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Your window to Oklahoma Aviation...Past, Present, Future

January 2001

What's It Like to Fly a Trike?

by Bob Ferguson

First of all, what is a trike? Many people don't seem to know about this fun form of ultralight flying. A trike is simply a tricyclegeared platform holding an engine and pilot suspended from a hang-glider wing. Or, that's how they started out. Today's trikes can be very sophisticated 2-place designs with fairings, instrumentation, lights, strobes, and even electric starting. Mine is much simpler -- a tubular aluminum frame with no instruments, a padded nylon seat, and not much else, except seat-of-the-pants flying like you've never before experienced.

The seat-of-the-pants description is real in this case because the trike is flown by weight shift. There are no control sticks or wheels, no rudder pedals (no rudders!) Steering on the ground is direct via the nose wheel with your feet right on the forks.

Oh, yes, and it's backwards. In fact, all of the control inputs are backwards from conventional aircraft. I use the phrase "control inputs" because the hang-glider wing is flown by pressure on a bar attached to the pivot point of the wing on the trike. All inputs directly affect the wing and what it is doing. To increase the angle of attack on this wing, you push the bar away from you; the leading edge of the wing goes up and you slow down. To go faster, you pull the bar towards you, the leading edge of the wing comes down, and you speed up

Confused yet? We haven't even gotten to roll inputs. Yes, those are backturn you push the bar toward the right (shifting your weight to the left), the wing banks to the left, and you are in a left turn. Push the bar to the left and you can roll back to level or continue into a

wards, too. To initiate a left ward to conventional aircraft rudder pedals-- push with your right foot and the wheel turns left.

Ready for a ride? I know there are people out there who have taught themselves to fly one of these things and



Bob Ferguson's favorite flying machine, a 40-hp trike.

right turn.

Climbs or descents are strictly functions of power. Wanna climb? Add power. Wanna descend? Reduce power. However, like the rest of the controls, these are also different. Power is usually controlled with your right foot and brakes (if available) with your left foot, like a automobile accelerator and brake pedal. In addition to the accelerator pedal, there is sometimes another throttle lever for "cruise control" mounted on the trike structure (this can cause interesting situations, as you'll see later).

Ground steering is just like a child's tricycle-- back-

lived to tell about it, but I'm guessing most of them did not have much conventional aircraft experience. I have been flying conventional planes for 29 years and the instincts built over those years are strong: you pull back to flare for landing and you push the right pedal to go right. A wise person starts with some dual and gets some new habits developed before soloing something this foreign.

The first time you pull back to flare the trike and slam it into the ground (followed immediately by much cursing in your headset from the instructor sitting behind you) is usually sufficient to prevent you from ever doing it again. Self preservation takes over and you are then ready to begin making decent landings and learning what you need to solo.

Solo flight goes like thisafter lining up on the runway,

using the wing bar, you level the wing and pull back to reduce the angle of attack and allow a rapid acceleration. My trike has a 40-hp mill and is a true ultralight, so acceleration IS rapid. Nose wheel straight, seatbelt tight, goggles and ear protectors secure (anything that leaves your body goes through the behind prop you, so empty

your shirt pocket before climbing in), throttle down, and the excitement begins.

About the time you think the ground is going by a bit too fast, you shove the wing bar away from you, the wind gets under it and you leap into the air as the trike moves forward to its natural hang point. In my case, it is decidedly laid-back. There is, admittedly, a moment of slight terror as you lift off the ground in a machine you have never flown before and don't know fully what to expect. It quickly passes as you realize it is climbing nicely and you are truly in control and flying this thing.

It is a good idea at this

point to pull the wing bar back and gain a bit more speed to allow for the possibility of engine failure. With so much power available, I reduce it some after all obstacles are cleared and a sure return to the field is possible. Now you can take some time to look around and enjoy the ride. The wind is in your face at about 35mph, the ride is comfortable, the engine is throttled back to a comfortable roar and you can explore the handling characteristics of this flying flivver. The first thing you notice is that changing the angle of attack of the wing does not result in any pitch change that you can discern. The trike is suspended below the wing and always hangs in the same attitude. You have to learn when you are climbing or descending by visual cues from the ground. It's the old "houses getting bigger or smaller" routine.

The good part about the basic attitude is that the main wheels are always in the proper position to touch down first on landing and this always aligns you immediately so you can fly a crab in a crosswind and the trike will straighten out as it hits the runway. This is good since you have no rudder and no rudder pedals. It is extremely important that the nose wheel be straight prior to letting it down to the ground. Any deviation will result in a sudden veering that may quickly become uncontrollable.

This all sounds so technical and doesn't convey any of the sensations of trike flying, but I'm not sure words

continued on p. 4.

From Mike...



It is mid-December as I sit to contemplate this month's column, an opportunity to consider the realities of the old year and the possibilities of the new. Forgive me if I wax philosophical.

By the time you read this, we all will have entered the New Year and thus crossed a mystical boundary in time. Of course, by now everybody knows that, in mathematical terms, the "real" millennium occurred this year rather than last, but that's old news.

The real, sobering news is that we are now actually living in the year 2001, when, in Stanley Kubrick's classic 1968 movie, HAL (the HAL9000 computer, don't you know) first said, "Good morning, Dave." After having thirty years to digest the movie, I still get goose bumps on hearing the opening music, "Thus Spake Zarathustra."

I remember a similar feeling when we entered 1984. In high school, when I first read Aldus Huxley's classic novel about life under Big Brother, the thought of actually living in 1984 was impossibly remote. However, shortly afterward, I saw the 1960 movie of H.G. Wells' "The Time Machine," with its thoroughly fascinating but unsettling look at the fragility of one's current circumstances with time. Maybe time was not unlimited as my youthful outlook would have supposed.

Even so, I was amazed when 1984 suddenly arrived. The arrival of 2001 is less of a shock, but the passing of these iconic dates does represent significant milestones in my life. The older I get, the more I notice the passage of time in general-a natural response to the aging process, I suppose.

Over the years, I have noticed a pattern. In about September when the hot swelter of summer had abated, I would start to get very busy. As fall continued, the trend would increase and soon I would be over-committed, struggling to get everything done. Thanksgiving and the coming of Christmas would only add more to my pile of things to do.

However, after the first week in December, as business activity began to wind down and holiday commitments increase, I would be forced to just give up and let go of the busyness, knowing it would be after the first of the year before things got going again. A sort of gloom would settle on me during the holidays. But then magically, after the first of the year, my mood would brighten and I would look forward with anticipation to the possibilities it might bring.

Luckily, over the past several years, I've learned to actually look forward to that letting go process, knowing that some things are in God's hands, and I don't need to worry about

them.

So, I've started enjoying the holiday season, using it as an opportunity for contemplation and reflection, not only letting go of the old year, but also being "reborn" into the wonderful possibilities of the new year.

Hmmm, do you think that's what it is meant for?? As the teenagers would say, "Well, duh!" I heard on the radio the other day that, through the ages, it is no accident that major holidays, feasts, and celebrations were planned for this time of year, when the short days and dreary weather threatened the morale of our ancestors.

Future of The Oklahoma Aviator

One obvious area of concern has been the fate of The Oklahoma Aviator. Last month I reported that the future was uncertain. Since then, we have received many, many encouraging phone calls, letters, and other messages expressing the hope that The Oklahoma Aviator will continue. Some of those communications have also included tangible assistance of one sort or another.

I want to personally thank Bob Jandebeur, Guy Baldwin, Dan Cork, Cliff Magee, Greg Merrill, and Mark Roesler for the help they have given.

As a result of this encouragement, we have decided to continue publishing the paper. We have written a business plan which establishes some goals for the next 6-9 months. These goals include the following:

1. Increase our subscriber base as much as possible to better attract advertisers.

2. Increase our advertising base

by at least 50 new advertisers.

3. Obtain whatever grants are available from organizations which promote aviation.

With each month's incremental increase in revenue, we will be able to spend a little more time on the paper, building up the point when it can be our full-time occupation.

So, if you want The Oklahoma Aviator to survive and prosper, please help us meet our goals.

Custom Propeller to Donate Dynamic Prop Balancing

OWASSO - Dan Cork of Custom Propeller has offered to donate to The Oklahoma Aviator the price of one Dynamic Propeller Balance job per month for each of the next six months.

Using sophisticated electronic equipment, Dan balances the entire engine, propeller, spinner, and accessories assembly- - what he refers to as the "rotating package."

Many times, static balancing performed during the manufacture of a propeller or when it is repaired by a prop shop will produce what seems to be an acceptable level of vibration. However, dynamic balancing is often needed. Dynamic balancing is done with the propeller on the airplane and with the engine running. Thus, all parts of the rotating package are balanced as a unit. A vibration sensor is mounted on the engine and connected to the balance analyzer. A strobe target is attached and the engine is run at cruise rpm and power settings. A strobe light is used in conjunction with the balance analyzer to determine the location and amount of any additional weight required for dynamic balance. New weights are generally installed on the spinner bulkhead, in accordance with approved procedures. Normally, static balance weights on the propeller are left in place so that, if the propeller is installed on another aircraft, it will still be in a statically balanced condition.

Dynamic balancing should be done after overhaul or disassembly of the propeller or engine, after any excess metal has been removed to dress out nicks & cuts, after any paint detail job, after any de-ice boot reinstallation, or after any repair to the spinner or spinner bulkhead. Dynamic balancing should also be done anytime a vibration is noticed. As a general rule, dynamic balance should be rechecked every 500 hours to stay within the limits for normal wear and tear of the propeller.

So, if you'd like to make your airplane run smoother and help The Oklahoma Aviator in the process, give Dan a call at 918-272-3567 or email him at PropDoc@aol.com.

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Acceptable Aircraft for FAA Exams: Make It Easy for the Examiner to Say "Yes!"

by Dave Wilkerson

When applicants schedule their checkrides, they often ask "What should I bring with me?" Anticipating this, every Practical Test Standard (PTS) has an "Applicant's Practical Test Checklist... Appointment With Examiner" page. The page has space for the examiner's name, the meeting location, plus the date and time to meet. The checklist then covers three categories of 'stuff' to bring - acceptable aircraft, personal equipment, and personal records. Each item on the checklist has a shadowed box to check as applicant and instructor verify the preparation for the test.

The first category is ACCEPT-ABLE AIRCRAFT. Acceptable? You find guidance from the Practical Test Standard's introduction, in a paragraph entitled Aircraft and Equipment Required for the Practical Test. Briefly, it says that applicants must provide an airworthy, certificated aircraft, equipped with fully functioning dual controls.

The PTS goes on to say that the aircraft must be capable of performing ALL appropriate tasks for the certificate or rating sought and that it has no operating limitations prohibiting the performance of those tasks.

Most examiners have heard at

least one applicant explain how they don't do this or that maneuver because the airplane responds so and so. If your airplane cannot perform each maneuver listed in the PTS, that airplane is not acceptable for testing. This is a safety issue, so the Federal Aviation Administration (FAA) gives examiners no latitude to accept an unacceptable airplane.

Recent events have proven that the examiner who accepts such an airplane jeopardizes his authority to examine. Some still do so, trusting that the FAA will never know. But discovery is not the main issue safety is.

When instructors use airplanes that do not meet their type certification requirements, they do two terrible things. First, they risk their aircraft's occupants during each flight. Second and more long-term, they teach pilots to rationalize FAA requirements, and that risks the public's safety. When examiners accept such an aircraft, we perform a far darker offense: we give that sin validity, which undermines the public trust.

While employed by an aviation school some years ago, after making the above statement I received some ridicule from my associates for being "naive." (Airplane accidents have since claimed several of these associates lives.) A Fixed Base Operator once forbade me to return when I refused to fly an airplane with an obvious electrical system fault. (That FBO later went out of business, having lost an airplane and all on board.) A pilot's respect for the PTS is far stronger in his last decade of flying than in the first. One even appreciates the Applicant's Practical Test Checklist, and how it relates to the industry we love.

The private pilot practical test is uncomplicated; its tasks permit airplanes to be simple, to a point. They must have navcom radios and gyroscopic instruments for flight by instrument reference. Commercial checkrides require a complex airplane for at least the takeoffs, landings, and appropriate emergency procedures, plus the electrical equipment required for the private pilot test. Airplanes required for the Instrument rating checkride need the requisite flight instruments plus radio equipment for a list of non-precision approaches. The list then continues to specify that a precision approach must include a glide slope, localizer, marker beacon, and approach lights. Having a proper aircraft for the checkride should be a simple task.

much as pilots want to hear it. Safety's first step is for pilots and examiners alike to know when and how to say "no."



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The Aeronca Champ

Recently, a local accident involving an Aeronca Champion received a great deal of the usual inept TV and newspaper publicity, resulting in grumbling by viewers and readers regarding the questionable safety of the Aeronca 7AC Champion.

I can easily forgive some of my non-aviation friends, who have the unshakable belief that small airplanes aren't safe and are simply accidents waiting to happen; for they know not of what they speak. For them, and others who might have the same idea, I would like to take up for the poor old "Air Knocker."

The folks at the Aeronautical Corporation of America (AERONCA), were not asleep at the switch during World War II and, by October, 18, 1945, had received an Approved Type Certificate (No. 759) for a light plane called the Aeronca Champion Model 7AC. By the end of the war, in August, they were busily lining up distributors, dealers and buyers.

For about \$2400, a flight school

operator, student pilot, or flying farmer could have a little airplane that was better than or at least equal to the venerable old Piper Cub, which had hardly changed since 1939, and could be soloed from the front seat.

The Aeronca Model 7AC Champion, soon to be known as the lovable old "Air Knocker," is a classic airplane which came from a long line of successful light aircraft designs, dating back to the early thirties. Most Champs were built and sold during the 1946-1947 post war aviation boom period in time to help train hundreds of ex-servicemen on the famous postwar "GI Bill."

By late 1948, the boom was over and flight schools were looking for buyers to take surplus Champs off their hands. The popularity and need for the Airknocker continued to drop until the price of a used one fell as low as \$500.00 in the mid-fifties.

Then a new crop of student pilots began to emerge, looking for a cheap means of building flight time and giving the old Champ a new lease on life.

The crop sprayers/dusters gave the Champ a try during the late fifties, but the 7AC was better suited to carrying people than 2-4-d. Faithful flying farmers never gave up on her and one version featured a removable back seat and was known as the "Farm Wagon."

The Champ prototype flew as early as the summer of 1944, but was kept under wraps until the fall of 1945. By early 1946, the Aeronca 7AC Champion was selling like hot cakes. When the show was over, approximately 800 7AC models had been manufactured. At one time, early on, the company was building over 40 airplanes a day!

Examiners want to say "yes" as

Now, fifty-six years since the first experimental test flights began, several thousand Champions are still being operated every day in the United States as well as many other countries. Powered originally by the very successful Continental A-65 (65 hp) engine, a number of alterations and model changes have been made over the years to improve the general performance of the Champ. In fact, a few airplanes were converted to tricycle landing gear.

Written off many times, the little 7AC Champ keeps coming back, usually with a new group of owners looking for a low-priced, light airplane with modest operating costs.

For some reason, the Champ has not reached the popularity of the Piper J-3 65 HP Cub. It is surprising because the performance is about the same, but the Champ features a better enclosed cabin, automotive-type entrance door and fuel gauge. It can be flown solo from the front seat. It is also much easier to enter and exit. Visibility is better from the Champ and the cabin is more comfortable.

The tricycle gear type trainers, introduced by Cessna, Piper, and others in the fifties, created a whole new population of pilots who had never been trained in the conventional-gear aircraft (referred to as tail draggers). Almost every nose-wheel-trained pilot has that "gnawing pit of the stomach feeling" when he sees a Cessna 195 or 180 landing or taking off, wondering what it would be like to successfully and safely "tame" a taildragger.

Over the year, more than a few nose wheel pilots have decided to master the conventional-gear airplane and the old Aeronca Champ has been one of the less expensive taildraggers around. Consequently, the Aeronca 7AC got another lease on life. The Champ is perfect for the taildragger training, due to its general ground handling characteristics and good forward visibility.

The safety experts will tell you the Champ's safety record is a little higher than they would like, but at the same time they have to admit that the record is not so high when all usage factors are considered. When properly maintained and operated within its limitations, the 7AC Aeronca Champ is a very forgiving little airplane.

Nowadays, more often than not, Champs are being restored to betterthan-new and treated as the cherished antiques they are.

Look for Champs to be around for quite a few more years.

[Editor's Note: this article was reprinted from one appearing earlier in The Oklahoma Aviator.]

Trike It-- You'll Like it!

continued from p. 1.

can do that. Once mastered, flying the trike is a little like following your nose. You apply control pressure instinctively and you go where you are thinking. You truly become one with the machine. I'm sure it is not as free-feeling as true hang glider flight, but for those of us who are not blessed with ridge lift to soar on all day it is a wonderful way to fly.

Recall that throttle arrangement I mentioned earlier? Well, one of the things you have to remember is to make sure the "cruise control" is set to idle before starting the engine. I'm saying this out of experience, because one time I didn't. Without thinking about it, I climbed into the seat, made the ignition hot, grabbed the starter rope, and pulled. The engine almost always starts on the first pull and this was no exception. However, instead of the smooth idle I was expecting, suddenly all 40 horses were alive and stampeding from the starting gate. The problem was, I was not strapped in, did not have my feet on the pedals, and did not have hold of the wing bar. Flying is about being prepared for what one will encounter and this time I was definitely not prepared. As the out-of-control machine accelerated startlingly quickly, careening diagonally across my pasture runway to-

ward a fence and some livestock, my mind went into "brain-lock." With more presence of mind, I could simply have retarded the cruise control and ended the adventure. However, I was occupied with other activities such as finding the wing bar and dealing with aft-moving ground trying to drag my feet rearward. As the fence rapidly approached, I had found the wing bar but not gotten my feet on the pedals. At the last moment, with no other choice, I pushed the wing bar forward and, thankfully, the craft leaped into the air, clearing the fence and cows handily. I could then leisurely get my feet on the pedals, retard the cruise control, and shakily start to consider what really happened. It only takes one such adventure to make a believer out of me!

Low and slow is the best way to enjoy the trike experience. Of course, slow is a given and you don't want to get too high where a Cherokee driver might try to use you for a bug on his windshield. Throttling way back to hold altitude, you begin to feel as if you are floating above the ground. The engine gets relatively quiet and I am guessing that it is only using about 15 horsepower to keep me in the air.

You can see so many things that would go unnoticed in a bigger/ faster/higher machine. People sunbathing by the pool are sometimes VERY interesting! You can read the road signs and watch drivers do stupid things with their SUV's, and you would be amazed at how many deer you can see within 5 minutes of Gundy's Airport out toward the north and east. You can get pretty close to them before the sound of the engine causes them to scatter. I generally try to observe from a distance so I don't disturb them. Once you are airborne you don't want to come down! Not that landings and touch and go practice aren't a hoot- they are. But it is hard to make the last landing and put it away for the night.

Of all the flivvers I fly, this is the flivverest! It comes awfully close to that classic description of "a collection of spare parts flying in close formation," but for pure flying fun, it can't be beat. Trike it--You'll Like It!



Bob's partner Gene Cockrell in the driver's seat.



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THE SQUADRON

An Atlanta-area EAA member designed this set of decorative airplane lights. We liked them so much we are making them available for sale. The set includes six low wing airplanes, six biplanes, and a string of bulbs. The airplanes are pearl white and lights are white (with four colored bulbs). The price is \$19 a set plus \$4 S&H. Allow 3-week delivery. Use them in place of Christmas lights, for hangar dances, for fly-ins-- any aviation celebration! Send checks to:

The Oklahoma Aviator, PO Box 100, Cookson, OK 74427



BY DR. GUY BALDWIN Senior Aviation Medical Examiner



ATP, CFII-MEI

Allergic Rhinitis or "Runny Nose"

There has been some confusion over the use of some of our newest antihistamines. The new drugs are supposed to be non-sedating and okay in the aviation environment. Basically, that is true.

However, to get an update, I called Warren Silberman, D.O., the manager of the Aeromedical Certification Division, and asked him about three specific antihistamines: Zyrtec, Allegra, and Claritin. In his return letter he stated that it is not always the medication that may have some influence on your medical certification but the medical condition itself. If the allergic rhinitis or runny nose is severe, it might result in an ear block and granting medical certification with an ear block is not likely.

Allegra, Allegra D, Claritin, and Claritin D-12 and 24 hour are acceptable medications for the flying environment. There are no limitations to be placed on an airman for taking any of those medications, however, your FAA doctor, in completing his form under item 60, should comment that you are not having any side effects from the drug.

In the case of Zyrtec, its continuous use is not permitted in the aviation environment. If the airman does not need to take the medication on a continuous basis, then the AME writes in block 60 that the airman has been warned not to pilot an aircraft within 48 hours after taking the drug. The FAA will then allow its use.

If you have any questions regarding this or any other topic, do not hesitate to contact my office.

Guy Baldwin D.O.

Flying Aggies Win NIFA Region VI SAFECON

The Oklahoma State University Flying Aggies Flight Team won Top Team at the National Intercollegiate Flying Association's Region VI SAFECON. The event was hosted at St. Louis Downtown-Parks Airport from October 17th through the 21st.

The Flying Aggies won first in both the flying events and ground events categories, defeating seven other schools for the overall team award. Other team awards were Cheri Dyson as top female pilot, Stewart Master - 1st in Computer Accuracy, Gralon Hudgins - 1st Message Drop, and Brad Baker - 1st in Aircraft Recognition.

Having been around for more than fifty years, the Flying Aggies is the oldest aviation club in the Midwest; the Flight Team is an integral part of that organization. Oklahoma State is proud of its aviation program, and it has been heralded as one of the finest in the nation by winning the NIFA Loening Trophy some twenty-five times in the history of the organization.



Flight Destinations: Part 2- Shangri-La- An Elegant Island Resort

by J. Thomas Pento, PhD

Most of you will remember the movie classic "Lost Horizon" which was based on the 1933 novel by James Hilton. This is a story about a frantic flight, a plane wreck in the Tibetan Mountains, and the discovery of Shangri-La - an idyllic, peaceful refuge from the pressures of life. Everyone would love to find a destination like this, but of course we all know that Shangri-La doesn't really exist --it's just a



a "real-life Shangri-La". The resort complex contains 144 guestrooms, 32 suites in the main lodge, and a condominium complex with an additional 84 suites. During check-in we were acquainted with the many recreational facilities that the resort has to offer. These include indoor and outdoor tennis courts and swimming pools, racquetball, basketball, volleyball, bowling, video arcade, and scenic jogging and horseback riding trails along the lake. The Body Shop Spa is a complete fitness

> center, and pampers guests with facials, massage reflexology, and European body wraps. The marina has boat, jet ski, and parasailing rentals. Fishing guides are available and this lake is home to some monster largemouth bass.

For an overview of the resort facility, we borrowed a golf cart to do a self-guided tour. At the golf course clubhouse we learned that the Shangri-La has two 18-hole courses. The

scenic Gold Course offers broad rolling

fairways and spectacular views of Grand

Lake. The championship Blue Course,

considered among the top five courses in

the Midwest, features long narrow fair-

ways and muliteered greens. Also,

Shangri-La is host to the annual Mickey

Mantle Celebrity Charity Golf Classic. I

was interested to learn that each golf cart

contains a "Pin Mark" GPS receiver with

a specific golf course database. The GPS

is programmed so that the moving map

display provides the layout of each hole and pin distance from any point on the

fairway. The database will even suggest

proper club selection and keep track of

your score. For the next several hours

we rolled around the 650 acres of the re-

The elegant Shangri-La resort lodge.

wonderful story, about a utopian state of mind. Not at all true!! Shangri-La does exist as an island resort in the middle of beautiful Grand Lake-of-the-Cherokees in Northeastern Oklahoma. Best of all it has an airport, recently reopened as Grand Lake Regional, with a hard-surface runway. With this "flight destination" in mind my wife, Maureen, was eager to join me for a cross-country flight to experience Shangri-La, and this time without the plane wreck in the mountains! Last month I described our flight to Grand Lake and Grand Lake Regional Airport. This month I will tell you about our stay at this elegant island resort.

Shangri-La first opened in 1964 and has a reputation as "the best luxury resort in the Midwest." Over the years this major luxury resort hosted the 16th Mid-West Governors Conference in 1977, the 74th National Governor's Association meeting in 1982 and is generally considered to be



Maureen tries out the Waverunner! The Oklahoma Aviator, January 2001, Page 6

sort, located on the southern end of Monkey Island, with spectacular views of Grand Lake in every direction and crisscrossed with fairways, forests, and ponds. To complement our afternoon of enjoying the scenic fairway environment, we chose the casual, but elegant, Greenery Restaurant in the main lodge for dinner. The restaurant sits atop the clubhouse and has a magnificent view, with solid glass walls from floor to ceiling, overlooking the lake and rolling greens of the golf course below. Each course at the Greenery has a golf"Practice Tee," which offered such items as Jack's succulent shrimp cocktail or Tiger's Cajun fried shrimp, consisting of breaded butterflied shrimp, tossed in Cajun seasoning and served with bleu cheese. Ordering from the "Driving Range" translated into a choice of salad, potatoes, rice, or soup. House specialties, found under the "Gold Course" on the menu, were slow roasted Oklahoma prime, whiskey pepper steak, and Greenery chicken, consisting of seared breast of chicken topped with fresh spinach, sundried tomatoes, mozzarella cheese and drizzled with herb garlic oil served on sautéed angel hair pasta. Fresh seafood and steaks were also on the "Gold Course" menu, and all entrees came with a choice of house or Caesar salad, baked potato or specialty house rice and fresh baked baguettes. The "19th Hole" included an array of desserts, such as cheese cake de jour, Granny Smith's caramel apple pie, strawberry labamba, and chocolate mousse torte. After consuming a succulent item from each golfing category, we felt a need to walk the golf course-- this time to burn off some calories!!

Next morning at breakfast we discussed our recreational options for the day. The crystalline blue morning sky promised to provide another hot Oklahoma summer day, thus water sports were high on the list. The day before, on our golf cart tour, we observed wave runners and jet skies streaming across the lake. It looked so refreshing that we decided to give it a try. Soon we were down at "The Waterfront" marina receiving instruction on the operation of the Waverunners. As first timers, Maureen and I were a little nervous about skimming across the water at 40-50 MPH, but as we soon learned, there's nothing to it. Just rev it up, hold on and have some refreshing fun!! Later that afternoon Maureen decided to try the relaxing luxury of a massage and facial at the "Tahitian Health Spa," while I relaxed beside the indoor pool amidst tropical foliage, rustic footbridges, and a sparkling waterfall. Maureen's pampering at the health spa had set her aglow.

Following our afternoon of total relaxation, we were ready to step out for

dinner. We decided to dine at a wellknown Monkey Island nightspot called "The Shebang." This restaurant is fash-ioned like a 1920's dance hall and offers a very interesting menu entitled "The Variety House" starring Madam Cluck, Hereford Hunks, Seafood Troupe, Pasta Galore, The Pizza Family, and Baby Back Ribs! Warnings on the menu, including "Someone's child is breaking things, is he or she yours? Credit cards accepted for damage." After enjoying the menu, I chose the Madame Cluck Strips, billed as the hottest act in town. Maureen chose the Roughy Boys from the Grand Tour of the Seafood Troupe, accompanied with the "Cajun Grilled Shrimpettes, always very hot and spicy!" The menu made it clear that all of the above acts perform with "buxom baked potato, Toulouse salad, and garlic bread." For dessert we each chose an ice cream cone from one of the variety of "lusty flavors"! The décor of the restaurant was festive and complemented the creative menu, which made for a memorable dining experience.

Next morning we returned to the airport and found Juliet more than ready to get back into the sky. Following take off, we circled Monkey Island to get a better view of the scenery that surrounds Shangri-La. As usual, the view was much more breathtaking from the air. Banking over the bluegreen water of Grand Lake, I turned onto our southwest course for home. The sky was washed a clear blue with shades of gray along the horizon and a thin cirrus layer of what appeared to be powder sugar spread on an invisible glass counter top was suspended high above. Returning home in Juliet on this clear summer day, after a relaxing stay at Shangri-La, was like waking up in a dream. I might have pinched myself to be sure that it was real-- when Maureen reminded me that I had drifted nearly 10 degrees off course and brought me back to reality in an instant. Well, I guess the Shangri-La experience can't last forever-- but we plan to visit this island paradise again!



Grand Lake Regional Airport, surrounded by beautiful Grand Lake.

derived name. The menu started with the



OAOA Storm Water Workshop a Big Success

On December 6, 2000, the OAOA sponsored a workshop in conjunction with the OSU Chapter of the American Association of Airport Executives. The topic was new state storm water permitting and monitoring regulations, which affect airports and many other industries. Approximately 80 people, representing almost 40 airports from across the state, attended the workshop. OAOA Corporate Director, Mr. Derek Blackshare, President of Cinnabar Environmental Services, LLC assembled a panel of speakers and served as panel moderator.

Scott Van Loo, with the City of Tulsa, briefed attendees on the history of the storm water permit regulations and summarized the changes and unique features of the new regulations. A summary of the changes is as follows:

1. Nearly all airports will require permits to legally discharge storm water.

2. The Notice of Intent (NOI) form has several changes involving Endangered Species and Aquatic Resources of Concern.

3. All airports will be required to collect quarterly visual samples of storm water runoff.

4. All permittees will have to prepare and file an Annual Comprehensive Site Compliance Evaluation Report.

5. A new provision allows for facilities with no exposure to file a certification form to that effect.

Guy de Verges, from Cinnabar Environmental Services, discussed permitting options for airport tenants. The Oklahoma Department of Environmental Quality (ODEQ) had previously stated that tenants would need to obtain permits separately from the airport. However, due to complaints, the ODEQ now says that permitting for tenants is up to the individual airport-- they can be covered under the airport's permit or not. If tenants are covered under the airport's permit, the airport becomes responsible for tenant activities and is liable for any violations by the tenant.

De Verges also covered elements required in the Storm Water Pollution Prevention Plan (SWPPP), including drainage analysis, potential pollution sources and Best Management Practices (BMPs) to address them, self-inspection schedule, sample collection, and the preparation of the Annual Comprehensive Site Compliance Evaluation Report. He also discussed potential pollution sources such as deicing areas, fueling areas, material storage areas, aircraft and vehicle maintenance activities, aircraft and vehicle washing activities, etc.

Jeff Elbert, of A&M Environmental and Engineering Services, described how to determine storm water runoff outfalls and outlined visual sampling requirements, which include:

1. Quarterly sampling of qualifying rainfall events beginning with 4th calendar quarter of 2000.

2. Sample collection within the first 30 minutes of flow, only during daylight hours.

3. Sample evaluation (by the same person, if possible) for color, clarity, odor, floating solids, suspended solids, settled solids, foam, sheen, and other obvious indicators of storm water pollution.

4. Sample analysis form signed and certified by authorized official.

Al Hartlein, of Bentley Environmental Engineering, discussed the importance of conducting thorough self-inspections and documenting them properly. Inspections should include fueling areas, material storage areas, maintenance and washing areas, and especially co-located tenant operations. He also discussed the importance of employee and tenant training and documentation.



Speakers panel at the OAOA Storm Water Workshop.

Carl Johnson, of Bucher, Willis, & Ratliff Corp, covered requirements of the Annual Comprehensive Site Compliance Evaluation Report form, the first of which will be due by December 1, 2001. Of particular note are summaries of self-inspections and corrective actions taken to resolve problems discovered, results of visual runoff samples, and BMP effectiveness.

Don Mooney, from ODEQ, also offered general comments on the history and development of the ODEQ's new regulations and permit, and discussed payment of permit fees. He offered his assistance to answer questions and asked that requests/questions be e-mailed to him at donald.mooney@deqmail.state.ok.us

OAOA plans to have an update to this and other environmental issues at the annual conference April 22-24 at Quartz Mountain.

Can You Define "Airworthy?"

By Clifford R. Magee, Attorney-at-Law



The practice of law is a profession dealing with people, documents, and events that tell their own unique stories. The practice of law is at best subjective.

Aviation has its own unique subjective term of art: "airworthy." This term accounts for a large body of aviation law. This article focuses on the significance of the term and its potential impact on an aviation insurance claim.

I will intentionally not even offer a suggestion of a definition of airworthiness, so as not to add fuel to an ever-smoldering fire. I simply reiterate, for purposes of this article, that it is a subjective term. Prove that to yourself right now. First, try and define airworthiness to yourself. Then try and state your definition to another airman.

The FAA itself does not provide a clear and consistent definition, but it does require that an aircraft be airworthy if it is operated for purposes of flight. Many factors may assist in showing that an aircraft is or is not airworthy. Some actually impact the aircraft's ability to fly. Some, such as a logbook entry, have no bearing on the aircraft being able to become physically airborne. Some factors are easy to determine, such as a bent propeller, a damaged landing gear or inoperative position lights on a night flight. Other factors are not as readily discernable, such as an airworthiness directive not having been complied with on an experimental aircraft engine. This is subject to interpretation.

However, when it comes to an insurance loss there is less room for interpretation. This narrowing of interpretation for insurance purposes is due to a legal doctrine known as "causal link exclusion." In cases where the doctrine is applied, if an insurance company wants to exclude coverage, it must show a connection between the occurrence of a casualty and the commission of an act that gives rise to a policy exclusion.

For instance, suppose you were flying an out-of-annual airplane and an accident occurred because the engine quit due to frayed ignition wires. Suppose your insurance policy contained an exclusion requiring the aircraft be airworthy. It would be possible for the insurance company to show that a proper annual inspection would have corrected the frayed ignition wires, and thus have prevented the accident. Under those circumstances, they could deny coverage even under the causal link exclusion doctrine.

On the other hand, suppose you were flying that same out-of-annual airplane and the engine quit because the airplane ran out of fuel. Under the causal link exclusion doctrine, the insurance company could not deny coverage even though the policy contained an exclusion requiring the aircraft to be airworthy. The reason is that the out-of-annual condition did not cause the accident.

Some courts apply causal link exclusion doctrine and thus do not allow insurance companies to deny coverage unless they can show that an excluded act or condition caused the loss. However, the majority of courts, including those in Oklahoma, reject causal link exclusion. Thus, even though a loss may have no connection to an excluded act or condition, the insurance company can deny coverage.

Defining the term airworthy and applying the Oklahoma courts' rejection of the casual link exclusion doctrine may determine whether or not you have insurance coverage in the event of a loss. This is a result of the terms of most, if not all, aviation insurance policies.

A review of your insurance policy will most likely reveal some sort of airworthiness definition. The policy will also likely state that the aircraft must be airworthy for coverage to apply. If the aircraft is not airworthy, the "exclusions of coverage" portion of the policy will control whether or not the insurance company will pay. (You may also find it useful to know that most aviation insurance policies exclude coverage if an airman violates an FAR and a loss occurs.)

What does all this mean? In Oklahoma if your aircraft is not "airworthy" at the time of a loss, your insurance company may attempt to deny coverage. Fortunately for the insured, the insurance company has the burden of proof to show that your aircraft was not airworthy. Unless obvious, it can be just as hard to prove that the aircraft was not airworthy as that it was. Maybe it will depend on how many big pieces are left over. All in all, the determination is subjective and depends on whom you ask.

Notice: This article is provided for general information purposes and not presented as legal advice.

(Placeholder- AOPA Advertorial)



Specialties Services is located at 2680 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

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24-Hour On Call Service

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A MESSAGE FROM BOB JANDEBEUR TO OKLAHOMA AVIATOR READERS

The State of Oklahoma has always been a haven for aviators. From the earliest aviation pioneers such as Clyde Cessna and Wiley Post up through the astronauts of today, our history is rich with aviation accomplishments. Currently, we enjoy the benefits of being one of the most active aviation states in the nation. We rank 4th in total number of airports and 1st in number of airports per capita. Aviation activities in Oklahoma produce an enormous economic benefit to the state, totaling over 11.7 billion dollars.

The Oklahoma Aviator has, for more than *twenty years*, fostered and promoted aviation activities in this area of the country. Now, its future is in question.

As the new Oklahoma Aeronautics Commissioner for District 1, I firmly believe that *The Oklahoma Aviator* provides a benefit to all Oklahoma aviators, aviation businesses, and aviation organizations. We should *not* allow that benefit to disappear. Therefore, I am supporting *The Oklahoma Aviator* and I *challenge* other business and individuals to do so also.

If you would like more information on how you can help, please email me at bob@jandebeur.com.

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Calendar of Events

For a free listing of your event, email us at ok_aviator@mindspring.com or call 918-496-9424

REGULAR MONTHLY EVENTS 1st Thursday- Oklahoma Pilots Association meeting and dinner, Wiley Post Airport, Oklahoma City, OK. Contact Helen Holbird- 405-942-6308

1st Saturday- Ponca City Aviation Boosters Club fly-in breakfast, rain or shine, 7:30-10:00AM, Ponca City Regional Airport, Ponca City, OK. Contact Don Nuzumnuzum@poncacity.net or Bruce Eberle- 580-762-5735

2nd Thursday- Oklahoma Windriders meeting. For all balloon enthusiasts. 7:00 p.m. Metro Tech Aviation Career Center. Ron McKinney, President 405-685-8180

2nd Saturday- Debbie's Diner fly-in

breakfast, R.L. Jones Airport, Jenks, OK

3rd Saturday- Green Country Ultralight Flyers Organization meeting. Call 918-632-6UFO for location and details, or call Bill Chilcoat at 918-827-6566 for additional information

4th Thursday- Vintage Aircraft Association Chapter 10, 7:30PM, South Regional Library, 71st & Memorial, Tulsa, OK

JANUARY 2001

13th- Hall of Fame Induction Dinner, Oklahoma Chapter of the Ninety-Nines, Kirkpatrick Center Omniplex. For more information, contact headquarters at 405-685-7969.

15th- Education Camp, "Golden Age

of Flight," for Grades 1-4, Tulsa Air and Space Center, 7130 E. Apache, Tulsa, OK, covers lift and drag on kites, wing shape, Bernoulli's principles, and understanding gliders, \$30/student. Call 918-834-9900 for more info.

FEBRUARY 2001

2nd-3rd- Garage sale, Oklahoma Chapter of the Ninety-Nines, Trina Jones home, 1708 Westminster Place, rain date February 23-24. For more info, contact headquarters at 405-685-7969

15th- Education Camp, "Golden Age of Flight," for Grades 1-4, Tulsa Air and Space Center, 7130 E. Apache, Tulsa, OK, covers lift and drag on kites, wing shape, Bernoulli's principles, and understanding gliders,

\$30/student. Call 918-834-9900 for more info.

MARCH 2001

26th-30th- Education Camp, "Aviation, Gliders, and Planes," for Grades 3-6, Tulsa Air and Space Center, 7130 E. Apache, Tulsa, OK, covers Lindbergh, clouds, Amelia Earhart, and commercial flight, \$198/student. Call 918-834-9900 for more info.

APRIL 2001

20th-21st- Education Camp, "Women in Flight," for Grades 1-5, overnight for mom or guardian and daughter, Tulsa Air and Space Center, 7130 E. Apache, Tulsa, OK, \$30/ student. Call 918-834-9900 for more info.



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An overhead view showing Lot 4 Block 4 on the left and Lot 5 Block 2 on the right.



Trees abound everywhere at the Tenkiller Airpark. This is a view of Lot 5 Block 2 from the runway.



Short final for 23. If you lived here, you'd be almost home! Note the lake beyond the runway end.