

An aerial photograph taken from the perspective of someone looking out of an airplane window. The top half of the image shows a bright blue sky with scattered white clouds. The bottom half shows a vast, flat landscape of green fields and brown patches, likely agricultural land, stretching to the horizon. In the immediate foreground, the curved, metallic surface of the airplane's fuselage is visible, reflecting the sky and clouds. The text 'Sun and Fun in a SONEX' is overlaid on the top half of the image in a white, outlined font.

Sun *and* Fun *in a* SONEX

Text, photos and experience by Kerry Fores and *Metal Illness*



Photo by Kevin Fores

This is a story of flying.

Simple flying in a simple airplane. The kind of flying many pilots never experience as they stare at a GPS and artificial horizon instead of the landscape and real horizon outside the cockpit.

Others never experience this type of flying as they do not trust themselves, or their airplanes, more than an hour from home. To those pilots I offer this: wherever you fly, you are within an hour of someone's home.

Working for Sonex Aircraft, LLC, I can count on attending two airshows each year: “AirVenture”, in Oshkosh, WI, the mecca of sport aviation, and Sun and Fun in Lakeland, FL, considered by many to be the fly-in season opener. As I live and work in Oshkosh, flying to AirVenture has never been an option – it is a simple taxi across the airport. As I have always been part of the crew which drives to Sun and Fun, flying to that venue was something I accepted I would never do. However, this year I was offered the opportunity to fly my scratch-built Sonex, which I affectionately call *Metal Illness*, to Sun and Fun and I accepted without hesitation.

Preflight

The planning and preparation began by putting together a small bag of tools and spare parts. This was limited to the items that would get me quickly back in the air if a failure occurred, rather than leave me grounded, waiting for a rotor or coil for the Jabiru engine to arrive. A minimum of common tools were packed so basic repairs and adjustments could be made, if necessary, on a ramp even if the “Closed” sign was hanging in the FBO window. I had no reason to expect trouble, but it is so much easier to be prepared than it is to be stranded.

While the tool kit was being assembled, charts were gathered and flight-planning began. I use the flight planning and TFR features of the AeroPlanner website (aeroplanner.com) included with my EAA membership. Other sites I've found useful include AirNav.com for information on specific airports, the aviation weather maps of wunderground.com, and SkyVector.com to preview charts. With the help of these websites and my Anywhere Map GPS software, I was able to draw thick red lines on what I consider the most important tool in my navigation toolbox – the good 'ol sectional chart. Electronics fail,

batteries die, but the chart is always there, always on, and it comforts me to know my position on a line on map.

On a VFR cross country the weather is always the wild card. When flying to a specific event the weather will make or break the trip, as rescheduling is out of the question. And when that trip is 1200 miles in each direction, there is plenty of opportunity for weather delays, in-flight route modifications, or a complete cancellation of the trip. I assigned myself a “no-earlier than” and “no later than” departure window to help with planning, and began to watch the weather forecasts as that window approached.

Time to Fly

The weather forecast looked good for my planned Saturday departure but dawn brought the reality of high winds and low clouds over much of the upper Midwest. I arrived at the hangar packed and ready, but hesitated before opening the door. When I did open the door I paced the ramp looking at the windsock and the overcast. Nope. Not today. I pushed the “Down” button on the hangar door and started to unpack the plane. Then I stopped again. Yup, I can go. I raised the hangar door, rolled the airplane out, pulled the car in, and again found myself staring at the windsock and low ceiling. I strapped myself in, all the while thinking of my kids, my wife, and my desire to “do the right thing”.

I tuned in ATIS and it agreed with what I was seeing and feeling as the wings rocked in the gusting winds. “If I get a few hundred miles south I'll be OK”, I thought, as I put on my headsets, locked the canopy and began to flip switches. All I needed to do was push the start button when I realized I was making a foolish decision. I unbuckled and put the airplane away. I was not going to be a victim of “get-there-itis”. The best decision a pilot can make is when to stay on the ground.



The morning of my departure was clear and calm. *Metal Illness* stands ready in the hangar.

Saturday, Sunday, and Monday passed with continued poor weather but Tuesday, opening day of Sun and Fun, dawned severely calm and clear. This was it, I was still within my departure window, and there were no second thoughts.

At 6:45 AM the wheels of *Metal Illness* felt the grip of Oshkosh's runway 27 let go and she and I turned immediately south and climbed faster than the rising sun for our cruising altitude of 9500 feet. When flying a course and specific altitude it always takes me 10 to 15 minutes to truly settle in. Course corrections, trim corrections, watching the engine monitor for signs of

trouble, and, on this trip, a bit of nerves as this was the longest cross-country I had undertaken and there was plenty of unknown ahead, despite extensive planning and preflight weather and TFR checks.

After I settled in on course and at altitude I began to try to locate myself on the bold red line I had drawn on my Chicago sectional. I've lost GPS a few times on local flights, and vowed that I would never find myself without a back-up plan should I lose it on this trip. "There's the railroad tracks, and the cross road there, but that lake looks out of place. Oh c'mon, I know how to read a map! I can't be lost 30

minutes from home!" Then I realized my ground speed was fluctuating between 195 and 205 miles per hour and I was much further down the road than I thought. The 20 knot tailwind was very welcome, as was the smooth air and clear sky. This trip was off to a great start!

Flying a line on a map that is pretty much straight for 1200 miles, and flying that line at 9500 feet, leaves plenty of time to be bored, even in the Sonex. I kept looking at the placard on the panel that clearly warns me against "intentional periods of straight and level flight", but didn't want to disrupt my progress with rolls and wifferrills. Chicago came and went and as I continued south I tuned in to Champaign approach just to eavesdrop. Another experimental called in for flight following. He was on his way to Sun and Fun as well.

As "Metal Illness" is sparsely equipped - MicroAir radio, Lift Reserve Indicator, Grand Rapids EIS, ball, compass (AutoZone, \$4.97), PS Engineering Intercom, and Anywhere Map - my flight was planned to keep me out of Mode C airspace and the more congested areas that can be entered without a transponder, but are best entered with. I found this presented no hardship in navigating the length of the US, and I marveled at how little the radio was used in a 2400 mile journey.

My anticipated fuel stops passed underneath one by one as we were urged along by the favorable tailwind. Visibility was hampered just a bit by a morning haze and low sun, but the sky was without a cloud. Down below the power stations of central Illinois were pointing the way to Sun and

Mulhenburg, KY. This first gas stop came 2.8 hours and 475 miles after leaving Oshkosh.



Cairo, in southern Georgia, was my second and last stop on the way down, 413 miles and 3 hours from Mulhenburg.

Fun with long trails of smoke that illustrated very clearly just how strong this wind was, and that it was exactly on my tail. A big reward for not flying out on Saturday, as planned.

The landscape turned from brown to green and as southern Indiana approached, time was nearing for a fuel stop. Where to land? Evansville is too big – I wanted easy in, easy out. Owensburg was smaller, but Muhlenberg, KY, (M21) with its single runway and Unicom attracted my attention. I consulted my Anywhere Map airport database and found they had self-serve 100LL, just what I had a taste for.

One feature I would never fly without is a fuel flow sensor. Not only does it give me very accurate fuel levels, it also provides fuel burn rate and endurance based on the current throttle setting, mixture setting, and fuel remaining. This information, coupled with a GPS's ability to provide "Time to Target" information, lets me play with throttle settings until I find the one that gives me the comfort level I need to maximize the fuel remaining, or decide if I can divert to another airfield should the primary target not work out. It is very easy to turn a 30 minute fuel reserve with a 10 minute "Time to Target" into a 1:15 hour reserve and a 15 minute "Time to Target", simply by throttling back and adjusting the mixture.

Less is More

I prefer small, uncontrolled airports. They have minimal traffic and service is typically outstanding. Muhlenberg was all of that. As I pulled up to the self-serve pump

the airport manager came out of his office to greet me. He talked me through the operation of the self-serve gas pump and then asked if he could take a picture of my plane. While that transpired a pick-up truck pulled up with two guys who proceeded to give "Metal Illness" a complete inspection, ask me the usual questions, and then tell me they expected to see it on the cover of Sport Aviation in a few months. I thanked them for the kind comments and while they continued with a self-guided

"I kept looking at the placard on the panel that clearly warns me against 'intentional periods of straight and level flight'..."

tour, I went into the manager's office to take care of business. He told me of all of the local eateries in case I was hungry, and told me where the key to the courtesy car was hidden should I pop in some day and need transportation when no one was around. I love small airports.

I took a picture of my plane with the airport's name in the background, a tradition I started the first time I landed somewhere I'd never been before with my Sonex, and was soon in the air and on course. I left a smoke trail on climbout for the boys on the ramp who were still watching. En-

couraged by the tailwind, I had flown 2.6 hours, and covered 475 statute miles on only 14.9 gallons of fuel.

I settled into what was now routine: keeping the plane from climbing over 10,000 feet, and keeping her pointed in the right direction. The plane wanted to keep going up and I was not stern enough with my pitch commands and trim adjustments to reign her in. I wanted to keep going up as well, but am limited to 10,000 feet without a transponder. I also had a small directional problem. Seems in the hills of Kentucky and Tennessee and further south, roads run 'round mountains, instead of at convenient right angles to the poles and equator. As such, this Wisconsin pilot continued to feel I was heading southwest when in fact I was heading south by southeast. At any rate, it gave me something to do in the still, empty air found at 9500 feet.

Near Nashville I tuned in Approach Control as I cued Elvis on the iPod. The controller had a strong mid-south accent which, coupled with the layers of clothes I shed at Muhlenberg, gave me the sense that I was in a time machine. Normally getting to Nashville from Oshkosh requires a lengthy day in a car, but here I was watching Nashville pass just off my left wing only 4 hours after leaving Oshkosh – 'bout as long as it takes to get Chicago in the rear view mirror by road.

Flying north and south I quickly moved from one sectional to the next. I started the morning on the north edge of the Chicago sectional, passed fully through the St. Louis sectional, and now had moved on



Plant City served as a resting spot while waiting for Lakeland to reopen after the daily airshow.



Tied down at Sun and Fun 8.3 Hobbs hours and 1200 miles after leaving Oshkosh.

to my Atlanta sectional. The hills began to rise up but from 9500 feet they did not look very threatening. A friend who left Oshkosh on the Saturday that I aborted assured me they are really quite ominous when scud-running below the peaks.

Huntsville slipped by on my right and I was looking forward to seeing the Talladega Race track. While not a NASCAR fan necessarily, one reason I love flying so much is to see the sights, and this one fell easily into my flight plan. After Talladega there wasn't much to see, and plenty of time to not see it. The miles between Talladega and the Jacksonville sectional are very rural.

Approaching the Florida panhandle I began to plan my next fuel stop. There were many airports near the red line on my chart, so one by one I considered them, discounted them, and pressed on. When Cairo Grady (70J), in Cairo, Georgia, came into view, it was a mandatory stop. It fit the bill of being a small airport, and fuel options beyond were very limited. The winds were reported just below 10 knots and 15 degrees off the runway. The approach end of runway 30 was a few hundred feet from a woods so I anticipated some burbling winds, and I was not disappointed. The Sonex did a fine job with the turbulence induced by this pilot, and I taxied to the self serve fuel pump with heat building under the bubble canopy. I had come a long way from the cold Wisconsin spring morning I had left 5 hours earlier.

My reasons for choosing a small airport were reinforced. Before I could exit the cockpit a gentleman approached and

offered me refueling options. As I was already parked at the self serve I chose to take that option and he stayed on hand in case I needed help. Seems they just installed the system and were having some bugs with it. It worked flawlessly for me and proved to be one the most user-friendly pumps I encountered. While refueling I was told they spent a lot of time choosing the right system, and I offered that they had chosen well. I also mentioned the burbles at the end of the runway and he agreed that they "had sumthin' liven' don nare".

"After Talladega there wasn't much to see, and plenty of time to not see it."

I visited the small airport office building which was obviously built with great hopes, and perhaps at one time those hopes were realized, but now it houses the bathrooms, a computer for pilots to use, a few balsa models, and the recently harvested shirt tail of their latest private pilot.

I walked into the lone maintenance hangar and struck up a conversation with the gentleman who had met me at the fuel pump. He was repairing the wing tanks on a Cessna and told me of his need for a powered tug, as the planes were just too heavy for him to push and pull around by hand anymore. He offered to break away from his work to drive me into town if I was hungry, but the Granola bar I packed

in my backpack was enough for me.

Anxious about what the last leg of my trip would hold, I decided to get back in the air. The only mechanical scare I had for the flight occurred during start-up in Cairo. The starter turned the prop rapidly, but it just would not fire. Just as I began to get concerned, I looked at the main fuel valve and found I had turned it from "On" to "Off." With the valve properly positioned, the Jabiru started right up. I taxied to where the wild things live at the end of their runway and, with a trail of smoke, left Cairo for what would be a leisurely trip down the Gulf Coast.

Cruising the Gulf

As I was very near the Gulf of Mexico I decided I'd stay low to do some sightseeing. It was 1:00 PM and the airshow was about to begin at Sun and Fun. If I kept my pace up I'd just be spending a lot of time waiting at Plant City for Lakeland to re-open after the daily air show. My decision to stay low was quickly amended when some 2000 foot tall towers came into view. Also, wild fires were creating poor visibility and the air was rough. I climbed to smooth, clearer air near 5000 feet and used the coastline as my compass south.

The gulf coast north of Tampa offers little in the way of the white sandy beaches and bustling vacation towns commonly associated with Florida. Most of it is swamp, and undeveloped, which leaves few options for a successful emergency landing. I ventured about 6 miles off the coast to pretend I was on patrolling the Pacific in my P-38, but an imagined miss of



Flying home my first stop was Dawson, Georgia, 2 hours and 23 minutes of flying north of Lakeland.



Springfield, Tennessee, just north of Nashville.

the smoothly humming Jabiru encouraged me to fly closer to the green area of my sectional.

One highlight along the coast was Cedar Key, a small island about 80 miles north of Tampa proper. This small island has a short, paved strip (CDK) which called to me. Perhaps just a low pass? No, too much bother to loose 5000 feet of altitude just for that.

My flight path had me pointing directly at a nuclear power plant and, while I'd love to lead a formation of three F-16s – one off each wingtip and one a mile in trail - I'd prefer not to have them there for the wrong reason. I turned inland, away from the plant, and the visibility diminished as the bumps increased. To the south I saw the first real clouds of the day, and they appeared to be organizing for a possible thunderstorm. I knew, however, that they were well south of my final destination.

30 miles north of Plant City (PCM) I throttled back, tuned in their Unicom, and began to familiarize myself with their runway. I was nervous about this arrival, as visibility from the heat and humidity was low, and I anticipated heavy traffic from other aircraft arriving on Sun and Fun's opening day just as I was. When I heard a Cessna doing touch and goes, much of my anxiety eased as I couldn't imagine anyone doing touch and goes in heavy traffic. I followed the lead of a few other aircraft and crossed the runway at mid-field and entered a left downwind. The air was very bumpy, and the wind a bit off the runway. I sat up straight in the seat, kept my eyes peeled for other traffic, and took a firm grip on the stick.

Often a bumpy approach leads to smooth air in ground effect but not here, not today. Just as the wheels hit I found myself heading for the side of the runway. I gave the Jabiru full power intending to go around but as the power took hold I found I was able to take control of the airplane again. I eased the throttle back while holding the mains firmly on the runway, and kept her under control for the roll-out.

The parking crew at Plant City offered me a piece of grass which I was happy to have. While securing the airplane I was heartened to see a few more airplanes grapple with a smooth landing, so I felt fairly sure it wasn't me.

The stop-over at Plant City allowed me one more opportunity to review the Sun and Fun arrival procedure. This was the



Top: The Talladega race track. It was built over the top of an old airport, and new runways were built nearby.

Middle: Cedar Key, in the Gulf of Mexico 70 miles north of Tampa. The small runway tempted me.

Right: Cairo Grady Airport. The woods at the end of the runway made for some interesting winds when approaching from the south. This photo was taken on my flight home.





part of the trip I least looked forward too. Now, however, I knew the wind direction and I knew which runway to plan my arrival for, which helped greatly in setting my mind at ease. I was as afraid of getting involved in another pilot's error as I was in causing problems of my own. Having grown up in Oshkosh I've seen my share of questionable arrivals and landings as people flock to the show amid heavy traffic and I didn't want to be part of anyone's long-term memory, or the highlight of anyone's Sun and Fun stories.

Sun and Fun Begun

Departing Plant City I immediately throttled back to the 100 knot arrival speed defined in the Sun and Fun arrival NOTAM and stabilized myself at the proper arrival altitude. I gave a wide berth to the power plant on the edge of Lake Linder which is the landmark for the initial run at Lakeland. The arrival control frequency was nicely done, as it repeated the specific arrival procedure over and over, with a friendly female voice breaking in when

necessary to give specific instructions to individual airplanes.

In the haze and low sun of early evening, I let an occasional burp of smoke

out of my smoke system just to announce, "I'm here, do you see me?!". The sun was setting on the departure end of the runway and the colored dots painted on the run-



My primary flight instruments are the seat of my pants and the horizon outside the windshield, but for engine monitoring and specific numbers, I refer to my Grand Rapids EIS. Here it shows me in level flight at 8420 feet, running the Jabiru engine at 3000 rpm with a fuel consumption of 5.5 gph. The indicated airspeed is 146 mph, but the TAS was 170 mph.

way as targets for arriving airplanes were no longer colors, but shiny round pools. I was instructed to land on or beyond the green dot so I knew I was safe to just fly it down the runway past both dots.

The real challenge was getting to parking. Arriving into a sunset and trying to pick out volunteers with orange paddles is a challenge against a backdrop of sun, haze, and aircraft and tents painted every color of the rainbow. The ground person-ell drove out to me and lead me to parking. This procedure could have only been improved if the golfcart I was assigned to follow had stayed off to the side instead of right in front of me. Taxiing a taildragger leaves forward visibility compromised.

Before I could get out of the cockpit I was welcomed to Sun and Fun, surrounded by folks interested in the Sonex, and offered a top-off by the local fuel vendor. I called the rest of the Sonex clan already in Lakeland to let them know that I had arrived and they promised to bring the van over to pick me up. No hurry, I offered, it was great to have completed the trip and the weather and atmosphere were spectacular.

The trip down had taken 8.3 hours of engine time. I lost actual flight time when I had to reboot the IPAQ on which I run the Anywhere Map software. I had left Oshkosh at 6:45 AM, and was on the ground at Lakeland just 11 hours later, including fuel stops, wandering down the Gulf Coast, and killing time at Plant City. The little Sonex is a time machine, having transported me from early spring to summer in just a day. Usually I feel like a neglectful parent leaving *Metal Illness* sitting on a ramp overnight, away from the warmth and security of her hangar, but as I walked away from her that evening I felt like that was what she wanted. She was grown up now, and didn't want dad fussing over her in front of her peers.

Sun and Fun Be Done

As my friend and Sonex builder/pilot Tony Spicer says, going on a cross country is a lot like flying off an aircraft carrier – you can't enjoy the flight because you are too worried about the landing. On a lengthy cross-country such as this, weather is the single biggest obstacle to success. As soon as I landed in Lakeland I started watching the weather for the return trip home. After a few days of that, I had a feel for the major weather systems and knew I was stay-

ing put at least until the show's end. With that in mind, I throttled back on monitoring the weather.

As this is a story about flying I will not delve into the details of the week spent working Sun and Fun and the evenings spent with friends, customers, and the fun-loving crew that makes working for Sonex Aircraft more of a lifestyle than a job. Everyone should be so lucky as to make their living doing what they are passionate about.

My friend who left Oshkosh on the day I chose to abort also left Lakeland a few days before me, and once again he left in weather. I stayed put until Monday morning – closing day of the show - when both Tony Spicer and I were taken out to the airport for an 8:00 AM departure. Tony got off a few minutes before I and we watched Sonex #32 leave Lakeland under the capable hands of Major Tony Spicer for the last time, as he had found it a new

“...while I'd love to lead a formation of three F-16s – one off each wingtip and one a mile in trail - I'd prefer not to have them there for the wrong reason.”

home during the show. Everyone in the Sonex community knows Tony and the considerable contributions he has made. I can work for Sonex Aircraft for 20 more years and will never sell more aircraft than Tony's \$5.00 video has.

My departure was straight forward. As soon as I pulled my airplane out of the parking spot I had a very patient volunteer pull up to guide me to the runway. A burp of the throttle let her know I was ready to taxi and she guided me through the grass to the hard surface, where the flagmen took over. I was waved onto the runway and with a rolling motion of the flagman's hands I was launched into the rising sun. Just like my departure from Oshkosh, the cloudless sky was obscured by low sun and haze. I turned north, settled in at 8500 feet and 2950 rpm, and set my course for home.

Central Florida offers little for scenery,

so I opted to start the iPod up and make some small changes to the waypoints programmed in the GPS. I would follow the same path home, but take a more direct route to Georgia from Lakeland. This would keep me away from the gulf coast, but I already had that postcard so I didn't need to go back.

Unlike my flight down which included some loafing and an extra stop at Plant City, my flight home was going to be flown at a steady altitude and throttle setting so I could record accurate data for future flight planning. Once again the winds proved favorable as I was on the back of a high pressure system which offered me a small push and a clear sky. A flight home on any of the previous days would have put the wind on my nose with the added possibility of playing hide-and-seek with tornadoes.

As I crossed into Georgia I watched Cairo-Grady pass under my left wing. It was out of place for a fuel stop for this return trip, but I dipped my wing in salute to the creature at the end of the runway, and the gentleman who was willing to break away from repairing a customer's aircraft to drive me into town if I wished.

Looking at the chart I saw that Dawson, Georgia (16J), offered the type of airport I was looking for and conveniently kept me from having to enter the Moody 3 Military Operating Area. I began a cruise descent to “buy back” the fuel and time I spent on climb-out and tuned in ATIS at Southwest Georgia Regional (ABY) to get the current wind and altimeter setting. The landing at Dawson was typical for the trip: an easy flare with 25 pounds of baggage and only a few gallons of fuel left up front to balance it out.

Leaving your comfort zone is a great way to grow as a pilot. Having learned to fly in Oshkosh there was always a runway pointing relatively into the wind, and that runway was always plenty wide and plenty long. My flying skills improved greatly when I left Oshkosh's expansive runways and committed myself to landing where there were few, if any, options and sloppiness would get me into the weeds rather than just off the runway's centerline.

I've also learned that the “standard” pattern – the one you were taught while you droned around the pattern in a Cessna 150 - is seldom available in the real world. While it is important to fly appropriate pattern entry and traffic patterns when

you can, very often the pattern needs to be adjusted for existing traffic. Do you know how to do slow flight? Do you know how to lose altitude quickly without overshooting the runway? Are you prepared to land without flaps, or with full flaps? Have you ever flown downwind at full throttle? While the perfect pattern may impress your flight instructor and examiner, it is often difficult to perform when arriving at an airport with other traffic about.

At Dawson my streak of great service continued when a friendly line man came out immediately to assist me with the self serve fuel island. Funny, I've yet to actually serve myself at a self serve facility. When he found out where I was from he asked me whether Brett Favre was coming back for one more season. Like the rest of the country, I didn't know.

I left Dawson and as I climbed I watched the sun reflected off my Sonex pass over the ground. Even from 8500 feet it was quite brilliant, but further polishing will bring it into better focus. Talladega was my next waypoint and there was little to see between where I was and the racetrack, other than the slowly rising hills. Talladega came and went, as did Huntsville, both slipping quietly under my left wing.

Nashville came into view at the top of my GPS, as well as my Atlanta sectional. The red line on my chart had me passing to the west of the home of Country music and my fuel gauge was indicating the air to fuel ratio in the tank needed to be adjusted. I picked out Springfield-Robertson (M91) on my chart and confirmed with the Anywhere Map that they had the flavor of gas my Sonex craves.

My descent to Springfield put me at an altitude that the traffic arriving and departing Nashville would be sharing, so my eyes were particularly wide and my head was on the proverbial swivel. The approach end of runway 22 at Springfield-Robertson is built on a rise in the ground, much like a railroad track crossing a ravine, which quickly falls away on each side of the runway. This is exactly the kind of situation that would have had me firmly gripping the seat cushion when I first ventured away from Oshkosh's expansive concrete runways after earning my private ticket. Today, however, a little right aileron into the wind, a little left rudder to straighten out the nose, 20 degrees of flaps, and comfortably rolling out a few hundred feet down the runway.

Leaving Springfield I was also leaving the hills behind and heading for the flatlands of Indiana and Illinois. Radio traffic at Evansville was heavy, but not a single aircraft was spotted as I slipped by, at 8500 feet, identified only as a "primary target" on their radar. Champaign came into view as the sun came off my tail and appeared on my left. I transitioned to the Chicago sectional – a milestone, as this would be the last chart I'd need to get me home.

Sonex Time Traveller

Shortly after Champaign is what is now known as Rantoul National Elliot Airport (TIP), but thousands of airmen and women, including many of the famed Tuskegee Airmen, knew it as Chanute Air Force Base. Chanute is one of the many airbases

that were closed in the late 1980s and 90s, and it finished life as a training base. I had visited Chanute in 1986, while it was still active, when one of my Air Force buddies invited me down for a weekend. On that particular trip I drove, and it took me 6 or 7 hours. Today, as I passed over it's shrunken runways, I was only 90 minutes from home.

Some of the former hangars and most of the aircraft on the field at the time of the base's closure are now the foundation of the Octave Chanute Aerospace Museum. This was my destination one fine Saturday in February of 2005. The Sonex whisked me down there in less than two hours, but walking around the base and museum seemed more like a trip back in time. I wasn't 90 minutes from home, yet I was



Above: Rantoul National Elliot Airport - the former Chanute Air Force Base. A great destination for anyone within a few hours of central Illinois.

Left: Even with it's spotty handling the Sonex is a very capable cross-country platform. With little effort the airplane icon on my GPS stayed glued to the course line.

20 years back in time. Such is the power of flight, such is the joy of my Sonex. That power will really be put to the test when I fly my father-in-law down for a visit to the museum, as he was stationed there in the early 60s.

While the museum is not a “spit-and-polish” museum, it is certainly worth the visit. Many of the aircraft once statically displayed around the base or used for training are now inside the confines of the museum. The aircraft I remember from my visit in 1986 was the massive B-36 Peacemaker. It has been dismantled and moved to California where it is being restored. Another highlight I remembered was Thunderbird Park, which featured all of the types of aircraft flown by the Thunderbirds painted in Thunderbird markings. These have all been gathered and are now in the main hangar. I can only imagine the sight of 4 or 5 F-105s flying an airshow routine! My only disappointment was that the B-52 had been disassembled and all that is on display is the forward fuselage. Having served as a B-52 weapons loader, the BUFF is one of my favorite aircraft.

Taildragger Test

The next logical fuel stop, and the last for my return trip, was De Kalb, Illinois (DKB). De Kalb is my first waypoint when flying south or east, and my last for the return flight. It keeps me outside Chicago’s Mode C veil, but just barely. As I descended from 8500 feet and reached 5000 feet the air began to get bumpy. I assumed it was convection currents rising from the dark, plowed fields below, but when I



Infected!

When I committed to building my Sonex I entered the project with no previous metal building experience other than a steel toolbox in 7th grade. This was the biggest roadblock to me jumping in with both feet.

However, after just a few parts, I embraced the aluminum construction techniques used to build a Sonex - even one from scratch - and never looked back.

There was never any question I would polish, rather than paint, my

airplane. I’ve taken a bit of heat for having polished my floors and cooling baffles, and perhaps a few other parts that no one will ever see, but it has become an illness. And so Sonex #009 became known as *Metal Illness*.

No properly named aircraft that flies like a fighter and is graced with beautiful curves is complete without nose art. The beautiful woman in the pin-up is my wife, Anne, who is a Registered Nurse, and the perfect model for the perfect airplane.

tuned in De Kalb's AWOS I learned the real cause was high winds – specifically, 18 knots gusting to 24.

As I continued lower it was necessary to throttle back. The bumps were getting bigger and I cinched down the shoulder straps and got a good firm grip on the throttle, stick, and seat cushion. Remember when I mentioned getting outside your comfort zone? I was there.

Mercifully the wind was only a few degrees off the runway heading, so I took comfort in that. What I feared most was that the rough air would not smooth out in ground effect, as I had experienced in Plant City, and I would have to fight the invisible foe for control of my aircraft. I flew the downwind leg and turned base close to the approach end of the runway to account for the strong headwind that would be trying hard to keep me from reaching the long, narrow strip of concrete. I brought "Metal Illness" over the numbers with only 10 degrees of flaps and plenty of power. My plan was to fly it right onto the runway and slowly ease the power back once the mains were planted. As it worked out, the landing was excellent. Of course, when you are in a taildragger the flying continues until the airplane is tied down, and I had yet to turn off the runway to expose the side of the airplane to the full 24 knot gusts.

The Sonex, as designed, has a direct steering tailwheel and non-differential brakes. I don't recall how many times I've been told you can't fly a tailwheel airplane without differential brakes, but I have for nearly 200 hours now. I'd like to think it is because I am a superior pilot, but the truth is it's all about the design. As I turned and presented the vertical stabilizer to the gusting wind, I could feel the tailwheel hanging on for dear life, but hang on it did and I never touched the brakes or the throttle. At the FBO, the windsock looked like a statue, locked permanently in an unwavering pose.

Taking off in those conditions is much easier and my ground run could not have been more than 100 feet. I climbed out above the bumps and watched the time to target for Oshkosh tick off on the GPS. I was back in familiar territory and switched to the memory mode of my radio and all of my programmed frequencies.

Home - In Many Ways

The southern tip of Lake Winnebago came



By the Numbers:

Metal Illness is powered by a Jabiru 3300 (120 hp) fitted with an AeroCarb and Sensenich 54 x 64 prop.

| | |
|----------------------------|-----------------|
| Miles Flown..... | 2400+ SM |
| Hobbs Time | 17.2 Hours |
| Flight Time | 16.2 Hours |
| Fuel Consumed | 88.76 Gals |
| Fuel Stops | 6 |
| Fuel Consumption: | |
| Avg. in flight | 5.55 GPH |
| Avg w/engine running | 5.16 GPH |
| Mileage | 27 mpg |
| Cruise RPM | 2950 rpm |
| Cruise Altitude | 9500 / 8500 ft. |
| TAS | 166 - 174 mph |
| Avg. Ground Speed | 148 mph |

into sight and I decided I'd move a little east of course to fly over the stable where my wife, Anne, keeps her horses. The odds were good that she would be there and I could let her know I was home, but the arena was empty.

Arriving in Oshkosh the winds weren't as bad and they had been 45 minutes earlier in De Kalb, but I had to work the radio harder in the last 5 minutes of the flight than I did for the entire trip home - ATIS,

Tower, Ground Control – and on every frequency the same voice!

Back at the Sonex hangar I was met by the Sonex crew that had either stayed behind to keep the doors open or who had flown home from Florida commercially that same day. All were a bit concerned about my status, as my attempts to call with progress reports were thwarted by no cell phone signals and, later, a dead phone battery. But I had made it home and my luggage arrived with me.

My first long cross-country ever, in an airplane I scratch-built from 13 sheets of aluminum, was a resounding success. The weather could not have been more cooperative and I was richly rewarded for my decision to not launch into questionable weather. My piloting skills were tested and honed, and my confidence in my airplane was complete, as it has been since it's first flight. It was exciting to navigate almost the entire length of the country on my own and see the states I have seen so often through the windows of a car from a new perspective. Flying puts a new perspective on everything, and the pride of flying an airplane you've built yourself has no comparison.

The world of aviation is a wonderful one. Standing on a ramp - whether in Oshkosh, or Muhlenburg, or Cairo, or even DeKalb in a high wind - is like being home for me. It's a world within a world, where everyone is friendly, you can leave with your airplane open without worrying about your possessions walking away, and people you met only 5 minutes earlier will drop their tools to drive you somewhere for food. Maybe that exists in other activities as well, but I'm not ready to find out. I like my world. And I'm not at all interested in being cured of my *Metal Illness*. □



Some day....



Scenes from Sun and Fun

Below: John Monnett entertained everyone at the Sonex Builder's party with his gas-powered blender.

Bottom: Sonex Aircraft customers pause for the annual Sun and Fun Builder's Party group photo.



The Heritage Flight - F-22 Raptor, P-51 Mustang, and F-15 Eagle. This was the Raptor's first civilian airshow performance.

