



The OSU Aviation Program: Academics and The Airport at Don Scott Field

The Ohio State University Aviation Program: Academics and The Airport at Don Scott Field & The 2004 OSU Airport Master Plan

**Presentation to the OSU Board of Trustees
Facilities Planning Committee**

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The OSU Aviation Program: Academics and The Airport at Don Scott Field

Outline

- **Academics and Aviation: How the Airport supports the OSU Aviation Program**
- **2004 Airport Master Plan status and its benefits to the Aviation Program**
- **Results of the Environmental Assessment, including the Noise Study**
- **Summary and Final Comments**



The OSU Aviation Program: Academics and The Airport at Don Scott Field

History of the OSU Aviation Program

**1917 – U.S. War Department designates OSU as one of
the nation's six Military Schools of Aeronautics**

1942 – Board of Trustees establishes the School of Aviation

**1981 – Ohio Board of Regents approves Bachelor's
degree in Aviation**



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“Aviation” as a National Priority

“We need national leadership to develop an air transportation system that simultaneously meets our civil aviation, national defense and homeland security needs” – *The Final Report of the Commission on the Future of the United States Aerospace Industry, 2002*

- **Currently, over 40 colleges and universities in the U.S. offer Bachelor’s degrees in Aviation-related programs, including Purdue University and the University of Illinois**



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Organizational/Administrative Relationships

- **The Aviation Program is administered by the Department of Aerospace Engineering and Aviation (AAE), which reports to the College of Engineering**
- **AAE is responsible for managing and operating the Airport at Don Scott Field; Airport Director reports to AAE Chair**
- **Aviation Program set to return to independent status by the end of 2004, pending Board approval. The new Department of Aviation becomes responsible for Airport management**



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Organizational/Administrative Relationships (con't)

- **The Aviation Program contributes to the College's teaching, research and service/outreach missions, supports the overarching goals of the University's Academic Plan**
- **The OSU Airport is an earnings unit that directly supports the Aviation Program missions in teaching, research and service/outreach**
- **The University's academic mission is the primary force driving Airport development needs**



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Relationship Benefits

- **The Aviation Program, College, and University control the direction and destiny of the OSU Airport**
- **Projects benefiting the Aviation academic programs are Airport management's highest priority, while meeting the FAA's highest safety and efficiency standards**
- **All Aviation Academic Program and Airport Plan revisions are proposed, reviewed, and approved through rigorous, well-established University procedures, culminating in review and approval by the Board**



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OSU Aviation Program Demonstrates Academic Excellence

- **Viewed nationally as top-notch Aviation Program**
- **Student teams placed 5th in 2004 national student competition**
- **Five presidents of University Aviation Association from OSU, including current president, Prof. Gerald Chubb**
- **Program graduates are in high demand throughout the industry with many alumni in leadership positions**



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The Aviation Program Supports the OSU Academic Plan

- **Strongly supports land-grant mission “to address our society’s most compelling needs”**
- **Provides an intrinsically multidisciplinary and interdisciplinary academic program across three Colleges**
- **Sets a high standard for the “dissemination of knowledge in service to communities, state, nation and the world” – offers extension program assistance to community airports**
- **Committed to diversity – relatively high proportion of women students and instructors, including Chief Flight Instructor**



The OSU Aviation Program: Academics and The Airport at Don Scott Field

The Teaching Mission of the Aviation Program is:

“ to provide a baccalaureate and graduate education to persons pursuing careers in the field of aviation – and provide an academic program that will prepare a student with the foundation upon which to develop and function as a professional responsible for the design, management and operation of tomorrow’s safe and efficient national and international aviation systems.”



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Academic Programs in Aviation

- **Bachelor's degrees in Aviation**
 - **BS in College of Engineering**
 - **BA/BS in College of Arts and Sciences**
 - **BS in Aviation Management Special Area through the College of Business (BS)**
- **Aviation Program offers two areas of concentration:**
 - **Aircraft Systems (FAA Commercial Pilot Certification)**
 - **Aviation Management**
- **Autumn Quarter 2003 - 225 students with approximately 110 in flight training**



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Airport Enhances The Aviation Program Teaching Mission

- **Airport provides a real-world, learning laboratory for aviation students in and out of the classroom**
- **The Airport provides flexible, priority access to space and facilities close to the Columbus campus, essential to full-time students**
- **Summer internships and year-round work experiences as flight instructors, in flight operations, and in airport management prepare students for life after graduation**



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**Senior Cliff Whitfield and Flight Instructor Kristen Holby
evaluating flight performance and stability of Cessna 152**



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The Research Mission of the Aviation Program is:

“to conduct research on real problems concerning the safe and efficient operation of aircraft in the national and international aviation systems.”



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Aviation Research at OSU

- **Aviation Program Research - \$4.1M since 1992 to support more than 30 funded research projects from FAA, NASA, DoD, aircraft manufacturers**
- **Research areas have included avionics, evaluation of flight system displays, pilot risk assessment, aviation psychology, human factors, etc.**



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Prof. Chuck Hall, visiting from NC State, downloading data from experimental portable instrumentation package in collaborative research with OSU Prof. Jerry Gregorek and graduate student Fernando Falasca



The OSU Aviation Program: Academics and The Airport at Don Scott Field



Goodrich SmartDeck simulator system used by MS student Chrissy Liu to assess pilot situation awareness



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The Airport Advances The Aviation Program Research Mission

- **Provides laboratories and space for many research programs, e.g., flight simulation systems, conventional and experimental aircraft, etc.**
- **Provides flexible space for research projects in the Electrosience Laboratory, Gas Turbine Laboratory, Department of Computer Science and Engineering**



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The Aviation Program Service Mission

- *“Provide aviation professionals who become leaders in the aviation in Ohio and across the nation and the world”*
- *“Serve the Community, State and Nation, through faculty participation in matters concerning aviation”*
- *“Serve the Department, University, Community, State and Nation through the management and operation of the OSU Airport”*
- *“Serve the community, by providing flight education services”*



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Aviation Program Service/Outreach Enhanced by the OSU Airport includes:

- **Flight Training clinics to the general public**
- **Support of Experimental Aircraft Association Young Eagles Program, Explorer Post**
- **Consultants to aviation industry across Ohio, e.g., NetJets, county airports, etc.**
- **Host of National Conferences on Safety and Flight Education**



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**Scott van Ooyer, BS AVN, ENG 1987, Captain, Southwest Airlines, and
Matt Tallarico, BS AVN, ENG 1990, First Officer, Southwest Airlines**



The OSU Aviation Program: Academics and The Airport at Don Scott Field



Sean Menke – COO of Frontier Airlines, ASC Aviation Graduate, 1991



The OSU Aviation Program: Academics and The Airport at Don Scott Field



Some of the more than 130 OSU Aviation Alumni at NetJets



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Airport Economic Impact

2002 Economic Impact study based on FAA guidelines indicated \$4.3M in direct impacts, \$37.5M in indirect impacts, and \$31.1M in induced economic impacts



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Airport Financially Supports the Aviation Program

The Airport provides cash and in-kind resources of nearly \$650,000 to augment the Aviation Program's academic and research efforts, thereby improving program excellence to maintain a position of prominence among universities with aviation programs