

# JAMS

## JAMS Adhesive Bonding Joint Working Group



AMTAS Autumn 2010 Meeting  
October 21, 2010



The Joint Advanced Materials and Structures Center of Excellence

# Adhesive Bonding Joint Working Group

- **Motivation and Objectives**

- Form a working team to leverage the individual R&D tasks that will:
  - Increase awareness of overall Adhesive Bonding R&D plan and knowledge base between the working group and community
  - Provide an efficient means of using resources
  - Provide commonality in specimen fabrication and testing
  - Discuss technical, safety, and certification related issues in the structural adhesive bonding area
- Include all JAMS adhesive bonding related projects
  - Consider adding representative from CECAM for better visibility throughout that team

- **Plan**

- Conduct monthly meetings to discuss progress and needs
  - Tentatively first Thursday of the month, 10:00 Pacific/1:00 Eastern
  - Telecon/Webex
- Use common materials and manufacturing methods, where possible
- Build on results of each others research to make greater progress than can be done individually
- Report out on results of team



# Adhesive Bonding Working Group: Projects



## Certification of Bonded Structure:



- Define robust M&P methods
- Validate bond integrity and durability
- Relate to certification requirements

## Composite Bond Integrity/Durability:



- Establish effects of contamination on long term durability of composite bonds
- Develop accurate and efficient durability test methods

## Improved Comp Bonding Thru Surface Characterization:



- Process control as measured by surface features or materials condition
- Evaluate in-line QC methods to assess bond quality

## Metal Bond Durability Standards:



- Improve ASTM standards for metal bond durability testing
- Develop guidance for exposure conditions and failure mode analysis

# Robust Bonding M&P Collaborative Activity

