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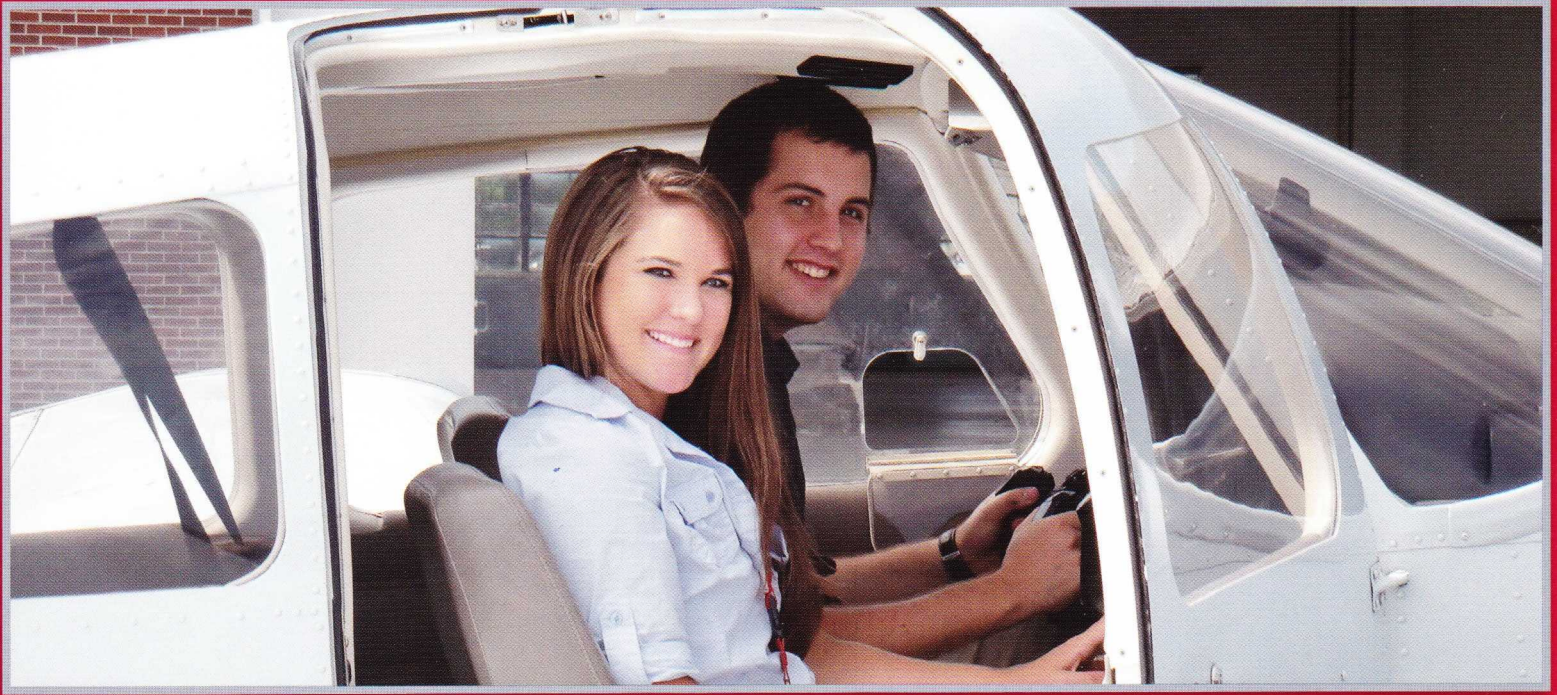
DISCOVER



ENGAGE



CENTER FOR AVIATION STUDIES



Learning: Preparing the Next Generation of Aviation Professionals

The CAS recognizes that aviation is a complex, dynamic industry needing educated professionals to plan, design, operate, and manage aviation and air transportation systems.

The goal of the CAS academic structure is to provide the most comprehensive education possible so that our graduates can contribute to, and be successful in, the aviation industry.

The CAS academic program offers Bachelor of Arts and Bachelor of Science degrees from the College of Engineering, the Fisher College of Business, and the College of Arts and Sciences. Each College has its own emphasis: Engineering with a systems emphasis, Business with a performance emphasis, and Arts and Sciences with a socio-economic emphasis.

Students from all three colleges take the aviation core curriculum together, developing an awareness and appreciation of each other. Beyond the common core, various electives allow students to tailor their degree to areas of particular interest. "Professional Pilot" and "Aviation Management" are our two specializations.

The Professional Pilot specialization focuses on flight education. A comprehensive curriculum of classroom courses and flight laboratories are offered that guide

students toward earning their Private, Commercial, Instrument, Multi-Engine, and Flight Instructor licenses and certificates. These courses may be taken for academic credit as part of an aviation major or minor. Courses within this curriculum are also available for those not seeking an academic credit, such as professionals in the community or OSU students simply wishing to learn the joy of flight outside of their other academic studies. The curriculum is fully certified by the Federal Aviation Administration under Federal Aviation Regulations, Part 141.

The Aviation Management specialization focuses on the management and organizational models of the wide variety of businesses that serve the aviation industry. Course offerings within this specialization include the study of airports, airlines, corporate aviation, cargo aviation, and other aviation services.

The CAS academic program offers both specialization and flexibility. Students may choose to focus on one area or another, or they may choose a selection of courses from either specialization to receive a well-rounded education.

The CAS supports learning through extracurricular activities as well. Students can join a number of groups,

and each one offers industry-, government-, or aviation-related activities. A few of these groups include:

- The OSU National Intercollegiate (NIFA) Flight Team
- Alpha Eta Rho, a coed aviation fraternity
- The AAAE OSU Student chapter, a professional airport association

Internships, co-ops, independent studies, and employment opportunities are available to students locally, regionally and nationally.

Active national relationships involve our students with major national and regional airlines, airports, fixed-base operators, governments and regulatory departments.

The CAS also supports graduate study through a number of departments within the University, including Civil and Environmental Engineering and Geodetic Science, Integrated Systems Engineering, Geography, Business, and City and Regional Planning. Through the CAS, both graduates and undergraduates alike have worked with faculty to complete exciting, award-winning projects as part of their studies. The CAS is producing the next generation of aviation professionals.

Aviation Research: Leading the Way with New Discoveries

Central to the mission of the Center for Aviation Studies is conducting research of importance to aviation. The aviation industry is highly complex and multidisciplinary, incorporating the fundamentals of engineering, business, policy, geography, planning, and the social sciences into a system that provides the world's most advanced mode of transportation and facilitates economic and cultural growth around the world. In order to create the next great advancements in aviation, coordinated research in all of these disciplines is required. At the CAS, the resources available at The Ohio State University, including The Ohio State University Airport, as well as through academic institutions and industry partnerships throughout the nation, create a unique environment for such research.

Both graduate and undergraduate students alike are involved in the research conducted at the CAS. The CAS works closely with Ohio State students and faculty researchers who are studying aeronautical engineering; civil, environmental, and geodetic engineering; integrated systems engineering; city and regional planning; geography; business administration; and



others in a cohesive, integrated environment. Research performed at the CAS is not only academically rich, but is also immediately useful to the industry.

Recent research topics have ranged from environmental sustainability to business productivity, from accessibility issues to safety and human factors issues, all contributing to improving the nation's and world's aviation systems. A sample list of the research being conducted by the CAS includes:

- The balancing of land-use development with the preservation of airspace for safer air navigation
- The environmental impacts of airport expansion
- The economic impact of aviation
- Business aviation services operations management
- Aircraft maintenance systems optimization
- Simulation of the next-generation air transportation (NextGen) system
- Airport safety management systems research
- Crew human factors research
- Innovative flight education methods

Research at the CAS is funded through both federal grants and industry support.

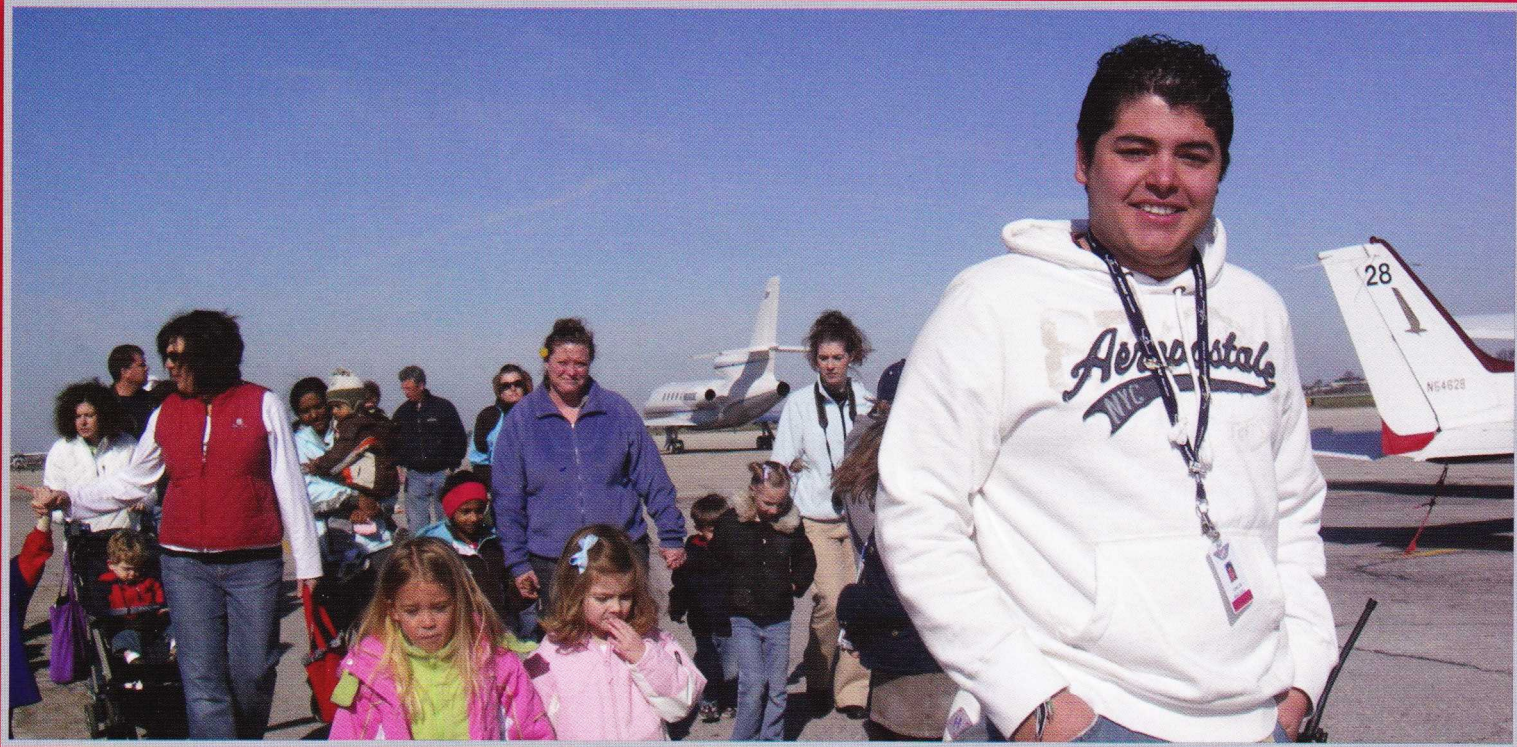
Integrating Learning, Discovery, and Engagement with The Ohio State University Airport

The Ohio State University Airport (KOSU), a federally certified general aviation facility, is the primary teaching and research laboratory serving the CAS. Equipped with an aircraft fleet, flight simulators, air traffic control, weather station, and communications and navigation systems, The OSU Airport is host to numerous aviation and non-aviation research projects. Such initiatives include airspace protection, environmental and safety management systems, AGATE/SATS, conflict resolution, airport executive training, and other engineering and business concepts. The OSU airport is fully integrated within all three pillars that define the mission of the CAS, serving as the home base of the CAS flight education programs and the focal location for community outreach. The Airport's Flight Training Clinic is open to anyone who wants to earn a pilot's certificate, making the most technical levels of flight education and outreach at the CAS accessible to virtually anyone.



THE OHIO STATE
UNIVERSITY AIRPORT





The Center for Aviation Studies: Engaging the Community

The Center for Aviation Studies proactively engages the immediate community and beyond on a number of levels ranging from K-12 students to business and industry policy makers. The Outreach programs not only support the mission of the CAS, but are also congruent with the mission of the University. STEM after-school, weekend and summer programs are examples of ways the CAS provides aeronautical knowledge and career education to the younger generation.

The CAS educates approximately 2,000 people in the Columbus area each year, with a focus on elementary, middle, and high school students. All community members are welcome to visit The OSU Airport to enjoy the excitement of one of Ohio's busiest airports. CAS Outreach programming includes:

- OSU Airport tours guided by CAS staff and aviation students
- Middle school and high school career shadow programs that equip participants with knowledge to help in their education and career choices
- Aviation Explorers, a regularly scheduled worksite-based program for young men and women ages 14 to 21

- Partnerships with community and university organizations that include:

- Youth Aviation Adventure, a fast-paced, single-day event offered twice annually for young men and women ages 12 to 18
- LIFESports Career Day for underserved middle-school students
- Women in Engineering summer camps for prospective engineering students

In addition, the CAS recruits prospective aviation majors to enroll in The Ohio State University to study aircraft systems and aviation management. Some of the CAS Outreach activities include:

- Weekly airport tours for prospective high school students and their families
- Women in Engineering first-year student information fairs
- College of Engineering recruitment fairs
- Student Involvement fairs
- Ohio State-Newark transfer-student fairs

- Columbus State Community College transfer-student fairs

For current CAS students, the Center enhances retention and provides valuable networking opportunities through internships, student organizations, and publications.

Finally, the CAS serves as a point of contact for government and other entities seeking the aviation industry expertise of our faculty, emeritus faculty, and alumni.

As the CAS meets its goals, the aeronautical industry in Ohio will grow and provide an increase in aviation job opportunities.

CAS Outreach Audiences:

- Kindergarten through 12th-grade students
- Current CAS students
- The Greater Columbus Community
- The aviation industry



The Future of Aviation is Here.

OHIO'S AVIATION HERITAGE

In 1903, Orville and Wilbur Wright took the Buckeye State to the forefront of the aviation industry. In the years to follow, The Ohio State University built upon the State's aviation roots by emerging as one of the nation's premier aviation academic and research institutions, preparing students to lead, develop, and operate a safe and efficient global aviation system for the 21st Century.

THE CENTER FOR AVIATION STUDIES (CAS)

The Ohio State University Center for Aviation Studies (CAS) is a leading center for aviation related research, education, and scholarship. The mission of the CAS is to incorporate engineering, business, and behavioral philosophies into a multi-disciplinary approach to the many components of the aviation industry, supporting world-class flight education programs, academic degree programs, research initiatives, and outreach activities on local, regional, national, and international levels.

Drawing upon a talented pool of faculty members, as well as graduate and undergraduate students, the Center for Aviation Studies is dedicated to advancing the aviation industry. In addition, the partnerships that the CAS has established within the aviation industry enable students to network with aviation professionals, participate in internship programs, and conduct research with and for leading aviation companies. These partnerships are invaluable resources for developing future careers in the industry.

CONTRIBUTING TO THE FUTURE OF AVIATION

The CAS is committed to advancing the future of aviation by training the best pilots, utilizing the latest aviation technologies, developing cutting-edge research and creating new business models and policies. There is enormous opportunity for growth in the aviation industry and the CAS will help educate, pioneer and engineer people, systems and technology to lead this growth to unprecedented heights.

