Foyer

SESSION 2: ADHESIVE BONDING and REPAIR

10:00 AM Infrared Spectroscopy: A Potential Quality Assurance Method for Composite Bonding (Ashley Tracey and Brian Flinn, University of Washington)
10:30 AM Durability of Adhesively Bonded Joints for Aircraft Structures (Dan Adams, Larry DeVries and Clint Childs, University of Utah)
11:00 AM Effect of Surface Contamination on Composite Bond Integrity and Durability (Tomas Pribanic, Dwayne McDaniel and Vishal Musaramthota, Florida International University; Xiangyang Zhou, University of Miami)
11:30 AM  CACRC Depot Bonded Repair Investigation – Round Robin Testing  
(John Tomblin and Lamia Salah, National Institute for Aviation Research, Wichita State University)

12:00 PM  Lunch  
Grand Ballroom, 3rd Floor

1:00 PM  FAA Centers of Excellence Phase III Update (Pat Watts, COE Program Director)

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### SESSION 3: DAMAGE and ENVIRONMENT

1:30 PM  Impact Damage Formation on Composite Aircraft Structures  
(Hyonny Kim (University of California - San Diego)

2:00 PM  Certification of Composite-Metal Hybrid Structures —Damage Tolerance Testing and Analysis Protocols for Full-Scale Composite Airframe Structures under Repeated Loading  
(John Tomblin and Waruna Seneviratne, National Institute for Aviation Research, Wichita State University)

2:30 PM  Environmental Compensation Factor Influence on Composite Design and Certification  
(John Tomblin and Waruna Seneviratne, National Institute for Aviation Research, Wichita State University)

3:00 PM  Break  
4th Floor Foyer

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### SESSION 4: CRASHWORTHINESS and MATERIAL ISSUES

3:30 PM  Challenges and Opportunities In Crashworthiness Certification of Composite-Intensive Airframe Structures  
(Mostafa Rassai, The Boeing Co., for Paolo Feraboli, Bonnie Wade and Max Spetzler, University of Washington)

4:00 PM  Crashworthiness Evaluation of Composites Structures—Certification by Analysis  
(Gerardo Olivares, Juan Acosta and Vikas Yadav, National Institute for Aviation Research, Wichita State University; Suresh Keshavanarayana, Wichita State University)

4:30 PM  Buckling/Crippling of Structural Angle Beams Produced using Discontinuous-Fiber Composites  
(Tory Shifman, Brian Head, and Mark Tuttle, University of Washington)

5:00 PM  Development of Dynamic Mechanical Analyzer (DMA) Calibration & Testing Procedures  
(John Tomblin, Matt Opliger, and Yeow Ng, National Institute for Aviation Research, Wichita State University)

5:30 PM  Concluding Comments and Wrap-up (Curtis Davies, FAA)

5:40 PM  Adjourn

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