
OAI Dean's Committee September 1988

“The Engineering Deans of Ohio Universities recommend that the Ohio Aerospace Institute be established to focus and continue to improve and develop the state’s strengths and capabilities to play a major role in the evolving opportunities in the aerospace field. The institute is envisioned as a strong partnership of Ohio Universities, government laboratories, and industries...”



History & Background

- Private, not-for-profit 501 (c) (3) founded in 1989
- First NASA-associated collaborative Institute chartered to foster relationships between universities, aerospace industries, and government organizations
- Strong support from:
 - NASA Glenn Research Center
 - Wright Patterson Air Force Base - Air Force Research Laboratory
 - Ohio research universities
 - State of Ohio
 - Aerospace industry
- More than \$297M in secured funding
- More than 360 federal awards
- Revenue \$11.2M (FY15)
- More than 60 employees in two locations
 - Cleveland HQ (Adjacent to NASA Glenn)
 - Dayton – adjacent to Wright-Patterson AFB



OAI Mission

Enhancing our partners' aerospace competitiveness through research and technology development, workforce preparedness, and engagement with global networks for innovation and advocacy.

**Research & Technology
Development**



**Education &
Training**



**Collaboration +
Innovative Solutions**



OAI's Portfolio

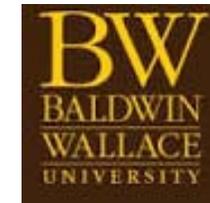
- **Innovative Partnerships with Government, Industry, and Universities**
 - **Research in Materials, Structures, Propulsion, Vehicle Health Safety and Monitoring, Computational Modeling, and Space Science and Exploration Technologies**
 - **STEM Workforce Development at all levels**
- 
-

OAI Economic Impact on Ohio FY1998 - 2015

- **Report prepared by CSU Center for Economic Development, Maxine College Goodman College of Urban Affairs.**
 - **Employment impact: 1,702 jobs.**
 - **Output (total value of goods and services) impact: \$232.3 million.**
 - **OAI activities generated, on average, 95 jobs per year and \$12.9 million in output per year.**
 - **“The benefit (OAI) has provided Ohio and Ohioans is pronounced, both through its contribution to public knowledge and innovation, and through its contribution to the state’s economy and vitality.”**
-

University Membership

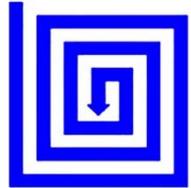
- OAI's university membership includes major aerospace and aviation advanced degree granting institutions in Ohio
- The university membership program also includes technical and community colleges
- OAI's network of collaborating universities is international



Expanding Industry Network



Small Business Network



PDH Applied Physics, LLC



OAI Engagement with the Aerospace Community

- **Member, Ohio Aerospace and Aviation Technology Committee**
 - **Member, Ohio Aerospace and Aviation Council**
 - **Member, Ohio Research Officers Council**
 - **Associate Member and Ohio Representative to Aerospace States Association (ASA)**
 - **Corporate Member, American Institute of Aeronautics and Astronautics (AIAA)**
 - **Associate Member, Aerospace Industries Association (AIA)**
-



America Makes

OAI supports the National Additive Manufacturing Innovation Institute (NAMII), now called America Makes (AM), in Youngstown OH.

- **AM uses OAI's network for outreach and intellectual property management to accelerate additive manufacturing technology.**
 - **OAI's role in AM is focused on partnering agreements, intellectual property compliance review and protection.**
 - **OAI is a "SILVER" member of AM and participates in governance of the consortium.**
 - **America Makes is also a Large Industry Member of OAI**
-

Scholarship and Fellowship Support: Ohio Space Grant Consortium

- **23 Ohio institutions of higher learning**
 - **More than \$4.1M in scholarships and fellowships to date**
 - **50 new undergraduate scholarships and 10 new graduate fellowships each year, plus renewals**
 - **Supports Ohio students pursuing degrees in Science, Technology, Engineering & Math at Ohio institutions**
 - **Strong emphasis on inclusion of underrepresented groups**
 - **Over 500 undergraduate scholarships since inception**
 - **Over 150 graduate fellowships since inception**
 - **Touches every OH county and Congressional District**
 - **www.osgc.org**
-

AFRL Student Challenge Project: Robot Sentry Demonstration

OAI's AFRL Capstone Project

- Demo of wheelchair-to-robot-sentry conversion projects held at WBI April 29, 2016
- Project sponsored by AFRL Materials and Manufacturing Directorate
- 3 Teams – Case Western Reserve, Ohio Northern, Northeastern – each accepted challenge to convert industry-developed wheelchair (Action TrackChair®)
- Capstone is producing direct hires for AFRL!
- www.afrlstudentchallenge.org

The image is a screenshot of a news article from the website STARS AND STRIPES. The article title is "Could robots protect our military bases?". The author is Barrie Barber, and it was published on April 30, 2016. The article text describes a demonstration where a 410-pound, two-tracked robot was used to search for threats. It mentions that a student, Emily Gudaitis, piloted the robot using a PlayStation controller. The article also notes that the robot was used to navigate an orange fence-lined obstacle course. A photograph on the right side of the article shows the tracked robot in a field, with several people standing nearby. The robot is a light-colored, two-tracked vehicle with a camera mounted on top. The background shows a white tent and some trees.

U.S. Department of Commerce

International Trade Administration

International Exporting and Trade Missions



- **2016 Recipient of President Obama’s “E” Award. The President’s "E" Award is the highest recognition any U.S. entity can receive for making a significant contribution to the expansion of U.S. exports.**
 - **Exceeded \$166M in aerospace exporting transactions**
 - **Ohio partners include JobsOhio and Ohio Development Services Agency**
 - **Key program purpose: To enhance global competitiveness of U.S. industries through training, seminars, ITA Gold Key Service and international relationships including trade shows and supply chain summits**
 - **Engagement / Program Participants: Airbus, Boeing, U.S. Brazil Aviation Partnership Program, Farnborough Air Show, Embraer, AIRTEC International Aerospace Supply Fair, Export-Import Bank of the United States, Parker Aerospace, Magellan, NASA, Projects Unlimited, U.S. Global Leadership Coalition**
-