



FLIGHTLINES

Newsletter of the Texins Flying Club

June 2004

CALENDAR OF EVENTS

9 June (Wednesday): TFC Board Meeting, 6:30 PM, TKI Conference Room. All members welcome.

12 June (Saturday): General Membership Meeting, Donuts 8:30 AM, Meeting 9:30 AM, TKI Conference Room, **Mid-Year Elections**

10 July (Saturday): General Membership Meeting, Donuts 8:30 AM, Meeting 9:30 AM, TKI Conf. Room

14 July (Wednesday): TFC Board Meeting, 6:30 PM, TKI Conference Room. All members welcome.

Congratulations on these Member Achievements!

Member	Event	Date	Instructor
None Reported			

TSA SUSPENDS "PILOT INSECURITY RULE"

The "pilot insecurity rule" has lost its bite—at least for now. The Transportation Security Administration has suspended enforcement of the rule that allowed it to revoke a pilot's certificate for alleged security risks. The rule was particularly onerous because the only avenue of appeal was back to TSA! Thanks to an intense lobbying effort on Capitol Hill, Congress ordered TSA to come up with a new appeal process. TSA won't enforce the rule against U.S. citizens until a new appeals process is in place.

FAA SAYS NO TO GIANT N NUMBERS

The FAA has turned down a petition from a Massachusetts anti-noise group to require aircraft owners to put 2-foot-high N numbers under their wings. As AOPA had argued in its comments on the petition, the FAA said the issue had been debated, studied, and decided years ago—the current 12-inch-high numbers on the fuselage are sufficient. AOPA suspected that it was a thinly veiled attempt to make it easier for the Stop The Noise group to sue pilots.

FAA MAPS OUT LONG-TERM PLAN FOR ENHANCED SAT-NAV

Top officials at the FAA recently announced that the agency is committed to maturing satellite-based navigation for the long haul using the wide area augmentation system (WAAS). Executives from the FAA's Air Traffic Organization said part of their plan for

supporting general aviation's transition to WAAS is to develop 500 new WAAS approaches each year, making the system more useful to GA pilots. "Using WAAS to deliver all-weather access to airports increases a local community's access to the world," said AOPA

President Phil Boyer. "This is why AOPA embraced this navigation system early on." The FAA expects to be able to deliver Category I ILS-like performance throughout the continental United States and parts of Alaska using WAAS. But that won't happen until after a full constellation of new-generation GPS satellites are in place, expected sometime around 2013.

ASF's ANNUAL NALL REPORT SHOWS GA ACCIDENTS DOWN

General aviation pilots set a record low for the number of accidents in 2002, according to the AOPA Air Safety Foundation's annual Joseph T. Nall General Aviation Safety Report. The nation's most comprehensive examination of general aviation (GA) safety and GA accident trends is now available online. "But there is a downside to the report," said ASF Executive Director Bruce Landsberg. "Accidents that simply should not happen—those due to fuel mismanagement and flights into bad weather, mostly under VFR—continue."

AIRCRAFT SALES UP AS ECONOMY IMPROVES

Piston airplane sales are good indicators of how the economy is doing. When people get nervous, aircraft sales tank. But based on several indicators, it appears that the economic recovery is continuing. The General Aviation Manufacturers Association (GAMA) announced that general aviation aircraft billings rose 21.1 percent while shipments increased 9.7 percent in first quarter 2004 compared to the same time period last year. GAMA said tax incentives such as bonus depreciation helped boost sales. Based on the figures, Cirrus Design is now selling more four-seat piston airplanes than any other company, nudging out Cessna. Cirrus recorded 105 shipments compared with Cessna's 89. In the rotorcraft world, Robinson Helicopter saw an 82-percent increase in deliveries.

HELIO COURIER CELEBRATES GOLDEN ANNIVERSARY

The first production Helio Courier, built in June 1954, will be on display at this year's EAA AirVenture in Oshkosh beginning in late July. Serial No. 1 was restored to flying condition at JAARS, a missionary aviation support group based in Waxhaw, North Carolina. A number of Helio Couriers will fly to Oshkosh to celebrate the event: 15 are now scheduled and more are expected.

Out of the Pattern

Consistent Landings

Part 3

Make the same good landing time after time

BY ALTON K. MARSH (From [AOPA Pilot](#), March 2002.)

Do you consistently make good landings? The experts see the traffic pattern as a precise ballet where pilots maneuver and reconfigure the aircraft the same way, every time. To them, a good landing starts on downwind, not in the flare.

Ron Fowler

Ron Fowler wrote *Making Perfect Landings* and several other books, most of them published by Iowa State University Press. During an interview from his home in Christmas, Florida, he provided his version of the landing ballet.

"Try as best you can to make every landing just like the one before," Fowler said. "You are either managing the plane, or the plane is managing you." The three secrets, he said, are to fly a perfect ground track, manage your airspeed, and make a precision descent. Here's how he does it.

On the downwind leg, he maintains a consistent one-half-mile distance from the runway. Yes, that is a tight pattern. How do you gauge one-half mile? Look at the runway and estimate from that; if it is a 5,000-foot runway, then mentally turn half of it 90 degrees to the runway to visualize a half-mile.

Then, pick out landmarks that track that line, and check the windsock to see if the airplane needs to be crabbed to maintain that path. Once you know you are on a half-mile-wide downwind, look at where the runway intersects either the wing (low-wing airplane) or the strut (high-wing airplane). That way, you'll never again have to line up on that Arby's at your hometown airport.

Select as a touchdown target the second stripe on the runway centerline. That is only a target; you will aim to land on the third stripe. By selecting a stripe, and not "the numbers," you assure that you will not land short. Berms at the approach end of the runway can be 8 inches high, and the landing gear will not survive an impact.

Reduce the power abeam the third stripe. It is critical to retrim the airplane every time you change the power or flap settings. Trim for the proper approach speed as recommended by the manufacturer. It is common for pilots to underuse the trim.

Next, pick out a landmark a half-mile from the end of the runway; you can turn base past that point if you wish, but plan to pass over it on final 300 to 400 feet above the ground. You may find that this is a higher approach than normal, but it is preferable to one that is low and flat, Fowler said. As you turn base, look at the landmark and "make the cookies and milk come out together," Fowler said. That is, plan the descent so that you are 300 to 400 feet high at the landmark on final. Don't just fall somewhere in that range — pick a number. Don't make

a power adjustment more than 50 rpm if you can help it. If you find you need to adjust power by more than 100 rpm, go around. "Anytime pilots have to make large power changes, they make inconsistent glide paths and a bad landing," Fowler said.

Be ready to go around

Check the owner's manual and fly within five knots of the suggested speed. ("Three knots is what I make my students do," Fowler said.) If you are more than five knots off, it is time to go around, he said.

On final, keep the flight path lined up with the centerline. It is there to show you wind drift. Use one degree of heading correction for each knot of crosswind component.

Be aware of the wind when turning base to final. If you have a tailwind, start a shallow turn early. If it is a headwind, start the turn late and square it off. If it appears that you need more than 15 to 20 degrees of bank to line up with the final approach course, go around.

Where do you put the flaps down? Anywhere you want to, but do it the same way every time. Otherwise, you deal with an unfamiliar situation for each landing. If you want to put down two notches on downwind, do that every time. If you would rather do that on base, then let that be your method. But be consistent. "Full flaps won't prevent a go-around if the plane is properly trimmed," he said.

"Go out and try this for yourself," Fowler advises. I did. I rented a Piper Archer and brought along flight instructor Markku Koppanen to take care of the plane while I read Fowler's notes, and to get a second opinion of the tips Fowler offers. Bottom line? We both felt we benefited from the practice.

I found that to make the steep approach, I needed a head start on slowing the airplane, and so I flew downwind at 85 knots. We experimented with nearly a dozen landings before settling on an initial power reduction abeam the third runway stripe to 1,200 rpm. That allowed us to complete the approach and to land on the target with no more than a 100-rpm power reduction, although that last part was tough. We overshot the target a few times, but landed short of the third stripe on only one of the dozen landings. All the touchdowns, by the way, would have pleased the passengers — if I'd had any. There was only one greaser, however.

Crosswinds

Fowler suggests crabbing during most of final, but switching to the slip method of controlling crosswinds while well above the runway; he does not like the kick-out method. That's when the pilot crabs to within a few feet of the runway and then kicks in rudder at the last second to align the fuselage with the runway centerline. "The kick-out method is too difficult. You can't tell when the tires are going to touch," Fowler said. In other words, your aircraft may still be in a crab at touchdown, and that is hard on the landing gear.

Many textbooks tell you that in order to break the glide, you should level the flight path above the runway, starting at 20 feet. If you actually wait that long, Fowler suggests, you are going to float. "You are going to be zipping along," he said.

Use a good follow-through, just like a good golfer or baseball player. Keep applying aft pressure after touchdown. Too many pilots let the nose slam down. That is because they were actually trained to do that during touch-and-go practice in their student days, Fowler said.

Caveats

Ah, you say, but the pattern at my airport is so busy I can't possibly turn a half-mile final. That's true, but you can still be 300 to 400 feet above the ground when one-half mile from the end of the runway, and you can aim for the second runway centerline stripe from that point. You can also have the airplane fully configured and trimmed by that point.

Obviously, you need to make a smaller power reduction if the aircraft ahead forces you to a two-mile or longer final approach. But at the final half-mile ground reference point, you can reduce power to the value you have previously tested.

William K. Kershner

Bill Kershner was a key contributor to the 1986 three-part FAA pamphlet series titled *On Landings* that is still available on the Internet. Links are provided on AOPA Online by going to the Web address at the end of this article. Like Fowler, Kershner has written many books for student pilots, commercial pilots, and flight instructors, most of them also published by Iowa State University Press (see "[Wake Turbulence](#)," p. 91). A link to Iowa State University Press is also provided on AOPA Online. Here are Kershner's suggestions for consistent landings.

Kershner's mantra is to make configuration changes early so that adjustments during the final phase of landing are few. "The less juggling you have to do the better," he said. He puts in the first two notches of flaps in his Cessna 150 after reducing power to 1,700 rpm abeam the intended point of landing. He slows to 65 kt and will use that speed on base and on early final, transitioning to 60 kt on short final. His first turn to base is made with 30 degrees of bank so that he can get around the turn quickly, level the wings, look for non-pattern, straight-in traffic (which he hates), and look at the runway for altitude cues. The turn to final is shallow. "I stabilize the flap configuration and airspeed as soon as I can. You're too busy to be changing them," he said. On final, when he knows he has the runway made, he reduces the throttle to idle "so I don't have to worry about it." Like Fowler, Kershner does not try to land on the end of the runway.

Just above the pavement, he looks out along the nose 75 to 100 feet ahead and watches the runway. He tries to hold the aircraft off to keep it from landing. The

stall warning horn tells him when he is 5 to 8 kt above the stall speed.

His main point is that he lands the same way every time — consistently.

A final tip

The coach of the Embry-Riddle Aeronautical University Eagles Flight Team — Mike Leeper — offers a final few tips. It makes a huge difference in your landings if you trim the airplane in its final configuration at 300 feet and then let go of the yoke for a second. That tells you if the aircraft is properly trimmed. If it is, your landings will improve. "It works like magic," Leeper said.

Leeper also preaches consistency. "Lower the flaps at the same place, make your radio calls at the same spot, turn base at the same location, every time."

His flight team appears to be able to make consistent landings, since they have *consistently* won their regional collegiate flight competition 14 years running.

Once Around the Pattern

Here's a checklist of tips as you fly the pattern

- Turn downwind one-half mile from the runway. Use the runway to help visualize that distance. Retrim with every power and configuration change.
 - Pick ground references for the downwind course. Note where the wing or strut intersects the runway. Use that point in the future to assure a one-half-mile downwind.
 - Reduce power abeam your touchdown point — the third runway centerline stripe.
 - Set flaps. Consider using two notches. Retrim.
 - Pick a ground reference point one-half-mile from the end of the runway. Be 300 to 400 feet above the ground at that point.
 - Maintain airspeed to within 5 kt of the manufacturer's recommendation.
 - At 300 feet, take your hand off the yoke or stick briefly to assure that you are properly trimmed.
 - Aim for the second stripe, land on the third.
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To put your life in danger from time to time... breeds a saneness in dealing with day-to-day trivialities.

— *Nevil Shute, 'Slide Rule: The Autobiography of an Engineer'*.

Shopping for Tires

Sometimes the cheapest tire isn't the best deal. What matters most is tread depth and the more, the better.

Aviation Consumer
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by Jonathan Spencer

Aircraft tires are probably one of the least-discussed components of an airplane. When you talk to your shop about replacement, the conversation is all of two sentences: Your mechanic says: "That left main was about wore out – we replaced it." And you reply: "OK."

Sound familiar? But what did he replace it with? Was it the best choice given your type of flying? Could he have saved you some money with a different tire? And would a cheaper tire really have saved you money in the long run?

It's likely that the tire your mechanic put on was expensive or at least mid-priced. With his mark-up, you'll probably pay around \$140 for the tire and \$35 for the tube, so about \$175 total and that's before labor to mount it.

Depending on what sort of flying you do, he could have saved you half that. Of course, it would have taken a day or two longer because he'd almost certainly have to special order the tire rather than taking it from his stock.

And there's some evidence that a cheaper tire won't last as long under some circumstances. Unfortunately, figuring out what's fact and what's myth in the airplane tire business is a challenge, even when talking to your mechanic. We'll try to sort some of that out here.

Aviation Consumer last wrote about tires in the March, 1997 issue. In the seven years since that last report, the basic design of aircraft tires hasn't changed much, although there's been some minor shifting of market players and some positive developments in the way tires are sold.

Goodyear and Michelin still own the high end of the market, with Goodyear still having a significant edge. McCreary still shares the low end with Michelin's Condor line and the retreads. And retreads are still fighting an uphill battle for respectability. The number of tire distributors and retreaders has declined as the big guys have bought out the little guys. But there are still some good tire deals out there and now you can find them and buy them on the Web.

There are a few changes to individual tire lines. Goodyear's Flight Custom II is gone, replaced by the Flight Custom III, which has two grooves instead of four. And there's a new retread called "The Monster," that's advertised to outlast any 6.00 x 6 tire made. More on both of these later.

Tires 101

While it's tempting to compare aircraft tires with car or truck tires, the comparison is flawed. The applications are very different and so aircraft tire design is very different from car tire design. An important consideration

in tire design is heat dissipation. Most heat is generated in a tire by the flexing of the tread as it contacts the ground and again when it rolls off contact with the ground. Car tires are designed to run for hours without overheating and one way that's done is by limiting the deflection to only about 17 percent.

Aircraft tires don't need to run for hours. In fact, they only have to handle a taxi to takeoff followed by the takeoff roll, or a landing roll followed by a taxi back to parking. In both cases, they have sufficient time to cool before they're called upon to perform again.

Therefore, aircraft tires are designed for deflections of 32 to 35 percent. This provides a larger footprint (and better traction) for small aircraft and reduces ground bearing pressure by spreading the load for heavy aircraft. The trade-off is faster heat build-up.

Aircraft tires aren't designed to handle a maximum-braking effort abort. If you abort a takeoff and use maximum braking effort, most tire manufacturers recommend a tire inspection and, for heavier aircraft, a mandatory tire change.

Tires come in a number of different types and designs, but for most of us, it's academic. Theoretically, you can choose between any combination of bias- or radial-ply and tubed or tubeless. But for most light aircraft, bias-ply and tubed is the only game in town.

Although almost all car tires these days are radials, light aircraft tires are almost universally bias-ply. There are several reasons for this but the most significant is cost—bias-ply tires are cheaper to build. And the primary advantage of radials – better handling in turns – isn't a big deal for airplanes.

Radials are available in a number of bizjet sizes, but only the Cessna Citation X requires them (main gear only). Many airline aircraft can use radials, but most do not because radials are more expensive and cannot be retreaded as easily as bias-ply tires.

Tubeless tires are also almost universal for cars but not widely used in airplanes. That's because a tubeless tire requires an air-tight wheel. Most light aircraft wheels consist of two halves that bolt together and few are designed to be air-tight. Tubeless tires show up on a wider variety of aircraft than radials—King Airs, Conquests and Aerostars, for example.

The Differences

Within a given tire size and type, there are only a few variables that a manufacturer can manipulate: tread depth, hardness of the rubber, the number and width of grooves, ply material and the ply rating.

Tread depth is really a measure of how much rubber is on the tread of the tire. Everything else being equal, more tread means longer life. Since there's no advantage to making grooves that don't extend almost to the underlying fabric belts, you can check this easily by measuring the depth of the grooves.

There are limits, however. Every size tire has a specified maximum diameter. No tire, including retreads, can exceed that diameter. So even "The Monster" retread (a 6.00 x 6 tire), which boasts 11/32 inch of tread depth, cannot exceed the 17 1/2-inch maximum inflated outside diameter specification.

Rubber hardness is determined by the rubber compound the manufacturer picks. Hardness is defined as a rubber's resistance to indentation and it's measured with a device called a durometer a sharp-pointed probe with a calibrated spring and gauge. You can buy a durometer for about \$100 but you can get that information from the manufacturer or a distributor.

Generally, harder rubber means the tread lasts longer. But a manufacturer can't arbitrarily increase the hardness of the rubber used because a tire is molded in one piece and a sidewall made of rubber that's too hard may be prone to cracking.

So manufacturers compromise and use a slightly softer rubber for the tire than they might prefer for the tread to prevent sidewall cracking. Retreaders have no concern about the sidewall because they only add rubber to the tread, so they use a harder rubber and boast that their tires last longer than the originals.

Number/width of grooves is a new parameter, primarily because until recently, most light aircraft tires had four grooves and nobody questioned that. When Goodyear replaced the Flight Custom II with the Flight Custom III, they changed from four narrow grooves to two wider grooves.

They told us that tests showed that narrower grooves tend to close where the tire is in contact with the ground, reducing the effectiveness of the grooves to prevent hydroplaning. By using fewer, wider grooves, Goodyear found it was able to put more rubber in contact with the ground and also improve the tire's resistance to hydroplaning. So far none of the other manufacturers have followed Goodyear's lead in reducing the number of grooves, but this may be something to watch for in the future.

Ply material is the material the manufacturer chooses for the fabric plies of the tire. Most manufacturers use nylon for both the case plies—the fabric that gives the tire its shape—and the belt plies—the fabric running under the tread—but Goodyear uses Kevlar for the belt plies on its Flight Custom III.

Ply rating is a confusing specification to most people and for good reason. There is no industry standard for this rating, so one manufacturer's 6-ply rating may not correspond to another's.

Goodyear says that ply rating "is an index of tire strength and does not necessarily represent the number of carcass plies in the tire." A better specification is the load rating, which you can find on the side of the tire.

Retreads

Almost all aircraft fleet operators use retreaded tires. This includes many flight schools, most airlines and the military. They find it lowers their costs with no increase in failure rates. Nonetheless, few private owners use them. There are several reasons for this, some of which may not be rooted in logic.

Most shops only stock top-of-the-line tires; it minimizes liability concerns and maximizes mark-up. The hassle to either convince a shop to order retreads or to stock them is more trouble than most owners want to deal with.

And the price differences are down in the noise level compared to the typical costs in most annual

inspections. But if you change your own tires or you go through a lot of them because you fly a lot, retreads may be worth your consideration (see sidebar).

Making Them Last

If you're in a hurry and looking for a complete tire-care course in one sentence, here it is: check your tire pressure before you fly. Yep, that's it. Tire manufacturers produce lengthy treatises on tire care, and yes, there is more to it. But if you ask them what's the most important thing an airplane operator should know about tires, they'll all say "Check the pressure."

If you are interested in the full discussion, you can find one at Goodyear's

www.goodyearaviation.com/tirecare.html

and Michelin's at

<http://aviation.webmichelin.com/care/index.cfm>.

Both are PDF files requiring Adobe Acrobat Reader and both are lengthy (Goodyear's is 49 pages, Michelin's is 86). If you'd rather not wade through that many pages, here's the quick summary:

- Check tire pressure before you fly.
- If you see fabric anywhere on the tire, chunks out of the tread or damage to the sidewall, have your mechanic check the tire.
- More than 5 percent pressure loss per day is reason for concern.
- And when you do replace a tire, don't cheap out and re-use the old tube. Tubes stretch with use and a used tube in a new tire may develop folds that will eventually chafe and wear through, costing you more money than you would have spent replacing it in the first place.

Money's Worth

You can find a lot of anecdotal evidence about relative tire quality, but not much that's backed by anything remotely like a scientific study. Our mechanic told us he felt that Goodyear Flight Custom IIIs lasted longest, Michelins didn't last nearly as long, McCreary's rotted quickly and he wouldn't touch retreads.

But he doesn't compile statistics on tire use and he has no way to track what kind of flying his different customers do, so these impressions are just that. As befits an aircraft mechanic, he has made the most conservative choice with what little data he has.

Desser Tire & Rubber, the biggest U.S. supplier of aircraft tires, demurred on giving opinions and instead told us the percentages of their sales by tire model. From that, we were able to confirm that Goodyear Flight Custom IIIs outsell Michelin Airs by a factor of better than four to one. This is probably a good indication of how individual owners divide their purchasing.

We also noted that Desser sells 25 percent more McCreary Airhawks, 85 percent more Michelin Condors and more than twice as many retreads as Flight Custom IIIs, although we suspect that most of these go to flight schools and other fleets.

The only results of real-world testing that we could find was a test that Goodyear had the flight facility at the University of North Dakota Aerospace Program do for them. UND tested Goodyear's Flight Custom III and

Flight Special II against the Michelin Air. Goodyear claims—and UND confirms—that the Flight Custom III lasted through about 40 percent more landings than the Michelin Air in flight training use.

The test was done on UND's fleet of Piper Warriors. UND told us that the Flight Special II also lasted longer than the Michelins, but they didn't quantify that. UND normally uses Michelin Aviators on its Arrows and retreaded Aviators on its Warriors. Unfortunately, they don't track landings on either of these tires so we couldn't compare them with the other results.

As we go to press this month, we are completing a round of our own exhaustive tire testing. As explained in the sidebar at right, we designed a towable rig to simulate aircraft landings. For our tests, we simulated 200 landings for 11 tire models and we also did some locked wheel tests. Look for a detailed report on the results in the June issue of Aviation Consumer. Although we're still crunching our data, our initial findings support Goodyear's claims.

What to Buy

Let's review what's out there and what each costs. If you ask most mechanics what the top tire is, they will almost universally say the Goodyear Flight Custom III. A quick look at the photos of tire cross-sections shows that the Flight Custom has more fabric and more rubber than the Michelin Air or the McCreary Airhawk.

The additional fabric should help the tire withstand the aviation equivalent of road hazards and the additional rubber should help the tire last through more landings. But you pay a price for this. Desser's price for a 6.00 x 6 Flight Custom is \$117 and you'll pay more if your mechanic sells it to you.

Goodyear's Flight Special II is their "economy" tire, although it's not much cheaper than the Flight Custom. Desser sells the 6.00 x 6 (6 ply) for \$96, only \$11 cheaper than the Flight Custom. It's hard to see how saving \$11 on a tire would tempt many buyers, but Desser sells about half as many Flight Specials as Flight Customs.

Michelin's top-of-the-line tire is the Michelin Air. Desser's price for this tire is halfway between the two Goodyears – \$110. One interesting point is that the Michelin Air's speed rating is 120 knots compared to the Goodyear Flight Custom III's speed rating of 160 knots. Is this a meaningful difference for aircraft that land well below 100 knots? We don't know and there's nothing in the literature to help.

The only data point we have on Michelin Airs is the UND study, but apparently many owners prefer the Goodyear line.

The Michelin Aviator is Michelin's economy tire. Michelin puts more distance between their top tire and their economy tire—the Aviator is \$93 at Desser for the same size, \$17 cheaper than the Air. Desser sells almost the same number of Aviators as Airs, so owners seem to be split evenly on which of these is the better buy.

Michelin makes another tire—the Condor—although looking at the ads you'd never know it was Michelin's. The Condor is a low-end tire, competing with the McCreary line and with retreads. The price difference is

noticeable; a 6.00 x 6 (6-ply) Condor costs \$49.95 from Desser. The Condor is a big seller: Desser sells 25 percent more Condors than the combined sales of Goodyear's Flight Custom and Flight Special.

McCreary has made a business of serving the low end of the market. Their Superhawk is the top of the low end and sells for \$73.95. It's not a big seller, however. Next down McCreary's line is the Airhawk, selling for \$44.95.

The Airhawk does well, selling slightly more than the Flight Custom. If you're trying to fly for the least money and you don't fly a lot, the Airhawk or the Condor are probably the most economic new tires. The bottom of the low end is the Airtrac, selling for \$41.95. The Airtrac sells about as many as the Flight Special.

Desser's biggest seller is its standard retread, at \$43.95. Their "Monster" retread (\$59.95) is also popular, selling at a volume equivalent to 70 percent of the Flight Custom. Desser is explicit that the Monster is designed for airplanes that make a lot of landings—flight school airplanes—not for low-usage airplanes.

Recommendation

If your mechanic is going to mount your new tires, you have a decision to make up front—do you go through the hassle of insisting he special-order a tire or do you just go with his recommendation.

If you go with his recommendation, it will cost \$25 to \$50 more, depending on what alternative tire you had in mind. Many owners will decide that the hassle just isn't worth the price difference.

If you replace your own tires you have more flexibility. Then it depends on how you fly. If you fly daily or even weekly, it may be worth getting a top of the line tire just for the peace of mind. And based on tread thickness alone, we'd recommend the Goodyear Flight Custom III over the Michelin Air. In our next tire article in the June issue, we'll put some specific numbers on that.

If you don't fly a lot, and especially if you don't make a lot of landings, you should probably consider one of the cheaper tires or one of the retreads. After all, your tires will probably rot out before they wear out.

And as one of the retreaders asked us, would you rather rot out a \$90 tire or a \$50 tire? Yes, a \$90 tire may take a little longer to rot out, but it's certainly not going to last twice as long. And whatever you end up buying, make your purchase last by checking the pressure every time you fly.



Grand Opening!

The new "Frontiers of Flight" museum opens Saturday, June 5th, at the southeast corner of Love Field (University and Lemmon). Open Mon-Sat from 10:00 – 5:00 and Sun from 1:00 – 5:00. Admission is \$8 for adults and \$4 for children.

Texas Hill Country Weekend Vacation

By Calvin Coffey



Tired of the hustle and bustle? Need a weekend to rest and relax? I suggest a nice cross-country flight to Gillespie County Airport (T82) to enjoy the Texas Hill Country. The relaxing flight from Collin County Regional (TKI) took 3 hours in my C170, since I circumnavigated the president's ranch TFR (he was in residence). My route took us over Mexia, Cameron, Georgetown and the famous Horseshoe Bay Resort.

I tied down my airplane in front of the Hangar Hotel and checked in. The large 2 story Quonset hangar hotel is decorated in early 1940's style and has an old time looking switchboard in the office. They have a large porch with comfortable chairs that overlook the runway and ramp allowing guests to watch the airport activities and beautiful Texas sunsets. The rooms are very impressive and comfortable. Once a month, they have a Pilot Special rate for \$79/night vs. the normal \$139/night. For more information check www.hangarhotel.com or (830) 997-9990.

Lunch was a short walk away at the Airport Dinner. This very popular restaurant has many local and fly-in customers. The restaurant and staff are dressed up like the old 1940's diners. The old-fashioned blue-plate specials and fountain treats are rather popular. They serve 8a-4p on weekends, 10a-2p on weekdays. You can reach them at (830) 997-4999.

After lunch, I picked up a rental car at the Motor Pool (just north of the self serve pumps). The car rental is \$35/day + gas for a late model Chevy Malibu, 1st 100 mi free, +\$.10/mi after, and is rather flexible on the Sunday return time. Their phone number is (830) 990-0562.

7 mi E of Fredericksburg on Hwy 290 is the Wildseed Farms. It is the largest working wildflower farm in the United States. They have a large selection of seeds, natural foods, flowers, gardening accessories and a new butterfly exhibit. The best time to view the wildflowers is April-Sept. For more information check (830) 990-1393 or www.wildseedfarms.com.

11 mi E of the Wildseed Farms is the Lyndon B. Johnson National Historical Park. They have a very enjoyable trolley tour through the park. The trolley tours LBJ's one-room schoolhouse, his boyhood home, his adult home (the "Texas White House"), his gravesite, 7000' runway, and several other dwellings on his ranch.

The tour is very informative, relaxing and scenic. For more info visit www.nps.gov/lyjo.

On the way back towards Fredericksburg, you just have to stop at Luckenbach to see the place made famous by "Willie, Waylon and the boys". Musicians gather for jam sessions under the huge oak trees behind the post office/bar/general store. A large chuck wagon was serving 2-alarm chili to celebrate Texas Independence Day. There is a large dance hall that regularly hosts live boot scooting music. Seemed like everyone here was just enjoying the hill country, a few beers and the free country music that seems to play on here. Check it out on www.luckenbachtexas.com.

German farmer immigrants built Fredericksburg in the 1880's. Now the town hosts a multitude of very nice shops, antique stores, restaurants, brew pubs, wineries, and the Admiral Nimitz Museum and Historical Center. There are over 2 acres of aircraft, tanks and guns on display there. Admiral Nimitz was born in a small boarding house on Fredericksburg's Main Street. Can't say there isn't something there to see for just about everybody that visits. Check out their website at www.fredericksburgtexas.com.

I definitely felt recharged and enjoyed this little vacation to the heart of Texas hill country. Hope you do too!



RACE FAN GETS SIX MONTHS FOR FIRING AT CROP DUSTER

A NASCAR fan armed with a deer rifle and emboldened by a high blood-alcohol level has been sent to prison for six months after firing on a North Carolina crop duster last year. The man opened fire on D. Wayne Slaughter, who owns Wa-Lu Aviation in Farmville, North Carolina. Medication may have enhanced the effects of the alcohol, the shooter's attorney told the court. The shooter couldn't hear the televised race while Slaughter was legally dusting pine trees nearby, so he successfully drove the airplane off after a 12-shot volley. Three of the shots hit the aircraft, one piercing the wing a foot from the Air Tractor's fuel tank and another causing the battery to explode. The pilot was not hit but suffered mental anguish. Slaughter, past president of the National Agricultural Aviation Association, said he hopes publicity about his case will encourage other ag pilots to report similar incidents.



Calendar

Jun 4-5 National Biplane Exposition and Convention; Bartlesville, Oklahoma FMI: 918-622-8400

Jun 5-6 Little Rock AFB Air Show; Little Rock, Arkansas FMI: 501-987-3353 or www.littlerock.af.mil

Jun 4-5 Gulf Coast Wings Weekend; Galveston, TX -- free ground and flight training Web: gulfwings.org

Jun 5 — FIRST SATURDAY – FLY-IN Aircraft Sale Panola County Airport (4F2); Carthage, TX. Contact: Joe Foster-airport manager 903-693-7856 // cell 903-407-8291, airport@dctexas.net

Jun 12 Garmin GNS 430/530 & AOPA Air Safety Foundation (ASF) Seminar: Meacham Field (KFTW), Ft. Worth, TX. FAA Wings Approved. Email: rgurno@ftav.com Web: www.ftav.com

Jun 18-19 Okie Twist Off; Claremore, OK Info: 918-519-2874 or iac.org

Jun 18-20 Cherokee National Fly-In; Tan-Tar-A Resort, on the Lake of the Ozarks; Osage Beach, MO FMI: Ken Mason (650) 464-6520 or email kenmason@cherokeeflyin.com or see www.cherokeeflyin.com

Jun 19-20 Aerospace America Int'l Air Show; Oklahoma City, OK FMI: <http://www.aerospaceokc.com>, Will Rogers World Airport (OKC) Great Show - Blue Angels, 3 days, kids program; sky market; fly-in's welcome; kids 12 and under FREE. Contact: Lois Lawson or Don Schmidt 405-685-8546, skoshione@aol.com

Jun 19, 2004 —EAA 1246 Poker Run - McKinney, TX. <http://www.eaa1246.org>, Poker Run originating at Collin County Regional (TKI) Airport. Hamburgers, hot dogs, and prizes. FMI: EAA1246@Comcast.net

Jun 26 Open House / WINGS Seminar 5000 Airport Road; Denton, TX Topic: Aviation Meteorology Unscrambled U. S. Flight Academy Annual Open House and BBQ. This seminar satisfies a portion of the Wings Program. This program is sponsored by Federal Aviation Administration and U. S. Flight Academy.

July 27-Aug. 2 EAA Airventure Oshkosh; Oshkosh, WI Info: 920-426-4800 or airventure.org

Sept 18-19 Fort Worth International Air Show; Ft Worth, TX Info: 817-551-1967 or allianceairshow.org

Welcome New Members

Ben Walsh
Dee Stewart
Michele Pharao
David King
Dan Richardson

Highlights from May Board Mtg -- 05/12/04

Meeting called to order at 1830 by President, Roger Nordmeyer. Attendees were: Roger Nordmeyer, Fred Carvajal, Art Jones, Doug Darlington, Bob Moran, Rick Still, Keith Gutierrez, Bill Moore and Calvin Coffey.

Operations / Maintenance: 7TY Instrument Panel overlay installed; 100-hr inspection completed. 3NB new sun visors installed; audio intercom fixed; bad GPS antenna connection; new alternator; new baggage door latch; repaired/new gas tank senders & fuel gages. 08J back on-line after being repaired for hard landing. Club flew 72.3 hours last month.

Treasurer: Balance in checking account getting low. 1 month behind on overhaul account accrual. No April gas bill yet from WingsPoint; monitoring fuel cost increases but still within financial model limits. Total bill for 08J is ~\$7.9K.

Membership: 4 new members this month; currently standing at 133 members. Great GPS presentation and Chili luncheon at last Membership meeting – many thanks to Calvin Coffey for his work on the GPS presentation and to Doug Darlington for cooking and setting up the chili luncheon.

Communications: May newsletter has been published on website. Website has been updated. Have action item to put GPS simulators up onto website. Have a request that On-line scheduler be updated to show instructor time by month (admin only). Still looking for member to fill position.

Safety: Board discussed hard landing incident in 08J again and put together our required action report. In summary, pilot/member will be required to pay Insurance Deductible (\$1000) and complete a minimum of 5 hours remedial training with the Chief Instructor

Meeting adjourned at 2030.

TFC Fleet Maintenance May '04 Fleet Maintenance - 5/01/04 through 5/31/04

6268K

5/11/04 Carburetor heat cable adjusted.
5/13/04 new instrument lighting rheostat installed.
5/26/04 50 hour oil change.
Off line, in paint shop at Aero country

7929U

5/26/04 100 hour inspection completed.
Off line at Artizone for nose wheel strut mount work.

737TY

5/05/04 New pilot seat webbing and 100 hour complete.

733NB

5/04/04 GPS antenna connection serviced. Loaner GPS returned.
5/05/04 Prop nick dressed. New speaker installed.
5/12/04 Fuel gages rebuilt and installed.

7508J

5/04/04 New left main tire and 50 hour oil change.
5/04/04 In FBO for elevator trim and gear light repair. Parts are in house for repair 5/21/04 Main gear bushings installed.
5/31/04 Transponder reseated.
Off-Line starting Saturday June 8 for new interior.

TFC Fleet Statistics (1H '04)

	Jan	Feb	Mar	Apr	May	Jun	YTD
Total	80.6	94.4	84.9	72.3	120.6	0	452.8
6368K	12.8	14.1	5.7	13.6	19.8		66.0
7929U	14.9	18.1	22.5	17.4	13.3		86.2
733NB	11.8	16.5	13.6	20.7	32.7		95.3
737TY	31.9	28.5	30.5	15.2	40.3		146.4
7508J	9.2	17.2	12.6	5.4	14.5		58.9



TEXINS FLYING CLUB OFFICERS

Office	Board Member	Office Phone	Home Phone	Email
President	Roger Nordmeyer	(972) 344-0673		Roger.tfc@verizon.net
Ops VP	Fred Carvajal	(214) 480-3280	(972) 562-2128	fhcarvajal@aol.com
Trainer Maint	Doug Darlington	(972) 344-8393	(972) 578-8410	d-darlington@raytheon.com
XC Maint	Keith Gutierrez	(214) 480-7940	(972) 422-1983	kgg@ti.com
Membership	Rick Still	(972) 344-8391	(972) 612-8443	r-still@Raytheon.com
Communications	OPEN			
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Treasurer	Bob Moran	(214) 567-5961	(972) 612-1402	rmoran@ti.com
Chief Instructor	Art Jones	Cell(214) 803-1313	(972) 346-2646	adj1@airmail.net
Safety	Bill Moore		(972) 270-1769	b.moore1@att.net

TEXINS FLYING CLUB INSTRUCTORS

Instructor	C F I I	M E I	C o n v	S E S	C F I G	A T P	Office Phone	Home Phone	Email
Mike Baulch (M)	*	*	*	*				(972) 843-2208	mbaulch@flash.net
Calvin Coffey (M)	*	*	*	*		*		(972) 423-1770	cfly@airmail.net
Keith Cole	*	*				*	(972) 952-4997	(972) 382-3932	a137j@texoma.net
Don Copley	*						(940) 391-1767	(940) 365-5722	dcopley@prodigy.net
Hank Eilts (M)	*		*				(214) 480-3581	(972) 517-8273	eilts@ti.com
Jim Evans	*		*	*			(214) 284-9467	(972) 390-9950	Jb4ev@aol.com
Rich Graham		*				*	(972) 491-0011	(972) 491-0011	habu05@aol.com
Art Jones (M)	*	*	*				Cell(214) 803-1313	(972) 346-2646	adj1@airmail.net
Jim Lewis (M)							(972) 952-2817	(972) 727-1422	jimlewis@raytheon.com
Richard Klein	*	*	*				(972) 344-3356	(972) 424-2307	rsklein3@attbi.com
Russell MacDonald	*							(972) 491-1380	russmacdonald@verizon.net
Bob (M) Niedwiecki	*	*				*	(972) 390-3672	(972) 414-3517	robert.niedwiecki@experian.com
Bryan O'Neill	*		*				(972) 344-5770	(972) 562-4241	Bsofty@yahoo.com
Sherman Ratliff (M)	*						(214) 965-6063	(972) 660-4480	shermanr@airmail.net
Mark Seglem	*	*	*			*	(972) 727-3465	(972) 727-3465	mseglem@swbell.net
Dick (M) Stephens	*		*				(972) 517-1647	(972) 517-1647	stephens6@speakeasy.net

(M) TFC Member/Instructor **CFII** - Certificated Flight Instructor, Instruments; **MEI** - Multi-Engine Instructor; **Conv** - Conventional Gear (Taildragger) Instructor; **SES** - Single Engine Sea; **CFIG** - Certificated Flight Instructor, Glider; **ATP** - Airline Transport Pilot-rated. **Note:** All instructors are assigned by TFC's Chief Flight Instructor (Art Jones).

ABOUT THIS NEWSLETTER: Inputs are encouraged! Of particular interest are flying experiences that others can learn from. Forward inputs to Rick Still, email r-still@raytheon.com

TFC AIRCRAFT AND RATES

Tail No.	Make	Model	Rate/Hr
Simulator	ATC	610J	\$ 0.00
6368K	Cessna	150M Commuter	\$51.50
7929U	Cessna	150M Commuter	\$51.50
733NB	Cessna	172N(180) Superhawk	\$76.00
737TY	Cessna	172N Skyhawk	\$72.00
7508J	Piper	PA-28R-180 Arrow	\$87.00

- * Detailed aircraft features are listed in Club Handbook
- * Monthly Dues: \$35.00 for regular members
- * Instruction: Primary: \$19.00 / Hr
Advanced: \$21.00 / Hr
- * TFC measures aircraft rental rate using tachometer hour.
- * Rate includes cost of fuel
- * All non-instructional flights require additional 8.25% tax.

KEY CONTACT INFORMATION

McKinney & TFC

Aircraft Scheduling www.texins.org/flyingclub
 TKI ASOS Land Line (972) 542-9659
 Airport Manager (972) 562-6080 ext 4053
 WingsPoint @ TKI (972) 562-5555
 Monarch Air @ TKI (972) 562-0717

General

DUAT (800) 345-3828
www.duat.com
www.duats.com
 Dallas FSS/FSDO (214) 902-1800
 Ft. Worth Center (817) 858-7300 (ZFW ARTCC)
 FlightCom, Inc. (800) 432-4342 (Josh Pruzek)
 Southwest Soaring (972) 251-5079 Metro
 Monarch @ ADS (972) 931-0345
 DE: TM Smith (972) 661-8086
 DE: Richard Caldwell (972) 885-4911
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 DE: Carol Walker (214) 948-0440
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