

*Welcome!*

JAMS/AMTAS Fall 2013 Meeting  
Edmonds Conference Center  
14 November 2013

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# Welcome!

- This is the 10<sup>th</sup> Annual AMTAS Fall Meeting
  - The meeting agenda and a list of attendees are available at the registration desk:
    - Fifteen speakers representing 5 universities, Boeing, and the FAA
    - 91 persons pre-registered for the meeting
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# Introductions

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- Prof. Mark Tuttle, AMTAS Director  
Prof. Kuen Lin, AMTAS Co-Director  
Ms. Ellen Barker, Assistant to the Director
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  - Prof. Michael Bragg, Dean  
College of Engineering  
University of Washington
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# AMTAS Updates

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## Background and Status

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# The FAA Center of Excellence Program

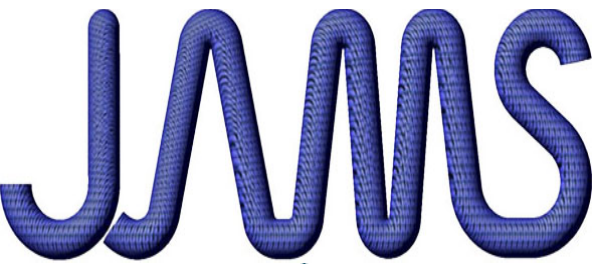
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- CoE program was initiated in 1990
  - Administered by Dr. Patricia Watts of the W. J. Hughes Research Center (Atlantic City, New Jersey)
  - Eleven CoEs have been established since 1990
  - CoE's are funded in three "Phases" over a total period of 3-10 yrs
  - Eight CoEs are currently active:  
[www.faa.gov/go/coe](http://www.faa.gov/go/coe)
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# JAMS-AMTAS-CECAM

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- The FAA Joint Advanced Materials and Structures (JAMS) Center of Excellence was formed in 2004 and consists of two university teams:
    - AMTAS ('A'dvanced 'M'aterials in 'T'ransport 'A'ircraft 'S'tructures)
    - CECAM ('Ce'nter for 'C'omposites and 'A'dvanced 'M'aterials)
  - All JAMS projects are related in some manner to safety and/or certification issues
  - JAMS is in Phase III; extended to 2015. Competition for new Advanced Mat'l CoE will (presumably) occur in 2014
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# JAMS CoE Member Schools

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## AMTAS (Advanced Materials for Transport Aircraft Structures)

- University of Washington, Lead
- Washington State University
- Oregon State University
- Edmonds Community College
- Florida International University
- University of Utah



## CECAM (Center for Composites and Advanced Materials)

- Wichita State University, Lead
- Northwestern University
- Purdue University
- Tuskegee University
- University of Delaware
- University of California at Los Angeles





- Curt Davies (FAA W. J. Hughes Research Center, New Jersey) is JAMS Program Manager
  - FAA Technical Monitors – AMTAS projects (Hughes R.C.): Allan Abramowitz, Curt Davies, Dave Galella, Lynn Pham, Dave Westlund
  - Larry Ilcewicz, FAA CSTA, Advanced Composites, (Renton) also helps guide all AMTAS projects
  - UW-AMTAS:
    - Prof. Mark Tuttle, AMTAS Director
    - Prof. Kuen Lin, AMTAS Co-Director
    - Ms. Ellen Barker, Assistant to the Director
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# JAMS/AMTAS Meetings

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- Annual JAMS meetings
    - Held during spring (~ March-June)
    - Speakers from all 12 JAMS universities
    - The two lead universities (UW and WiSU) alternate as hosts
    - 2013 JAMS Meeting was hosted by WiSU, held 8-11 April
    - 2014 JAMS Meeting: hosted by UW, details TBD (*tentatively*, 25-26 March, Kane Hall, UW campus)
  - Annual AMTAS meetings
    - One-day mtg, held during autumn (~ Oct-Nov) in the Pacific Northwest
    - Speakers drawn from 6 AMTAS universities, industry, FAA
    - 91 registrants for today's meeting
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# JAMS/AMTAS Meetings

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- Agendas and presentations from all past JAMS-AMTAS meetings are available from the AMTAS website:

<http://depts.washington.edu/amtas/>

(follow link to “Events”)

- Summary and presentations from the meeting today will be posted sometime next week (Ellen will send e-mail when site is updated)
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# Special thanks to..

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- The Boeing Company
- Our many additional industrial partners, particularly



- Hexcel Corporation



- Cytec



- Toray



- General Plastics



# Special thanks to..

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- The University of Washington:
    - Provost Office (Associate Provost Mary Lidstrom)
    - College of Engineering (Dean Michael Bragg)
    - Department of Aeronautics and Astronautics  
(Chair Jim Hermansen)
    - Department of Materials Science and Engineering  
(Chair Alex Jen)
    - Department of Mechanical Engineering  
(Chair Per Reinhall)
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# Meeting Agenda is Intended to Foster Discussion (*use Session I to illustrate*)

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- 8:45-10:30 am: Session I

8:45–9:05	Failure of Notched Laminates under Out-of-Plane Bending	I. Hyder & N. Atanasov for J. Parmigiani, OSU
9:05–9:10	<i>Discussion</i>	
9:10–9:30	Delamination/Disbond Arrest Features in Aircraft Composite Structures	Luke Richard & Kuen Lin, UW
9:30–9:35	<i>Discussion</i>	
9:35–9:55	Damage Tolerance Test Method Development for Sandwich Composites	Dan Adams, U of U
9:55–10:00	<i>Discussion</i>	
10:00–10:35	<i>Industry Feedback</i>	Gerry Mabson, The Boeing Co.

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- Please participate in the discussion throughout the day!!!
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  - Comments or questions before we begin?
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Thanks for attending!

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