

AMTAS Spring 2006 Meeting

Welcome!

April 11, 2006 University of Washington, HUB Room 108



Spring 2006 Mtg ded Materials in (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)



TAS Spring 2006 Meeting

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	Kuen Lin, AMTAS
	course plan	Co-Director
10:55-11:20	Advanced Materials and	Jerrilee Mosier,
	Manufacturing Innovation	Edmonds CC
	Center (AMMIC) Activities	
11:20–11:45	Tech focus—Nanotechnology	Russ Maguire, The Boeing Co.
11:45-Noon	Wrap-up	_



AMTAS Status and Materials in 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

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

 2nd 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 Inced Materials in Meeting Meeting

	Tuesday, June 20, 2006	Wednesday, June 21, 2006		Thursday, June 22, 2006	
AM		8:00 a.m.	Technical presentations continue	9:00 a.m. Technical presentations continue 10:00 a.m. Aviation industry perspectives 11:30 a.m. Review wrap-up	
		12:15 p.m.	Lunch	12:00 p.m. End	
PM	NO TECHNICAL MEETING ACTIVITIES	1:30 p.m.	FAA introductions	1:15 p.m. Technical presentations continue	
	2:45 p.m. Technical presentations begin				
	5:00 p.m. End of session	5:00 p.m. 6:30 p.m. (Dutch treat)	End of session Optional dinner		