

Airworthiness Assurance Center of Excellence

The FAA has long had a successful partnership with the nation's academic research community, working with U.S. colleges and universities to foster research by both faculty and students.

This research has made significant contributions to the advancement of aviation science and technology and provided the agency and industry a high return on investment.

Research that makes an immediate impact and provides solutions to aviation problems in the short term is crucial to the FAA's mission and is an integral element of the FAA's commitment to aviation. Equally important is long-term research that is designed to advance aviation technology and to meet the future needs of the aviation community.

As a result, the FAA has expanded its commitment to support the long-term academic research that is pivotal to the future of aviation through the establishment of a major new program, Air Transportation Centers of Excellence (COE). This is an innovative program that makes it possible for the FAA to work in true partnership with the academic community and industry to advance aviation technology into the 21st century and beyond. Air Transportation Centers of Excellence enable the FAA to enhance internal research capabilities and access academic and industry resources while striving to hasten the application of research to benefit the aviation community and the flying public. Through long-term collaborative efforts, the government and



these affiliates effectively link to build competence and to leverage resources by sharing facilities and expertise.

By establishing a network of prestigious aviation research centers throughout the country to advance mission critical technologies, the agency takes a proactive part in creating a pool of technical professionals trained in aviation related research areas; helping finance graduate education; fostering cooperative FAA-university-industry research and development (R&D) efforts; and, ultimately, improving the national airspace system.

The Airworthiness Assurance Center of Excellence, established in September 1997, is the most recent of the four centers created under this program. Other centers include Computational Modeling of Aircraft Structures, Airport Pavements, and Operations Research.

The Airworthiness COE consists of nine core members: Iowa State University, The Ohio State University, Arizona State University, Northwestern University, University of Dayton, University of Maryland, University of California—Los Angeles, Wichita State University, and Sandia



Lead Universities

The Ohio State University

Iowa State University

Core Team

Northwestern University *Arizona State University*

University of Maryland

University of Dayton *Wichita State University*

University of California-Los Angeles *Sandia National Laboratories*

68 Industry Partners

31 Affiliate Universities

12 Other Partners

National Laboratories, of which The Ohio State University and Iowa State University serve as lead institutions. There are presently 68 industry partners, 31 university affiliates, and 12 other partners, which include other government laboratories, state organizations, etc. The Airworthiness Assurance COE organizational chart is shown above.

Each selected institution is awarded a long-term cooperative agreement to conduct critical research in a specific area of aviation related technology. The COE provides matching funds, which solidify a significant partnership between the COE and the FAA. Through this partnership, the government, academic institutions, and industry leverage the resources available for aviation research. Recently the FAA has received the authority to award single-source contracts to the successful applicant

in a COE competition. This authority gives the COE the latitude to go from basic research through engineering development, prototyping, and testing.

Airworthiness Assurance COE research areas include:

- Maintenance, Inspection, and Repair
- Crashworthiness
- Propulsions and Fuel Systems
- Advanced Materials

To find out more about the Airworthiness Assurance Center of Excellence, contact:

Airport and Aircraft Safety Research
and Development Division, AAR-400

Federal Aviation Administration
William J. Hughes Technical Center
Atlantic City International Airport, NJ 08405
Phone: (609) 485-5043
Fax: (609) 485-4101

Safety