Welcome!

April 11, 2006
University of Washington, HUB Room 108
Spring 2006 Mtg
(5th Semi-Annual Meeting)

- 29 Jan ’04: 35 attendees
- 10 Nov ’04: 40 attendees
- 14 April ’05: 53 attendees
- 13 Oct ’05: 55 attendees
- 11 April ’06:
  - 53 persons pre-registered
  - ½ day program, due to upcoming JAMS meeting (20-22 June)
Spring 2006 Meeting

Agenda

8:30-9:00  Registration & Coffee
9:00–9:10  Welcome & Introductions  Mark Tuttle, AMTAS Director
9:10–9:45  AMTAS/JAMS: Status, Activities and Future Plans  Mark Tuttle, AMTAS Director
9:45–10:15 Composite Safety and Certification Initiatives  Larry Ilcewicz, FAA
10:15–10:30 Coffee break
10:30–10:55 AMTAS education/short course plan  Kuen Lin, AMTAS Co-Director
10:55–11:20 Advanced Materials and Manufacturing Innovation Center (AMMIC) Activities  Jerrilee Mosier, Edmonds CC
11:20–11:45 Tech focus—Nanotechnology  Russ Maguire, The Boeing Co.
11:45–Noon Wrap-up
AMTAS Status and Future Plans

- Brief summary: AMTAS projects
- Federal funding supporting alternate energy
- Evolving collaboration with University of Manchester
- Preparations for JAMS meeting
AMTAS Projects
(Results will be presented at JAMS meeting; June ’06)

- Reliability-based Damage Tolerant Composite Design Methodologies (K. Y. Lin, PI)
- Combined Global/Local Variability and Uncertainty in Integrated Aeroservoelasticity of Composite Aircraft (E. Livne, PI)
- Improving Adhesive Bonding of Composites through Surface Characterization (B. Flinn, PI)
- The Effects of Surface Pretreatment on the Degradation of Composite Adhesives (L. Smith, PI)
- Short-Course Development: Maintenance/Repair of Composite Aircraft Structures (C. Seaton, PI)
Fed funding supporting alternate energy

- **Background:**
  - AMTAS must become “self sufficient”
  - Spring ’05 AMTAS Mtg: Possible solution is to move towards Regional Center for Composite/Advanced Materials and Manufacturing, supporting multiple industries
  - Autumn ’05 Mtg: Ad hoc subcommittee chaired by Rob Albers recommends, among several options, pursuit of alternate energy (especially wind energy)
Fed funding supporting alternate energy

- April 7: Ms. Sally Hintz, (NW Director, Offices of Sen. Cantwell) provides briefing on federal funding opportunities (slides available)

- Primary Focus: 2005 Energy Bill and associated programs of
  - EPA
  - USDA
  - EERE (Office of Energy Efficiency and Renewable Energy)

- DoE has not released guidelines for alternative energy competitive grants...will monitor and respond when guidelines released
Evolving Collaborations with the University of Manchester

- July 2005: UK Dept of Trade and Industry program announced; goal is to “promote linkages between UK universities and high tech clusters in the US”

- July-Sept 2005: Andrew Walker of Univ. of Manchester develops/submits proposal (with input from M. Tuttle)

- November 2005: £1.5 M award to support collaboration between UM and UW/AMTAS
Evolving Collaborations with the University of Manchester

- Jan/Feb 2006: Video Conferences between UM and UW personnel
- March 23-24: UM personnel visit UW campus: (Andrew Walker, Philip Withers, Jonathan Cooper, Richard Day)
- May 12: Mark Tuttle and Ellen Barker (and perhaps others from Boeing?) will attend opening ceremonies of the UM NW Composite Centre
- Summer 2006: UW Faculty Group (TBD) to visit UM (perhaps in conjunction with Farnborough Air Show, 17-23 July)
Types of UW-UW Collaboration

• Education:
  • Web-based composite courses for academic credit
  • Composite-related short courses
• Research:
  • Composite materials characterization
  • 3-D aeroelastic design concepts/tools
  • Low-cost manufacturing processes
  • Market analyses (in conjunction with Business School)
• People exchange, required to facilitate Education/Research collaborations
  • Undergraduate/graduate students
    • Four UW Tuition waivers received
  • Faculty/staff
Preparations for JAMS Meeting

• 1\textsuperscript{st} FAA-JAMS 2005 Technical Review Meeting
  24-26 May 2005, Wichita, KS
  Hosted by Wichita State University
  ~ 120 attendees

• 2\textsuperscript{nd} FAA-JAMS 2006 Technical Review Meeting
  20-22 June 2006, Seattle, WA
  Hosted by the University of Washington
  120-150 attendees (?)
Preparations for JAMS Meeting

- Hotel rooms blocked out (University Inn, Silver Cloud, Travel Lodge)

- Meeting to be held in Kane Hall, UW campus
  - Newly-renovated theatre-style conference room
  - State-of-art multi-media equipment
  - Coffee breaks/lunch in Walker-Ames Room

- About 25 presentations (@ 30 min ea)
  - AMTAS and CECAM PI’s and students
  - FAA speakers
  - Industry speakers
  - Andrew Walker (U of Manchester)
## Preparations for JAMS Meeting

**Tuesday, June 20, 2006**

**AM**

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<th>Time</th>
<th>Activity Description</th>
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<tr>
<td>8:00 a.m.</td>
<td>Technical presentations continue</td>
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**PM**

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<th>Activity Description</th>
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<tr>
<td>2:45 p.m.</td>
<td>Technical presentations begin</td>
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<td>5:00 p.m.</td>
<td>End of session</td>
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**Wednesday, June 21, 2006**

**AM**

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<th>Time</th>
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<tr>
<td>9:00 a.m.</td>
<td>Technical presentations continue</td>
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<td>10:00 a.m.</td>
<td>Aviation industry perspectives</td>
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<tr>
<td>11:30 a.m.</td>
<td>Review wrap-up</td>
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<td>12:15 p.m.</td>
<td>Lunch</td>
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<td>1:30 p.m.</td>
<td>FAA introductions</td>
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**Thursday, June 22, 2006**

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<tr>
<td>1:15 p.m.</td>
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<td>5:00 p.m.</td>
<td>End of session</td>
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### Optional Dinner (Dutch treat)

6:30 p.m.