NATIONAL INSTITUTE FOR AVIATION RESEARCH
WICHITA STATE UNIVERSITY

FOR IMMEDIATE RELEASE

Advanced Joining & Processing Lab undergoes reorganization and transfer to College of Engineering

Wichita, KS – June 12, 2012 - The Advanced Joining and Processing Lab of Wichita State University's National Institute for Aviation Research (NIAR) has been reorganized and transferred to WSU's College of Engineering. The lab is now under the leadership of Zulma Toro-Ramos, Dean of the College of Engineering.

The lab was reorganized due to a shift in its overall mission and industry demand. When the Advanced Joining and Processing Lab was founded in 2003, friction stir welding, friction stir spot welding and friction stir processing were fairly new technologies that were emerging in the aircraft industry.

The lab, which was founded after recommendations from NIAR's Industry Advisory Council, began with a mission to develop standards for friction stir welding and assist manufacturers in developing and testing prototypes in order to assess the feasibility for mass production.

While the lab is still assisting various organizations in researching friction stir welding implementation, much of its focus has shifted. In early 2009, lab management realized a need to research the possibility of using robotic applications to perform more complex friction stir welds that would enable more efficient workflow through the manufacturing floor while at the same time reducing the equipment footprint and need for tooling. At the time the lab was using a large gantry machine, but later acquired additional robots capable of performing friction stir welding and became involved in training staff and student assistants to program the machines.

In the fall of 2010, this technology was advanced to the point where it was deemed necessary to progress upward in the Technology Readiness Level, and incorporate it into the manufacturing process. The lab then moved to the new National Center for Aviation Training (NCAT), along with additional NIAR labs including the CAD/CAM Lab and lay-up room for the Composites & Advanced Materials Lab.

At this time, the lab will remain at the National Center for Aviation Training, and will continue as a member of the National Science Foundation's Center for Friction Stir Processing, performing research for its members: Bombardier Learjet, the FAA, Hawker Beechcraft, General Motors, Embraer, Cessna and Spirit AeroSystems.

ABOUT NIAR

The National Institute for Aviation Research (NIAR) at Wichita State University supports the aviation industry by providing research, development, testing and certification services to manufacturers, government agencies and education entities. NIAR laboratories include: Advanced Coatings, Aging Aircraft, CAD/CAM, Composites & Advanced Materials, Computational Mechanics, Crash Dynamics, Environmental Test, Full-Scale Structural Test, Mechanical Test, Metrology, Nondestructive Test, Research Machine Shop, Virtual Reality and the Walter H. Beech Wind Tunnel. NIAR operates on a nonprofit budget that has steadily increased to more than $49 million in fiscal year 2010. NIAR is the

largest university aviation R&D institution in the U.S. With its location in Wichita, Kan., the "Air Capital of the World," NIAR is able to integrate business, government and university entities in cooperative efforts to advance aviation technology. NIAR operates more than 250,000 square feet of laboratory and office space and employs 350. Clients include Boeing, Bombardier Learjet, Cessna, Hawker Beechcraft and Spirit AeroSystems.

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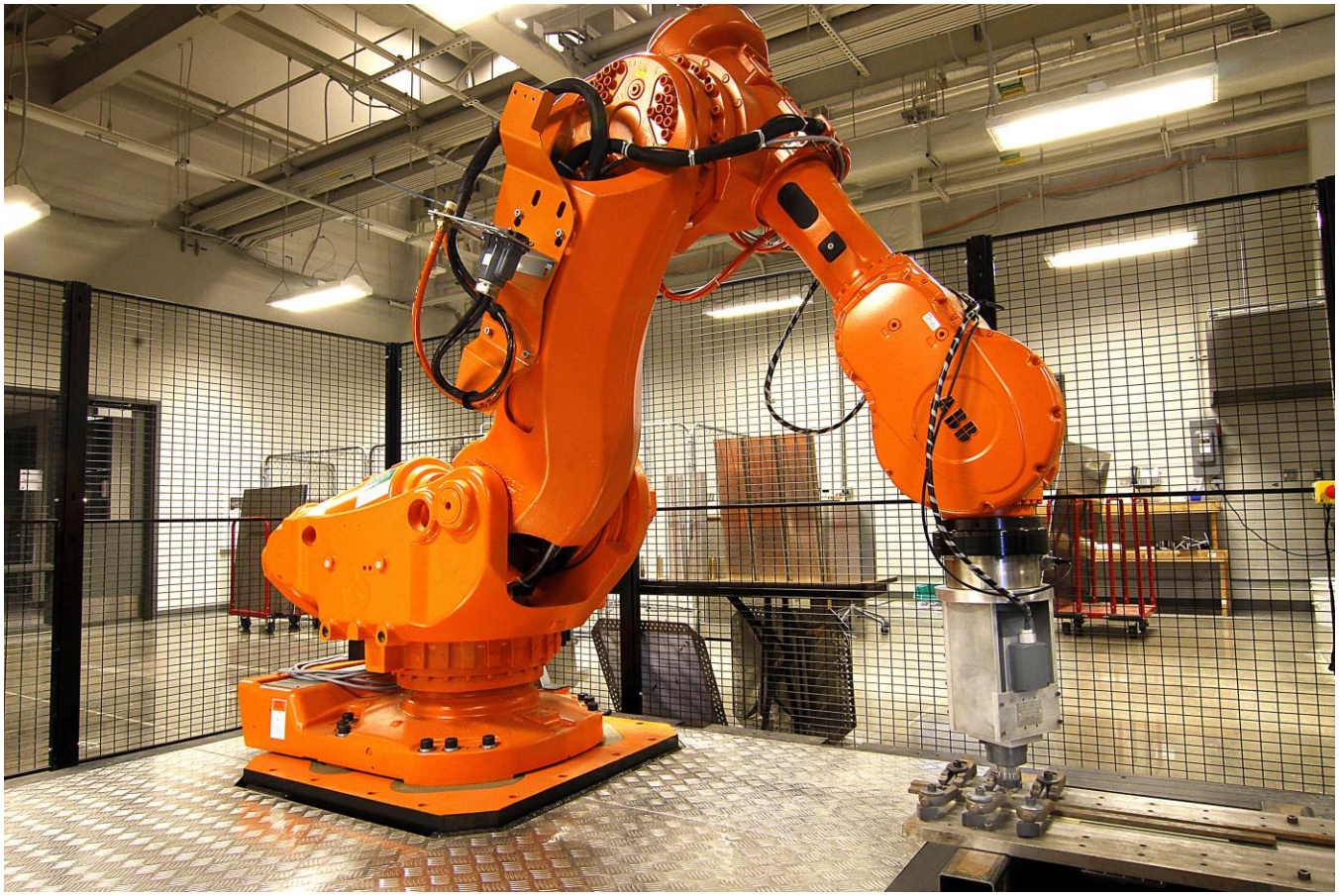
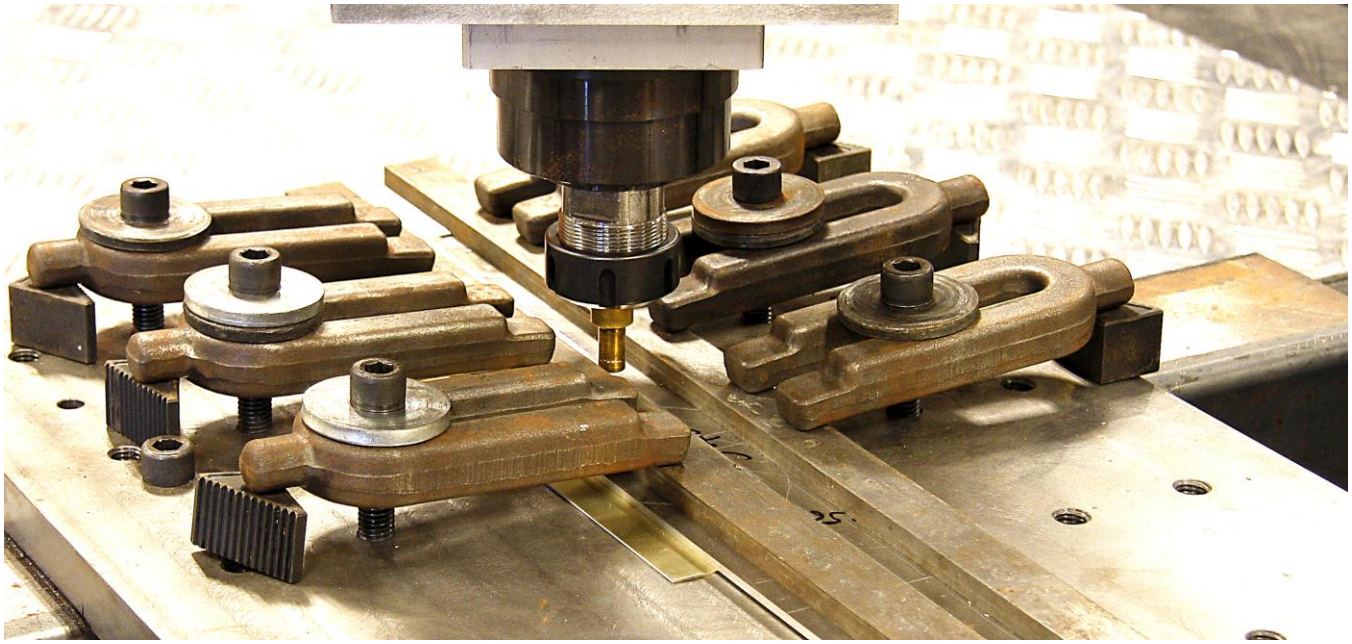
PHOTOS





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