

# FAA COE on Advanced Materials for Transport Aircraft Structures (AMTAS)

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## Preliminary Working Meeting

# WELCOME!

January 29, 2004



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A Brief Overview of Anticipated  
Center Structure and Activities

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# Background – FAA Centers of Excellence

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- FAA Centers of Excellence (COE) are:
  - Funded through cooperative agreements among academic institutions, their affiliate industrial partners, and the FAA
  - Funded in three “phases” over a total period of 3-10 yrs
  - Expected to be self-supporting thereafter



# Background – FAA Centers of Excellence

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- Five pre-existing FAA COE's:
  - Center of Excellence for Airport Technology (U. Illinois lead...established 1995)
  - National Center of Excellence for Aviation Operations Research (NEXTOR...UC-Berkeley, MIT, U. Maryland, VPI co-leads...established 1996)
  - Airworthiness Assurance Center of Excellence (AAACE...managed by FAA via Hughes Res Ctr... established 1997)
  - Center of Excellence for General Aviation Research (CGAR...Embry-Riddle lead...established 2001)
  - Center for Aircraft Noise and Aviation Emissions Mitigation (MIT lead...established 2003)



# (New) FAA COE on Advanced Materials

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- Oct 7: FAA released solicitation for proposals to establish a new COE devoted to Advanced Materials
  - FAA Phase I funding (3 yrs); \$300-\$500k 1<sup>st</sup> year, minimum \$300k/yr during years 2 & 3
  - Matching funds from non-federal sources req'd
- Nov 17: ~5 groups from around the country submitted proposals
- Dec 18: Joint award to University of Washington (UW) and Wichita State University ("WSU" - WiSU) announced



# New FAA COE on Advanced Materials

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- Although a joint award, the “COEs” led by UW and WiSU are to be independent...
  - UW: Center on Advanced Materials for Transport Aircraft Structures (AMTAS)
  - WiSU: National Institute for Aviation Research (NIAR – includes activities carried out under CGAR and AACE)
- Meeting between FAA-UW-WiSU to occur at Hughes Res Ctr during early March
- Initial start-up complicated by:
  - Lack of established FAA Budget for FY 2004
  - Retirement of Chris Saher (FAA)



# Center on Advanced Materials for Transport Aircraft Structures ([AMTAS](#))

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- Overall mission:
  - Perform research studies
  - Provide educational opportunities
  - facilitate technology transfer
- pertinent to the use of advanced materials in transport aircraft
- “Advanced materials” meant to imply (at least initially!):
  - Polymeric-based composite materials and structures
  - New materials developed via nanotechnologies



# (some of the ) Unresolved Issues

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- Interactions w/ WiSU-led Center. Likely to be elements of
  - Collaboration
  - Competition
- Selection of AMTAS Executive and Technical Advisory Board members
- Annual (semi-annual?) review and evaluation of on-going projects





## (some of the) Unresolved Issues

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- Annual (semi-annual?) process used to develop prioritized list of new and continuing Center projects (research, education, tech transfer)
- Intellectual property issues:
  - Among Center members
  - With external entities
  - Export control laws (ITAR/EAR)

