By Susan Grossman

With a new fleet of airplanes and a respected, rapidly expanding academic program, the Department of Aviation is filling the skies over Max Westheimer Airport.

On any given afternoon, the air over north Norman can be filled with a ubiquitous light buzzing sound. Look up and that buzz likely can be traced to any number of crimson and cream, single-engine planes sporting an interlocking OU on their tails.

These planes belong to the University of Oklahoma's Department of Aviation, a unit within the College of Continuing Education, where the next generation of airline professionals is being educated for jobs in the cockpit, boardroom, control tower and all points in between. Currently, 160-plus students are enrolled in a variety of aviation degree programs in the department located at Max Westheimer Airport on OU's north campus.

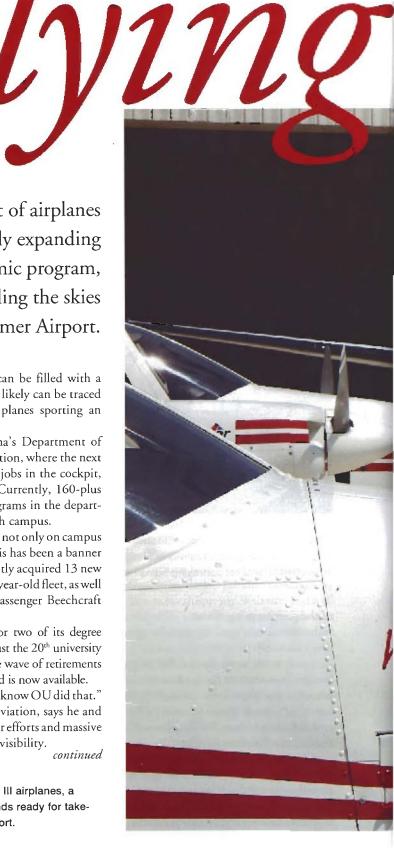
While the aviation program has been a well-kept secret not only on campus but also in the state, the word is starting to leak out. This has been a banner year for the burgeoning program. The department recently acquired 13 new single-engine Piper Warrior III airplanes to replace its 30-year-old fleet, as well as a new twin-engine Piper Seminole and two multi-passenger Beechcraft airplanes-a Baron and a King Air.

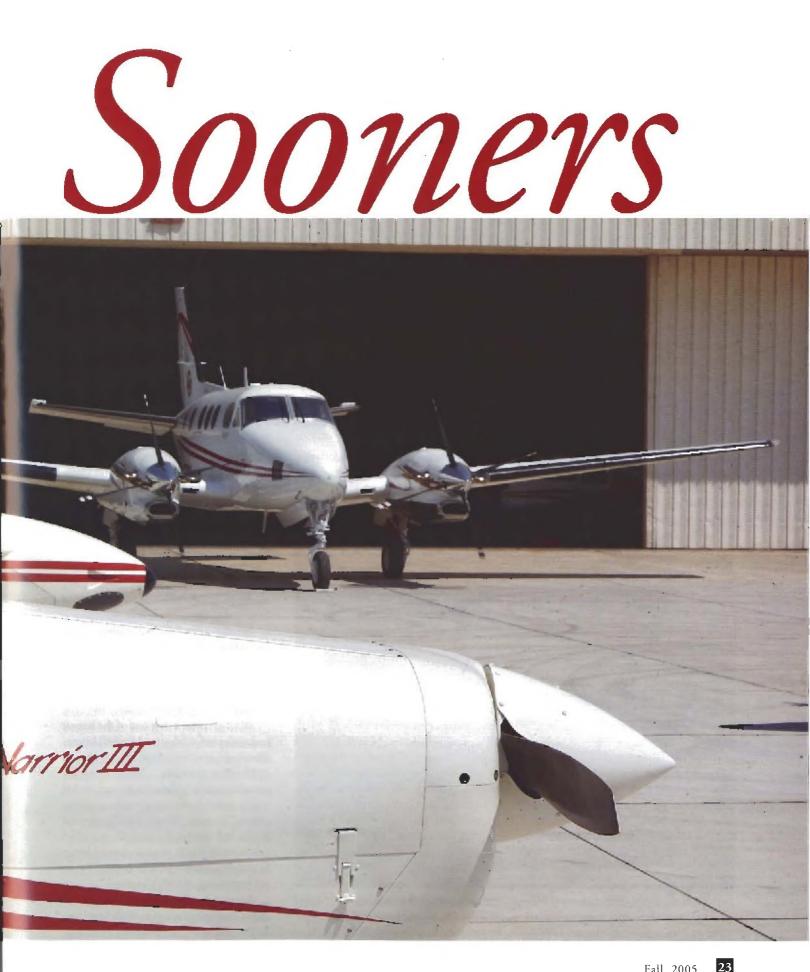
In addition, the department achieved accreditation for two of its degree programs, making OU the only school in the Big 12 and just the 20<sup>th</sup> university in the country to achieve this distinction. Anticipating the wave of retirements from the air traffic control system, a new minor in that field is now available.

All this activity might cause people to remark, "I didn't know OU did that." Glenn Schaumburg, now in his 12th year as director of aviation, says he and his staff have worked hard to change this perception. Their efforts and massive changes in the aviation industry are giving the program visibility.

continued

OU's new fleet of aircraft, which includes 13 Piper Warrior III airplanes, a Piper Seminole and a Beechcraft Baron and King Air, stands ready for takeoff on the tarmac of the University's Max Westheimer Airport.







Nothing but blue skies are ahead these days for Reneé Mitchell, coordinator of aviation undergraduate programs, and Glenn Schaumburg, director of aviation at the University of Oklahoma, who have seen remarkable growth in the program over the past five years.

says. "Pilots of modern airliners must understand and master highly complex systems—modern airplanes are flying computers linked to electrical and mechanical systems. Pilots must operate in a complex air traffic control environment, must understand weather models and always must mentally 'stay ahead of the airplane.'

"OU Aviation recruits bright students, provides them with a strong education and teaches them to function as part of a team," he continues. "OU's program is the most intellectually demanding aviation program in the nation."

## Consolidating the Program

Reneé Mitchell's position as coordinator of aviation undergraduate programs did not exist five years ago, a time when the aviation department had fewer than

# "OU's program is the most intellectually demanding

"People used to be able to get a job with the airlines without a degree, and now a degree is mandatory," he says. "I think having a degree in aviation, especially from the University of Oklahoma, shows that a student has completed a quality, rigorous program that provides them the skill to successfully complete the training that the airlines will put them through."

#### **Planting the Seeds**

In 1940 the OU Board of Regents established a flight-training program as a part of the Civilian Pilot Training Program. Walter Neustadt Sr. of Ardmore arranged a gift of \$10,500 from the estate of his late father-inlaw, Max Westheimer, to buy a 160-acre tract of land north of Norman.

In February 1942, University officials and the Norman Chamber of Commerce offered the local airport facilities to the U.S. Navy, and the tract was expanded to 1,600 acres for a naval reserve aviation base during World War II.

The following year, the Navy facility was designated the Norman Naval Air Station and included 91 buildings and more than 3,000 assigned officers and personnel at its peak of operation in 1945.

The actual University aviation department had its beginnings around 1947 as a flying club, Schaumburg says, offering licenses and certificates to people who wanted to become pilots. The aviation degree was established originally in the College of Education. In 1992, the program was moved to the College of Continuing Education, which then assumed responsibility for the complex operational and administrative duties of the program.

## Friends in High Places

When then OU President Richard Van Horn wanted to learn how to fly, he was told he could do it right in his own back yard. The president emeritus became a commercial/instrument-rated pilot in both single and multi-engine aircraft, his ratings earned through OU's flight training program. Now the Clarence E. Page Professor of Aviation, as well as a Regents' Professor of management information systems, Van Horn was instrumental in bringing the aviation program together with the Price College of Business to give students a solid, competitive career foundation by combining academics with flying skills.

"A significant aspect of the OU aviation program is that academic rigor and quality are as important, if not more important, than flying skills," Van Horn 100 students. Before 2000, aviation and business majors received academic advising through the College of Business. As the aviation program began to grow, the logistics of this arrangement became cumbersome with business on main campus and the airport two miles north.

"Aviation is so specific," says Mitchell. "This arrangement was not good for the students, going back and forth between here and main campus."

So, she moved from business to the Department of Aviation at Max Westheimer in fall of 2000 and took a hard look at ways to improve the program. "There just wasn't enough staff or enough time to do this before," she says.

With aviation being one of the largest industries in Oklahoma, Mitchell immediately set out to increase the number of internships available. "Internships for our students help them understand what will be required of them as working professionals," she says. "We think we know what it's like to be a pilot, for example, but when you're on the inside, you have a much better foundation upon which to build, a better understanding of what's required."

Among the many internships OU offers is a unique partnering with American Eagle. This bridge program gives stu-



Courtney Driessner, an OU flight instructor, enjoys the view from the cockpit of a Piper Warrior III, one of 16 new aircraft that have replaced the University's 30-year-old fleet. Driessner, a 2003 graduate of the aviation program, began teaching in summer 2005.

# aviation program in the nation."

dents the opportunity to train in an Embraer Regional Jet simulator, as well as a guaranteed interview with American Eagle upon graduation.

"We are extremely proud of this partnership," Mitchell says. "Our students attend the same ground school as the newly hired pilots, and we are told that our students do just as well as the new hires."

Chelsea Schindler, a May 2005 graduate in aviation management, now a fixedbase operator working with corporate jet pilots at Love Field in Dallas, completed the bridge program and interned with American Eagle. She recalls that although it was intimidating sitting with captains and first officers, those same pilots were surprised at how well prepared the OU students were. Presently, 100 percent of students who have gone through the bridge program and met American Eagle Airlines minimum requirements for the number of flight hours have been hired.

Scholarship opportunities have been increased and an external advisory board of 20 aviation industry executives formed. The University of Oklahoma College of Continuing Education Aviation Advisory Board provides advice, support and advocacy for the leaders of the aviation program to improve the stature of the program, not only on a local but also a national level.

Tom Clark, a member of the board, spearheaded efforts to replace the department's fleet of instructional airplanes. Also an OU Regent, Clark lent his expertise as owner of Tulsair Beechcraft in selecting New Piper Aircraft of Vero Beach, Florida, as the company to furnish the department's 13 new planes. The new training planes were constructed in Florida and flown to Norman during the winter and spring.

Two of the single-engine planes are equipped with so-called "glass cockpits," which illustrate gauges, flight instruments and engine elements on two large television-like screens. These cockpit configurations are essential in educating today's pilots, according to Schaumburg. "The industry requires new pilots with GPS and glass cockpit training," he says. "It's important for us to provide this technology to our students."

The July 2005 accreditation of the bachelor's degree programs in aviation

management and professional pilot from the Council on Aviation Accreditation required the satisfaction of a wide range of quality standards relating to strategic management of resources, interactions of



Scott Cory, a senior in aviation, consults with Reneé Mitchell about graduation requirements in aviation management. Cory, a licensed pilot, is one of a growing number of OU students who will be seeking non-flying aviation careers after graduation.

faculty and students in the education process, and achievement of learning goals in degree programs.

"Major airlines are looking for accreditation as a symbol of quality," Schaumburg says. "This distinction says that when you get a degree from an CAAaccredited program, it meets and exceeds industry standards."

The department has offered degrees with concentrations in professional pilot and aviation management for some time. However, a nonflying aviation management concentration has been added to its degree options for those students who want to be part of the aviation industry, just not at the helm of an airplane. For every pilot in the cockpit, there are five jobs on the ground to keep him or her there—everything from flight dispatcher to safety inspector to aviation lawyer.

With all these changes implemented by department staff, students were motivated to make their own mark on the program. They reinvigorated the Sooner Aviation Club and reactivated the Beta Chi Chapter of the international aviation fraternity, Alpha Eta Rho. This chapter is the oldest in the country.

Mitchell is quick to point out that all aviation programs excel at something. So, what sets the OU aviation department apart?

"I think we are extremely studentoriented," she says. "We have one of the safest programs in the country, offer a number of internships, are now accredited, have a new fleet of airplanes, and our students earn a solid degree from a nationally recognized institution."

Although he has his private pilot's license, Oklahoma City senior Scott Cory switched to nonflying aviation management and has a temporary job with the Federal Aviation Administration. "Being in this program has been great, and I can't imagine doing anything else," he says. "The people running aviation are great, and they are doing a lot to improve it, like adding the minor in air traffic control, not to mention getting a degree from an accredited program gives us that much more clout."

Norman-based freelance writer Susan Grossman is a public relations specialist for University of Oklahoma Outreach.

Sooner Flight Academy

Throughout the Oklahoma summer, engines roar and the dust blows at Max Westheimer Airport with the coming and going of planes ferrying aviation students on test flights. But certain days are even busier than usual. Dozens of children ages 4 to 18 are on hand for week-long Sooner Flight Academy summer camps. "Amelia Earhart" hangs out with "Wylie Post" as students experience science, math, engineering and technology while participating in aviation activities. Using everything from bubbles to boomerangs, they learn the principles of flight, aerodynamics, aerial navigation, Newton's Laws, aircraft instrumentation, Bernoulli's Principle (movement of fluid), materials science, general math and the history of flight. And get this: it's fun.

"What we do is so unique and different," says Pam Kennedy, now in her sixth year as Sooner Flight Academy director. "Everything we do is experiential because learning should be fun, not a chore. We try to put things in perspective. So, that's why we have people dress like famous aviators, for example, as the kids learn about aviation history."

Campers can be found measuring wind speed, charting a flight path, using global positioning systems, understanding weather phenomena, practicing survival skills, building rockets and performing pre-flight checks, to name just a few of the camp's activities. Camp sessions culminate with some kind of flight: 8-12-year-olds get airplane rides; kids 13 and up get logshla rime with a flight instructor, campers area 4.7 fly flight simulators.

"We have four goals for our camps," Kennedy says, who is herself a pilot, skydiver and engineer. "We want our students to feel involved, learn safely, and enjoy a lot of hands-on experiments, all with minimal idle time."

Byron Briggs of Norman is an OU junior, working on a

double major in economics and aviation management. He traces his academic path, in part, to his time as a Sooner Flight Academy camper at age 13. "I've been interested in flying since I was 10, and my experience at Sooner Flight really increased that," he says.

But camps are not limited to kids. Sooner Flight also hosts camps for adults and seniors through Elderlearn, part of OU Outreach Senior Adult Services. Kennedy recalls one adult student, a veteran pilot of WWII, who long had been grounded due to health problems. "The opportunity to fly again with a flight instructor in the right seat almost moved him to tears. He never lost his love for flying, and it meant a great deal to him to get to fly an airplane again," she says. "It was incredibly rewarding."

Nor are camps limited to summer. Kennedy and her staff travel the state during the school year offering teachers and students the same hands-on, fun learning style for science and math through a variety of custom-designed programs. Last year, Sooner Flight served 2,500 students across the state.

One outreach program called "Ticket to Tomorrow" is sponsored by organizations such as the Oklahoma Aeronautics Commission and ConocoPhillips of Houston with additional sponsors always welcome.

Kennedy says the program also tailors curriculum for gifted and talented children, those with learning disabilities and has established a mentoring program for inner city youth "Everyone looks up when a plane goes over," she says. "Aviation is such an attention grabber. We use this curriculum to get kids excited about aviation.

"Other universities have flight programs, but I don't know of any that supports lifelong learning like we do. We start with four-year-olds and teach big kids, teachers and seniors too."