

May 2003

# Historic Curtiss-Wright Hangar to be Reconstructed at Wiley Post Airport

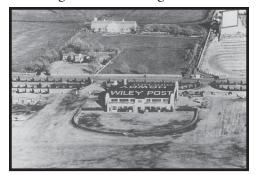


### by Bob Kemper

homa is aware of Wiley Post another in court for the rights Airport (PWA) in Bethany. to manufacture airplanes. Active and vibrant, Wiley Post is one of the two busiest general aviation airports in the state. However, perhaps some challenges seemed unlikely to people are not aware that in the succeed, so in the mid-1920s, days of yore, there was another the two companies merged to Wiley Post Airport, yet it went become Curtiss-Wright. by another name early in its history

Sometime next year, pending funding, a historic hangar located at the original Wiley Post Airpark will be reconstructed at the current Wiley Post Airport and will serve as the headquarters for the Aerospace America International Airshow.

after their first flight in 1903, was then far-northwest Oklathe Wright brothers began to homa City—the corner of May



The original Wiley Post Airpark. Note the drive-in movie at the upper right.

have stiff competition from Glenn Curtiss. Through the Most everyone in Okla- early 1920s, they battled one However, by then each company had gained a firm foothold in the market. Further court

> Once the dust settled, the new company established a business plan that called for promoting aviation and their products all across the U.S. They began looking for active, growing cities with an interest in aviation. Oklahoma City was just such a place.

In 1927, Curtiss-Wright Here is the story. Very soon struck a deal to buy land in what

Avenue and Britton Road. There they established an airport, Curtiss-Wright Field and erected a large hangar with an art deco exterior, dedicating it in 1928. They staffed the new facility with mechanics and

about advertising.

At about the same time, Oklahoma City's municipal airport, located at SW 29th and May Avenue, was a going concern. However, companies and pilots complained about high rental rates for hangars and land, so some of them moved to Curtiss-Wright Field. One such pilot was Wiley Post, who had gotten permission to fly the Winnie Mae around the world and was making preparations This is the third of twelve Each 13"x16" print is signed for the flight. He installed the in our series of historic aviation by the artist. Single prints are Sperry autopilot there, flew test flights, and made other modifications

Post's presence at Curtiss-Wright Field attracted other aviation celebrities-Amelia Earhart, Charles Lindberg, Billy Mitchell—practically every aviation luminary in the country would visit, talking about the round the world flight and how they thought it should be done.

Meanwhile, in 1928, Paul R. Braniff began regular air passenger service between Oklahoma City and Tulsa, operating a Stinson Detroiter from Curtiss-Wright Field. By 1930, Braniff Airways had been flight instructors, formed and had acquired a 6equipped it with air- passenger enclosed-cabin

Vegas. By the early 30s, Braniff had acquired other larger and faster aircraft and had expanded their routes. They outgrew Curtiss-Wright Field, but continued to make Oklahoma City their corporate home until 1945

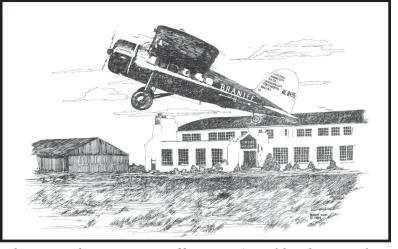
motor, started an aircraft manufacturing company at Curtiss-Wright Field. Seeing the benefit of having a world-renowned pilot employed, Keeden hired Wiley Post as the president of the company. As such, Post's main duty was to fly each of the

In 1934, Mark Kleeden, a continued on p. 5. German-born oilman and pro-

### **Historic Oklahoma Aviation Art**

art prints, created in the mid-1980s by Joe Cunningham and noted Tulsa artist Monte Toon, Add \$6 S&H for each order. depicting significant events in Make checks payable to The Oklahoma aviation history.

\$20 each. Any six prints are \$90 or the full set of twelve is \$170. Oklahoma Aviator.



This scene depicts a Braniff Airways' Lockheed Vega taking planes for sale, and set Travelair and two Lockheed off from Curtiss-Wright Field in the 1930's.

## The Horizontal Windsock

### by Mike Huffman



### Oklahoma Aviator of the Year Awards

One of Joe Cunningham and Mary Kelly's best-received activities was the annual "Oklahoma Aviator of the Year" award. Our records, though perhaps incomplete, show the first such award was made in 1984, with the deserving recipient being Charles W. Harris from Tulsa--pilot, owner of several airplanes (he won't say how many), organizer of the National Biplane Association and the Tulsa Regional Fly-In, and longtime supporter of general aviation.

From then through 1998, the year before he died, Joe made the annual award. In a few of those years, two aviators were honored.

At some point, it apparently became a tradition that the award be made on December 17 of each year--the anniversary of the Wright brothers first flight.

Joe died in May, 1999 and an award was not made that year. Since we took over publication of the paper in 2000, things have been a little too hectic for all over the state to nominate aviators use to consider re-instituting the award.

However, what better time could there be than this Centennial of Flight year to start doing so again?

Now, to be honest, the idea of Barbara and I simply choosing a single person to receive the award, above all others on the Oklahoma aviation scene, is a little frightening.

Oklahoma Aviator to represent the whole state and this award is no different. We feel the award should be based on notable achievement and we may not be aware of aviation folks and their achievements from all over the state.

And, even if we were, it is very humbling to think the two of us acting alone could make the proper choice.

After all, there could be so many different crieria for such an award. Some that come to mind include notable achievements:

- As a pilot or mechanic
- As an airplane builder
- In promotion of aviation
- As a aerospace educator
- In legislation benefitting aviation • In aviation volunteerism

• In aviation manufacturing

In humanitarian endeavors involv-

ing aviation. The list could be endless. So, here

is what we have decided: First, rather than recognizing just one Oklahoma Aviator of the Year, we

will make more than one award. The number of awards and the categories will not be fixed, but may vary from year to year, based on the accomplishments of Oklahoma aviators during that year.

our readers in nominating people to receive the awards.

Third, we will establish a fairly small committee of advisors to help us select the recipients of the awards. From those selected for a given year, the committee will also help us select the overall Oklahoma Aviator of the Year

Fourth, we will continue Joe's tradition of making awards on December 17 (with this years Centennial celebrations still in the planning process, the place and time are still TBD). To allow that to happen smoothly, we will accept award nominations from now until October 1. We will make the selections and notify the recipients by November 1.

To be selected, the nominee will be a living person currently residing in Oklahoma whose notable accomplishments have occurred in the last few years and are preferably still occurring.

So, I am encouraging readers from to receive the award. Write us a letter or send us an email telling us who your nominee is and why you think he or she should receive an award. Give us at least a half-page of background so our committee can make a fair judgment. Use our list of categories or come up with your own!

Then, stay tuned to see who the In everything we do, we want *The* 2003 Centennial of Flight "Oklahoma Aviators of the Year" will be!

Name

Bus. Name

City/State/ZIP

Telephone

Email

Address

### by Barbara Huffman



### Second, we will enlist the help of **Aviation Activity in** Oklahoma

Seems as if each month The Higher Plane begins with something like, "This has been a great month in aviation!" Well, this month really has been! There are many items of interest to report, some of which you will read about in this extended issue of the newspaper. I'd like to mention just a few.

Our Wild Eggs and Onions breakfast fly-in here at Tenkiller was a great ness are thriving. And aviation educasuccess. Michael and I helped experts Jim Harrod and Max Watkins park almost 70 airplanes, and we fed breakfast to over 110 folks. A woman who an auction to fly for a day in a beautiful, just-restored, highly-modified tires – and Tenkiller was one of their stops. Our guests even brought some-Guttman's German CT and Paul tion history. It's just too much fun! Jennings' Polish Wilga. A good time was had by all!

The Higher Plane

Michael and I attended the OAOA conference at Lake Texoma, where we met with lots of friends, old and new. The conference was informative and well-planned, though the attendance was somewhat disappointing. The Oklahoma Aviator has committed to encourage OAOA membership, for there are many benefits to active participation.

I am so proud of Michael's selection by the EAA to fly our state flag to Kitty Hawk, as part of their "Fifty Flags to Kitty Hawk" program. You'll read more about it elsewhere in this issue and in future issues.

This state is just kicking with Centennial of Flight activities. Airshow, flyin, and flight parade groups are bustling with planning activities. Our aviation museums are making creative strides forward. Despite airline difficulties and a less than encouraging economy, many of our aviation busition activities have never been stronger in Oklahoma with Young Eagles programs, summer camps for children, aerospace education growing in our had never flown in an airplane won schools, and programs to groom young people for careers in aerospace.

We are on The Higher Plane here Piper PA-12, complete with tundra in Oklahoma, with great organizations, good state-wide support, legislators who are watching out after our interthing of an international flavor to the ests, and individuals pushing ahead to fly-in; the airplanes included Tom continue our record of exciting avia-

send us an email telling us who your minee is and why you think he or should receive an award. Give us least a half-page of background so r committee can make a fair judg- nt. Use our list of categories or come with your own! Then, stay tuned to see who the 03 Centennial of Flight "Oklahoma	For those of you who are following my flight training progress, here's a news bulletin. Dr. Guy Baldwin gave me my flight physical and the result- ing Student Pilot's License. Yeah! Now I am one step further along. My ac- tual tutelage will begin under the ca- pable instruction of CFI John Sevieri, a friend and neighbor here at Tenkiller, just as soon as Michael has our little Colt ready for service, which should	THE OKLAHOMA AVIATOR Published monthly at 32432 S. Skyline Drive Cookson, OK 74427 918-457-3330 <i>Founders</i> Joe Cunningham and Mary Kelly	
SUBSCRIPTION FORM f you would like The Oklahoma Aviator delivered to your mailbox, complete this form and mail it with your \$20.00 check to: The Oklahoma Aviator 32432 S. Skyline Drive, Cookson, OK 74427 me is. Name dress gy/State/ZIP		<i>Editors/Publishers</i> Michael and Barbara Huffman <i>Advertising Sales</i> Michael Huffman The Oklahoma Aviator is published monthly. All rights reserved. Sub- scription price of \$20.00 per year may be sent along with other re- mittances and correspondence to: The Oklahoma Aviator 32432 S. Skyline Drive Cookson, OK 74427 email: OklahomaAviator@earthlink.net	

### not be too long now.

### **Up With Downs**

by Earl Downs



### Thar She Blows!

The Wright Brothers made their first powered flight into a 26 MPH wind. That's a pretty strong wind and I know of a lot of modern planes that must be handled very carefully in such a blow. Didn't Orville and Wilber understand the dangers of high winds, particularly in a first flight situation? Of course they did, and they also knew that a strong wind can help as well as hurt. They wanted the strong winds because it reduced their ground speed so a crash would be more survivable. They aimed their craft directly into the wind (no cross wind allowed) and never intended to make any turns. One hundred and twenty feet later, history had been made.

They dragged their machine back to the starting place and made three more flights on that historic day. The strong headwind provided a ground speed so slow that the lifeguard helpers were almost able to keep up with the machine by running along the flight path. After the fourth flight, the wind that had been adding safety turned against them. As the men approached the delicate craft it suddenly lifted and started sliding sideways. A wing dug into the sand and they watched helplessly as the "Flyer" tumbled onto its back. Damaged beyond simple repair, the Wrights returned to their shop in Dayton and restored their masterpiece to a flyable condition. As it turned out, the 1903 Flyer never flew again, but that's another story.

Speaking of winds, spring presents a time of constant weather change and I once heard a rumor that the wind occasionally blows a bit in Oklahoma. I thought this might be a good time to talk a little about our windy weather flying. The wind has been our friend and our foe from the earliest days of aviation. Let's review some basic considerations about flying on windy days.

Most of this discussion will relate to how wind can affect us on takeoff and landings, but winds at altitude are also important. After all, a strong headwind can reduce your ground speed enough to greatly increase your time enroute and fuel burn. Pre-flight planning should always include how the wind effects the amount of fuel needed to complete the flight. The accident records are full of accounts of

pilots who ran out of fuel within sight of | by Dr. Guy Baldwin, AME their destination airport. Even worse, many of these pilots overflew perfectly good fuel stops in hopes that they could reach their destination. "Hope" has no place in aeronautical decision-making (ADM).

For takeoff and landing it is important to have as much wind information as possible. The windsock, tetrahedron, or even the waving "stars and stripes" are good indicators for wind direction at non-towered airports. If ASOS/AWOS is available, use it. We don't have an automatic weather reporting system at Cushing airport, so I keep the phone numbers for Stillwater and Chandler ASOS/AWOS in my cell phone directory. When I approach a non-towered airport, I use information form a nearby ASÔS/AWOS or ATIS if I can't get good information from my destination airport. Unicom can also be helpful, but remember, it is not official and it is common to not get an answer to your call. Blowing smoke or dust can be good indicators when landing because the wind at pattern altitude can be quite different from what is occurring on the ground. Good ADM means you should always use all available information.

How much wind is too much wind varies with pilot experience and with the type of airplane you are flying. My rule-ofthumb is that if the wind speed exceeds half your stall speed, start paying attention. A low center of gravity airplane such as a Piper Cherokee may be safe, while a Cessna 152 may get you in trouble. Taildraggers are particularly vulnerable to high winds because they taxi with a higher angle of attack than tricyle gear airplanes. If I taxi my Aeronca Champ in a 15-knot wind, it will fly with a ground speed of only 20 MPH!

Depending on the date your plane was manufactured, it may or may not list a maximum demonstrated crosswind. This is simply the speed of the wind at a 90degree angle that the manufacturer demonstrated for certification purposes. It is based on the performance of a skilled test pilot. Your own skill in handling crosswinds should be taken into consideration when dealing with strong surface winds. It is important to check actual and forecast surface winds before you fly and compare them with the runways you intend to use. Crosswind accidents are seldom caused by sudden and un-forecast changes in the wind. However, thunderstorms can cause violent wind changes and if the storm is approaching to within 20 miles of your field, keep your bird in the hangar.

The approach speed to use in strong winds should be about the same as usual unless the wind is gusty. If the wind is gusty, a good rule to follow is to increase your approach airspeed by half the gust value. For example, if the wind is 15 knots gusting to 25 knots, increase your normal approach airspeed by 5 knots. Because your groundspeed is low when landing

## Ask the Doctor



### Your Medical is Out

A question that comes up regularly in Warbirds conference I attended in Phoenix, AZ: "When does your medical truly expire?" In that instance, the question concerned an airman who had a valid medical certificate but, sometime prior to its expiration date, had visited an Aviation Medical Examiner, only to find he also had a medical problem that required further tests. The questioner asked if the airman could continue to fly until the expiration date of his current medical certificate. There was some confusion in the meeting as to the correct answer. I thought I knew the an-

into a strong headwind, it is common for ing in a strong, steady wind is not hard to pilots to add airspeed to make the approach 'look" right. Be careful— a high approach airspeed can lead to floating in the flare, nose low landings, and directional control problems after landing.

Remember, your small airplane is <u>al-</u> ways trying to fly unless it is in the hangar or tied down. When you are taxiing you rience do make a difference. should apply the controls to compensate for the effect wind could have on you. Fly-

swer, which was later confirmed by Dr. Warren Silberman, Chief of the FAA Aeromedical Branch in Oklahoma City.

Under normal circumstances, a medical certificate is valid until midnight of the last day of the expiration month. For example, if your medical is due in April, it is valid until April 30th at midnight. However, if you visit an Aviation Medical Examiner on April 15th and, as a result of that examination, your medical is put on hold, you really do not have a medical at that point.

The reason is that, once the new medical examination is started, the current medical is technically null and void, even though you still have it in your possession. I have my office was also asked during a recent not seen the FAA take action against an aviator who has continued to fly after that point, but it certainly could happen, especially if an incident occurs during that period. Also, if you were involved in an accident, your insurance may, in fact, be null and void as well.

> If you have any questions regarding when your medical really expires, talk to your Aviation Medical Examiner, the Aeromedical Board, or to one of the support groups such as Pilot Medical Solutions, the AOPA, or the EAA. Of course, you are always welcome to contact my office.

> do, but taxiing in such a wind can sometimes present a real challenge.

> If in doubt about your windy weather skills, get some dual instruction. Most wind related accidents are caused by a lack of good ADM and/or deficient piloting skills. Training, practice, and recent expe-

> Comments or questions? earldowns@hotmail.com



## Flight Destinations: Return to Shangri-La

### by J. Thomas Pento, PhD

Once you have experienced the tranquil beauty of Shangri-La, you will want to return again and again. Of course, we all know Shangri-La as the fictional utopia from the movie classic, "Lost Horizon," which was based on the 1933 novel by James Hilton. In the movie, this idyllic refuge was isolated in a lost valley high in the Tibetan Mountains. However, Shangri-La also exists in northeastern Oklahoma as a luxury island resort in the middle of beautiful Grand Lake-of-the-Cherokees. Best of all, it has an airport with a hard-surface runway. In the spring of 1999, Maureen and I spent a wonderful weekend at the Shangri-La courtesy van. The re-Shangri-La and were eager to return.

made, we took off for Shangri-La from courts, swimming pools, racquetball, our home airport in central Oklahoma basketball, volleyball, bowling, video in our Cherokee 180, affectionately arcade, and scenic jogging and horseknown as Juliet. It was solid overcast back riding trails along the lake. The with a ceiling of 2000 feet and a flight Body Shop Spa is a complete fitness service forecast of improving weather center, and offers facials, massage realong the route and at our destination. Starting out VFR below the low clouds, we were pleased to find rising ceilings parasailing rentals. Fishing guides are and patches of blue sky appear as we available and this lake is home to some neared Tulsa. Shortly after passing Tulsa monster largemouth bass. In addition, International, we were flying directly Shangri-La has two 18-hole golf

over the large Grand Lake Dam and courses. Each golf cart contains a GPS and the surrounding countryside. Upon descending into the traffic pattern for receiver with a specific golf course da-Grand Lake Regional Airport on Monkey Island, the home of Shangri-La.

Grand Lake Regional (309), owned and managed by Paul Stanton, is located in the middle of Monkey Island and adjacent to the Shangri-La Resort. The airport is non-towered and CTAF is 122.7, which also controls the VASI lights. A GPS approach is planned, but is not currently available at this airport. The airport terminal building is an interesting combination of short order restaurant, deli, convenience store, and real estate office.

After arrival, a phone call brought sort complex contains many recre-With reservations for a return visit ational facilities that include tennis flexology, and European body wraps. The marina has boat, jet ski, and



Grand Lake Regional Airport sits like a jewel in the middle of Monkey Island.

Davis Field Aviation, LLC Davis Field Muskogee, OK (MKO) air bp 918-682-4101 Full Service FBO+FAA Certified Repair Station Hangar Rental + Aircraft Sales + Rental Flight Instruction Winter Hours M-S 7:30-5:30 Sun 8:00-5:00 Unicom 122.8 ASOS 135.02

Annual Inspections-Pitot Static System Check Transponder Certification Major Repairs Avionics Installation and Repairs

tabase. The GPS moving map displays the layout of each hole and the pin distance from any point on the fairway. It will even suggest proper club selection and keep track of your score.



Shangri-La's nicely landscaped front door.

For dinner that evening we chose the casual but elegant Greenery Restaurant in the main lodge. The restaumagnificent view, with solid glass walls lake and rolling greens of the golf course below. Each gastronomic delight at the Greenery has a golf-derived name. After eating our way around the golf course— to take in some pure Oklahoma air and burn off some calories!!

At breakfast the following morning, we considered our many options for the day. It was going to be a beautiful bluesky Oklahoma day. Maureen decided to have a relaxing massage and facial at the "Tahitian Health Spa. I went to the practice range, borrowed some clubs, and shagged some little white balls. Then we both hit the pool and had lunch at the health spa grill. Later that afternoon, we went down to "The Waterfront" marina and rented a jet boat. After receiving some instructions and being fitted with life vests, we skimmed over Grand Lake at 50-60 MPH, which seemed to be incredible speed on the water. A ride on the lake provides ex-

our return to the marina, it was time for happy hour and a juicy burger and fries at the Marina Bar and Grill.

Next morning, following a wonderful buffet breakfast at the Greens, we returned to the airport. My preflight revealed that Juliet was more than ready to get back into the sky. After take off on runway 17, we circled Monkey Island to get a better view of Shangri-La and the surrounding scenery. As usual, the view was even more breathtaking from the air. Banking over the blue-green water of Grand Lake, I turned onto our southwest course for home. The thunderstorms described in my preflight briefing could be clearly observed off in the distance to the south, but our flight was smooth and clear with a washed gray sky turning to clear blue off to the northrant sits atop the clubhouse and has a west. Shangri-La is like a pleasant dream, and on this occasion the from floor to ceiling overlooking the dream became reality. We plan to come back again!

[The author is a commercial pilot with an instrument rating and 600 hours of flying experience. He is a professor golf course, we felt a need to walk the of pharmacology at the University of Oklahoma. As a free-lance writer, he publishes aviation travel articles on flight destinations in the Southwest United States. To obtain more information on Shangri-La and other flight destinations, visit the author's web site at: http:// moon.ouhsc.edu/jpento/]



ceptional views of the resort, golf courses Maureen tries her hand at the jet boat.



## Curtiss-Wright Hangar.

### continued from p. 1.

to the Oklahoma City Municipal Airport and back. The only model produced by the company was known as the Wiley Post Biplane and was powered by a Ford Model A engine. [The Omniplex Air and Space Museum has a City aviators (which included Ray Wiley Post Biplane on display- that is Jacoby, Paul Braniff's mechanic) heard another interesting story- Ed]

After Wiley Post and Will Rogers were killed in 1935, Curtiss-Wright Field was renamed Wiley Post Airpark. In 1937, a local man named John Burke bought the airport and established a flight school. With World War II heating up, Burke established a U.S. Government-chartered Civilian Pilot Training (CPT) school, using Wacos, J-3 Cubs, and whatever other airplanes were available around the airport. By the late 40s, lots of airplanes were based there — including the latest, hottest post-war models— Bonanzas, Republic Seabees, Beech Staggerwings.

However, by the early 50s, the city was growing up around the airport and, true to form, residents complained about airport operations. So, in 1955 Burke closed the airport and turned a portion of it into a shopping center. The Wiley Post name was transferred to what was then Tulakes Airport at NW 50th and Rockwell.

new planes from Curtiss-Wright Airport was developed as residential property and a church appeared on one plot of land. Still later, Jackie Cooper bought a parcel of land containing the old hangar and opened an auto dealership there.

In 1992, a group of Oklahoma



Early Braniff employees and students gather outside the Curtiss-Wright hangar. Paul Braniff is seen with captains hat near the center of the photo.

that Cooper was planning to tear down the old hangar, so they approached him, explained its historic value, and eventually convinced him to disassemble the hangar rather than simply demolish it (at an extra cost of over \$50,000).

At the time, Oklahoma City University (OCU) was developing an aero-

sembled hangar was made available, with the intention that it would be reconstructed and used to house a portion of their program. Dr. Freda Deskin received the building for OCU. Later, she left OCU to found the Aviation and Space Technical Education Center (ÅSTEC) Charter School. ASTEC beplanning to reconstruct it at one of their the three airshow days each year. facilities.

America was made aware that Curtiss-Wright Corporation might be willing to provide partial funding for reconstructing the hangar. Long story short, ASTEC Charter School, Aerospace America, the Oklahoma Airport Trust, and many volunteers, Aerospace America will be the recipient of the historic legacy of the Curtiss-Wright hangar.

west side of Wiley Post Airport and the facility will also include a grass runway and taxiway with access to the rest of the airport.

Besides being the headquarters for Aerospace America and being used by ASTEC for activities and special functions, the plan is for the hangar to support general aviation and provide a gen-

Later, a portion of the old airport space education program and the disas- eral aviation convention center. The hangar will include office space, a conference room, workshops for restoring aircraft, a 1930s-style short order grill restaurant, and perhaps a nationallyknown pilot supplies store.

Through making the Curtiss-Wright hangar its home, Aerospace America plans to expand public access came the recipient of the hangar and was and knowledge of its activities beyond

During Aerospace America 2003, In the fall of 2002, Aerospace the hangar site will be dedicated to the Centennial of Flight. Funds will be raised from corporate and private contributions; in addition, commemorative bricks with donor-selected names through a cooperative effort involving or messages are being sold, by which donors can permanently and personally commemorate the Centennial of Flight.

Says Don Dennis, Chairman of Aerospace America, "We hope aviators from all over the state will take advan-The hangar will be rebuilt on the tage of this opportunity. The reconstruction of the Curtiss-Wright hangar is not just for Oklahoma City or Aerospace America-it is a part of Oklahoma's wonderful aviation heritage and something we can all feel a part of."

[Ed.- For additional fascinating Braniff Airways history, visit www.braniffpages.com.]



The Oklahoma Aviator, May 2003, Page 5

## Aircraft Specialties Services Introduces New Oil Additive

subject bound to raise controversy. Oil additives for automobiles and, later, airplanes have been around forever-from the STP, Marvel Mystery Oil, Motor Honey, and countless others in the 1950s; to the Slick 50 and other Teflon additives introduced in the 1970s; to today's late-night TV infomercials and the displays in auto parts stores where customers can turn a crank to see how an additive coats a set of plastic gears "better" than straight oil.

Users either love or hate oil additives, often standing toe-to-toe arguing for their favorite, citing miraculous healing of engine problems or horror stories of premature engine failure, leaking, or other problems.

Lately, the Federal Trade Commission has stepped into the fray, citing oil additive manufacturers for unsubstantiated performance claims, levying fines, and sometimes causing products to be removed from the market.

So, why would Aircraft Specialties Services, a highly reputable Tulsa aircraft engine parts refurbishment company, want to introduce a new oil additive for aircraft engines? Greg Merrell, the company founder, explains it this way.

Over the past 25 years, we have inspected and repaired literally thousands of aircraft engine parts each year— cams, lifters, cranks, gears— so we get a chance to observe failure modes. For instance, Lycoming engines have always been prone to cam and lifter failure due to pitting of the contact surfaces.

Of course, we had a selfish desire to figure out why such parts fail in service, because we occasionally had to warranty parts we had reground. However, we've also seen a lot of new parts fail. In fact, regrinds often do better than new parts.

"Over the years, we came to realize that a common denominator was corrosion. Any internal combustion engine is a big corrosion factory and aircraft engines are no exception. When fuel burns in the cylinders, water, carbon particles, carbon monoxide, and other nasty chemicals are produced. Even with new engines, those materials, along with unburned and partially burned fuel, "blow by" the piston rings and wind up in the crankcase. There, aided by elevated oil temperatures, they form various types of acid and other harmful compounds. The mixture gets pumped around to all the engine parts. The acids and other reactive compounds also begin attacking the oil itself, creating additional chemically-reactive materials that can pretty quickly degrade the oil.

With aircraft engines, the situation is worse because airplanes are not flown frequently. The corrosive materials sit around in the engine for long periods of time and get a chance to do more damage. Although engine oil has some ability to absorb and neutralize corrosion-caus-

Engine oil additives. Now, there is a ing materials, engines with even normal blow-by exceed that capacity in as little as 25 hours of operation.

> We explored a lot of different avenues to improve the situation. At one point, we got FAA approval for a thin-film tungsten disulfide coating for cams, lifters, and other internal steel engine parts. It was moderately successful, but was expensive.

> "I was friends with a petrochemist, Edward Kollin, who is also a pilot and owner of a Cessna 210. Ed was formerly with Exxon Research for many years, set-

tomobile oils contain the following ingre-

• Base stocks- the basic oil itself. In single-

viscosity oil (such as SAE 10, 30, 40,

etc), natural mineral oils of varying vis-

cosity are blended. Some multi-viscos-

ity oils (such 15W-50) use a blend of

mineral base stocks with synthetic stocks

such as poly alpha olefins (PAO). Some

exotic oils use all synthetic base stocks.

Dispersants- chemically-reactive mate-

rials that "surround" partially-oxidized

fuel and oil components, keeping them

in suspension in the oil. Without dis-

persants, these materials tend to either

produce deposits on pistons or valve

guides or, in combination with water,

Detergents- surface-active materials that

its and the corrosive action of acids.

ing reactive and corrosive.

lead to corrosion.

another.



dients:

ting up and running the engine research laboratory for their Advanced Fuels and Lubricants Group. He was of the opinion possible to formulate an oil additive package to greatly improve the situation. So, we teamed up and began developing what has become known as ASL CamGuard<sup>TM</sup>." According to Ed Kollin, modern autiny balls of twine suspended in the oil. As the oil warms up the "twine" unravother balls, thus making the oil thicker than it would be without them.

- Anti-foam agents- materials that break up bubbles and keep the oil from becoming foamy. Oil foam does not lubricate well nor carry heat away.
- Seal swell agents- used to cause rubber engine seals to swell slightly to improve their sealing ability.
- Corrosion protective materials for copper, tin, and lead metal parts such as bearings.
- separated out of the oil.
- Friction modifiers that reduce friction and improve fuel economy.

For various reasons, oil companies are that it should be not willing to design, test, and certify new aircraft oil formulations, says Kollin. the same time, improve anti-wear prop-Thus, "modern" aircraft oils employ 1960s technology. For instance, singleviscosity ashless dispersant aircraft oils include dispersant (about half the percentage of automobile oil), anti-oxidant (again, a lower percentage), and an antiwear agent. However, according to Kollin, a specific anti-wear agent used, tricresyl phosphate, is not nearly effective as ZDDP. In addition, some of the multi-viscosity aircraft oils use PAO in their base formulation; PAO has a wellknown seal-hardening tendency, which is compensated for by using more seal swell agent.

So, oil additives are marketed to improve the performance of the oil. However, according to Kollin, most of them consist of oil with one or two other ingredients, formulated to pass a specific test without regard to their effects on other operating characteristics.

By contrast, Kollin says ASL CamGuard contains 11 different components. All the components are active, most of them are multifunctional (meaning they address more than one problem), and some of them are synergistic (meaning they work better in combination than they do sepa-

that, at low temperatures, are like little rately). For instance, 3 of them are ferrous metal corrosion inhibitors, 5 are nonferrous metal corrosion inhibitors, 8 have els and "tangles" with the twine from anti-wear properties, 3 are effective antioxidants, 4 help prevent engine deposits, 5 help clean up existing deposits, and 3 are effective seal conditioners.

> Now, after four years of development and extensive testing, ASL CamGuard is being offered for use in uncertified aircraft (certified airplanes will come later). To offset the negative reputation of oil additives, Aircraft Specialties Services is making all test methods and data available for scrutiny and comment.

"There is no substitute for regular oil Demulsifiers- materials that keep water changes— we have for a long time recommended 25 hours or 3 months, whichever comes first. But, even that is not enough to prevent corrosion. We believe we have a formulation that will truly improve corrosion greatly and, at erties, decrease deposits, and condition engine seals," says Merrell. "We think our product will be useful not only in airplanes, but in any infrequently-used engine with any motor oil, including boats, motorcycles, antique automobiles, emergency generators, and others we have not thought of."

For more information, contact Aircraft Specialties Services at 918-836-6872. or visit www.aslcamguard.com.



A Continental lifter face, pitted after only 196 hours in 4 years. The oil was changed every 25 hours in this engine.



## OAC News: Grants for Aerospace Education & Tulsa Airports



#### OAC AWARDS GRANTS TO PRO-MOTE AVIATION EDUCATION

At its February meeting, the Oklahoma Aeronautics Commission (OAC) awarded two aviation education grants totaling \$55,000 and, at its April meeting, two more grants totaling more than \$30,000.

A \$13,000 grant was awarded to Southwestern Oklahoma State University (SWOSU) for the annual Small Aircraft Transportation System (SATS) Expo to be held in Weatherford, May 2-3. The SATS concept is to promote the development and use of affordable high-tech general aviation aircraft to form a new national air transportation system—ultimately resulting in something akin to the Jetson's flying car. This grant will provide a unique educational opportunity for Oklahoma's general public, general aviation industry, airport man- program. The program will focus on chil-

agers, pilots, and university and public dren in grades 6-8 teaching hands-on aeroschool students to learn of technological advances in SATS and the aircraft industry.

Last year over 2,000 participants attended the SATS Expo and over 400 students participated, this year we expect the number of students to double," said Dr. John Hays, SWOSU President.

The OU Sooner Flight Academy received a \$42,000 grant that will help fund their summer aviation camps. The grant will provide student tuition assistance, lesson supplies for children, advertisement in the form of enrollment brochures, and teacher training services for Oklahoma teachers. The OU Sooner Flight Academy is a proven program that increases students' ability in math and science while encouraging careers in aviation and promoting airports.

We have been able to serve thousands and thousands of children across the state with quality and unique aviation education programs, thanks to the support and funding over the past six years from the Oklahoma Aeronautics Commission," said Pam Kennedy, OU Sooner Flight Academy Director. See page 10 for more information about the Sooner Flight Academy program-Ed.]

STARBASE Oklahoma, Inc., a nonprofit organization devoted to educating children about aerospace, math and science, received a \$25,200 aviation education grant that will be used for their Constellations space curriculum, encouraging them to set FEDERAL FUNDS goals and explore aviation careers. The new curriculum emphasizes aviation, space exploration, robotics, and technology. As a 1998 FAA grant to the OAC. part of the program, 20 teachers will be trained to use the Constellations materials.

We expect to serve over 1,000 children this year with the Constellations program," said Bill Scott, Director of **ŠTARBASE.** He added that STARBASEtrained teachers are currently working in 22 different counties across Oklahoma and he is hoping to expand that this year with the new curriculum.

A \$4,923.90 aviation education grant was awarded to the Claremore Regional Airport to be used for their Young Eagles program, which was held on April 25 and 26. [See page 8 for a report on the event-Ed.]

"This is a unique opportunity for children to actually go up in an airplane, see what is like to fly, and get inspired to pursue aviation careers," said Sheri McKenzie, Manager of the Claremore airport.

We believe by helping fund these aviation education programs we are building a helped us to make this possible and send new generation of Oklahoma aviators," added Victor Bird, OAC Director.

'The Commission is glad to be able to assist with funding and help support aviation education programs in Oklahoma," said Commission Chairman, Bill Kendrick.

TULSA AIRPORTS RECEIVE

The City of Tulsa will be the beneficiary of \$273,000 in federal grant money left from

Both the OAC and the FAA agreed that the money should go to Tulsa for projects at Tulsa International Airport and Jones-Riverside Airport. Tulsa International will receive \$143,000 to help pay for the rehabilitation of 14 connecting taxiways and portions of a perimeter road, and for upgrading lighting on one of the primary runways.

Jones Riverside will receive \$130,000 to help pay for the installation of perimeter fencing, identification and direction signs, new runway lights, and the extension of a taxiway and airport access road.

"I am very pleased that this money is coming to Tulsa for these airport projects. Jones-Riverside is one of the most active general aviation airports in Oklahoma, with over 500 aircraft and 322,000 operations a year," said Brent Kitchens, Director of Airports.

'It is just tremendous that the FAA this money to Tulsa. We are glad Tulsa can use it on these projects to improve its airports," said Victor Bird, OAC Director.

'It is great when we can keep money here for our Oklahoma airports and not lose it to Washington," said Bill Kendrick, Aeronautics Commission Chairman.

### **OCASE: Coordinating Oklahoma's Aerospace Education Programs**

### by Barbara Huffman

developing coalition to coordinate all state groups dedicated to aviation and space education? It is called the Oklahoma Coalition of Aviation and Space Education (OCASE) and it has been in existence a little over a year.

*The Oklahoma Aviator* had a chance to talk with Cheryl Neal, award-winning Aerospace Educator at the Kirkpatrick Science and Air Space Museum at Omniplex in Oklahoma Ĉity and a current OCÂSE officer. Cheryl shared that the organizational tasks of electing officers, developing by-laws and the like are complete, and the real work is about to begin.

The main mission of OCASE is to develop a formal way to coordinate the many good programs already in the works. There is no need to reinvent the wheel by each aerospace-based education entity that develops aviation and space educational programming. It's already out there. We exist to coordinate programs that promote Oklahoma aviation and space education at all levels with existing organizations and to foster an environment for aerospace technologies literacy for the citizens of Oklahoma. We also exist to support commercial activities of Oklahoma aviation and space industries," explained Neal.

At the present time, members of Are you aware that Oklahoma has a OCASE include the Civil Air Patrol, NASA's Aerospace Education Services Program (AESP) at OSU, the Oklahoma Alliance for Geographic Education (OKAGE) at OU, the Oklahoma NASA Space Grant Consortium, the Kirkpatrick Science and Air Space Museum at Ômniplex, the Oklahoma Space Industry Development Authority (OSIDA) - a state agency, OU's Sooner Flight Academy, Sooners Touching the Future, STARBASE Oklahoma, the Tulsa Air and Space Museum, the Young Astronauts Program - and state branch of the national Young Astronauts program out of Washington, DC, and their newest member, The Oklahoma Aviator!

Neal said, "we are looking forward to having more aerospace education groups join OCASE to coordinate all of the great existing programs already out there for our Oklahoma citizens."

Melissa Sue Smith, OSIDA public relations officer and OCASE officer stated, "We want to encourage industry partnership in OCASE. As our educators are teaching the future aerospace industry leaders, it is important for them to be in dialog with the current industry leaders." For membership information, contact Melissa Sue at (405)602-3877 or msmith@okspaceport.state.ok.us.

### Oklahoma Aviator Spotlight: **Deanna Robertson of Robertson Aviation**



[We at The Oklahoma Aviator have long thought it would be interesting to spotlight notable people on the Oklahoma aviation scene. So, this month shuttle astronaut. We have been begins the first "Oklahoma Aviator present at three of her four launches." Spotlight." Look for more in later is- Comments: When asked if she sues- Ĕd.]

Aviation Experience: Deanna has held a Private Pilot rating since 1970, with commercial, instrument, and CFI since 1975. She also has her ATP, multiengine, commercial multi-engine, and is an A&P mechanic, maintaining her own fleet of 13-16 airplanes.

Favorite airplane: "The second plane I ever bought – a little yellow and white Cessna 150.'

Business history: Deanna has owned and managed Robertson Aviation, located at Jones Riverside Airport in Tulsa, since 1976. The business provides flight training, airplane rentals, aviation supplies, and pipeline patrol. Ten CFI's work for Deanna on an asneeded basis.

What excites you? "I run this business because I love to fly and help other people fly – and I know how I maintain these planes in a safe way."

Who do you most admire in aviation? "Jan Mauritson was one of my favorites. She checked me out in the Debonnaire."

Do you have a claim to fame? "Yes, my first cousin is Ellen Ochowa,

Comments: When asked if she were ever sorry she'd started Robertson Aviation, Deanna's enthusiastic answer was "Never!"

## News of the Oklahoma Cent

### ERS CHOSEN FOR KITTY HAWK **FLIGHT**

The Experimental Aircraft Association (EAA) announced recently that Michael and Barbara Huffman, publishers of The Oklahoma Aviator, have been chosen as the Oklahoma representatives for EAA's "50 Flags to Kitty Hawk" program, commemorating the 100th anniversary of the Wright brothers first powered flight.

Under the program, a selected EAAmember pilot from each state will fly a private airplane to the Wright Brothers National Memorial in Kitty Hawk, NC, carrying a flag from their home state and a proclamation from the state's governor declaring the day of their flight as "50 Flags to Kitty Hawk Day." On arrival at Kitty Hawk, each pilot will be welcomed in a National Park Service (NPS) ceremony. Following the ceremony, the flag brought by the pilot will

OKLAHOMA AVIATOR PUBLISH- state flags will be honored on the EAA's Huffman. Countdown to Kitty Hawk website (www.countdowntokittyhawk.org) and in Sport Aviation. At the end of the year, the fifty flags will be used as part of a permanent EAA/NPS exhibit at the National Memorial site.

> The Huffmans, active in Centennial of Flight activities in Oklahoma, want to use the opportunity to celebrate and publicize Oklahoma's rich aviation his-

"Oklahomans became involved in aviation a short time after the Wright brothers flight. Since then, aviation and aerospace activities have grown to the point of becoming the state's number one industry. Besides the business aspects, Oklahomans have a unique, longstanding love of flying. To celebrate that, we wanted to fly an airplane manufactured in Oklahoma, so we approached Luscombe Aircraft Company, manufacturers of the newly-type-certifibe flown throughout the day at the Na- cated Luscombe Sedan Model 11E and tional Memorial. The pilots and their they graciously agreed," said Michael

Their Kitty Hawk flight is planned for the first week in June, beginning in Altus, the home of Luscombe Aircraft, with stops in Oklahoma City and Tulsa. Pilots wishing to fly along on one or more legs should contact The Oklahoma Aviator at 918-457-3330 or OklahomaAviator@earthlink.net. As final details of the flight are

developed, they will be communicated to those wishing to join up.

Other pilots chosen so far by EAA include Ronald David, Orange Beach, AL; Martha King, San Diego, CA; Donna Miller, Golden, CO; Barbara Walters-Phillips, Apopka, FL; Charles CLAREMORE YOUNG EAGLES Taylor, Chicago, IL; David Clark, EVENT Plainfield, IN; Kevin Brennan, Roches- RECORD ter Hills, MI; Johnny Smith, Tupelo,



Montgomery, Everett, PA; Marcia Barnes, Mountain City, TN; Rick Raesz, Fort Worth, TX; Michael Davis, Danville, VA; and Eric Oxendorf, Milwaukee, WI.

## SETS OKLAHOMA

On April 25 and 26, volunteer EAA-MS; Les Featherston, Mt. Vernon, MO; member pilots gave airplane rides to 240 John D. "Mike" Rice, Santa Fe, NM; children and young adults, ranging in Carl La Rue, Cambridge, OH; Gina age from 8 to 17, setting a record for



Flying fun at the Claremore Young Eagles event in Bill Kendrick's Piper Clipperall smiles at the end of the flight! From left to right: Jon Townsend, 10; Abbie Lacy, 12; pilot Bill Kendrick, 100; and TJ Hargis 11.





The Young Eagles ground school in full swing. First the kids were given about 30 minutes of classroom discussion about how airplanes fly. Then it was into the hangar for a hands-on comparison of different types of airplanes.



### WWW.HOWARDAIRCRAFT.COM

Specializing in the sale, acquisition, & brokerage of Cessna 210 Centurions and other quality high-performance aircraft.

Offering these 210's and other piston singles & twins: 1976 C-172M, 1-owner since 1977, NDH, 800 TT since new!! One of a kind original! 1967 C-210G, 4200 TT, 822 FRMN, King IFR, 4-owner, STEC-50, NDH, good P & I, 8/8 1967 C-210G, 3622 TT, 620 FRMN, KX-155, DME, B4 AP, Uvalde mod, NEW Interior !! 1968 C-210H, 76 hrs FRMN & prop, King IFR, HSI, Cent III, Rad Alt, WX7, new paint! 1972 C-210L, 3-owner, NDH, 3100 TT, 1400 SMOH, Garmin 430, MK-12D, dual GS, clean! 1975 T-210L, 2823 TT, 160 on Custom Airmotive eng/prop, NEW Paint, Glass, Leather!! 1978 T-210M, NDH, 1-owner! 3060 TT, GNS-430, Color Radar, HSI, Uvalde, New Paint!



## tennial of Flight Celebration

rn of Dreamsred by Freedom

the highest number of rides given at a work. On Friday, several area schools,



Eli Kinnard, one of the lucky Young Eagles who got a ride in a T-6.

McKenzie, manager of the Claremore Regional Airport; Tom and Elaine Egbert, the EAA-designated Young Eagles Coordinators for the area; and Barbara Huffman, co-publisher of The Oklahoma Aviator. Besides the organizers, over 20 other eager and hardworking volunteers staffed the event.

Despite un-forecast low clouds and visibility both mornings, the event went off like clock-

single Young Eagles event in Oklahoma. including Claremore High School, Peace



Homer the Clown entertains OHP pilot Steve Kirby's son and daughter.



### 

Aircraft Specialties Services is your complete one stop aircraft parts and pilots supplies headquarters. You can fly-in, drive-in, or order on-line 24 hours a day, seven days a week, 365 days a year. Aircraft Specialties Services in located at 2860 North Sheridan road in Tulsa, just across the street from the general aviation runway at Tulsa International Airport.

In addition to parts and pilot supplies, Aircraft Specialties Services still offers the finest in aircraft engine machine work, which includes their exclusive Platinum Precision Reconditioning. They can take your proven steel engine parts- crankshaft, camshaft, connecting rods, rocker arms, tappet bodies, counterweights, and starter adapters- and return them in like-new condition.

Aircraft Specialties Services also offers the latest in digital crankshaft balancing and they have recently added a full line of aircraft hardware. Their goal is to be your complete one stop aircraft parts supercenter. Stop by, call, or shop on-line today, Aircraft Specialties Services. SUPERIZR

2860 N. Sheridan Road, Tulsa, OK 74115 Phone: 918-836-6872 Fax: 918-836-4419 DD2B764K

The event was organized by Sheri Academy from Tulsa, and home schoolers from the Claremore area, brought large groups of students.

The groups were assigned a scheduled arrival time; as each group arrived, the students were ushered through planned activities preceding their flight. First on the agenda was a 30-minute 'ground school" by Mike and Barbara Huffman to provide them a basic understanding of how airplanes fly and to allow them to understand and enjoy more of their flight experience. Next, each group was shown several different airplanes, pointing out similarities and differences between them and allowing them to look inside and move the controls. At the next stop, Steve Kirby of the Oklahoma Highway Patrol (OHP) introduced the students to OHP's use of airplanes. Next, Rex Niver of the Tulsa Technology Center gave a presentation on aviation careers and the training available through the Tulsa Aviation Education Alliance.

By that time, the kids were "chomping at the bit" to get in the airplane. Tom Egbert had arranged for 12-15 EAA-member pilots and their airplanes to be on hand. A pre-planned loading/unloading procedure and traffic flow was established by which over fifty children were flown each hour. Dr. Guy Baldwin acted as "air boss," assuring clear communications and traffic flow around the airport.



It is all "thumbs up" for this summer's OU Sooner Flight Academy, directed by Dr. Pam Kennedy, at right. See page 10.

After each group completed their flight (not before!), they were treated to hot dogs, potato chips, and drinks. In between events, Homer the Clown entertained with balloon animals, tricks, and jokes.

Áround noon a flight of T-6s and Chipmunks from Riverside airport arrived and performed flybys. With the Claremore aerobatic box open, Dr. Guy Baldwin performed aerobatic demon-

continued on p. 10.



### **Oklahoma Centennial of Flight News**

### continued from p. 9.

strations in his Extra 300. Toward the end of the day, a couple of lucky students were provided rides in one of the T-6s.

On Saturday, the program was the same except it was geared toward the general public rather than school groups.

The EAA Young Eagles program was established in 1993 with the goal of flying one million children before the 100<sup>th</sup> anniversary of powered flight on December 17, 2003. To date, over 893,000 rides have been given.

#### ENROLLMENT BEGINS FOR SOONER FLIGHT ACADEMY SUMMER AVIATION CAMPS

Enrollment is now open for the annual OU Sooner Flight Academy summer aviation camps slated at local airports across Oklahoma and Kansas. The program, offered by the Aviation Department at the University of Oklahoma's College of Continuing Education, and hosted by public school systems and airports across the state, promotes aviation and allows children to experience a practical application of math and science.

"Aviation is fun and exciting, and it is packed with scientific and mathematic principles that children need to learn to be competitive in today's world," said Pam Kennedy, Director of the Sooner Flight Academy. "Our curriculum is unique and incorporates games, building projects, and experimentation to get children excited about learning.

Cadets will take airplane rides, build and launch rockets, experiment with gyroscopes, perform pre-flight inspections, build and fly kites, build composite aircraft parts, and use magnetic compasses to learn navigation.

The flight camps scheduled throughout June and July are open to children who will be entering grades one locations. Local community leaders are lion miles. It has served as a cargo aviation history.

through twelve next fall. Norman camps encouraged to contact the OU Sooner hauler, an aerial mapping platform, and will serve children between the ages of 6 and 18.

School districts send their staff to the Sooner Flight Academy's in-service training program where instructors learn to facilitate the Academy's curriculum of hands-on learning activities. Teachers receive materials they can use to continue teaching aviation principles in their classrooms throughout the school year. Camps are held at the school, but students at each grade level spend one day at their local airport taking airport tours, doing pre-flight inspections, and flying. Local pilots and many EAA chapters are donating their time and airplanes to ensure children in grades 3 and up receive airplane rides.

"Our goal is to get students excited about learning math and science and at the same time revitalize interest in aviation throughout communities. By involving airport operators, pilots, community groups, parents, and local aviation-related businesses, children see positive role models and meet mentors who help them stay focused on exciting careers and positive lifestyles," said Kennedy.

The theme of the program this summer is the 100th anniversary of powered flight. All of the lessons will tie in with the history of aviation and the spirit of invention that has caused the aviation industry to grow rapidly in the past 100 years.

The Oklahoma Aeronautics Commission is funding scholarships to help children statewide attend the program and train teachers across the state. The program runs June 2 through July 18 and serves a different age group of children each week in Norman, but serves all grade levels simultaneously in other

they are interested in providing additional tax-deductible scholarships for students. Since the Academy is selfsupported, tuition is required to cover

schedule for the summer of 2003 includes camps in the following locations: Altus, Bartlesville, Beggs/Ökmulgee, Burlington KS, Chanute KS, Enid, Guthrie, Idabel, Jenks, Muskogee, Norman, Ponca City, and Woodward.

Cadets attend the program from 9 AM to 4 PM Monday through Friday in Norman and from 9 AM to 3 AM Tuesday through Friday in other locations. Enid camps dismiss at 2:00 PM. Class size is limited to 30 students with two teachers in each classroom. Registration forms are available in the lobbies of participating airports. Scholarship applications and online registration are available on the Academy's web teers at the Foundation's Oshkosh, Wissite at http://flightcamp.ou.edu. For more information call the OU Sooner Flight Academy at 405-325-1635. Come Fly With Us!

EAA B-17 TO STOP IN TULSA

On June 16, 2003, the EAA B-17 Aluminum Overcast will arrive at Tulsa International Airport on its 2003 Centennial Tour. The B-17 will be in Tulsa until June 22 and will be offering rides from June 19 through June 22.

The EAA Aviation Foundation's B-17G-VE, serial number 44-85740 nicknamed, Aluminum Overcast, was delivered to the U.S. Army Air Corps on May 18, 1945. Although delivered the airplane has an interesting history.

Purchased as surplus from the military inventory for a mere \$750 in 1946, the airplane has flown more than 1 mil-

Flight Academy at 405-325-1635 if in pest control and forest dusting applications.

The airplane's return to its military roots began in 1978, when it was purchased by a group of investors who camp costs. wished to preserve the heritage of the The OU Sooner Flight Academy's magnificent B-17. Dr. Bill Harrison of Tulsa headed the group, known as "B-17s Around the World." Their goal was to return the B-17 to its former glory.

> The economic reality of simply maintaining a vintage bomber, let alone the cost of restoration, prompted the group to donate the B-17 to the EAA Aviation Foundation in 1983. Since that time, an extensive program of restoration and preservation was undertaken to insure Aluminum Overcast would be a living reminder of World War II aviation for many years to come. The restoration has taken more than 10 years and thousands of hours by dedicated staff and volunconsin, headquarters.

> Rides in the B-17 are \$350 for EAA members and \$395 for nonmembers. For more information on reservations, please call 1-800-359-6217 or visit

### www.b17.org. CENTENNIAL OF FLIGHT PARADE PLANNED

A Centennial Parade of Flight is being tentatively planned for July 4 in Tulsa, as part of the Independence Day Celebration at the River Parks. The parade will involve as many as fifty civilian airplanes representing aviation history from the 1910s to the present. As presently conceived, the airplanes too late to see action in World War II, will leave Riverside Airport during the afternoon and fly along the Arkansas River past the assembled spectators. A narrator will describe each airplane and lead the spectators through its place in

## Airshow Oklahoma is in final and Randy Ball in his Russian MiG- fighter and B-2 stealth bomber flyby demonstrations and static dis

preparations for its 2003 airshow, to be held at Muskogee's Davis Field May 16, 17, and 18—Friday through Sunday. As a new feature this year, the tion of officers into a drug interdicairshow gates will be open Friday starting at noon, with a full airshow Friday evening before dark.

U.S. Army Golden Knights parachute team, which will open the show on all three days. Following the Golden Knights will be a WWII parade of flight, featuring T-28s, T-6s, a B-25, a C-47 and other former military aircraft.

17 jet fighter. In addition to aerobatics, the Oklahoma Bureau of Nartion scene by rappelling from a Huey helicopter.

As a unique new feature of the This year's show will headline the airshow, a Tulsa model rocket group will perform a rocketry demonstration by firing a large rocket on each of the three days of the airshow.

Because of the war in Irag, partici-pation by the U.S. military will be less than in previous years. However, a C-23 cargo plane will be in atten-Aerobatic performers include Dr. dance, an A-10 Wart Hog will provide nese Zero from the Tora-Tora-Tora are \$8.00 advance/\$10.00 at the gate. Guy Baldwin in his Extra 300, Stan a demonstration of close air support Musick in his North American T-6, for ground troops, and with luck, Randy Harris in his Steen Skybolt, spectators will see an F-117 stealth

on Saturday and Sunday.

Retired U.S. Brigadier General cotics will demonstrate rapid inser- Reg Urshler will fly his North American P-51 Mustang in a "heritage flight" with the A-10 Wart Hog. Heritage flights commemorate the connection between today's military airplanes and those of the past, and are becoming increasingly popular at airshows.

After the heritage flight, General Urshler will perform an aerobatics demonstration in the P-51. Following that, rumor has it that Genral Urshler will be "jumped" by a Japagroup and a dogfight will likely ensue—wonder who will win?

In addition to the aircraft flight and under are free.

demonstrations and static displays, the airshow will again feature a wide variety of interesting vendor displays, food concessions, flight simulators, games, and rides for children of all ages.

To close out the Friday evening show, the Golden Knights will perform a special jump at dusk featuring pyrotechnics and smoke. After the end of the airshow, a firework display will be presented.

Advance tickets are available at area Git-n-Go stores or by calling the airshow office at 918-684-6363. Tickets will also be available at the gate all three days of the show. Adult tickets Children's tickets are \$2.00 in advance/\$4.00 at the gate. Children 5

## National Biplane Expo 2003 to Honor Tom Stafford

BARTLESVILLE - The National Biplane Association is privileged to announce that Astronaut Lt. General Thomas P. Stafford, USAF Retired, a veteran of Gemini VI, Gemini IX, Apollo X, and Apollo-Soyuz, will be its special honored guest for the 17th Annual Biplane Expo scheduled for June 6-7 at Frank Phillips Field in Bartlesville, OK.

General Stafford has had a most remarkable military aviation career and, in addition, he has served the nation in its astronaut program, logging four separate space flights including lunar orbit. His space flights include a record of six spacecraft rendezvous.

General Stafford's accomplishments and honors include among others, induction into the prestigious



Lt. General Thomas P. Stafford

Astronaut Hall of Fame, as well as be- try of the Apollo 10 mission, Gening named only the eighth ever re- eral Stafford recorded the highest cipient of the Congressional Space speed ever achieved by man, 28,547 Medal of Honor.

It is particularly significant that From the sands of Kitty Hawk, General Stafford be the honored guest NC in 1903 to the moon and back reaching a speed of less than 30 miles per hour.

General Stafford commanded the first aircraft configuration. lunar module, Apollo 10, traveling to the moon, where he selected the site Box 470350, Tulsa, OK 74147, 918two months later. After traveling mil- cwh@hvsu.com

National Aviation Hall of Fame, the lions of miles in space, during re-enmiles per hour.

of the Biplane Expo in 2003 as the in 1969, aviation has moved at a year marks the Centennial of Flight. lightning pace-from the Wright The Wright Brothers created powered Brothers historic 30 mph biplane of flight at Kitty Hawk on December 1903 to General Stafford's 28,500 17, 2003, traveling 120 feet and mph Gemini trip to the moon in 1969, to the pristine biplanes of 2003, biplanes have been and con-Less than sixty six years later, tinue to be the most historic of all

For further information, contact and descending within nine miles of Charles W. Harris, Chairman, PO of the first lunar landing that occurred 622-8400, 918-665-0039 fax, email

### **TCC Offers Hands-On Summer Aerospace Education Course for Classroom Teachers**

will be a course designed to dem- Space Station. Featured will be Field trips to the Oklahoma Air 26. Three credit hours are awarded onstrate flight history and con- loads of hands-on experiments for and Space Museum will be hosted for completion. The instructor will cepts, a celebration of the 100th the classroom, including gliders, by a member of the EAA. A explo- be Teresa Shelley-Carroll assisted by anniversary of powered flight, and rubber-band-powered airplanes, ration of ultralight airplanes and her husband Bill Carroll, a mem-aerospace technologies from electric-powered park flyers, and their workings will be included. ber of EAA Chapter 10 in Tulsa.

Offered at TCC this summer Goddard and Von Braun to the even rocketry!

Dates are June 16-19 or June 23-



**Calendar of Events** For a free listing of your event, email us at OklahomaAviator@earthlink.net or call 918-457-3330. To allow time for printing and publication, try to notify us at least two months prior to the event.

WHEN	WHAT	WHERE	CONTACT	DETAILS
1st Thursday	Dinner Meeting- Oklahoma Pilots Assoc dinner and meeting	Wiley Post Airport, Oklahoma City, OK	Helen Holbird- 405-942-6308	
1st Saturday 7:30AM-10:00AM	Fly-In Breakfast- Ponca City Aviation Boosters Club	Ponca City Airport, Ponca City, OK	Don Nuzum- nuzum@poncacity.net Bruce Eberle- 580-762-5735	Held rain or shine
!st Saturday	Aerobatics	Claremore Municipal Airport Claremore, OK	Sheri McKenzie 918-343-0931	Go to Ponca City for breakfast, then come to Claremor for hamburgers and aerobatics!
2nd Monday 7:00PM	Meeting- Oklahoma Chapter 99s	Wiley Post Airport	Poochie Rotzinger- 405-842-9829	
2nd Tuesday	Meeting- Spirit of Tulsa Squadron- Commemorative Air Force	Tulsa Technology Center Jones/Riverside Airport, Tulsa	Jim Dagg 918-224-6293	Restoring 1942 PT-19. Hangar space and workers needed
2nd Tuesday	Meeting- EAA Chapter 24	Aviation Tech Center OKC Airport	Martin Weaver- 405-376-5488 pacer31a@earthlink.net	Start 7:00PM
2nd Wednesday 7:30PM	Meeting- Tulsa Cloud Dancers Balloon Club	Contact Frank Capps	Frank or Cheri Capps- 918-299-2979 aerosportballoon@hotmail.com	
2nd Thursday 7:00PM	Meeting- EAA Chapter 1005	Ada Municipal Airport Ada, OK	Terry Hall 580-436-8190 or adairprt@wilnet1.com	Call or email for exact location for monthly meeting. W occasionally meet off airport.
2nd Thursday 7:00PM	Meeting- Oklahoma Windriders Balloon Club	Metro Tech Aviation Career Center, Oklahoma City, OK	Ron McKinney- 405-685-8180	For all balloon enthusiasts
2nd Saturday	Fly-In Lunch Meeting Kerr County Aviation Association	Poteau Municipal Airport Poteau, OK	Bryan Hoggatt- 918-647-4719	
2nd Saturday 11:00AM	Meeting- EAA Ultralight Chapter 98	Thompson Airport Tuttle, OK	Robert Crawford- 405-381-2840	Visitors welcome!
3rd Saturday	Meeting- Green Country Ultralight Flyers Organization (GCUFO)	Call 918-632-6UFO for location and details	Bill Chilcoat- 918-827-6566	
3rd Sunday	Tulsa Cloud Dancers Balloon Flight	Contact Frank Capps for time/location	Frank or Cheri Capps- 918-299-2979 aerosportballoon@hotmail.com	
3rd Monday 7:30PM	Meeting- EAA Chapter 10	Gundy's Airport, Owasso, OK	Bhrent Waddell- 918-371-5022 bwaddell@tulsa.oklahoma.net	
3rd Tuesday	Green Country Women in Aviation Meeting	Spartan School of Aeronautics Jones/Riverside Airport, Tulsa, OK	Dena Schafer - 918-831-5337	Men and women supporting women in aviation
3rd Thursday 7:00PM	Meeting- EAA Chapter 323	Sherman Municipal Airport Sherman, TX	Billy Dollarhide- 903-868-7609 dollarhide@ti.com	For more information, visit our website: www.eaa323.o
Saturday following 3rd Monday	Pancake Breakfast- EAA Chapter 10	Gundy's Airport, Owasso, OK	Bhrent Waddell- 918-371-5022 bwaddell@tulsa.oklahoma.net	
4th Tuesday 7:00PM	Tulsa Chapter 99s Meeting	Robertson Aviation, Jones/Riverside Airport, Tulsa*	Charlene- 918-838-7044 or Frances- flygrl7102@aol.com	*Unless otherwise planned. All women pilots including students are welcome to attend.
4th Thursday 7:30PM	Meeting- Vintage Airplane Association Chapter 10	South Regional Library, 71st & Memorial, Tulsa, OK	Charles Harris- 918-622-8400	
May 2-3	Small Aircraft Transportation Systems (SATS) Exposition	Thomas P. Stafford Airport Weatherford, OK	Linda Weckel- 580-772-7744 or 1-800-725-7744, chamber@nts-online.net	Come see the latest in NASA's program to prove a second tier air transportation system in the US.
3rd Monday	Meeting- IAC Chapter 10	Contact David Koehn for time/place	David Koehn- 918-671-0481 ffav8@sbcglobal.net	
May 12-23	Registration for Summer 2003 Term	Embry-Riddle Aeronautical University Oklahoma City	Russ Tresner - 405-739-0397 or oklahoma_city_center@cts.db.erau.edu	Call or email for more info or to get your name on our mailing list.
May 16-17	EAA Southwest Regional Fly-In (SWRFI)	New Bruanfels Airport (BAZ) New Braunfels, TX	New Braunfels Chamber of Commerce- 800- 572-2626, www.nbcham.org	
May 16-19 9:00AM-6:00PM	Airshow Oklahoma	Davis Field Muskogee, OK	918-683-5295 www.airshowok.org	
May 17 1:30PM-3:00PM	Angel Flight Annual Barbeque	Hangar B-52 Jones Riverside Airport, Jenks, OK	Angel Flight- 918-749-8992	Free BBQ for Angel Flight pilots, volunteers, guests. Shuttle provided to hangar from FBOs.
May 22	Commencement Exercises Embry-Riddle Aeronautical University- OKC	Eleanor Maurer Auditorium Omniplex	Russ Tresner - 405-739-0397 or oklahoma_city_center@cts.db.erau.edu	Call or email for more info or to get your name on our mailing list.
May 30-31	Hot Air Balloon Event Magnolia Festival of Oklahoma	Durant, OK	Frank Capps- 918-299-2979 aerosportballoon@hotmail.com	Hot air balloons, arts and crafts, live entertainment
Jun 6-7	17th Annual Biplane Expo	Frank Phillips Field (BVO) Bartlesville, OK	Charles W Harris- 918-622-8400 www.biplaneexpo.com	The world's largest gathering of biplanes by variety. Forums, workshops, special guests, exhibitsa fun tim
Jun 7 8:30AM-5:00PM	AOPA Annual Fly-In	Frederick, MD	Kathy Porfirio- 301-695-2160 kathy.porfirio@aopa.org	Over 100 exhibits, aviation seminars, headquarters tou and meet the staff
Jun 6-8	Ozark Balloon Fest	Bentonville, AR	Frank Capps- 918-299-2979 aerosportballoon@hotmail.com	Hot air balloons, arts and crafts, live entertainment
Jun 9-13 8:30AM-4:30PM	Aviation Careers Academy Tulsa Community College	Tulsa Technology Center- Riverside Campus, Jenks, OK	Youth & Academic Office for Continuing Education- 918-595-7566	For 10th-12th grade. Explore aviation facilities through field trips. Earn 3 hrs flight time. Cost: \$199.
Jun 13-15	Aerospace America International Airshow	Will Rogers World Airport Oklahoma City, OK	Carl Whittle, Director, (405) 685-9546, csw@aerospaceokc.com	Celebrating 100 years of powered flight with a salute to our military men and women.
Jun 13-15	Powered Parachute Fly-In at Aerospace America	Will Rogers World Airport Oklahoma City, OK	Bob Hawkins- 918-284-0032	We hope to have 20-50 powered parachutes
Jun 13-15	2nd Annual Sport Aviation Association Gathering	Frasca Field Urbana, IL	Bonnie Poberezny saa@sportaviation.org	
Jun 13-15	Eighth Annual Air Fest Arkansas Air Museum	Fayetteville Airport Fayetteville, AR	Judy Hammond- 479-521-4947 ArkansasAirMuseum@yahoo.com	Celebrating 100 years of flight. Admission: adults- \$7; children age 6-12, \$3; children under 6 free.
Jun 19-22	EAA B-17 "Aluminum Overcast" Tour Stop	Jones-Riverside Airport Jenks, OK	Charles W. Harris- 918-622-8400	
Jul 8-13	Ninety-Nines International Conference	Marriott Hotel- Space & Rocket Center, Huntsville, AL	Lisa Cotham- 225-293-4359 lisacot@earthlink.net	
Jun 14-15	Gainesville Fly-In	Gainesville Municipal Airport Gainesville, TX	Matt Quick- 940-668-4565	

## OAOA Holds 2003 Spring Conference: "Doing it Wright"



The Oklahoma Airport Operators Association (OAOA) 17th Annual Conference was held April 6th through 8th at Lake Texoma Resort with the theme, "OAOA '03...Doing it Wright!'

The successful conference began on Sunday, April 6 with a golf tournament and a fabulous welcome reception, featuring aviators from the past in period costume, including Pam Kennedy from OU as Amelia Earhart and Carl Cannizzaro from Horizon Engineering as a historical aviator, celebrating the Centennial of Powered Flight. Champagne toasts and birthday cake were shared as guests sang happy birthday to the Wright Flyer.

Monday, April 7 kicked off with a welcome address from 2002-2003 OAOA President Terry Hall, Ada Airport Manager, and the Honorable Jerry L. Tomlinson, Mayor of Durant, OK. Peter Regan, OAÓA lobbyist, provided a review of aviation-related legislation and tudes towards supporting aviation in mental Services. Debra Coughlan re- Roy Givens at Ardmore Airport. Oklahoma. All agreed that we were fortunate to have Sen. James M. Inhofe remain in the senate.

The first technical session was a current issues panel including Ed Agnew from the FAA, SW Region; Rosetta Robinson, Civil Rights Manager, SW Region; and Victor Bird, Director, Oklahoma Aeronautics Commission. Other technical sessions Monday included a WAAS/LAAS status update from Dr. John Fagan from OU; an interactive session with Pam Kennedy of OU Sooner Flight Academy encouraging the documentation of our Oklahoma airport's histories; and Airport Operations Training from Jim Thrash, Ops Officer at Will Rogers World Airport.

Monday was topped off by a surprise bash at the Tivoli Theatre in historic, downtown Ardmore, sponsored by Barnard Dunkelberg and Company.

Tuesday, April 8, began with the OAOA general membership meeting, where the slate of officers for 2003-2004 was presented. New officers are David Scott, president, Altus Quartz Mt. Regional Airport; Walt Strong, vice-president, OU Max Westheimer Airport; Phil Stone, secretary, Tulsa Airport Authority; Bob Williams, treasurer, Tulsa Airdiscussed several political races and port Authority; and Derek Blackshare, candidate's past voting records and atti- corporate director, Cinnabar Environ-

said. Student team members include

Michael Buscher, Nathaniel Easterling,

Tyler Anderson, Sonya Martin, Thomas

Peters, Daniel Ashbaugh and Senior Nic

Michael Buscher said he was look-

mained executive director and all regional directors remained the same. Lt. Col. Don Van Alstine then presented an informative session regarding the Oklahoma Civil Air Patrol and their role in mission, said of the OAOA, "The homeland security.

award went to Altus Quartz Mountain Regional Airport, David Scott, Manager. Frank Bice from LBR, Inc. was awarded the Pioneer Award. The Corporate Champ Award went to Derek Blackshare of Cinnabar Environmental Services, and the Atta Boy award to Larry Powell with Tulsa Airport Authority.

A chilly cowboy cookout by the lake on Tuesday evening, presented by Kent Rollins, Cook, Proprietor and Cowboy Poet, thrilled conferees. Kent set up his chuck wagon in the early Tuesday morning wind and cooked all day. That evening, he treated attendees to a spectacular steak dinner, complete with sourdough biscuits and peach cobbler cooked in Dutch ovens surrounded by hot coals, pinto beans, and all the trimmings. After dinner he recited his original cowboy poetry and told wonderful stories.

Door prizes, sponsored by many aviation-related businesses and organizations were freely distributed, and a laptop computer, supplied by the OAOA, went to

Lynn Pinson, who managed the Frederick airport for 15 years and is currently the Safety and Standards Inspector for the Oklahoma Aeronautics Com-OAOA is very important to the man-The 2002-2003 Airport of the Year agement and growth of Oklahoma airports. The problem is that many airport operators do not participate. We need to encourage all airport boards and city and county representatives to make sure their airports are well-represented in the OAOA." Lynn has not missed an OAOA conference in the past 17 years and was president of the organization in 1992.

OAC Commissioner Bill Boulton, conference participant, said, "The Oklahoma Airport Operators Association provides excellent service to Oklahoma airports, including assistance with all aspects of airport maintenance and development. In my opinion, all airports in the state would benefit from OAOA membership.

Approximately 130 people attended the conference, including 23 exhibitors. Airports represented were Ada, Altus, Ardmore, Claremore, Grove, Jones/Riverside, Lawton, Max Westheimer, Miami, Ponca City, Stillwater, Stroud, Tenkiller Airpark, Tulsa International, Wiley Post, and Will Rogers.



### **Claremore HS Students Advance to** Finals of World's Largest Rocket Contest

Pranger.

CLAREMORE - Eight students learning tool for the kids, and an exfrom Claremore High School will take tremely challenging assignment," she part in the Team America Rocketry Challenge, the world's largest model rocket contest in Great Plains, VA, on May 10th. Nearly 900 teams with more than 9,000 students from across the nation attempted to meet the very rigorous requirements of the contest, but ing forward to the team's trip and exonly the top 100 high school teams will pected his team would be among the top

compete in the finals. The students were asked to design, build, and test a model rocket that could fly as close to 1500 feet as possible with a payload of two raw eggs, and parathen

chute the eggs back to the Earth unbroken

Team supervising teacher, Denise Radcliff said designing and building the rocket required the students to learn aerodynamic concepts they would not normally encounter in physics class, such as how to compute trajectory and rocket and the opportunity for team how to eliminate drag. "It was a terrific teachers to attend an advanced NASA



five teams to share the contest's \$50,000 award in savings bonds, and \$9,000 in cash. He also said the team would be looking for corporate sponsors to help defray the team's traveling expenses to Virginia.

Team The America Rocketry

Challenge is co-sponsored by the Aerospace Industries Association and the National Association for Rocketry. In addition, the National Aeronautics and Space Administration (NASA) has contributed prizes to the winning teams, including a chance for students to build an advanced office/storage space. For More Info:

Call (940) 668-4565 or Email airport@cooke.net

rocketry workshop, meet with NASA engineers, and tour the Marshall Space Flight Center.

For more information about AIA's Team America Rocket Challenge, including the list of qualifying teams and details on how to sponsor a high school team, visit www.rocketcontest.org.

### **Oklahoma Chapter 99s News**

MARY KELLY SCHOLAR-SHIP FUND ENDOWED

On Thursday, November 7, 2002, the Oklahoma Chapter of the 99s presented a check for \$20,000 to Charlene Falkenburg, Chairman and Permanent Trustee of the Amelia Earhart Memorial Scholarship Fund at the meeting of the International Ninety-Nines officers and board of directors.

The money will be used to endow the Mary Kelly Me-



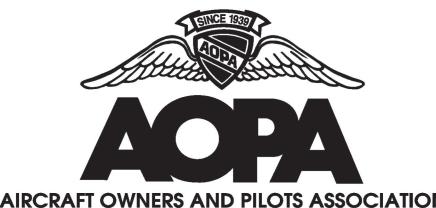
Ninety-Nines at the presentation. L. to R: Phylis Hensley holding Braydon Pogson, Ann Pogson, Sue Halpin, Charlene Falkenberg, Margie Richison, and Rita Eaves.

morial Perpetual Scholarship. Scholarship and devoted her life to in-This scholarship is to be awarded at the national level to promote aviation career development.

The award will be available to collegiate women before membership with a twoyear Ninety-Nines member-ship as part of the award.

Mary Kelly was a former Oklahoma Chapter member and later Tulsa Chapter member. She was a previous winner of an Amelia Earhart

## **Celebrating a Century of Flight** with 100 Reasons to Join ...



### AIRCRAFT OWNERS AND PILOTS ASSOCIATION

<u>Reason #2</u>: **Award Winning Magazines** 

**AOPA Pilot Magazine:** Written by pilots for pilots, AOPA Pilot is your magazine for award winning and stunning aviation photography; informative articles on the latest trends in technology; safety and regulatory issues; plus editorials from your favorite aviation superstars including Phil Boyer and Rod Machado.

**AOPA Flight Training:** AOPA Flight Training magazine gives you real-life lessons in aviation safety ... tips on becoming the best pilot you can be ... and the newest information on certification requirements.

ePilot: Enjoy GA's most informative weekly newsletter – ePilot – right from the convenience of your desktop or laptop computer. Keep up to date on the latest TFRs, Notams and technological advances ... and ePilot can even be personalized to fit your busy schedule. There is a version for AOPA Flight Training subscribers as well.





structing flying.

She loved to introduce young people to flying through her aviation camps at the Tenkiller Airpark she managed in Cookson, OK, including holding a girls-only weekend session. Because of her dedication to aviation and faith in today's youth, our Oklahoma Chapter was inspired to raise funds to endow the Mary Kelly Memorial Perpetual Scholarship. REMINDER: 25<sup>TH</sup> ANNUAL OKIE

DERBY COMING UP SOON

The 25th Annual Okie Derby will be August 15-16 based at Wiley Post Airport. It is chaired by Amy McCue (amymccue@full.net) and Karen Baskin (golfingpilot2@prodigy.net). As usual, the course will be limited to under 250 statute miles and be revealed to entrants on Friday night at the briefing. Fuel estimates will be handed to the starter prior to engine startup at race time based on professional weather briefings Friday night and Saturday morning.

Further information and registration requests should be address to Phyllis Miller, 1924 Red Prairie Dr., Edmond, OK 73003; email pmiller339@aol.com. Proof of insurance is required and ground speed estimates are required at the time of registration.

### Aerospace America 2003 Reschedules

For a variety of reasons, Oklahoma City's Aerospace America International Airshow has elected to change the show dates from its traditional Father's Day weekend the October 3, 4, and 5. Donald B. Dennis, chairman of the Aerospace America International Airshow Board of Directors explained the reasons for the change.

"One of the many reasons for changing the show dates is the absence of the Oklahoma City Air National Guard, whose members were gone to war. Airshow partners since the show's beginnings, these men and women provide irreplaceable assistance to the Airshow team. Another factor was the modern military display aircraft, so popular with spectators, were also gone to war."

Dennis said that, now that it appears the troops and equipment will be back by then, the board members are especially interested in paying tribute to all military men and women who have sacrificed in the name of freedom.

Aerospace America Executive Director Lois Lawson said all the civilian performers previously signed for the Father's Day weekend have, without fail, agreed to honor their contracts for the new dates.



## **Classified Advertisements**

To place a plain-text classified ad, mail us the text along with a check- \$0.35/word/month- \$15/month minimum. Call/email for custom ads rates with graphics- 918-457-3330, OklahomaAviator@earthlink.net





The Oklahoma Aviator, May 2003, Page 16