

The Lippisch Letter



Experimental Aircraft Association Chapter 33

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The Lippisch Letter is the monthly publication of the Dr. Alexander M. Lippisch Chapter (33) of the Experimental Aircraft Association, Cedar Rapids, Iowa.

Editor: David Koelzer
david.koelzer@home.com

EAA Chapter 33 Officers

President: Tom Olson
319-393-5531
tcolson@cedar-rapids.net

Vice President:
Steve Ciha
319-438-1204

Secretary/Newsletter:
David Koelzer
319-373-3257
david.koelzer@home.com

Treasurer:
Terry Scherman
319-362-8660
t.scherman@worldnet.att.net

Flight Advisor:
Dave Lammers
319-377-1425

Technical Counselors:
Tom Olson
319-393-5531
Ron White
319-393-6484
Marv Hoppenworth
319-396-6283

Young Eagles:
John Anderson
319-362-6159

Directors:
David Yeoman Sr.
John Banes
Ron White
Mark Anderson

What I Almost Did Not Do On My Spring Vacation

By David Koelzer

There are many stories told about travels to Sun-n-Fun. Fifty percent of them are ninety percent true, thirty percent are sixty percent true and fifteen percent are twenty-two percent true. The rest of stories will appear on the following pages.

My adventure started when I offered my services as ballast to anyone headed to Florida for Sun-n-Fun. Tom Olson's RV-6a must have had a CG problem because he took me up on my offer and we were on our way, well almost. The plan was for Terry Scherman, Paul Fisher (Chapter 75, Davenport), Tom and I to head out Friday to North Carolina and make a stop at Kitty Hawk to visit the spot where the Wright Brothers make their historic first flight. We would then proceed the next day to Florida. However, the Gods of Midwestern springtime weather had different plans. When Friday rolled around we had low everything; low visibility, low ceilings and low confidence that we would be able to make it out of town.

Saturday dawned clear and cheery but a quick check to Flight Service informed us that the winds along our route were forecasted be very strong (not so bad) and

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very gusty (bad). So we cooled our heels expecting that our trip was not meant to be and we should start making plans for next year. I got a call early Sunday morning letting me know that we were on and we would be "wheels up at 7:00". I hurriedly got my things together and headed to Tom's hangar knowing that "wheels up at..." was not the same as "lets have lunch around 11:30ish" or "Thank you for flying Northwest Airlines we will be taking off as soon as the fat man with the eight pieces of oversized carry-on luggage can find his seat". "Wheels up at..." is a test of manhood like killing a buffalo with a stone knife or paying for a daughters collage education. Those that can do it are true men; those that can't should become officials for the XFL.



I met Tom at the airport and after a preflight inspection we jumped in and taxied over to Terry's hangar. Terry's Long-eze was idling smoothly now after a short warm-up in the 37° morning air. A quick call to ground control and our flight of two was taxing to the active. After a Northwest Saab 340, looking unusually overloaded with carry-on bags, struggled into the air we took to Runway 27 and broke ground at 7:02 (The XFL is expecting our résumés).

Due to the delayed departure, our plans for Kitty Hawk were scarped and we decided to head directly for Lakeland. We were to rendezvous with Paul over Muscatine. We set our GPS to KMUT and tried to raise Paul on the Unicom frequency. As we approached Muscatine we finally raised Paul but we did not have him in sight. We were soon directly over our fix and still no Paul. We started an orbit to the right around our fix and Paul formed up half way around our first orbit. He apologized for being "late" and we quickly forgave him, forgetting to mention our own "wheels up at..." miscalculation.

Our next destination was KCKV Outlaw Field in Clarksville, TN but there were a few things between

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there and us. Our weather briefer had told us to expect a line of storms through Kentucky. Flying through Illinois was un-eventful. Skies were clear and visibility good. I got to watch some surprisingly close (for me any way) formation flying. After a while Terry and Paul elected us to take the lead since our plane had a navigator. Tom turned the controls over to me. I had brought along my new Garmin 295 GPS for its first trial run. Unfortunately, I could not figure a good way to mount it anywhere and it ended up resting in my lap most of the trip. Never the less, I was able to follow a track as straight as a 50 foot python navigating a 10 foot obstacle course.

Mean while Tom was busy dialing up AWOS stations to get an idea of the weather ahead. We were flying at 7500' and soon we were under a broken ceiling. Soon after we were also flying above a scattered cumulous layer and were deviating around puffy clouds to stay in the clear. Far from wrecking my serpentine course, I think all the deviations actually straightened it out. After a few more miles we got to a point where the cumulus clouds were reaching all the way up to the now solid ceiling and we could not see through to the other side. We descended down to 2500' and continued on. Outlaw was reporting 10 miles visibility and scattered at 4000' but there were some ugly looking clouds ahead. The air was smooth and we pressed on encountering some light rain. We were still able to see through to the other side of the rain so we flew on. We were soon clear of the rain and landed at Outlaw Field.

At Outlaw we were able to get out, stretch and gas up the planes. While we were waiting in line for gas our lineman informs us that we had just missed the filming of a movie. It turns out a local "Adult" cinematographer was using the airport as a backdrop for his latest creation. The lineman assured us that the young blonde star had a great asset...er, rather *was* a great asset to the film. *Yea that's it.* The lineman also assured us that the film crew and the beautiful star of the film should soon be back for some more takes. Filling our planes took an unusually long time and when we could find no more excuses to hang around on the field we were back in the air headed to Georgia.

Our next destination was KTMA Tifton, GA. With the weather behind us, this leg of our journey was smooth sailing. We deviated around the Atlanta airspace and were soon landing at Tifton. After we filled



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up our planes the FBO manager was kind enough to loan us his car so we could go into town for some lunch. We hunted around for a promised “Steak & Shake” but finally settled for “Wendy’s”. Not having anything for breakfast, my double cheeseburger tasted great but I just about choked on my first sip of iced tea. It was unbelievably sweet considering I had not added any sugar. Paul told me that’s what tea is in south. Tea just wasn’t tea unless there were still crystals floating in the bottom of the glass. Southbound diabetics beware!

After lunch we discussed our options. We would be arriving in Lakeland just as the day’s air show was finishing and we thought it would be a mad rush of everyone trying to land before dark. We decided to divert to KLEE Leesburg, FL and spend the night there. The weather on this leg was also no problem as we threaded our way around the many MOA that spot northern Florida. Our GSPs proved invaluable as they notified us when we were coming near to a MOA or restricted area. They also proved handy to guide us to our airport through the gathering haze and smoke from the various forest fires. Once we landed at Leesburg, we gathered our things and walked to a near by motel.

The next morning we were back at the airport reviewing the special arrival procedure for Sun-n-Fun. We set the coordinates for the “power plant” into our GSPs and were on our way. As we clear the trees at the end of runway 13, we realize we are over a large lake. We begin to wonder if we had to ditch, how many alligators would be there to greet us. The air was smooth on the way to Lakeland and we soon changed over to the approach frequency. We knew enough to keep quiet and listen to the controllers. Scanning for traffic, we approached the “power plant” and took our place in line with many other planes. Paul was behind a twin and the controllers were referring to his Q200 as an “Eagle”. Terry was behind Paul and was the “canard type”. Tom and I were behind Terry and we were the “taildragger” (I guess Tom’s nose gear does not show up very well in the Florida haze). The twin must have missed the “orange water tower” because he continued west. Paul quickly realizes that the twin was not following the pattern and turned south toward the field and we followed. Eventually, the twin turns south on an extended base leg just as we turn onto downwind. The controller takes pity on the errant twin and directs him to final approach and has Paul follow behind. On final the twin is cleared to land long on 09L (which is a taxi way the rest of the year) while Paul is cleared to land short. However, the twin lands short and despite the frantic calls from the controller to “SPEED UP, SPEED UP, SPEED UP” the twin slows down oblivious to the fast approaching traffic. Paul sees this and adds power to go around just as the controller shouts for Paul in his “Eagle” to abort and go around. Terry, Tom and I were able to land without incident and wondered how long it would take Paul to reenter the pattern to land. We taxied around a circuitous route toward the homebuilt parking when we were surprised to see Paul turn right in front of us. It turns out the controllers were so happy that Paul had averted a disaster that they quickly rerouted him to a landing on 09R where he was able to avoid a lot of detours that we had to take from 09L. Reunited we all taxied to the homebuilt parking to be nestled in with the others of our type. Tom joked that RVs were becoming so common that they would soon be sent out to park with the factory builds.

We tied down our planes and began to clean off the accumulation of extra juicy Florida bugs. Then we were free to roam around and admire the fantastic collections of aircraft. I spent a lot of time with the warbirds marveling at the amount of time, work and money that goes into keeping these birds flying in pristine condition. That evening Tom and I went to a Sonex gathering and enjoyed some brauts and beer. I got to talk in person with many of the people who I had up to then only known via email. Terry and Paul were off doing the same at a Q200 get together.

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The next day we again admired airplanes and browsed the many vendor displays. We also made several visits the on-field Flight Service Station. There was a line of storms that seemed to be parked over the Midwest and looked as if it was daring us to try and make it back home. For now we just enjoyed the sunshine. That evening we planned to meet Terry's sister (who lived in Florida) for dinner. On our way to our hotel we watched for a suitable dining emporium. We passed one establishment that was advertising Jello wrestling and our hotel was right next to a Hooters. Terry's sister did not care for Jello and was not in the mood for the fine cuisine offered by Hooters so we ended up at TGI Fridays even though it was a Tuesday. Later we again checked the weather over the Midwest and we decided we should start out early the next and see how far we could get before the weather grounded us.



Wednesday we woke up before dawn and made our way to the planes hoping we would not have to pay admission. Fortunately, there are not many air show goers at 6:30 am and we walked right in. One of the line crew helped us ready our planes and gave us the departure procedure. We took off and headed north. Ground fog was forecast for northern Florida and southern Georgia. Flying over Florida was fine and we did not hit the fog until Georgia. As forecasted the fog was low and at our altitude of 6500' we were clear on top. As we did on our trip down we began checking AWOS sta-

tions to get an idea of the local conditions ahead. Soon the ground fog was burning off and we headed for KCTJ Carrollton, GA. There we were lazily greeted by the airport dog and then more professionally by the gas truck. In the briefing room we again check the storms that seemed to have not moved and inch in several days.

We took-off knowing that we would be spending some time in Kentucky or Illinois while the storms blew over. We headed for KENL Centralia, IL where we made a quick gas stop. After yet another check of the weather we took off again and made a beeline toward Davenport. The clouds were getting thicker now but no sign of the promised storms. We had picked up quite a tail wind and my GPS was reporting a 210 mph ground speed and we were only flying at 65% power. We were making good time but we also knew it must be a pretty big low pressure area to be sucking us along that fast. As we approached Springfield, IL the clouds to our west took on a nasty green hue and we contacted Springfield approach to get traffic advisories and also pave the way in case we need to make a quick stop somewhere. Springfield approach asked if we had weather radar onboard. I looked hopefully to Tom but we had to admit that we did not. He then advised us that there was an area of weather to the north west of the field showing up on his radar but he could not determine its intensity. He also advised us that a twin turboprop that did have

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radar was changing course to the north to avoid the weather. We happily followed. This put us on a direct course to Peoria, IL. We encountered some light rain and contacted Peoria approach. When we broke out of the rain the sky to the west was looking ugly so we decided to land at Peoria and wait it out. The controller vectored us around to land on runway 22 which had an almost a direct headwind. We taxied to the ramp and it began to rain just as we finished tying the planes down. Grabbing our bags, we ran into the FBO expecting to spend the night there. As it turns out the pilot's lounge had cushy reclining chairs, cable TV and a great view of the flight line. If we have to get trapped somewhere, this place would get my vote.

After relaxing a while we wandered over to the terminal for a late lunch. As soon as we got there other travelers whose flights had just been canceled began arriving and the only waitress was hopelessly over-run. Our lunches, well actually somebody else's lunches arrived at our table and after considering the frantic look on the waitress' face we decided to be happy with what we got. After lunch we noticed that the rain had stopped and the sky was clearing. We headed back to the briefing room to check the radar and call Flight Service. We found that another area of rain was approaching from the south and a line of storms was approaching Cedar Rapids and if we left now we might just be able to avoid both. So we packed up the planes and taxied out to the runway. Just as we were doing our run up it began to rain and ground control informed us that the field had just gone IFR and asked our intentions. After considering a special VFR to get us out of the airport we decided to taxi back and wait. This time we got thoroughly soaked tying down the planes. Back we went to the pilot's lounge to dry out, wait, watch the weather and practice our powers of telekinesis to move the rain off to the east. It must have worked because a little while later the skies cleared and the storms had moved through Cedar Rapids leaving us a clear shot all the way with just enough time to arrive before sunset.

This time we had left our bags in the planes so we jumped in and were on our way. When we left Peoria airspace Paul headed to Dav-
enport and we headed directly to CID. Looking back we could see the tremendous storm clouds that had just blown over Peoria. Looking forward, though, it was clear sailing with just a few puffy cumulous clouds ahead. At CID the winds were 15-20 knots out of the southwest, which means that all the runways will have a crosswind. Eight hours of flying must



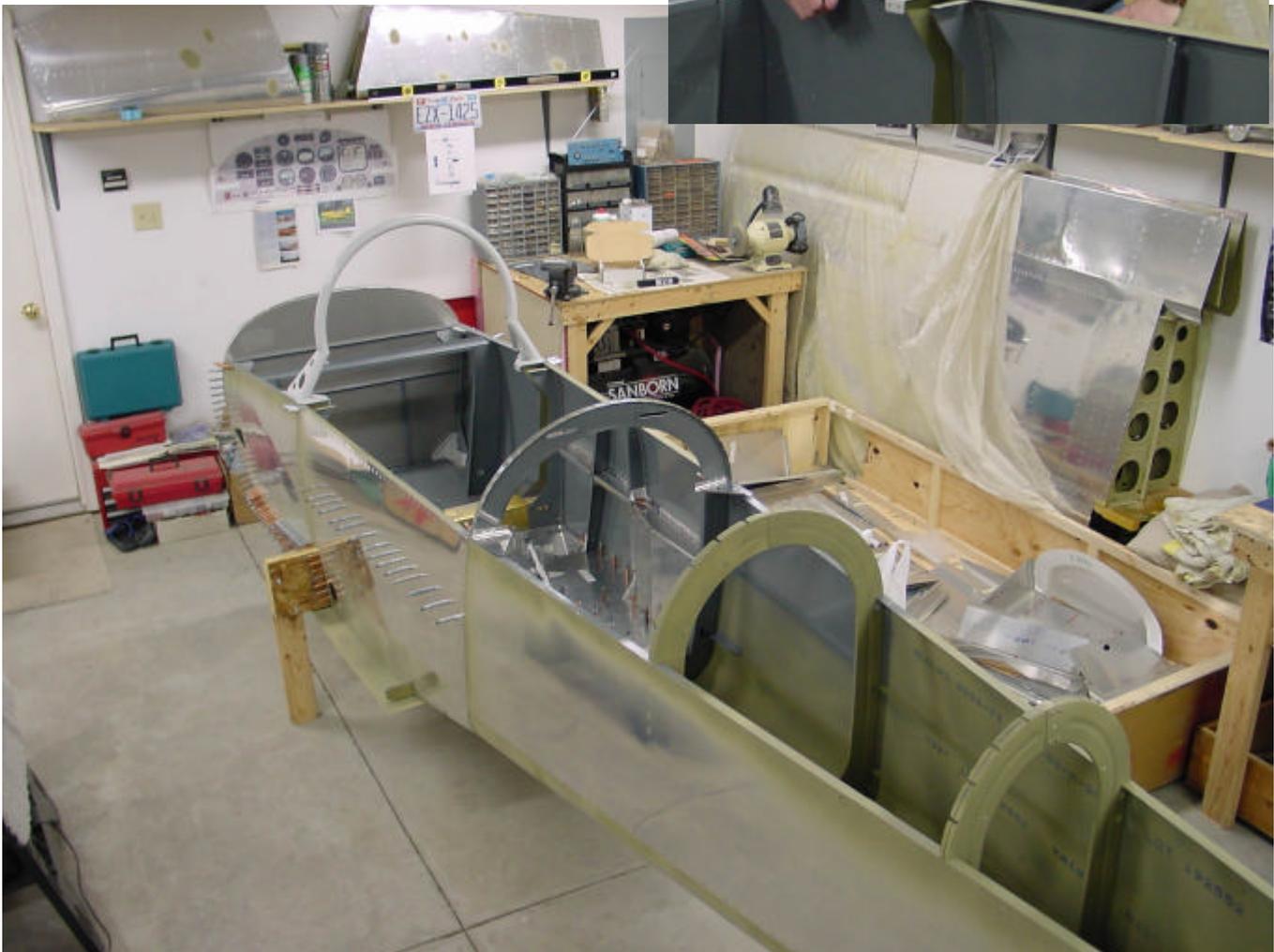
have sharpened everyone's skills because Terry was able to land right down the centerline despite the crosswind and Tom greased it on like there was no wind at all. As we were taxiing back to the hangar I realized that this was the first cross-country I had been on in almost fifteen years. Now I am really fired up to finish building my Sonex so I can make the trip next year in my own plane.

Project Profile: Mark Navratil's Van's RV-8A

By Todd Millard

For most of us, our passion for flying and airplanes was born in childhood fantasies. We built model planes and dreamed of flying them in swirling dog-fights against enemy aces. We didn't actually get to experience the real thing until we got older and were out on our own. There are a lucky few, though, that grew up around airplanes and real flying adventures. Mark Navratil is one of those lucky ones.

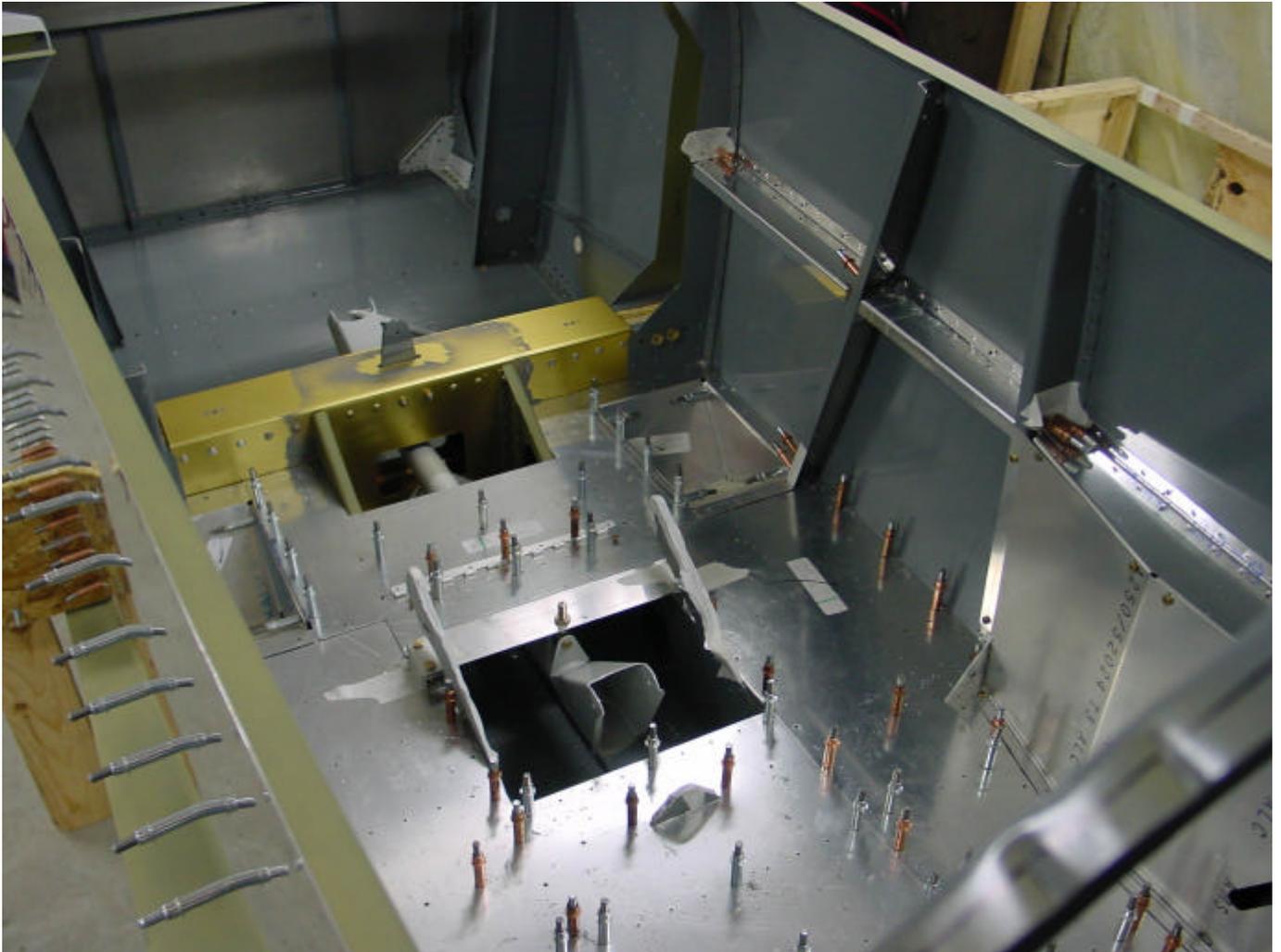
Since 1974, Mark's father has been flying Cessna 206's in Brazil doing missionary work. This is hard and dangerous flying into remote areas over miles of jungle and landing in small open areas that few of us would even call a strip. In addition to the flying, there are many other hazards in this less "tamed" country,



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vividly illustrated by the recent tragedy of a missionary pilot in Peru being shot down. Growing up, Mark helped his father work on the airplanes and frequently accompanied him on flights.

With this early exposure to flying, it isn't surprising that Mark opted for a career in aviation. After high school, Mark came back to the states and attended LeTourneau University in eastern Texas where he majored in Aviation Technology and Electrical Engineering. While in school, he also picked up his A&P and worked on the schools training fleet during his senior year. After college, Mark chose to get into the avionics end of the business and landed a job at Rockwell working on flight deck design for and regional/commuter aircraft.



Okay, okay, on to the project itself. In true engineer-like fashion, Mark exhaustively considered virtually every homebuilt design out there. He kept coming back to Van's designs because of their simple, clean designs, versatility, and the fact that his kits are very reasonably priced compared to many kits on the market. (It probably didn't hurt that his boss, our very own Tom Olson, finished his RV-6A about the same time.) Mark finally settled on the RV-8A, a tandem design, flown from the front seat, with a beautiful bubble canopy. Those childhood dreams of flying a fighter plane live on.

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Mark started his project in August of 1999 when he purchased his wing and empennage kit from a gentleman in Minnesota. The rudder and the tail were completed, but not up to Mark's standards, necessitating some major rework. He finished the construction of the wings in December of last year, but not without taking some time out to complete a Volksplane project with Alan Kritzman. But that is a whole 'nother tale best left for hangar time.



As you can see in the pictures, the fuselage just came out of the jig in the last week or two. This is a major milestone in the project and is typically thought to be a third of the way to completion. Mark has put about 1000 hours into the project so far, and his workmanship and attention to quality are quite evident.

To power his RV-8A, Mark purchased a Lycoming O-360 that was originally in a Cherokee 180 overseas. While there is some minor surface corrosion on the parts, the basic engine is solid. Mark is still debating whether to overhaul the engine himself or send it to AeroSport in Canada. Mark found a used, but like-new fixed pitch metal Sensenich prop that came off an RV-8 upgrading to constant speed.

While he still has a long journey ahead, Mark is definitely on track. His goal and dream is to have his RV-8A flying by his 30th birthday on November 18th, 2003 and to be able to fly it to Kitty Hawk for the 100th anniversary of flight on December 17th of that year. Best of luck Mark!



The T-6A Texan II is the inspiration for Mark's RV-8A paint scheme.

Last Meeting

By Tom Olson

The last meeting was our annual ladies night out banquet at the Ox Yoke Inn in Amana. The meal was excellent as always at the Ox Yoke. Many thanks to the Ox Yoke and their professional servers for such a nice meal.

Many thanks also go to Tim Etherington for providing the evening presentation. Tim spoke of recent developments in Synthetic Vision and the Highway in the Sky concepts being developed at Rockwell in conjunction with NASA and a wide assortment other companies. Tim provided some video of actual flight testing that has been performed and the ability of the pilots to better track a planned flight path through the sky using this new flight display.

As a side note, I was just at the Sun and Fun fly in and was able to spend some time looking at all of the new avionics equipment that is only recently available. Companies like Meggitt, Sierra Flight Systems, and BF Goodrich all have new LCD flight displays either available or in the works. What's that you say, these are all too expensive for us average guys. Then be sure to check out the Anywhere Pilot moving map display that uses the color IPAQ palm computer which has a truly sunlight readable display. In the next year or so they will be adding the ability to couple this to an Autopilot and overlay data linked weather radar onto the map. What's that, you want an LCD attitude display too. Then check out (<http://www.pcfightsystems.com/>). They have an \$1100 attitude sensor that will put an attitude display on the \$500 IPAQ as well. Be sure to look for them at Oshkosh.

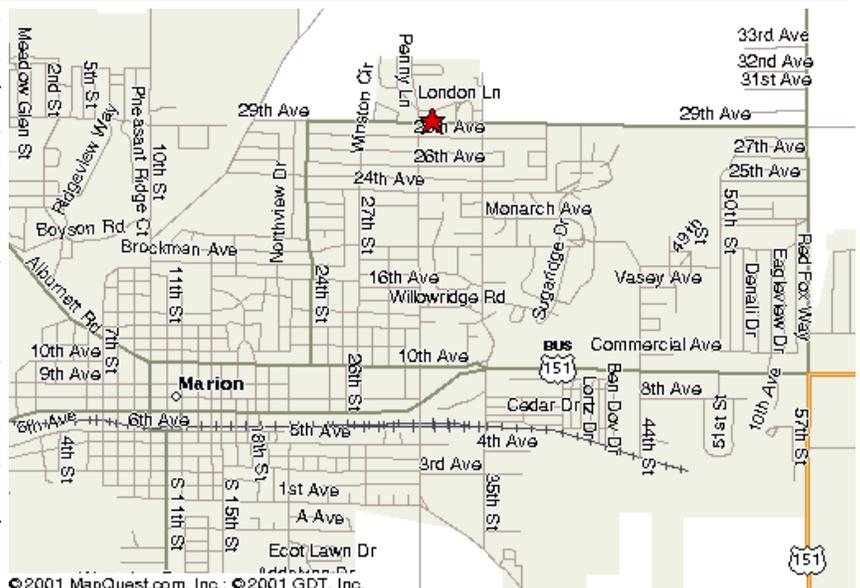


Next Meeting

By Tom Olson

The next meeting will be Friday Evening May 4 and feature David and Bettina Koelzer's Sonex. The meeting will be at their home located at 2930 Baker Street in Marion. Take Hwy 151 Business thru Marion, Go north on 31st St., west on 29th Ave and the first right onto Baker St. Look for the first house with an airplane in the driveway. Parking available on 29th Ave.

The meeting will start at 6:30. Please bring a lawn chair if desired as the meeting will be held on the lawn weather permitting. Saturday evening May 5 at 6:00 will be the rain date for the meeting. Please call Tom Olson at 393-5531 if the weather looks questionable.



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Editor's Rant

By David Koelzer

How practical is aviation? I am not talking about airlines or airfreight or airforces, which are very practical. I am talking about personal, private aviating. We had heard a lot lately about personal transportation. We are told that due to the increased demand for travel and overcrowding of airline hubs that the future of aviation will be quite different. Soon, rather than making airline reservations, Joe businessman will jump into his own glass cockpit, computerized super plane and be whisked to his destination regardless of weather and avoiding the traffic at the major airline hubs. Of course, Joe will have to be a pretty successful businessman to afford such a super plane. Also, will Joe be willing to spend the time to learn to fly, understand all the electronics, keep current and still have time to run a demanding business? If Joe was an aviation enthusiast he might do all these things, not because aviation is a practical means of travel but because aviation is fun, exciting and challenging. That is my whole point.

If you absolutely positively have to be there, you will drive or take an airline. When was the last time you spend hours checking the weather, plotting route, calculating fuel burns, and pre-flighting your car just to drive to Chicago and visit Grandma? You just jumped in and went. When you ran low on gas you stopped at the next filling station. If your car broke down, you pulled to the side of the road and called AAA and the only the most severe snowstorms would have forced you to stay home. Of course, if it was a nice day and the winds were not too bad and you were current, you might decide to fly yourself. That is if your plane would hold your wife, kids, dog and all the baggage that comes along with that. We might tell our wives that our planes are practical transportation devices and we might even tell that to ourselves but deep down we know better.

You can always spot a pilot at the airport. He may dress the same as other travelers and carry a bag just like thousands of others but a pilot will walk with the slight swagger that says: "*Oh! I have slipped the surly bonds of earth and danced the skies on laughter-silvered wings; Sunward I've climbed, and joined the tumbling mirth Of sun-split clouds - and done a hundred things you have not dreamed of - wheeled and soared and swung high in the sunlit silence. Hov'ring there, I've chased the shouting wind along, and flung my eager craft through footless halls of air. Up, up the long, delirious, burning blue I've topped the wind-swept heights with easy grace where never lark, or even eagle flew - and, while with silent lifting mind I've trod The high untrespassed sanctity of space, put out my hand and touched the face of God.*" Poem by John Gillespie Magee, Jr.

Fly Market

FOR SALE: 25% Share of 1941 Stearman Biplane NC64712 (the Red one) Based in Iowa City. The owner is selling his share because he purchased the major share of a newly restored Stearman that is now kept in the hanger next to this one. 220hp Lycoming, full electrical system, radio, Loran, smoke system. Well maintained, always hanged and flown regularly. \$17,500.

CONTACT: John Ockenfels
319-351-3461 evenings or
319 351 2848 daytime
e-mail johnockenfels@citycarton.com
OR johnockenfels@hotmail.com

FOR SALE: 1940 Taylorcraft For our new members who don't already know, one of dear friends and past chapter presidents, John Giordano, died in an accident last year. John owned 1/2 share in a very nice 1940 BC65 Taylorcraft. Susan Giordano is still looking for someone to take over John's share in this aircraft. Carl Carson is the other partner. This aircraft has been in Carl's family for all but 4 years since it was new. The engine was given a major in 99 and the prop was replaced the year before that. It was recovered in 1991 and is hangered in a T hanger at McBride Airport. This aircraft has to be one of the most economical ways to get airborne anywhere in the area.

Please give Carl a call if you are interested. 319-366-4545



Experimental Aircraft Association
Alexander M. Lippisch Chapter 33
c/o David Koelzer
2930 Baker Street
Marion, IA 52302
david.koelzer@home.com

In The May 2001 Issue...

Sun-n-Fun, Mark Navratil's RV-8A, Sonex Project Visit

Chapter 33 Calendar

May 4, 7:00 PM
Sonex Project visit
David Koelzer's home,
2930 Baker Street, Marion, IA



Diners enjoying their meal at the Ox-Yoke Inn before Tim Etherington's presentation on the Synthetic Vision and the Highway in the Sky concepts being developed at Rockwell.