

October 2006

Experimental Aircraft Association Chapter 33

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## Seattle Museum of Flight

By Tim Busch

As I sat scrunched up in my little airline seat after having been thoroughly inspected by the TSA, I did a little mental math and figured that a 300mph airplane would meet the block-to-block time of our flight to Seattle, and anything faster than 300mph would beat the airlines. I had resisted the urge to "moo" while standing in the various lines for check-in, security, the gates, and baggage claim. There must be a better way. We were taking a short vacation to visit Joleen's son & family. I leaned over in my seat and said, "Lancair IV Turbine: six hours. Airlines: ten hours." She agreed completely, wondering how long it would take to have it flying.

While we were there, we stopped at the Seattle Museum of Flight for an afternoon. For those who haven't been to the area, the old saying is that people in Seattle don't tan, they rust. I have to admit that out of the times I've been there, it has really been cloudy and rainy once, and this was the time. I can't believe they built an airplane factory in a place where IFR is the norm, but they probably get good at it. Also, Boeing Field lies right in the middle of a very



densely populated area. Test flying airliners must not bother anyone around there. The jumbos are built further north, but still, there are a lot of big airplanes in the area, and SeaTac is just a bit further south. Between the mountains, water, trees, and traffic, I'm not sure how comfortable we Midwesterners would be flying there, but the locals seem to do alright.

The museum was well done. The entry was full of early aviation artifacts such as several Wright reproductions. The main room was full of post-WWII aircraft centered around the SR-71 (with a detailed explanation of the previously classified supersonic engine inlet spike), complete with D-21 drone. Although I have seen an SR-71 before, the drone was new to me, and very interesting, as it was one of the most classified reconnaissance aircraft of its time. Other unique aircraft included the Williams X-Jet flying platform, which uses a cruise missile engine (where's the homebuilt version?), the Lear Fan, a NASA F-104 (my first model airplane as a kid), Paul MacCready's Gossamer Albatross II (one of his pedal-powered wonders), and a Curtis Robin (didn't I see one in the Greenfield museum?), along with many others.

Outdoors, there was a B-47, one of the Concordes, a 747, Harrier, and a MiG among others. Back indoors, there were separate areas for WWI and WWII aircraft, and a "vintage" room made up to look like an early airframe shop. It had a hit-and-miss engine hooked up by belts to various woodworking tools and various airframe parts in different stages of assembly. You had to admire the craftsmen of the time. They did a lot with very little.





The only “homebuilt” aircraft were located in a kids’ museum area. There was a Popular Mechanics Scamp biplane. I always thought they were cute, but I tried to take a picture of Joleen’s son in it, who is about my size, and he could barely get in it, so I don’t think the designer did much human factor design. There was a Thorp T-18 and a Scorpion II helicopter that kids were beating mercilessly. I suppose when they wear out, there will be more old homebuilts. There were very good displays for kids to explain how the controls work, the various types of construction, and one interesting display that simulated a hang glider as the kid sat in a seat in front of a computer screen. Moving the seat around interacted with the display, so they could actually “fly” the sim. The kids there were really enjoying the displays. Maybe we should work on a permanent local aviation museum for kids. Any takers? We did a short-term display at the Science Station years ago.

As is usually the case, we closed the place, not getting enough time to really see everything, but we had a good time and learned more about aviation history in the process. Hopefully Dave has room for a few pictures in the newsletter. [ *Editor: If I didn’t, then I would have made room!* ]



# Silent Flight

By Jim Meade [jnmeade@southslope.net](mailto:jnmeade@southslope.net)

It only takes 3 hours of flight time, including 10 solo flights and 3 training flights with an instructor to qualify for your private glider rating if you have 40 hours of powered flight time (FAR 61.109(f)(2)). You don't need to take a knowledge test (written) but you do have to pass the practical (checkride) test that includes an oral. There is a designated glider examiner in the Ames area. Glider operation, including motor gliders, requires no FAA physical (61.23). Some motor gliders have engines of 80 horsepower and seating for two. It almost sounds like a light sport airplane that flies without fuel.

I got my commercial glider rating earlier this year and am working on the Certificated Flight Instructor Glider (CFIG), which I hope to this fall. It's been fun and educational. I'm a better pilot and am enjoying a new and rewarding aviation experience.

There are two glider clubs in Iowa. The Blackhawk Soaring Club <http://www.blackhawksoaring.com/> is based in Muscatine and flies a Krosno KR3 tandem glider which has a relatively low glide ratio of about 27:1. The Silent Knights <http://www.knightglider.com/> are located in Ames and have several gliders, including trainers and high-performance single seat sailplanes. There is no charge for instruction. Tow charges and glider rent are nominal.

Tow pilots are welcome at both clubs if you just want to fly powered aircraft. Muscatine has a 160 hp PA-12 Super Cruiser and Ames operates a Super Cub.

Aspiring glider pilots will want to get the *Glider Flying Handbook* FAA-H-8083-13. It's available free on the FAA website or at a reasonable price through online aviation stores. It's well written and easy to read. Much of the material will be familiar to power pilots, but the portions on weather and the best glide speeds will be new to you and need to be studied. They'll make you a better power pilot. The training materials and equipment needed are minimal and inexpensive.

Another excellent source of gliding information is the series of books written or edited by Bob Wander <http://www.bobwander.com/>. In my opinion, they're among the simplest, clearest and best aviation instruction books to be found. They are reasonably priced and available online.

The soaring season in Iowa extends from about April to November, with the best soaring in the spring and fall. There have been a number of days this season when lift to 7,000 feet AGL has been available. This permits some long cross-country flights for those not afraid to "land out" off airport if the lift disappears. Outside the state, there is wonderful soaring at popular vacation spots, especially in the west.

A lot of the fun of soaring is the camaraderie established in the team needed for gliding operations. A tow pilot and glider pilot are the minimum necessary, as unassisted takeoffs are possible, but usually a small swarm of ground handlers is on hand to help with hook up and holding the wing level for takeoff. There is ample time to engage in hangar flying while waiting for the tow plane to return for another glider tow.

I've flown with both clubs and can say they are both very welcoming and supportive of new glider pilots. Both have active instructor cadres and work hard to train new members. There are excellent instructors and a range of pilots from the new and eager to the well-seasoned record setters who will be happy to share their enthusiasm and knowledge with you.

You can get a demo ride for a fee from either club. It's a nice way to see if you like the feeling of floating without an engine. I think you will. Time seems to flash by in the air as you search for thermals and try to fly as precisely and efficiently as you can. Soaring has been a big boost to my basic flying skills. You really do fly gliders by the seat of your pants and a tuft of yarn taped to the canopy. If you haven't flown a glider, or haven't flown one in a while, do yourself a favor and contact me or one of the clubs before the season is over for the year. Learn more at the Soaring Society of America <http://ssa.org/>

# Buzzing Tail...NOT

By Tom Meeker

For all you guys out there that have been following my saga about the tail buzz, I finally figured out what was causing it.

I first thought it was the rudder trim, which was of my own design. When tightening that didn't fix it I thought it might be the tail cone fairings. With those tightened down, the buzz remained. Next I suspected my VOR antenna, which is the V shaped antenna and is mounted on my bird on the belly back at the tail so as to extend back under the horizontal stabs. I removed those, and still no fix. Next I thought it might be an elevator. One showed some signs of cracking around the aft most rivet of one of the stiffeners. I stop drilled that and squeezed down the fold of the elevator just a bit to take some of the pressure off. Still, the buzz was there.

Most of the time I could just hear it as a low amplitude buzz. Sounded like someone was chasing me. It was clearly being set off by a harmonic vibration from the engine, which I could also hear. But at higher speeds, it sometimes took off and began to buzz quite loudly. Loud enough to be scary. And then would not go away until I slowed to below 140mph indicated. I could never feel anything in the controls, and could never see anything out the back that was vibrating. But it obviously was something blowing in the wind. It stumped me for quite a while.

When I first took off the VOR antenna and squeezed down the elevator, I thought I had it. I took a test flight and didn't seem to hear anything. But I had a rider with me and thought I might have been distracted. So I let the passenger out and took one more flight to see if I could hear that low amplitude buzz again. I did, and this time it was buzzing all over the place. It seemed I had new noises coming from two or three places. I was getting really frustrated. Then something obviously on the side or back of the canopy started buzzing kind of loud and covered up the other so I couldn't hear, so I limped back to the airport completely baffled and discouraged. I began to wonder if this new blended foil prop was giving off harmonics. Maybe the counter balance on the engine crank got de-tuned somehow. I was grasping at any explanation.



After calming down a bit I decided to fix the seals I had put around the back of the canopy to get rid of that new buzz so I could hear the other and try it again. As I was looking at that I found a couple of things. First, the weather seal that went horizontal across the aft edge of the canopy, about 10 inches long, was always being pulled up by the canopy lock. So I was constantly having to remount that, and knew I'd eventually have to do something different there. Well, this time I stuck the seal on the canopy skirt behind the lock instead of on the fuselage in front of it. That stopped that problem. Then I noticed a funny little white spot on the glass in the center near the back that coincided with a funny little white spot on the curve of the square canopy track frame. This is that square bar that the back canopy roller runs on. On mine, with the canopy closed on the ground, there is at least an inch or more of clearance between the bar and the glass. Evidently, in flight, the back of the canopy pulls in and contacts that bar. I could hardly push it down that far by hand, but in flight the forces must be very great. I also think that the better the back of the canopy was sealed up the more it pulled in, which means sometimes it might contact the bar and perhaps sometimes not. (I bet you're figuring out what's coming.)

Well, I put a bit of weather stripping on that bar to make a cushion there if it pulled in. And I also found that the very tail of the canopy fairing could easily be push down with my finger to contact the fuselage skin with the canopy closed. That might buzz so I stuck a bit of weather stripping under there. I figured all of this would at least get rid of the canopy noise so I could tell what else was going on back at the tail.

So... I went for a test flight. And lo and behold... no buzz at all. No noise other than the smooth feel of the engine. It was all the canopy. I looked back and sure enough, the canopy was pulled in against that square track. And I could put my hand on the canopy and could feel it vibrating with the engine. But now all was quiet. No buzz. It never was something at the tail, it just sounded like it. It was just the canopy all along. What a relief. I guess these are the kinds of things you have to watch out for when you have an airplane that flies so fast.



# 2006 Young Eagle Rallies

By Connie White

John Anderson and I want to thank all the Pilots and Ground Support for making 2006 such a great success. With the price of fuel and the busy schedules we all have, all of the rallies were well supported. We had 7 rallies and we flew 308 Young Eagles this year. A list of all the pilots and the number of YE's they have flown follows.

John Anderson N123JA	6	John Banes N8503S	19
Tim Busch N2123T	24	Steve Ciha N71PT	13
Dave Koelzer N36SX	17	Alan Kritzman N8EM	20
Tom Meeker N144TM	3	Dave Miles N2771L	58
Todd Millard N380MA	53	Mark Navratil N2D	17
Tom Olson N298TC	16	Terry Scherman N180TS	27
Tim Swift N38JD	13	Ron White N38AR	22

For a pilot to receive Young Eagle Credits, which can be used to help send a Young Eagle to the Air Academy camp at Oshkosh next summer, they must have flown 10 or more Young Eagles in the calendar year 2006. This will also get your name in the EAA Sport Aviation Book when the list is published. Those that wish to have 10 or more this year and don't will have a chance to do so, John Ockenfels of Iowa City in conjunction with City Carton has been supporting the Heart Connection. This is a group of kids with Cancer. On October 14th these kids and their families are going to a 2 day seminar at the Amanas which is a state wide event. John started out giving just 4 kids airplane rides which he was doing himself. This year he has had 28 kids (8 through 17) sign up and is looking for pilots that could help. John has said some of his employees will help support the ground. This is a chance for the pilots with less than 10 Young Eagles to get their 10. It is also a chance for the rest of the pilots of Chapter 33 to help John give these kids something to remember. Any one wanting to volunteer to help John on Oct. 14, 1pm-3pm at the Iowa City Airport, please contact me, Connie White 319-393-6484 or [longez38ar@juno.com](mailto:longez38ar@juno.com).

Also if you missed some of the Young Eagles Rallies this year you can check out some of the pictures on our Chapter's YE Gallery: <http://www.eaa33.org/young eagles/yegallery/index.html>



# Mystery Plane

"The Crazy Czech Pilot", Snooks Bouska, sent me some pictures of a Mystery plane which is currently under construction. It look a lot like a Grumman AgCat but that could not be since this plane has an open cockpit, a front seat and no hopper. We'll have to keep a sharp eye out incase this strange plane starts terrorizing the skies over Marion.







## Last Meeting & YE - Marion

Our September meeting pulled double duty. In the morning we flew Young Eagles. We had quite a good turn out and flew 27 kids. This kept our four pilots very busy. Thanks again to all the pilots and to the ground crew for putting on yet another successful event. In the afternoon we fired up the grill and were treated to a tasty lunch of burger, brats and other goodies. Thanks go to P & N Flight and Charter at the Marion Airport for hosting us as well as to Randy Hartman & Tom Meeker for slaving over a hot grill to feed us all.



## Next Meeting - Tower Tour & Videos \*RSVP required\*

For our October meeting we are arranging for our members to take tours of the CID control tower. However, since 9-11, security measures have changed at FAA facilities. To be able to attend the tour we need to submit the names of all those who wish to take the tour to the FAA in advance. Also any Foreign Nationals will need to fill out some paper work. There is a special form that those individuals need to fill out at least 2 weeks in advance so that the security division can review their visa/passport status and issue or deny clearance for entrance to the tower.

So I need to get the list of people who want to take the tour by Wednesday Oct 11th. Please email me [david.koelzer@mchsi.com](mailto:david.koelzer@mchsi.com) or call 319-310-3641 if you would like to go on the tour. If you are a Foreign National and want to take the tour please let me know immediately so I can get you the forms. If I do NOT have your name by Oct 11, you will NOT be allowed into the tower.

We will meet Saturday, Oct 21 10AM. at the Eastern Iowa Airport Administration Building, 2515 Arthur Collins Parkway SW. Turn into the main airport entrance, drive pass Lippisch Place and the Admin Building is the next turn to the right. Or those of you who might like to fly-in to the event, you may park at the Landmark (formerly Piedmont-Hawthorne) ramp and walk to the Admin building. Depending on the number of people who want to take the tour we may need to break up into several groups and go in shifts. We will also be playing some videos at the Admin Building for those waiting for the tour or those who did NOT get their names to me before the deadline.

This a great opportunity for all us who fly in and out of the Eastern Iowa Airport to see airport operations from the other side of the glass. BTW The tour is open to everyone; they need not be a Chapter member. But I will need those people's names by Oct 11th.

# Christmas Banquet

As is our tradition, we will once again hold a banquet during the Holiday season. This year John Anderson and Janet Blackledge have arranged for our event to take place at the Clark Alumni Hall on Coe's campus in Cedar Rapids on December 14th. We will have more details next month but for now put Dec 14th on your calendar and start looking for the perfect present for the gift exchange.

## Membership Dues Change Proposal

By Randy Hartman

All Chapter 33 members (and non-members for that matter) have access to our monthly newsletters via the internet at <http://www.eaa33.org/newsletters/index.php>. Allowing members to get the newsletter online has saved Our Chapter a lot of money and a lot of work. As you may know postage has risen dramatically over the past few years. It now costs the Chapter \$4.29 per subscriber per year just for postage (that will go to \$4.62 Jan 2007) not to mention the cost of paper, ink, labels and such. Also printing, hand collating, folding, stapling, labeling and mailing takes time away from people who could be using that time to organizing Young Eagles events or composing even better (if that were possible) newsletters. Printing the newsletter commercially would cost even more. Chapter 33 has not had a dues increase in as many years as anyone can remember and we believe that chapter dues would be better used to pay for the Chapter events & programs than for buying stamps & paper.

Starting in January of 2007 we will not be mailing any members a hard copy of the newsletter unless specifically requested by the member. If you would like to continue to receive a hard copy sent to your home, we are asking for an additional \$10 per year per address to cover the cost of postage, paper, ink, printing, and processing. Member who have taken advantage of our multi year dues program will continue to receive the newsletter until your dues are once again due, then the new schedule will kick-in. You can check your dues status by logging into our Chapter website <http://www.eaa33.org/members/index.php> If you have any comments you can bring them up at the Oct meeting or email to me at [randy@aoaircrafters.com](mailto:randy@aoaircrafters.com). Thank you for your cooperation with this change in our Chapter. Join the Chapter's email list at: <http://groups.yahoo.com/group/eaachapter33/join>



## Chapter 33 Calendar

**Oct 7 7-11am** Breakfast 7am – 4pm Open House, Billy Robinson Fly-In Grinnell, Iowa

**Oct 7 4-6pm** Iowa Aviation Hall of Fame Open House, **6pm** Social hour, **7pm** Dinner, Hall of Fame induction ceremony follows, reservations required 641-343-7184 (Lee Ann) aviation@iowatelecom.net

**Oct 14 1-3pm** Young Eagles, Heart Connection, Iowa City Airport.

**Oct 21 10am** Chapter Meeting, videos & Control Tower Tour, Admin Bldg. Cedar Rapids Airport. *Must RSVP for tower tour.*

**Oct 21 5:30pm** Dinner 6:30-8:00pm Dancing, 1st Annual Hangar Dinner Dance, Boone Big Band to perform, Boone, Iowa Municipal Airport

**Dec 14** Chapter Christmas Banquet, Clark Alumni Hall on Coe's campus



Well there's your  
problem right there!

In The October 2006 Issue...

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