

Advanced Materials

CECAM

Technology Bulletin

at the Center of
Excellence for Composites
and Advanced Materials



JOINT ADVANCED MATERIALS &
STRUCTURES CENTER OF EXCELLENCE

CECAM ACADEMIC
TEAM

Wichita State University

Northwestern University

Purdue University

Tuskegee University

University of Delaware

University of California
at Los Angeles

ADVANCED MATERIALS IN
TRANSPORT AIRCRAFT STRUCTURES

FEDERAL AVIATION
ADMINISTRATION

NATIONAL INSTITUTE FOR
AVIATION RESEARCH

August 6, 2007

C07-04

CECAM featured project

2007 JAMS Technical Meeting Overview

The 3rd Annual Joint Advanced Materials & Structures Technical Meeting was held July 10-12 at the FAA William J. Hughes Technical Center in Atlantic City, N.J.

The conference provided for an excellent exchange of research with more than 75 members of industry, academia and government attending. Researchers reviewed and provided feedback on the center's current research projects. FAA-sponsored research conducted by the JAMS center of excellence is divided into nine technical areas focused on advanced materials and structures:

- Material Standardization and Shared Databases
- Bonded Joints Issues
- Structural Substantiation
- Damage Tolerance and Durability
- Maintenance Practices
- Advanced Material Forms and Processes
- Cabin Safety
- Nanotechnology for Composite Structures
- Life Management of Materials for Improved Aircraft Maintenance Practices

JAMS has made a commitment to focus on aviation safety and certification needs by involving additional FAA and industry personnel in the process. The research reviewed shows continuing efforts to focus on aviation industry safety and certifications needs. This is a major accomplishment for the center and a fitting close to the first phase of the JAMS program. The program highlights the work of each of the universities and is becoming proficient at researching the safe use of composites and other advanced materials and processes in aircraft

structures. This increases the value of the center to the FAA and the aviation community in general.

The JAMS conference offered attendees a unique glimpse into what is happening in FAA research and development areas by offering tours of the technical center facilities, including the Engineered Material Arresting System (EMAS), Aircraft Rescue & Firefighting Demonstration, National Airport Pavement Test Facility, Fire Safety Facility and Full-Scale Aircraft Structural Test Evaluation and Research Facility (FASTER).

To view the presentations from this meeting, please visit www.jams-coe.org.

About JAMS

The JAMS Center of Excellence is led jointly by the University of Washington and Wichita State University. The center addresses the engineering and science issues associated with safety, regulation and product certification of advanced materials and structures to assure equivalent or higher levels of safety relative to existing technology. It also establishes engineering standards and provides training in the area of advanced materials and structures. The ultimate goal is to develop an advanced materials and structures knowledge base.

FAA William J. Hughes Technical Center Website

The FAA William J. Hughes Technical Center website is home to an extensive collection of technical reports focused on aviation, engineering and FAA materials. Through an easy-to-use search engine, visitors can find technical reports based on subject matter, title and author. The FAA William J. Hughes Technical Center reports may be obtained from the following website <http://actlibrary.tc.faa.gov/>.

For more information about the Center for Advanced Materials Performance at Wichita State University's National Institute for Aviation Research visit the [CECAM website](#).

