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Experimental Aircraft Association Chapter 33

A monthly publication of the Dr. Alexander M. Lippisch Chapter of the Experimental Aircraft Association, Cedar Rapids, Iowa.

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The Great Race to AirVenture

By Alan Kritzman

It all started back in February when I saw an article in sport aviation about the Airventure Cup Race. Back then I only had 15 hours in the RV and my longest cross-country since my check ride was to Dubuque. I figured everyone needs a goal so I sent my registration forms and the \$150 registration fee off to Oshkosh and hoped everything would work out.

To get ready I had to get the 25 hours flight restriction flown off and get some cross county flying done. I finally got all my time flown off in May and headed out on my first long flight. My son Max and I flew up to Minnesota to have lunch with my Dad. The two and a half hours up and back was no problem so I started to think I might actually be able to do the race. Over the next few months I made several trips to Minnesota and a trip out to Longmont, CO for the Rocky Mountain Fly-in.

While I continued to build hours on the plane I came up with a few issues that had gone unnoticed during flight test phase. When I put a head set in the back seat the intercom would be picking up more wind noise than it could handle. The result was I had to have my GIB (guy in back) unplug his mic so that I could hear the tower. The fix was a new noise canceling intercom from Flighttech. It is basically a hot mic system with no squelch but has some fancy circuitry in it so that it only picks up voices. The sys-



Photo by Mark Navratil

tem works great and makes communicating much easier.

After my ears where happy I had to make my backside happy for long flight. My original seats were made up out of the densest foam I could get from a furniture shop. They were not too bad to sit on but they tended to sink after sitting on them for a while. With these seats I could see find before take off but would have to do S turns after landing as I was sitting about 3 inches lower. I ordered a set of seats from Cleveland tools in Boone. They do a lot of RV seats and were able to get them to be before I left. I flew over and picked them up the weekend before I had to leave for the race. Now I can see when I land and when I get out the seats look much nicer.

My next concern before flying across the country VFR was in the event I had bad weather my RV had no gyros. I had a Dynon EFIS on order but they had a very long lead time. I was able to get the unit and install it two weeks before I had to leave. As it turned out all our flying was VFR but the EFIS worked great the entire flight.

With the plane ready to go I ordered a bunch of maps and started flight planning for the trip. Although Kitty Hawk is just over five hours by RV I decided to make it a two day trip and stop to visit some friends in Richmond, Kentucky. A check of fuel prices in the area showed I could save \$0.90 a gallon if I made a stop in Cynthiana Kentucky about 40 miles north of Richmond. All the rest of the flight would be direct to destination since the Race would be picking up the fuel costs.

So Thursday morning Max and I were ready at the airport at 7:00 with the plane packed with a weeks worth of supplies and all our camping gear for when we got to Oshkosh. The sun was shining and everything looked great, then I called to file a flight plan. The briefer said all eastern Iowa was fogged with visibilities below 3 miles and also Kentucky had fog that was not going to clear before noon. So as usual VFR was not recommended. I filed a flight plan anyway and said I would give pilot reports of what we found. Taking



Photo by Mark Navratil

off out of Cedar Rapids there was no sign of fog with the exception of the Iowa City airport. On our climb up to 7500 feet the visibility was about 20 miles and the only sign of any fog or clouds was at the Iowa City airport. The flight was going great until I contacted the Indianapolis center on flight following. Indy center gave me a vector around a small restricted area that was hot (during my briefing I had asked about the area and they had said it was not active). I don't mind getting vectors but in this case the controller forgot about me. After about 15 minutes being off course the controller said they lost me and to squawk VFR. I was around the restricted area so I turned on course and picked up flight following again after another 20 minutes. The rest of the flight was uneventful. Flight watch said the weather in Kentucky had gone to 3500' broken so everything was looking up. The Cynthiana airport turned out to be very nice 4000' runway down in a small valley. It was a great place to stop for \$2.00 gas.

After a quick fuel of the plane we were off to Richmond. At Max's request we stayed low on the flight to Richmond. I like to get up over the bumps but Max likes being bounced around and he wanted to see the area. So we leveled at 1000' AGL and scooted down to Richmond. The Richmond airport has a TFR that starts about 3 miles east of the north-south runway. Everyone I talked to warned me about it and said stay west of the interstate. Being down low the Interstate was easy to find and we stayed well clear of the TFR.

Arriving in Richmond we were greeted by a local RV-7 builder who offered to put the RV in his hanger for the night. So we pulled his Bonanza out of the hanger and tucked the RV in for the night. My friend Paul showed up and took us on a tour of the Richmond/Lexington area. We skipped the Bourbon distilleries this time since Max was along. We did see the horse track where they filmed the movie Seabiscuit and some other neat kids' sights.

The next morning we woke to fog covering the area. It started to lift about 10:00 and we headed off for the airport. The weather again looked promising with a front just moving off the coast of North Carolina. So after saying our good-bys Max and I were off to cross another quarter of the country. The view of the mountains was limited from 8500' by a layer of scattered clouds and visibilities in the 6 to 10 mile range. From what we could see it looked like a nice area to visit. This is one of those places where you hope the Lycoming keeps running.

About 100 miles out of Manteo (the race is based at Manteo but the timing of the race starts at Kitty Hawk) I called up flight watch to get a weather update. I was rewarded with Gust to 40 knots and heavy rain. At that point I started looking for alternate airports. The flight watch briefer suggested Edenton as having better condition. I did a quick lookup of the runways available and headed there. Once on the ground at Edenton we called flight service to close my flight plan and get an update on the weather. It looked like the storms were moving off but they would have rain for the next ½ hour or so. So Max and I asked about an airport car and headed off for the golden arches.

When we got back a call to flight service confirmed the weather had improved. A straight line flight from Edenton to Manteo airport was 45 miles over water with a large restricted area in the middle of the flight path. The airport manager at Edenton suggested a route that would have minimum over water time and keep us out of the CIA testing area. Due to the rain a cloud layer had formed at about 1500' so we were once again doing the last leg down where we Max enjoys flying. 10 miles out from the race kickoff point of Manteo our call sign changed from RV N8EM to Race 58.

After taxiing in to the new expanded ramp at Manteo (they are getting ready for a flood of traffic in December) we were greeted by Eric Whyte the race chairman. He helped us get tied down and showed us to the race check-in trailer. We checked in and got a bunch of stuff, briefing packets, schedules and a bunch of stickers. Every racer is required to put stickers of all the race sponsors on their airplane. As you can see there were quite a number of sponsors. It took about 3 hours in the North Carolina sun to get all the stickers in place.

About the time we got all the stickers on Bruce Bohannon arrived in the Exxon Flying Tiger. Max has always thought it was a cool plane so he had to go say HI. By the time I got there Max was in the plane trying to figure out how the oxygen system works. Bruce took time to explain in 8 year old terms how the turbo charger works and what the extra controls were all for. Just another nice guy in aviation I guess.

By this time Max and I were hot and tired so we got a ride to our hotel in one of the race vans. They had about 6 vans that were going back and forth to the hotels all day long. After checking in we talked one of the van drivers into a short detour and dropped us off at Subway for dinner. Unfortunately we had to walk the 2 miles back to the hotel. But Max didn't seem to notice we were walking since he had an ice cream cone in his hand.

The next morning we slept in and missed the first morning briefing for the time trials. We made it to the second one but got a 1:30 time slot. The plan was to fly the time trial then head to first flight airport for some sight seeing and maybe a swim in the Ocean. We spent the morning looking over the competition and talking with people from around the country. One of the people we met was from Kentucky out to Kitty Hawk on vacation and saw all the planes. Turns out I had looked over their Swift in the hanger the day before in Kentucky.



Photo by Mark Navratil

The time trials were to start at 9:00 with a plane scheduled every 6 minutes. The plan was to make two runs down the runway between 200 and 500 feet. The FAA required this to be run like an airshow with the usual 500 foot no mans land on each side of the runway. And since the runway ends at the waters edge they were also required to have a coast guard boat out in the bay to keep other boats out from under our flight path. With arriving traffic, coast guard being called away on a rescue and other delays by 11:00 they were an hour and a half late. At this point I should have given up and gone sight seeing, but Max and I really wanted to see how fast the RV would go down low. They changed the procedure to one pass with the hope that things would pickup.

We spent the day looking for some place cool to sit and waiting for our turn. Finally at 3:00 they told us to get ready. After about 30 minutes of sweating in the plane it was our turn. The flight entailed taking off into a right pattern staying below 500 feet, one full speed pass down the runway descending to 200 feet through the timing marks. A left traffic pattern for landing staying below 500 feet. The tower did a great job and kept two racers in the air at a time. It was all over in a couple of minutes. However, it was 4:30 and it looked like some weather was moving in. Max and I headed back to the Hotel for a swim in the pool before dinner.

Dinner was a fish fry provided by one of the sponsors. It was held at a park that is part of the airport. Part of the park was a beach on the airport grounds. Max and I had spent the day at the airport sweating when we could have walked 500 yards to a beach and had a nice swim. Well be enjoyed the fish and got to walk though the water after dinner. After dinner they held the race briefing and posted the time trial results. I was one of the slower (but not last) RV with a speed of 184 MPH. But I did have about a 7 knot heat wind where others had a tail wind.

The first leg of the race was to start at 8:00 with the slower planes going first. This makes for more passing but gets everybody to the destination before sunset. With my slow time I broke ground at about 9:00. The tower was launching planes every 2 minutes. The procedure to start the race is to take off from Manteo then fly direct to first flight airport where the timing began. Then pass down the runway below 200 feet so the officials can read the numbers on your plane. After the timers confirm your number, you're clear on course for Dayton.

Every racer is required to file a flight plan either VFR or IFR. Since this leg passed over some rough terrain I decided to activate my flight plan. I later found out of the 70+ planes only 6 had activated their flight plans. I also decided to call up Washington center for flight following with this many airplanes in the air I figured it was a good idea to have an extra set of eyes. I stayed on flight following most of the flight only leaving to call flight watch. There was some interesting things going on, airliners being vectored to stay clear of the race course. I also heard a Cessna call up looking for flight following, the controller denied the request but warned them that there flight path was crossing a race course with 50 planes heading his way some in excess of 250 knots.

About 20 miles out of Kitty Hawk my GPS decided it was not sure here it was and started spitting garbage out at me. Not a big deal, know how to pull out my charts and watch the compass and watch. I also got my backup GPS (no data base so I had to enter the airport information) out so I would have a line to follow. This keeps me a little bit busy because I always like to know where the closest airport is just in case.

Maybe I was looking at the map to much but all the way to Dayton I only saw two other aircraft. One was a glider over the mountains, taking advantage of some slope lift. From 8500 feet they looked a long way down. The other was another racer descending into Dayton; He was doing about 50 knots faster than we were. That was it until we crossed the finish line and entered the landing pattern.

The end of the first leg was the most exciting part of the race for me. The plan was to fly down a closed runway at Dayton at 200' and break into a right down wind for landing. About a mile out I noticed one of the other racers on final would be crossing my path so decided to stay up at 600' and let the other guys get the style points for the low pass. Turning into the down wind I counted three planes in front of us in the pattern and the pattern was getting very stretched out. Turning base I picked up two more planes, the pattern was stretched out more than I thought. A quick turn back to down wind got me in behind a long-ez about a half mile back. On a short final a Lancair decided to do a tight pattern. He was pulling it around hard and was getting closer and closer. I decided to go around and pushed the throttle forward; about the same time at I heard at least 4 calls on the radio that there two planes on short final. I keep the other plane in sight and climbed back up to pattern altitude for another shot. The second time around everyone was behaving them self.

After getting on the ground we tied the plane down and put our fuel order in. About a half hour later while standing in line to lunch Max said he was not feeling well. I got him some water to drink and had him sit down. I continued in line for about another 10 minutes and then I started to get light headed and blurred vision. About this time I started figuring the amount of fluids we had drank. I came up with about 6 cups each since we had arrived in Kitty Hawk. With a day and a half in the sun and 4 hours flying at altitude we were both dehydrated. I spent the next half hour on a couch drinking 4 bottles of water and Max had three. We were both feeling fine at this point but we spent the rest of the day drinking water and talking with the other racers. At final count I had 10 bottles of water along with a couple of sodas with dinner and Max had 8 bottles of water. It was a good thing the race sponsors were buying the water.

Monday morning we woke to over cast sky and low visibilities and the promise that they would improve. All day long they weather was going to break but it never did. So we spend a day at the airport. Max got to spend some time sitting in the Polan Special and I got to talk with some of the really fast guys about racing. It was kind of a relaxing day knowing someone else was making the weather call. I just had to be ready if the weather cleared. Our hosts in Dayton were great and provided an additional lunch and dinner for all the racers. The Race guys got hotels setup for everybody and busses to get up there.

Tuesday morning we were told to be ready for the bus at 6:00 for an early start. The weather was great and we were all eager to get to Oshkosh. The route to Oshkosh was via Aurora so some of the race officials had to take off early to check off everyone to make sure no one took a short cut over the lake.

Once again everyone was required to file a flight plan but I don't think anyone open them. No flight following on this leg either. There was a race frequency set up and everyone was monitoring it and giving position reports. On the second leg of the race I saw a lot more planes. Thing really got busy going into Aurora. We passed a Bonanza about 100 bellow him and under the Chicago class B at 1500 feet. Going down the runway a little red plane went zipping past us. After Aurora it was north for the race arrival to Oshkosh. The arrival procedure is to fly up Lake Winnebago from Fond Du Lac. The finish line is a boat in the lake covered in orange tarps. After the finish line it is a left turn into a base for runway 36. There was a lot of traffic and I had to do a right 270 before heading inland but a lot less holding than I have about at FISK.

That is my story on how I flew to Oshkosh the first time in the plane I built in my basement. Unfortunately we had to cut our stay to only one day do to weather moving in but all in all it was a great trip. Max is still looking through the race program every night before bed.



Photo by Mark Navratil

Fly Iowa 2003

By Todd Millard

Early this year we committed the Chapter to take on probably the largest task the Chapter has ever attempted. With Fly Iowa 2003 being held in Cedar Rapids on this, the centennial year of flight, the feeling was that the Chapter should go all out to make the event a success and get the word of Sport Aviation out to the public and kids. We decided to organize our biggest Young Eagles rally ever, host the EAA's Ford Tri-Motor, and provide a kids educational area. One of these would have been a good project, let alone three.

The response from the Chapter was incredible. You rose to the occasion and met the challenge head on. Despite weather delays and parking problems, we had a great time and gave a bunch of kids their first ride in an airplane. Thanks to everyone who came out on a holiday weekend, toiled through the hot weather and helped make the event a success.

Young Eagles flies 214 Kids!

A big thanks to Connie White, John Anderson and Janet Blackledge, the new Young Eagles process worked great (with a few kinks worked out Saturday morning). Despite a start slowed by collapsed tent from the Saturday morning thunderstorm, the great turnout of pilots and volunteers on Saturday made the event extremely successful. While there were 16 pilots and planes flying, there were twice as many others on the ground organizing and supporting. Having many hands enabled us to fly 165 kids Saturday morning and we could have handled many more. From a pilot perspective, everyone made our job incredibly easy and smooth.

Due to some mixup in the publication of schedules for Fly Iowa, there were some kids who showed up on Sunday for Young Eagles. With no notice those members who were at the airport or working on the Kid-Venture and Tri-Motor activities were pressed into service and we flew another 49 kids with only 5 pilots on Sunday morning/afternoon. Thanks to those who rose to the occasion on Sunday. An especially big thanks to Connie. She was very relieved when Saturday was over only to be thrown right back into it on Sunday. Great job by all! Here are the total kids for both days

John Anderson 9	John Banes 21	Tim Busch 21	Alan Kritzman 5
Todd Millard 29	Bernie Nitz 6	John Ockenfels 16	Tom Olson 11
Richard Searce 18	Terry Scherman 13	Tim Swift 6	Bruce Taylor 35
Ron White 12	Steve Willhoite 5	David Yeoman 6	Jim Zangger 1

One of our newest members, Bruce Taylor, took the prize for the most kids flown at 35 in his nice Cardinal RG. Terry Scherman took the prize for the most flights at 13 in his Long-Ez. Jim Zangger gets the award for the shortest flight (he actually made a short hop down 27 on the way to "fly" in to the breakfast). Unfortunately he was also shut down after only one flight by the tower as the amount of traffic made it difficult for them to keep track of him without a transponder. The "Iron Man" award goes to Max Dirks and Larry Wood for standing on the hot tarmac directing traffic both Saturday and Sunday. They were a huge help handling the flow of planes.



Photo by David Koelzer

Tri-Motor / Spirit of St. Louis

Despite being delayed repeatedly by the weather, the team did a great job of supporting both planes and making the trip a success. A big thanks to Dave Koelzer for organizing the visit and Chris Ogren for babysitting the Spirit throughout its visit. A big thanks also to Dave Lammers for helping coordinate the whole visit and flying the Spirit. They made 11 flights in the Tri-Motor and 7 in the Spirit. Not too bad considering they were only able to fly Saturday afternoon and Sunday afternoon.



Photo by David Koelzer

KidVenture

Thanks to Keith Williams for organizing and everyone who volunteered for this activity. My vision for a KidVenture-like tent wasn't as successful as we had hoped for a variety of reasons, but definitely not due to lack of enthusiasm and support by the volunteers. It was hard to get the kids in and involved in the activities and Young Eagles kind of overtook it for most of Saturday and Sunday. I think the activities will work in the future at our Young Eagles events or fly-ins, but will have to noodle some more on it. Thanks again for everyone's support on this.



Photo by David Koelzer

Last Meeting - Green Castle Grill

By David Koelzer

Our July meeting took place at Green Castle airport and we could not have picked a much nicer day for a meeting/grilling/fly-in. The skies were scatter, temps in the low 80s and practically no wind. Todd Millard and Jack Rezabek prepared a talk about aircraft smoke systems and were ready to show off their recently repaired Sky-Bolt to which, coincidentally, they had just installed a smoke system. What luck! But of course we all have come to expect fascinating, entertaining and enlightening Chapter presentations and



Photo by David Koelzer

the only way we would be denied such a presentation is if unforeseen and calamitous forces were to move inextricably to prevent both of our presenters from attending a otherwise fine meeting. But that is precisely what happened.

Fearing that an angry mob of disenchanted Chapter members might take matters into their own hands and install a smoke system onto what ever airplane was available (oh, say a large yellow tail dragger with a blue strip down the side) Vice President Alan Kritzman quickly moved that we wave the tradition presentation and move our attention to the grill and picnic table. The motion

was seconded. The vote was unanimous and chapter members went on make sure that none of the delicious items provided would go to waste! After a fine dinner, there was still time before sunset and several pilots took appreciative member for rides. We were also treated to demonstration of a colorful power parachute and of precision formation flying from a pair of Long-Ezs.



Photo by David Koelzer

Another great Chapter event and thanks go to Don Nelson for letting us use the fine facilities at Green Castle airport.

Next Meeting - Operator Performance Laboratory & Grilling

By Todd Millard

We have an interesting mix on tap for our meeting on September 6th. While we will be having our late summer fly-in/drive-in cookout at the Iowa City Airport, we also have a chance to tour the new Operator Performance Laboratory in a hangar at the airport. The cookout will start around 5 pm and the tour will take place at 6:30. Hopefully this will allow us to get through the tour and let those flying in get back home before dark.

The Operator Performance Laboratory (OPL) is a part of Mechanical Engineering at the University of Iowa. They are conducting research in synthetic vision, flight simulation, pilot eye movements, pilot and crew performance and workload, situational awareness and display optimization research. They are developing and testing using a static PC based 777 mockup, a static F15 simulator and a motion base fully functional 737-800 simulator. Many of you have taken part in their research studies on synthetic vision and flight displays. I had a chance to see some of their work at Oshkosh and was blown away with the amount of data they are able to present in an easy to use and comprehend fashion. Using one of their displays on a simulator, my 7yr old son was able to fly a perfect curved approach in near zero visibility conditions. It should be a great tour! Thanks to Dave Leedom for organizing the visit.

The plan is to meet at the Rezabek/Millard hangar around 5 pm for the cookout (in the new hangars nearest the runways across from the large JetAir hangar). We'll have someone positioned at the gate to let you in if you're driving. The Chapter will supply burgers, hot dogs, and sodas for the potluck cookout, so please plan on bringing a side dish/chips/desert to share. Afterwards we'll head over to the OPL hangar for the tour.

You might want to bring a chair to sit on and as always, families and friends are very welcome. Hope to see you there.

Officer Elections

It's that time of year to start thinking about electing new officers. Last year we went to a split rotation where in even years we elect a Treasurer and Secretary/Newsletter editor. In odd years we elect the President and Vice President. The Board members who are not officers are elected on an annual basis. So this November we will be electing a President, Vice President, and 3 Board Members.

A nominating committee of 3 regular members will be responsible for canvassing the Chapter for officer and board candidates. The committee will present the nominations in the November newsletter with the election taking place at the November meeting. Open nominations will also be accepted at that time. Those who wish to vote, but are unable to attend the meeting can contact the Secretary with their absentee ballot (no hanging chads please).

If you are interested in being on the nominating committee or running for an office, (it is a great way to meet a lot of people and help the Chapter grow stronger), please give me a call or email. Thanks!

Editor's Rant

By David Koelzer

Well, summer is almost to a close. Soon there will be a chill in the air and the leaves will begin to change color. All this can only mean the approach of the season we all know and love. Yes that is right, Presidential Campaign Season! Yes, soon candidates of all stripes will be crisscrossing the country in private jets stopping just long enough to shake hands and try to convenience us that they are just "regular guys" like you and me. Then they are off again flying to the next stop in their multi-million dollar jets.

One candidate in particular will be have a particularly big impact on us pilots, even those of us who aren't particularly politically minded. The Air Force flies around this One in a rather large and very nicely appointed Boeing 747 and every where this One goes a sixty mile wide TFR (temporary flight restriction) is sure to follow. But not to worry, if you should inadvertently fly into these TFRs you will quickly get to see up close, maybe even a little too up close, the pointy end of very serious F-16.

Now you may say that this is a rather rude way to treat a pilot, tax payer and registered voter but I doubt these F-16 pilots went to the trouble of intercepting you just to ask you views on the proposed Medicare Prescription Benefit. These guys want on the ground and they want you on the ground NOW. Since the F-16 will be armed with heat seeking missiles and you will be armed with a deep seated sense of indignation, it would be best if you do what they want you to do. So guys and gals, be sure to check those NOTAMS before every flight or failing that, you better get familiar with standard in-flight interception procedures. Good Luck.

Fly Market

For Sale: Boat trailer converted for hauling taildragger type airplane. \$500, like new. Al Heinitz, 319-354-6433.

FOR SALE: **Bendix/King KX99** hand-held transceiver, 720 com, 200 Nav and 7 weather channels \$250. **Flightcom headset** Nighthawk Model 4DLX \$60. **Strong Enterprises Parachute** Para-cushion Chair model 305 Covers the back of the body from the shoulders to just above the knees. Diameter of canopy 26'. Has been repacked only by Strong Enterprises. \$425 All items used only in motor glider which was flown a total of 40 hours. Paul L Jones, 3430 Emerson Ave NE, Cedar Rapids, IA 52411, 319-393-6777



Tim Busch, Brian Sponcil, Christine Remmert, Jill & Justin Fishbaugh at the "Theater in the Woods" ceremony, congratulate Dave Lammers (center) on a well deserved Chapter Major Achievement Award.



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In The September 2003 Issue...

Great Race to AirVenture, Fly Iowa 2003, Young Eagles, Tri-Motor, Spirit, KidVenture

Chapter 33 Calendar

Sept 6 5pm Meeting, cookout & tour of Operator Performance Laboratory, Iowa City Airport

Sept 7 7am Fly-in Breakfast, Dubuque Regional Airport

Sept 20 7am Fly In Breakfast & Airshow Burlington, IA

Sept 20 9am Fall Fly-In Wittman Regional Airport (OSH). Complimentary rides to EAA AirVenture museum

Sept 25 5pm Flight Supper, Washington, IA

GeoStar satellite picture of black out of Northeastern United States & Canada.

