A Center of Excellence
AMTAS
Advanced Materials in Transport Aircraft Structures

Spring 2007 Meeting

Welcome!

6th semiannual meeting of the Center for Advanced Materials in Transport Aircraft Structures (AMTAS)

April 12, 2007
University of Washington, HUB Room 310

JAMS CoE Member Schools

The joint center consists of two groups and includes ten institutions.

AMTAS (Advanced Materials for Transport Aircraft Structures)

- Director, Dr. Mark Tuttle
- University of Washington, Lead
- Washington State University
- Oregon State University
- Edmonds Community College

CECAM (Center for Composites and Advanced Materials)

- Director, Dr. John Tomblin
- Wichita State University, Lead
- Northwestern University
- Purdue University
- Tuskegee University
- University of Delaware
- University of California at Los Angeles

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Spring 2007 Meeting
Morning Agenda

8:30-8:50am	Welcome & Remarks	Mark Tuttle, UW Matt O'Donnell, UW
8:50-9:00am	AMTAS Composites Institute	Kuen Lin, UW
9:00-9:15am	Failure of Notched Laminates under Out-of-Plane Bending	Tim Kennedy, OSU
9:15-9:30am	Workshop Briefing/Expectations	Mark Tuttle & Larry Ilcewicz, FAA
9:30-9:45am	Coffee Break	
9:45-11:30am	Current AMTAS Research Breakout Sessions:	
	Damage Tolerance & Aeroelastic Instability	Room 310
	Adhesive Bonding	Room 200A
	Maintenance & Repair Curricula	Room 204N
11:30-12:15pm	Lunch	

Spring 2007 Meeting
Afternoon Agenda

12:15-1:15pm	Presentations on Future R&D:	
	Multifunctional Nanostructures …	Jiangyu Li, UW
	Composites Crashworthiness …	Paolo Feraboli, UW
	Analysis of Composite Failures	Jonathan Gosse, Boeing
1:15-1:25pm	Workshop Briefing/Expectations	John Quinlivan, FoF
1:25-2:30pm	Breakouts: Future Research Areas	Moderators
2:30-2:45pm	Refreshment Break	
2:45-3:45pm	Report-outs: Current AMTAS R&D	Moderators
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Current AMTAS Research
Breakout Sessions

- Three breakout sessions occur simultaneously from 9:45-11:30am
  - Rm 310: Damage Tolerance & Aeroelastic Instability
  - Rm 200A: Adhesive Bonding
  - Rm 204N: Maintenance & Repair Curricula

Current AMTAS Research
Breakout Session Format

- Moderator(s) from industry have been assigned to each breakout session:
  - Damage Tolerance & Aeroelastic Instability:
    Kumar Bhatia and Cliff Chen (Boeing)
  - Adhesive Bonding:
    Pete VanVoast (Boeing) and
    Eugene Dan-Jumbo (Northrop-Grumman)
  - Maintenance & Repair Curricula
    Joe Hafenrichter (Boeing)

Current AMTAS Research
Breakout Session Format

- Each session will begin with a brief (5-10 min) summary of the associated project(s) by AMTAS PIs:
  - Damage Tolerance & Aeroelastic Instability:
    Kuen Lin (UW)
    Eli Livne (UW)
  - Adhesive Bonding:
    Brian Flinn (UW)
    Lloyd Smith (WaSU)
  - Maintenance & Repair Curricula
    Charlie Seaton (EdCC)

Current AMTAS Research
Breakout Session Format

- The brief summaries will emphasize:
  - Objectives of each study
  - Results of each study

- Following the summary presentations, a detailed give-an-take discussion will occur, *involving all participants*, intended to:
  - Clarify practical implications of each study
  - Identify future needs and next steps in each area

- This format is intended to provide more focused feedback time from industry participants than has been allotted in past AMTAS meetings.

Current AMTAS Research
Breakout Session Report-Outs

- Industry moderators will provide a summary of the breakout session discussions to the re-assembled group from 2:45-3:45pm:
  - Damage Tolerance & Aeroelastic Instability:
    Kumar Bhatia (Boeing)
    Cliff Chen (Boeing)
  - Adhesive Bonding:
    Pete VanVoast (Boeing)
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