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www.sonexfoundation.com

## Submissions are always welcome at <a href="mailto:robbie@sonexfoundation.org">robbie@sonexfoundation.org</a>

Club membership is <u>free</u>, and for those who wish to participate in elections and help direct this member-run organization, a voting membership is \$25 annually. Your donations help us keep the websites running, and allow us to publish this newsletter. We sincerely hope you enjoy it.

## **Shop Talk**

Robbie Culver, President - Sonex Builders and Pilots Foundation

When our May 2015 newsletter was sent to members, none of us had any idea what was about to change our community forever. On Tuesday, June 2nd, 2015, Jeremy Monnett and Mike Clark were lost in an accident at the Oshkosh, WI airport. As this issue is written, no additional information has been released by the NTSB regarding the accident.

The week prior to the accident, Michael Farley and I were on a conference call with Jeremy and some of the staff at Sonex Aircraft, LLC. At the time we were discussing plans for Oshkosh, and other projects we had in mind. I don't really recall specifics beyond that, as they seem unimportant now. Michael and I attended the memorial services for Jeremy, held at the EAA museum in Oshkosh. I have never seen so many people at a memorial service – a testament to Jeremy's standing in the community and in aviation.

I wrote the following days after the accident, and wanted to share it here.

On Friday, March 13th, 2015 I drove up to Oshkosh to pick up a part for my Sonex project. As usual, I was replacing something I screwed up. Part of building an airplane.

When I got to the Sonex Aircraft, LLC factory, I was lucky enough to get to chat with Joe Norris and Kerry Fores for a bit, as well as the team in the office. It was nice to visit with them. As a customer I always enjoyed speaking with the folks there – they made me feel like a friend.

And then Jeremy Monnett came in – I think he had been up flying with his son. He was all apologetic for not having been there when I arrived. (This from the CEO of the company, who had a zillion things going on at once) I was able to spend some time touring the factory, where he introduced me to the staff members I didn't know, including Mike – one of the guys working on aircraft assembly. Mike and several other young men there were working on quick build kits, and just looking at the aircraft I could tell they did superb work and had top notch skills. I was envious of the workmanship.

It was an awesome tour and I really enjoyed meeting everyone and seeing what was going on.

The place was busy with lots of airplanes in various stages of construction. It was a really cool scene – lots of activity. Well organized but full. But what struck me the most was during our walk around – the whole time – was that Jeremy was being a Dad. He talked about the factory, and about the projects they had going on, but he was always keeping an eye on Miles. And it was obvious how much he not only adored his son, but how important it was to him that he gave his son not only attention but the love only a father can give.

At one point Miles smashed the toy glider he had. Jeremy looked at me, excused himself, and dealt with his son while I stood there smiling and watching. It was a very poignant moment as I also have a son and know what Jeremy was going through at that moment. When he finished, he apologized – to which I reminded him I was the one who should apologize as I was not only taking time out of his business day, but also away from time with his son.

As my tour concluded, and I left to drive back to Chicagoland, Jeremy thanked me for visiting. I don't know too many people that run a small business who understand their customers and the connections

they make when they just talk to them. Jeremy got it. I had other times when I talked to Jeremy, or was able to visit, but this one will always stand out in my mind as a special one.

Aviation is blessed with people like Jeremy Monnett. But he was a very unique, energetic, and happy person that I know we will all miss in so many ways.

Blue skies Jeremy and Mike.....may the sun shine down upon you and the breezes blow gently....

## Oshkosh photos

Robbie Culver

For me, part of the fun of going to Oshkosh is combining my love of photography and my complete and total submersion in aviation. I have posted photos from AirVenture Oshkosh 2015 at the following links – you can click on each link below to open the photo gallery:

Sonex Open House AirVenture 2015 photos are at

http://sonexbuildersandpilotsfoundation.zenfolio.com/p978659488

SBPF Member Meeting Oshkosh 2015 photos are at

http://sonexbuildersandpilotsfoundation.zenfolio.com/p941474564

SBPF Picnic at Oshkosh 2015 photos are at

http://sonexbuildersandpilotsfoundation.zenfolio.com/p906701386

Give Flight Waiex Wing Project 2015 photos are at

http://sonexbuildersandpilotsfoundation.zenfolio.com/p629898841

Many of the photos in this newsletter are from these image collections.



Michael Farley, Robbie Culver, and Eric Seber at the 2015 Sonex Open House.
This team started the Sonex Builders and Pilots Foundation in 2013.

## **Upcoming regional events:**

Regional events are the heart and soul of the Sonex community - please support your local Sonex event!

### September 2015:

September 12, 2015: 7th Annual Northeast Sonex Fly-In

Dillant-Hopkins Airport (KEEN) Keene, NH

The 7th Annual Northeast Sonex Fly-In is set for Saturday, September 12, 2015, at the Keene, NH airport (KEEN), with a rain date of Sunday, September 13. We'll update our web page before the summer. This was our web page from last year: <a href="http://tinyurl.com/6thSonexFlyin">http://tinyurl.com/6thSonexFlyin</a>

Contact: Mike Smith

Email: mike.smith208@comcast.net

September 12, 2015: 1st Annual Mid-Illinois Experimental Aircraft Fly-In Featuring Sonex Aircraft Company!

EAA Chapter 563 is putting on an Experimental Aircraft Fly-In featuring SONEX. Sonex has committed to coming down to Peoria ILL 3MY with their trailer and an airplane to set up to the fly-in. We decided to not restrict this fly-in to just Sonex in the effort to reach more home builders and possible new business for Sonex. I have attached a flyer for you to look at with the hope that we could get some exposure on the foundations web site. Sonex may contact you also. We have included a web site WWW.EAA563.org/fly-in for interested parties to go to and to get updates on additional forums and other information as it becomes available.

#### October 2015:

October 9-10, 2015: 12th Annual ASA Fly-In at Crossville Memorial Airport-Whitson Field (KCSV) Crossville, TN

The 2015 American Sonex Association Fly-in is scheduled for Friday October 9th and Saturday October 10th, 2015 at the Crossville, TN (KCSV) airport.

This years event will once again host the largest collection of Sonex, Waiex, Onex, and Xenos aircraft in the world. Save the dates on your calendar for the premier Sonex community fly-in!

### http://www.americansonexassociation.org

October 17th

Southern California Sonex Builders fly in. It will be Saturday October 17th from 9am to 12 noon at Wm. J. Fox Airfield (KWJF) in Lancaster California. Park in front of the terminal. So there are door prizes from MGL and Sensenich propellers, with the possibility of several others.

We will have two presentations. One from Jim Hicke on his trip to Yellowstone National Park and one from Dave Prizio on first flight safety. Dave has built several airplanes and is a contributing writer to Kitplanes Magazine and EAA Experimenter Magazine and a member of EAA homebuilt aircraft council.

You can see photos and video of the first Fly-in on our Facebook page. Like us on Facebook at <a href="http://www.facebook.com/pages/Southern-California-Sonex-">http://www.facebook.com/pages/Southern-California-Sonex-</a> Builders/396668133757388?success=1

Email us at southerncaliforniasonexbuilders@yahoo.com



Two special guest speakers

#### Dave Prizio

Preparing for Your First Flight
In this presentation we will look at considerations for a safe and successful first flight in an experimental amateur-built aircraft, based on my personal experience and guidance available from the FAA in advisory circulars AC90-89B-Amateur-Built Aircraft and Ultralight Flight Testing
Handbook and AC 90-116-Additional Pilot Program for Phase I Flight Testing. The goal, in every case, is to make the first flight experience more enjoyable and more successful, and above all as safe as possible for the pilot/builder.

#### Jim Hicke

Cross Country Flying in a Sonex.

Jim will talk about decision points in a cross country flight that are possible with modern avionics such as Dynon and MGL. The ability to see up-to-date fuel information and weather is a game changer and the experimental community is in the front line of having access to this technology.





#### PLEASE SUPPORT OUR SPONSORS

- Static Aircraft Display
- · Fly in or drive in
- Door prizes
- Restaurant opens at
- · Sonex Aircraft LLC http://www.sonexaircraft.com/builders/builderevents.html
- Aircraft Spruce http://www.aircraftspruce.com
- MGL Avionics http://www.mglavionics.com
- · Sensenich Propellers http://www.sensenich.com

When: Saturday October 17, 2015

9 a.m. - 1 p.m. - Free Admission

Where: Wm. J. Fox Airfield Lancaster California (KWJF)

Transient Parking in front of the terminal building

KWJF - TWR 120.3 WX AWOS 126.3 (661) 949-2840 Ground 121.7 Joshua Approach 124.55

http://www.airnav.com/airport/KWJF Call for more information 818-489-8954

You can see photos and video of the first Fly-in on our Facebook page.

Like us on Facebook at http://www.facebook.com/pages/Southern-California-Sonex-Builders/396668133757388?success=1

Email us at southerncaliforniasonexbuilders@yahoo.com

## **Builders Updates**

Michael Turrell - Onex 080

What is your Sonex's (Waiex/Onex/Xenos) Serial number - Onex 080

What gear configuration do you have? Tri-gear

Any modifications to the stock setup? Differential hydraulic toe brakes

When did you start building and when was the first flight? Started November 2011

What do you have installed? Please be specific - Engine, electronics, etc. A full list please-

Scott Casler, 85hp Hummel engine/Zenith carb, SPRL Fuel valve with extension

Mini X EFIS and 4000 EMS from GRT

iFLY740 GPS

V6 MGL radio

What modifications and customization did you do? Differential Toe Brakes, Fuel shut-off valve at the firewall,

What else do you have planned for the airplane? Paint

Where are you based? Dutton Ontario, Canada

What made you choose Sonex? The Onex folding wing design

What did you find most challenging about this build? Wiring, not yet completed

What would you do differently looking back? Nothing

What advice could you offer to someone currently building a Sonex? If building a Onex don't put the fuel valve shut off at the tank as per plans. It's my opinion that the fuel leaks happening are a result of the small movement imparted too the fitting at the tank every time the fuel is shut off or turned on

Do you have an online build log or web site? - http://www.onexmike.org





David Amsler - Sonex 1327

While it may give John Monnett fits, my plane was outfitted to transport a couple of old farts on comfortable cross country flights, with dual axis autopilot, not maximum aerobatic capabilities. It has

proved comfortable for cross country and has nicely performed some aerobatic maneuvers, and is a blast to fly with power of its CAMit 3300 upfront.

#1327 is a tail dragger, with center stick configuration. Standard kit, with pre-assembled spars and machined parts kits.

Lazy man's polish. Painted undersides of wings and tail and all difficult to polish moving control surfaces.



Approximate hours to build: Fabrication of parts 820 hours. Assembly 805 hours. Other related tasks: 960 hours (includes attending workshops etc.). Design of custom features: 300 hours.

What is your Sonex's (Waiex/Onex/Xenos) Serial number # 1327

What gear configuration do you have? Tail dragger

Any modifications to the stock setup? See below.

When did you start building? July 2009 - first flight July 2012

What do you have installed?

Engine: Camit model 3300SLRE

Corrosion inhibiting oil injector system

Carburetor: Camit standard, Bing 94/40 with custom needle and #282 jet.

Choke jet: Standard.

Carburetor heat: ST Aviation Ltd. Purchased from Jabiru USA 11-15-2009

Carburetor mixture control: HACman. From Green Sky Adventures Inc.

Auxiliary fuel pump: Facet # 40105 in series with engine driven pump.

Propeller: Sensenich wood/composite Model W54SK646

Propeller spacer and bushings: Custom 5/8" spacer, and longer bushings, designed and made by

builder

Oil cooler: Aero Classics Type 8000075

TOCA (Thermal Oil Cooler Adapter): Steve Rance, UK (LAA Approved)

Large 3/8" ports, AN8 lines, installed Jan 2012 with AN8 hoses.

Cowling: Sonex standard but 5/8" longer and horizontal split.

Battery: Odyssey PC680.

What else do you have planned for the airplane? Likely upgrade to new light weight external alternator, and improved flywheel connection (both still in development at CAMit, also possible conversion of aux. fuel pump from series to parallel configuration.

Where are you based? Southern Tier of Western NY Cattaraugus Co. / Olean airport. (KOLE)

What made you choose Sonex? Originally choose Zenith CH-650. Found out about folding (in flight) wing problem, did not like Zenith's response to that, mothballed kit and bought Sonex. A much stronger airplane. Sold off Zenith at big loss when they finally came out with a "fix".

What did you find most challenging about this build? Medical problems in mid build, wasted a year.

What would you do differently looking back? Never gotten that &%@!^&\* Zenith, Possibly longer prophub and cowl configured with LoPresti style inlets.

What advice could you offer to someone currently building a Sonex? You will likely spend more time building your airplane than flying it. Invest in tools equipment and work space setup as necessary to make the build enjoyable.

Do you have an online build log or web site? No, but modification posted to files section of old SonexBuilders Yahoo forum.

What can you tell us about the first flight? Did not have electric flaps and flap handle jammed down position. See my posts on need to cut deeper recess in flap detent angle.

How did it feel? Did anything surprise you bout the airplane? Otherwise uneventful test flight.

How did you prepare for that first flight? Transition training with Scott Scheetz.

Now that you have flown the Sonex, does it match your expectations? Yes, close to published specs.despite being one of the heavier Sonex out there due to all the goodies.

What goals do you have now? (Trips? Completing the 40 hours? Going to Oshkosh?) Now have about 220 hours on it, intending to fly it before age and medical issues catch up with wife and I.

### Significant Custom Features (listed nose to tail):

Prop spacer on Jabiru 3300 allowed moving cowl forward 5/8" for improved clearance and engine cooling. Much improved air passage to oil cooler. Much easier to fit cowl.

Cowl horizontal split cowl, three pieces, fastened with SkyBolt adjustable socket fasteners, all removable fasteners interchangeable.

Modified air baffling to account extra 5/8" and for spiral action of air from prop pushing air up and over cylinder #2, which also now has rounded top corners on leading edge fins much like cylinder #1 to reduce turbulence. Extra sealing around rear engine mount. Ramps from inlets to first cylinders have vents to cool undersides of cylinders. No CHT issues. Cooling air jets to both magnetos and the voltage regulator. Extra seals to insure that all air entering cowl is used for cooling.

Initially installed Jabiru 3300 engine #1915. Found malfunctioning hydraulic lifters and burned valves. Was under warranty, but Jabiru USA tried for a month without ever getting a response from Jabiru Australia. Jabiru USA did supply replacement exhaust valves and offered "upgrade" to hollow lifters, but impression left that they just did not really understand all issues with hydraulic lifter applications.) That was the end of my relationship with Jabiru. Purchased CAMit's kit to convert from hydraulic to solid lifter, eliminated problem with malfunctioning hydraulic lifters, and provided improved performance and smoother operation.

Other problems with that Jabiru engine became apparent, possibly due to earlier malfunctioning valves, and when CAMit Aero Engines started selling their own engines, I purchased serial # 0004, first to be installed in the US. That is now running great.

New CAMit engine has optional corrosion inhibitor system.

Thermal oil cooler adapter (TOCA) By Steve Rance (of the UK) removes restriction of oil cooler when starting, provides faster warm up. Had previously made custom oil PRV seat, and with that was able to reuse Steve Rance's TOCA on the CAMit engine

Tanis multi-point engine heater.

Custom ground carburetor control needle, and bored to size needle jet.

HACman mixture control on Bing carburetor.

Improved exhaust pipe junction sealing via custom beads rolled on pipes. Designed and made tool for this.

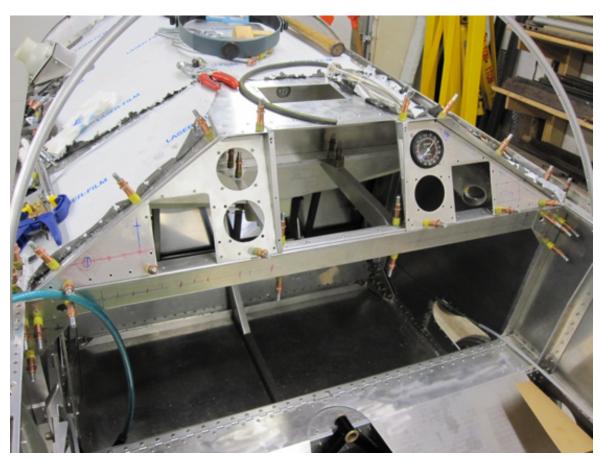
Integral mount for battery, fuel flow sensor and firewall stiffener.

Custom fuel tank air vent, provides full tank capacity, no spill, no syphon. (Tank leaked at fittings after first year, retrofitted with "oops" fittings.)

Great Plains hydraulic disk brakes with custom mountings that integrate wheel pant mountings and caliper mountings. Custom differential toe pedal operators. Matco parking brake valve. (At time, Sonex advised against using any hydraulic brakes, but these have worked fine. No fading, no grabbing.) Still think floating caliper is preferable to one side pads pushing against wheel bearings.

Optional  $5.00 \times 5$  tires.

Re-enforced panel structure to fit large screen Grand Rapids Technologies EFIS which bisects the standard panel and thus compromises fuselage structural integrity. Modification includes solid bulkhead behind fuel tank to add protection of plastic tank from anything electrical that might go pffft. behind panel. Revised structure stronger than original.



EFIS Includes synthetic vision, GPS navigation, and ADS-B weather and fuel tank level, fuel flow rate, fuel pressure, oil temp and oil pressure, carb temp, outside temp, plus CHT and EGTs for all cylinders.



Dual axis auto-pilot controlled by the Sport SX.

Other avionics: XCOM radio, Becker transponder, SkyRadar model L ADB-S receiver. Guardian CO detector. ACK dual frequency ELT

Dual Throttle to provide dual control with single center control stick while keeping center area clear of obstructions.

Electric flap operator. Switch right next to throttle. One hand stays on throttle and other on stick during landing. Eliminates looking like playing with yoyo when reaching for flap lever in pattern.

Panel mounted fuel shut-off. Visual indication of valve position, and can be switched off just prior to emergency landing while shoulder belts are tight.

Electric flaps and panel mounted fuel shut off together with toe brake operators, allow all flight operations with shoulder belts fully tightened which I consider to be a major safety improvement in event of emergency landing.

Custom upholstery and profiled cushions.

Storage boxes under knees. Side pockets. Wood trim on sides cover sharp edges of fuselage top angles.

Modified Van's air vents recessed into panel.

Todd's canopy bonded to custom frame and latch. (Sonex canopy cracked first night following installation.) Latch has integral locking tap and easy one hand squeeze to open operation.

LED landing, wing tip navigation and position lights and strobes.

Partitioned baggage compartment.

Re-enforced hatch opening on bottom near tail.

Custom 6" tail wheel and bracket. Uses \$15 Colson caster wheel that has dual precision ball bearings, not the cheap full complement conveyor bearings that are Sonex standard and not suitable for high speed operation. 220+ hours on that wheel and still looks good. (Being cheap, have two spares.) Bracket incorporates oilite bearings for swivel. Custom control link with rod end bearings.

#### Phil Bird - Sonex 759

What is your Sonex's Serial number? 759

What gear configuration do you have? Tail Wheel

Any modifications to the stock setup? Machined drums.

When did you start building and when was the first flight? Not yet flying. Hopefully later this year. Started building November 2014.

What do you have installed? Please be specific - Engine, electronics, etc. A full list please

2.2 Jab, Bing carb, 60x46 Sensenitch prop, MGL Ultra Horizon, Funke radio, backup steam ASI, Belite slip indicator. Duckworks landing lights, Aveo strobe lights.

What modifications and customization did you do? 2" prop hub extension to help with the C of G and so I could use the factory supplied plenum chambers plus fit the oil cooler at the front of the engine. Vans NACA ducts for fresh air. Own design air filter/ carb heat box.

What else do you have planned for the airplane? To finish it

Where are you based? Mittagong NSW Australia

What made you choose Sonex? Looks / price / performance

What did you find most challenging about this build? Cowling. I had a secondhand cowling to start with and had to modify extensively because of the extended prop hub, oil filter location and to clear the Rh plenum chamber.

What would you do differently looking back? Nothing

What advice could you offer to someone currently building a Sonex? Stick to the plans

Do you have an online build log or web site? <a href="http://www.mykitlog.com/corby202/">http://www.mykitlog.com/corby202/</a>





## **Great Lakes Sonex Fly In Report**

Al Eidukas

We are happy to report that the 3rd annual Great Lakes Sonex Fly In/Drive In was a great success. Though no airplanes were on display due to construction of a new runway this year we had a great turnout where the presenters/presentations did not disappoint.



A BIG Thank You to Tony Sabos from Simply Fly bringing us up to date on the Sport Pilot/LSA segment of aviation, Robbie Culver on sharing with us details of his near completion of his Sonex and the AeroVee Turbo build, (can't wait to see him fly in at next years event!) and Robert Helms of UL Power for his informative presentation on a new line of engines now available here in the USA.

Bob Meyer for a great job of research and presentation regarding the new ruling allowing the participation of a 2nd pilot (crew of 2) during the 40 hour fly off period. Dwayne Hudson from the FAA for his great job of reviewing the FAA inspection process and offering many important tips to help lead to a first time successful inspection and receiving ones airworthiness slip.



Many thanks to The Illinois Aviation Museum for sponsoring this event, EAA Chapter 461 for hosting and Clow International Airport for their on going support of this growing fly in. To the Sonex family who is always there in support. A Big thanks to David Henriksen for all he does so that we have great handouts and raffle prizes. To the many vendors for their donations: Sonex, Aircraft Spruce, Wicks, Dynon, MGL, GRT, Simply Fly & UL.

We are already working on next year and invite you to fly in or drive down to enjoy great people to learn/share the great experiences of aviation and what the Sonex community has to offer. Please mark you calendars for Saturday June 25th, 2016!

## Michael Farley's Oshkosh Trip Report

Michael Farley

### My Trip to Oshkosh 2015

Well, another successful Oshkosh AirVenture is now in the books! With attendance numbers totaling over 550,000 people and over 10,000 airplanes, this year's show was one of the biggest in recent years. Aside from one intense line of storms on the Saturday morning before the start of the show, this year's weather was nearly perfect with abundant sunshine and warm temperatures throughout the entire week.

This year's AirVenture marks the third time I've been able to fly my AeroVee powered Waiex up to Oshkosh from my home in central Ohio, and the first time I've made the trip with the new turbocharger kit installed on the engine.

Having installed the turbocharger over the course of the winter but only being able to fly around 14 hours prior to the journey to Oshkosh, I was excited to test the performance of this new engine option.

My basic plan for the week was simple. Just like previous years, I would fly my Waiex in formation with my father as he piloted his four place Wheeler Express. Having recently completed a three blade propeller conversion on his Express, my dad was interested in performance testing his airplane during our trip as well. Once at the show, he and I would spend most of the week camping, looking at airplanes, and having a lot of fun!

In general, I try to arrive at Oshkosh on the Saturday before the start of the show; this way, I can be at Oshkosh for the Sonex Open House that's held on Sunday, and I generally like to be there before all of the type club mass arrivals. As our scheduled Saturday departure time rapidly approached, both airplanes were checked over, packed up, and fuel tanks topped off in preparation for an early morning departure. After packing my Waiex with camping gear, tie downs, spare parts, etc. I calculated my takeoff weight at 1100 pounds so I knew this would be a good test of the turbo AeroVee's performance capabilities.

### Leg 1: KMRT - KOXI

The first leg of our trip was delayed several hours due to the frontal storm system that pushed through Oshkosh on early Saturday morning. After the system passed and it looked like the remainder of the day would be favorable weather, we departed our home base at Marysville, OH (KMRT) around 0830 local time.

Despite the relatively heavy takeoff weight, I was pleasantly surprised at the climb performance of the turbocharged engine; initial climb rates of 700–750 feet per minute were easily attained at takeoff power (40" MAP), followed by climb rates of around 500 feet per minute for the remainder of the climb once throttled back to climb power (35" MAP) and airspeed increased to at least 100 MPH. This was more of a cruise climb configuration but I generally like climbing a little faster in order to keep my cylinder heads nice and cool.

Just like the previous two Oshkosh trips, during this first leg we encountered head winds enroute to the first fuel stop. As a result we stayed at a low altitude, enduring light turbulence and rising temperatures the entire leg.

The good news was that both airplanes were running well, it was VFR, and our first intended fuel stop at Starke County (KOXI) had the lowest price of 100LL around!

Upon arrival at Starke County airport, the winds on the surface were light and out of the south so after a pattern entry for Runway 18, we landed both airplanes for our first fuel stop.

Leg Distance: 165 NM Flight Time: 1:35 Cruise Alt: 2500' MSL

Avg. Ground Speed: 125 MPH (stupid headwinds!)

Fuel Burn: 7.4 GPH



Fueling both planes at Starke Co. Airport

### **Leg 2: KOXI - C77**

After fueling up both airplanes at Starke County airport and relaxing for a few minutes, it was time to begin the second leg of our journey. I was already aware that, given the headwinds we would still be facing, making it all the way to Oshkosh non-stop from Starke County wasn't going to be an option. In addition, as my Waiex does not have a transponder it would be necessary to stay outside of the Mode C Veil around Chicago's airspace.

By this time the air temperature was well into the mid 80's and there was a broken cloud layer at 2500' MSL, so we knew this leg was going to be at low altitude, fighting those pesky headwinds, and very warm. After grabbing a few cold waters it was time to get back into the airplanes and continue the trip.

Even with the constantly increasing air temperatures, the Waiex jumped off the ground and climbed well as we turned west to continue our trek. After leveling off at only 2000' MSL I was forced to run my AeroVee fairly rich to keep the cylinders cool which didn't help my fuel economy, but that was a trade I was willing to make. Soon enough we began flying over the greater Chicago suburbs, so most of our time was spent looking outside for other traffic.

Thankfully, once we rounded the southwest corner of Chicago's airspace, our headwind turned into a quartering tailwind which would ultimately help us the rest of the day. I had already chosen Poplar Grove (C77) as our next fuel stop given the low fuel prices found there. Unfortunately, I was unaware of the weekend airshow currently in progress so the last few moments of this leg became somewhat stressful as we were forced to land amid a lot of airplanes performing multiple low passes. Thankfully we had no real issues and were able to promptly fill both airplanes back up with fuel.

Leg Distance: 135 NM Flight Time: 1:10 Cruise Alt: 2000' MSL

Avg. Ground Speed: 132 MPH

Fuel Burn: 7.5 GPH

### Leg 3: C77 - KOSH

By the time both airplanes were fueled and ready for our final leg, both my dad and I were exhausted, and truth be told, ready to be done with the day's journey. Everything had been going extremely well but between the hot and humid air temperatures and fighting headwinds most of the trip, we were both physically drained. At the same time we both knew that the Oshkosh VFR Arrival procedure is not the time to slack off and daydream, so we both made sure we were ready for the final leg of the trip. After a final review of the AirVenture Arrival NOTAM, we both ensured we had the appropriate arrival signs and performed a final check on the weather.

After looking over the current conditions, I discovered both good news and bad news: I knew we would have a nice tailwind this final leg of the journey, but I also saw that the surface winds at Oshkosh were reported at 200@16G22, or 200 degrees at 16 knots gusting 22 knots. While the Wheeler Express is excellent in crosswinds and my dad would have no issues with using Runway 27, I knew that these winds would limit my Waiex to using Runway 18 for the VFR arrival into Oshkosh. Given the need for a very close-in base to final turn for this runway, I made sure to spend a few extra moments looking over this procedure.

Our departure from Poplar Grove was uneventful and very quickly we started picking up a very welcome tailwind as we turned north towards Oshkosh. After setting the GPS direct to the RIPON intersection found right at the town of Ripon, WI, the rest of the trip was spend listening to the Arrival ATIS and watching out for other traffic. Thankfully the only other observed traffic as we entered the VFR Arrival corridor over RIPON was a Vans RV–8 that was at least 1 mile ahead of us. Inbound traffic was light during this time so as I overflew the Fiske waypoint, my request for Runway 18 was granted without issue. I immediately turned due east and followed Fiske road to set myself up for the left downwind entry for Runway 18. Behind me, my dad was assigned Runway 27 and was thus instructed to continue northeast for the right downwind for his runway.

Once I was at the appropriate distance for the left downwind for Runway 18, I turned north and started my descent for landing. The controllers had me turn base leg abeam the control tower with instructions to "land on the pink dot" so I made sure to carry plenty of speed during my close in turn from base to final leg. Once level, I immediately dumped the flaps and brought the power back for landing. I'm proud to say I landed right on the assigned dot and made the first paved turnoff, thus completing my third Waiex trip to AirVenture! After a quick taxi over to the Sonex portion of 'Homebuilt Parking', I shut down my engine and offered a silent prayer for getting my dad and myself to our destination safely.

Now it was time to have fun and relax!

\*One quick item of note for you Sonex fliers who want to make the trek into AirVenture. Your experience may vary, but in the 6 minutes between the Fiske waypoint and landing I was called all of the following: "Low Wing Homebuilt." "RV..." "Silver Bonanza." "Sonex." As I'm sure you've heard the ATC controllers at AirVenture are top notch and do an outstanding job, but be ready to be flexible. Not all of them know what a Sonex is and for my Waiex, the Y tail really throws them off. Whenever you make the trip be extra cautious during this time and pay attention as you may get called one of those generic terms! Be ready for it!

Leg Distance: 110 NM Flight Time: 0:50 Cruise Alt: 3000' MSL

Avg. Ground Speed: 151 MPH

Fuel Burn: 6.8 GPH



I just finished securing the Waiex on the Sonex Flightline! I think I was the 6th Sonex to park by the Sonex booth.

#### The Show

Throughout my previous articles I've written different stories of how much fun AirVenture is, and thankfully this year was no different. After both airplanes were tied down and our tent was set up, the rest of Saturday was spent watching other arriving traffic and walking through the airport grounds. With a heat index of 106 that afternoon, we made sure to drink plenty of water and tried our best to stay out of the sun!

On Sunday morning I untied my Waiex and made the quick taxi over to the Sonex factory for the annual Sonex Open House. I was very pleased to see a large turnout of customer built Sonexes there, and it's always a wonderful chance to catch up with good friends.

The generous folks at Sonex always go out of their way to make everyone feel welcome, once again confirming that I made the right choice when I purchased my Waiex kit!

I love being part of this community!



Michael Farley and Joe Norris at the Sonex Open House

By early afternoon all of the customer built airplanes were lined up behind the factory prototypes, and we all began our "mass taxi" back over to the Sonex portion of the parking area. Given the large amount of airplanes present, it took a few extra moments to figure out parking spots but in the end I was happy to park my Waiex next to Bill Larson's highly polished Sonex.

Bill had recently completed the turbocharged AeroVee upgrade to his engine so it was nice having both turbo AeroVees parked next to each other. Throughout the week, both Bill and I received many questions about the turbocharger upgrade from people interested in that engine option.



Over the next few days, I divided my time between touring the airport grounds, watching the afternoon airshow, and answering questions about my Waiex. For those of you who haven't been to Oshkosh yet, do yourself a favor: get there next year! The show is unlike any other and it's well worth your time to spend a few days looking around. Trust me, you'll love it!

As the week progressed, my dad and I spent some time each day reviewing weather forecasts to see what day would be the best opportunity to head home. Neither of us wanted to leave, but we also didn't want to get stuck at Oshkosh if a frontal system moved in between us and home. By the time we checked the forecast on Wednesday afternoon, the next front was scheduled to move in late Friday evening and bring with it the chance for some storms and high winds. Fearing a large number of departures on Friday morning, we ultimately made the decision to start our journey home sometime Thursday morning. We both hated the thought of leaving but a big high pressure system over Chicago promised good weather and light winds the entire trip home.

### Leg 4: KOSH - C56

On Thursday morning, both my dad and I were up early to pack up the airplanes and prepare for departure. For the return trip home, I was able to put some of my camping gear into the Express which lightened up my Waiex by around 60 lbs. Even though it's not a huge difference, removing that amount of weight does help climb and cruise performance on the airplane.



Getting ready to fire up. Thanks for the picture Kip Laurie!

Both airplanes were started right at 0700 local time and the taxi to Runway 36 for departure only took a few moments. Shortly after, my father and I were both cleared for takeoff and made the necessary right turn in order to clear the area.

Once well clear of the Oshkosh airspace, we turned both airplanes due south and began a cruise climb up to our cruising altitude of 3500' MSL. I had several possible options in mind for our first fuel stop depending on how the winds affected us, but thankfully the winds at altitude were calm. After rounding the southwestern corner of Chicago's airspace, we began a slow descent into our first fuel stop at Bult Field (C56). Having stopped here multiple times in previous trips, we knew they had cheap self-service fuel and a very pretty FBO office where we could cool off for a few minutes. With no other traffic in the area and light winds, we entered the pattern for Runway 27 and were quickly on the ground.

Leg Distance: 185 NM Flight Time: 1:35 Cruise Alt: 3500' MSL

Avg. Ground Speed: 136 MPH

Fuel Burn: 7.2 GPH

### **Leg 5: C56 - KAXV**

After refueling both airplanes and cooling off in the beautiful FBO at Bult field, it was time to continue our journey home. In previous trips Bult field was the last fuel stop I needed to make, but the lack of any tailwinds made it necessary to plan one last fuel stop before finishing our journey. I didn't want to end a great trip by running out of fuel just short of my final destination!

After departing Bult field, I set my GPS for Neil Armstrong field (KAXV) in Wapakoneta, OH as the last fuel stop. Having been through that airport previously I knew they had cheap self-service fuel and very nice facilities. Throughout this leg it was severe clear, so we climbed up to a cruising altitude of 4500' MSL to take advantage of slightly cooler temperatures.

Both engines seemed happier in the cooler air and we were rewarded with increased true airspeeds while burning slightly less fuel. In my Waiex, I had the power set to 30" MAP which was resulting in 3200 RPM and an airspeed of 140 MPH TAS. Not too shabby!

Before I knew it, both airplanes crossed the final state boundary into our home state of Ohio and began a gradual descent towards Wapakoneta. As I was the only one needing fuel at this stop, I entered the traffic pattern for Runway 8, landed, and immediately began fueling up at the self-serve pump. My dad followed me and also landed, but never stopped; by the time he taxied back to the runway for departure, I had completed fueling and was taxiing out behind him.

Leg Distance: 165 NM Flight Time: 1:20 Cruise Alt: 4500' MSL

Avg. Ground Speed: 143 MPH

Fuel Burn: 6.7 GPH

### Leg 6: KAXV - KMRT

This was to be the final leg of our journey, and also the shortest leg of the entire trip. Given our close proximity to home, we only climbed to 3000' MSL and kept our speed up as much as practical. After we leveled off in cruise, my father was finally able to push up the power in his Express to a normal cruise setting which left me chasing him the rest of the way home.

After a pattern entry to Runway 9 at Marysville, OH I followed my dad for the final landing of our trip. Once both airplanes were put away we spent a few minutes wiping off bugs, unpacking, and reflecting on yet another excellent trip!

Leg Distance: 46 NM Flight Time: 0:23 Cruise Alt: 3000' MSL

Avg. Ground Speed: 141 MPH

Fuel Burn: 7.0 GPH



Back at home!

### Final Thoughts

Overall, the entire Oshkosh trip was nearly perfect and I had a wonderful time flying my awesome little airplane back up to AirVenture for the third time. I continue to be amazed at the versatility of these airplanes, and marvel at its capabilities. Once home I was very thankful to see my beautiful wife and son, but I'd be a liar if I didn't admit there were some moments when I gave serious consideration to hopping back into my airplane and heading back up to Oshkosh!

Throughout the course of the trip I was able to put around 8 hours of flight time on my turbocharged AeroVee, and during that entire time the engine ran perfectly. Not once did I encounter any sort of burp, hiccup, hesitation, etc. I know there are a lot of interested parties who are giving consideration to the turbo kit, and while I'm just one example, I can wholeheartedly recommend the kit as being an excellent and highly recommended option. I've been extremely impressed with the operation of my engine and I'm very glad I made the decision to add the turbocharger to my AeroVee. Engine temperatures haven't been any higher than they were before, and the engine runs much smoother and stronger now than it did.

Before I installed the turbocharger, I would normally see cylinder head temperatures ranging as high as 30–40 degrees between the coldest and hottest cylinder. In fact, it's pretty normal to hear of an AeroVee where the front two cylinders are 30 degrees cooler than the back two cylinders. Now that I've added the turbo, the largest temperature range from coldest to hottest I'll see in cruise is perhaps 5–6 degrees total! And the same can be said for EGT readings; when I'm in cruise, the EGT spread from coldest to hottest may only be 15–20 degrees at the most!

On the trip to Oshkosh, I would generally run my mixture at a setting where I would indicate EGTs of 1150–1175 and as a result my CHTs would run right at 360. Remember this was at low altitude, on a very humid day, with air temperatures near 90 degrees. On the return trip I was finally able to climb to 4500' where the air temperature dropped to the mid 70's, and that altitude I could lean my EGTs to 1200–1250 and still have all my cylinders run at 350 degrees. I fully believe that, once the air temperature starts cooling off this fall, I'll be able to lean even more and keep everything running nice and cool.

Currently I'm running a Prince 54"x50" P-Tip propeller, made by Lonnie Prince. This propeller is the same size and pitch as the Sonex Factory recommended Sensenich "Climb Prop" and I believe performance to be similar. It's definitely more suited for climb rates but for me personally, that's the 25

primary reason I added the turbocharger in the first place. Cruise speed is great to have but most of my flying is local and I wanted the comfort of increased climb performance at heavy weights. The combination of the turbo and this Prince prop has given me all the performance increase I could ask for!

A lot of people at Oshkosh were asking me about performance numbers with my engine. I can tell you that from personal experience, the following are performance numbers I see with my engine and prop:

Climb Performance (@ T/O Power of 40" MAP):

Climb Rate, 900 lb. T/O Weight: 900-1000 FPM

Climb Rate, 1100 lb. T/O Weight: 700-800 FPM

Cruise Climb Rate @ 35" MAP: 500-600 FPM

Cruise Performance (@3000' MSL)

28" MAP - 3075 RPM = 138 MPH TAS

31" MAP - 3175 RPM = 145 MPH TAS

34" MAP - 3325 RPM = 154 MPH TAS

It should be noted that all of these cruise numbers are at a fairly low altitude and while my high altitude testing is ongoing, I've already seen much higher TAS numbers on lower fuel burns at higher altitudes. I hope to report more on those numbers soon.

I'd like to thank you all for taking the time to read this report, and if you have any comments or questions please don't hesitate to ask. I hope to see everyone at the ASA Crossville Sonex gathering in October!

Mike Farley Waiex #0056 michaelfarley56@gmail.com



I Love This Thing!!!

## **First Flight Testing**

Mike Singleton - EAA Flight Advisor #1910

Mike has performed first flight tests in 14 aircraft, including nine Sonex, one Waiex and one Onex.

Uh Oh! First flight and the engine just quit!

This is frustrating during engine testing but is guaranteed to elevate the adrenalin during a test flight. This has happened several times during flight tests I have performed. Fortunately, these failures (actually just stoppages) did not result in off-airport landings, with resulting chances for aircraft and/or pilot damage. Other critical incidents and emergencies have also occurred during flight tests I have made that could have been disastrous without proper flight preparation.



Being prepared for that first test flight requires development of a flight plan that minimizes risk while still accomplishing the flight test goals. I have read many articles and books on flight testing and have talked with many pilots who have performed these flights in at least one aircraft. All had differences in the specifics. However, they all agreed that safety is the dominant concern.

In preparing for that first flight test you should consider pilot ability, pilot preparation, aircraft readiness, airport conditions, support crew and weather.

The pilot should have recent flight experience in an aircraft with similar performance to the aircraft to be tested. Do not fall prey to that common pilot trait of over confidence. We've all learned many lessons by making mistakes, but the first flight test is not the time to learn too many lessons that way. If in doubt, talk with your EAA Flight Advisor. He/she will help you with your self-evaluation prior to committing to that test flight in an unfamiliar plane. If you decide not to make the test flight, the

advisor can help you find a suitable test pilot. If you determine that you will make the flight yourself, the advisor can help you find a suitable instructor and plane to gain the desired experience, if necessary, and will help with the development of a test plan.

Often, you may have a chance to fly in an aircraft of the same type you will be testing. Although the pilot may not be an instructor and may not let you perform certain tasks like take offs or landings, the experience will still be valuable since you will know how your test aircraft should feel during certain aspects of flight.



Pilot preparation for that first test flight should include a self evaluation of health, adequate rest, and mental exercises for possible emergencies. Play the "what if" game with yourself in the weeks before the flight. These should include what to do if the aircraft doesn't respond correctly to controls at lift-off and during each subsequent control input; what to do if the engine quits during each phase of the flight (during take-off, right after take-off, during the flight at altitude, during engine throttle changes, during the landing procedure); what to do if smoke or fire is detected; what to do if engine temperatures and/or pressures are out of limits; what to do if parts detach from the aircraft (canopy, control surfaces, fuel tank caps, propeller, landing gear, etc).

Obviously, you should insure that the aircraft is completely ready for flight. You should perform a VERY thorough inspection of the aircraft, paying special attention to critical components such as wing attach bolts, landing gear alignment and security, control surface security and proper movement, cotter pins and/or lock nuts in all the correct places, canopy or door latch mechanism security, etc. Don't forget to check everything under the cowl to minimize the chance of unwelcome engine issues during the test. Another excellent idea is to have several competent people perform separate inspections. Finally,

perform a full-throttle engine test with the aircraft in a climb attitude to be sure that the engine will not be fuel starved on climb-out.

The airport you use for first flight testing should have ample runway length and width to match the performance of the aircraft to be tested. What might be suitable for a Volksplane may be totally inadequate for a Lancair. A minimum length and width runway should not be acceptable for first flight testing. Give yourself an extra safety margin. Also, consider such things as obstructions, runway surface, possible emergency landing sites within close proximity and reasonable emergency crew (fire and ambulance) response times .

Now, if you are ready to fly, drink some water. I promise that you will have a good case of the dry mouth by the time you get back down. The hard work is done and the fun and exciting part now begins. The following first flight plan is one I have developed for my own use to insure my safety while evaluating the aircraft for two of the most important aspects of flight. I don't want to take too big a bite on this flight so I intentionally plan the first flight to be short. The nervous system will be much better prepared for detailed flight testing if we've already eliminated the worry about controllability and engine performance.

#### TAXI TESTING:

There are different opinions about taxi testing but I prefer not to perform high speed testing except once. This will be done on the initial take-off run. The only real advantage I can see in high speed taxi testing is that it can make the pilot more comfortable with this regime. However, the risk of loss of control is actually less with a straight take-off than with the high speed test where the pilot will have to deal with acceleration, alignment, torque, possible p-factor, then deceleration, decreasing torque and braking. I feel that it is wiser to separate the physical requirements of take-off from those of landing. If you have to master both techniques in the same taxi run, why not just be ready to do it if you have to abort the first take-off?

#### ENGINE RUN-UP AND BEFORE FLIGHT CHECK:

Perform a normal engine run-up to check magneto or ignition system operation and to verify that all engine parameters are in the green. If the engine is new, temperatures and pressures may be erratic or out of limits. If the engine is new and has not been broken in, temperatures may climb quickly during taxi. Do not take off with critically high oil or cylinder head temperatures since they will most likely get even higher during the initial climb.

Check all flight instruments, radios, transponder, GPS, etc. for proper settings.

Verify that the seat belt and shoulder harness and canopy or door are properly latched. You'd be surprised at what first flight jitters might cause you to forget.

#### TAKE-OFF:

The throttle should be applied slowly and smoothly to allow you to adjust to the feel of the plane during the acceleration phase. Concentrate on alignment down the centerline. This is especially critical with taildraggers. Once full control is assured, glance at the engine instruments to be sure all is ok.

Now pay close attention to the feel of the aircraft as the wings take affect and it begins to get light on the wheels. As soon as the wheels leave the runway surface assess quickly if all feels ok. Don't chop the throttle too soon since it will most likely feel different to you from anything you've flown. However, do not delay too long if the controls do not feel right or if the aircraft pitches or rolls dramatically. If either of these conditions are present it is time to quickly retard the throttle and get the plane back on the ground. It is much better to take the chance of damaging the plane now than totally losing control at a higher altitude.

#### AFTER TAKE-OFF:

If all goes well on the take-off roll and lift-off, establish a reasonable climb rate. Remember that the airspeed indicator may not be completely accurate, so keep the speed up to avoid a departure stall. As soon as practicable, begin your crosswind turn. The most vulnerable part of the first flight is from the time you can no longer land back on the runway until the time that you are assured of getting back to the runway or at least onto the level and reasonably unobstructed area on the airport property. For most of the planes I fly, this period of vulnerability lasts only about 30 seconds to one minute.

The entire first flight for me, except during that short period of vulnerability, is spent within gliding distance of the runway. If possible, climb to an altitude at least 1000' above pattern altitude and fly circles above the airport. Once at the desired altitude, take a moment to soak up the feeling and realize what you have just done.

Now get back to business and stay focused since there is more to do. So far you should have only been making shallow turns in one direction. It is time to make a shallow turn in the other direction and to increase the angle of bank (up to about 30 degrees) in both left and right turns. Don't forget to monitor the instruments. You don't want any surprises now and the instrument readings can forewarn of impending problems.

Next is exploration of slow flight. You should save full stalls for future test flights. I like to have a minimum altitude of about 2000' AGL for this testing. You may be more comfortable with more. For now, slow the plane until you get a stall warning alert (if installed) or the first indications of the impending stall. Recover, level off and think about how it felt. If the aircraft has flaps, you can now perform the same test with partial flaps and full flaps. DON'T STALL!

Regain altitude and set up a descent like you would use on final approach. There is nothing wrong with doing a full pattern procedure at high altitude before you try to do it at pattern altitude. This will give you a feel for how the plane will handle, particularly on final at landing speeds and with flaps. Remember that the airspeed indicator may not be completely accurate, so pay attention to the feel of the aircraft. Also, be prepared for the rapid descent rate of some aircraft. There have been accidents caused by pilots being surprised by this and landing short of the runway.

The practice approach at altitude will also give you an idea if the engine will have a tendency to quit when the throttle is closed. This is not an uncommon occurrence with new, tight engines. I have had this happen several times during different phases of flight testing with different aircraft, so be ready.

Because of the possibility of the engine quitting during the landing approach, it is prudent to maintain sufficient altitude so as to be able to land the plane without power from anywhere in the pattern.

#### LANDING:

Now that you are ready to land the plane, make a final check of all the instruments and enter the traffic pattern. This is another time for real focus so don't be distracted by non-critical events. Maintain that focus all the way through touchdown and deceleration. Taxi carefully back to the waiting crowd of admirers, shut down the electronics and the engine, get out, answer the immediate questions of the friends and supporters, then have a nice long drink of water (or whatever). Your dreams will be fun tonight!

# John Maxfield's Oshkosh Trip Report

John Maxfield N50NX

With the Phase 1 flight restrictions finally removed from my Sonex and the recent accident claiming the life of Sonex CEO Jeremy Monnett and a Sonex mechanic, I figured this was the year to take my Sonex to Oshkosh for the EAA Fly-In.

An early departure would allow for a leisurely pace for the day and any contingencies that might come up, so when I tuned the radio to the air to air frequency, I quickly discovered how many had the same idea. Doug Sytsma was an hour ahead in his shiny Cessna 120 while Mark, Danny, and new private pilot, Kyle Smokovitz were on their way in various planes to join up near Hillsdale.

A gentle cruise climb over the patchy morning fog to 4500' yielded cooler temperatures with little headwind for the two and a half hour flight to Lansing IL. While happily flying along at 3200 rpm, my AeroVee (VW) engine skipped its only beat of the entire trip on this leg.

Was it a drop of water in the fuel, a piece of something under a valve, or some other spurious malady? I may never know, it was so quick that it had to be only one cylinder missing one time. Believe me though, that one skip is enough to get your attention!

I chose Lansing IL as the first fuel stop. Taking this route was well south of a violent storm that raced through Oshkosh with 70 mph winds. Here's a picture of it I found online. I hope there's nobody in those soon to be horizontal outhouses! EAA's Big Ford Tri-Motor was busy flying rides in Lansing during it's last tour stop enroute to Oshkosh. What was interesting is that back in 1929, Ford had built a hangar for its fledgling airline in Lansing, and that hangar is still in use today.

The local EAA Chapter was using it and had a very nice display of it's cantilever construction and history. (Plaque picture) There was also a new Veteran's Memorial here, complete with a Huey Helicopter. Volunteers were tending to last minute details as Actor/Musician, Cary Sinise was to arrive the next day for its dedication.

After a couple of hours it was back in the air, with Madison WI the planned destination. EAA's Little Ford was giving rides there as part of Madison Airport's Big Bomber Weekend. A check on the radio revealed that the Smokovitz / Sytsma contingent had taken about the same amount of time to get out of LaPort Indiana and none too soon as that bad weather was starting to expand to the south.

As weather scout, I was happy to radio back that the 1500 ft ceiling was steadily raising and visibility improving as we all rounded the southwest corner of Chicago. About the time Joliet passed under my wings the sky was clear and 15 knots of tailwind was making the checkpoints fly by.

Madison WI is a Class C airspace facility, so radar vectors into the landing sequence resulted in a seven or eight mile final. Another experimental was being sequenced to land behind me and all of the sudden, after landing, someone on the radio was trying to hurry me along. What I didn't realize until I looked over my shoulder, was that "experimental" was a real live Curtiss Helldiver about to land at my cruise speed! I can tell you I was glad I'd aired up my tires as I rounded that corner onto a crossing runway.



The ramp was very busy with Warbirds, Bombers, and EAA's Little Ford, all selling rides. Line service was quick to sell me the little fuel I needed but doubtful of any hangar space as the sky to the west was starting to change.

The line supervisor was certain there was no room for me inside but confident, any weather would go around his ramp anyway. Being a little bit of a weather skeptic, I put my friendliest EAA face on and inquired with the owner of a private corporate hanger that was housing Little Ford. 32

He couldn't have been nicer or more accommodating when the next wave of storms came through. As the sirens wailed outside, the Sonex was snuggled in under Little Ford's wing, nice and dry. We all decided to have lunch at this point and who do you think was seated by me?

Yep... the Curtiss Helldiver Pilot! You see, it does pay to be professional and courteous at all times! It turns out he is originally from Michigan and used to fly Beech 18's for Wyman's flying service at Pontiac Airport. Nice guy.

And just as nice an evening returned after the rain. Little Ford was loaded up after a couple more rides and we both took off for OSHKOSH!

The exciting thing about flying into Oshkosh is the Fisk Arrival Procedure. Strangely enough, there wasn't any traffic in front of me this time until I reached the sorting out point at the town of Fisk. Seems there were a couple of Cessnas, one of them red, an RV, and another Red High wing plane all there at the same time and taking the controllers attention to sequence.

A little puff of my smoke system prompted the controller to clear me up the tracks for runway 27 where the second in as many controllers impressively called me an RV and cleared me to land on the orange dot.

Oshkosh was just a wonderful week of sharing Sonex stories with other owners, builders, and enthusiasts. I attended the Sonex Open House on Sunday and participated in the Mass Sonex Taxi to the tie down area. It was very moving as Jeremy Monnett's young son rode with his Grandpa, John Monnett in the lead Onex.

Later in the week while sitting around the Smokovitz's campsite, I began hearing how the Fisk controllers were sorting them out on their way in. It was then I discovered that after a long day of flying, stopping at completely different airports, we'd arrived at Fisk separated by only one plane!

It was time to head home Sunday morning before the airshow closed the airport. Luckily, the departure traffic was light and the Pink Shirted Controller cleared me for takeoff in no time. Rain was showing up on radar in western Illinois so I decided Aurora IL would be my first fuel stop instead of Poplar Grove.

The high overcast made for a very smooth ride at 3500 feet and a great view of that Beech 18 down there that I'm passing. What was that I said? Yes! I'm actually passing a Beech 18! Sure he's making 3 mile wide S Turns, but I'm passing him! I was still grinning when he followed me onto the ramp at Aurora for fuel, knowing I'm going to buy 6 gallons and he 60.

As it turns out, it's fellow Ford pilot, Rand Sigfreid from San Francisco who was following his son and daughter, flying a Piper Super Cub and Pacer respectively. Instead of hanging the big twin on the props, he elected to loiter around behind them. He'd seen the Sonex go by, its pilot waiving and giggling as he went, wondering who could that possibly be?

A light sprinkle had just started to fall at the west end of Aurora Airport as I pushed the throttle up, this time heading for at Coldwater MI and Lunch. Knowing Chapter members Sean Crooks and David Brent were also heading home this day, I called out on the radio and to my surprise, heard Sean reply.

We chatted back and forth as we flew and we were both surprised that even knowing our whereabouts only a couple miles away, we couldn't spot each other in the sky. It makes one realize how many planes go past without ever knowing they're there.

It turns out the restaurant at Coldwater closes at 3 pm on Sundays so all that was left was the hungry 45 minute flight back to Mettetal. One last climb up to the cool summer air at 3500 feet, with a tailwind and the sun at our back, it was the type of flight that always ends too soon. I hope your journeys to Oshkosh are just as enjoyable.

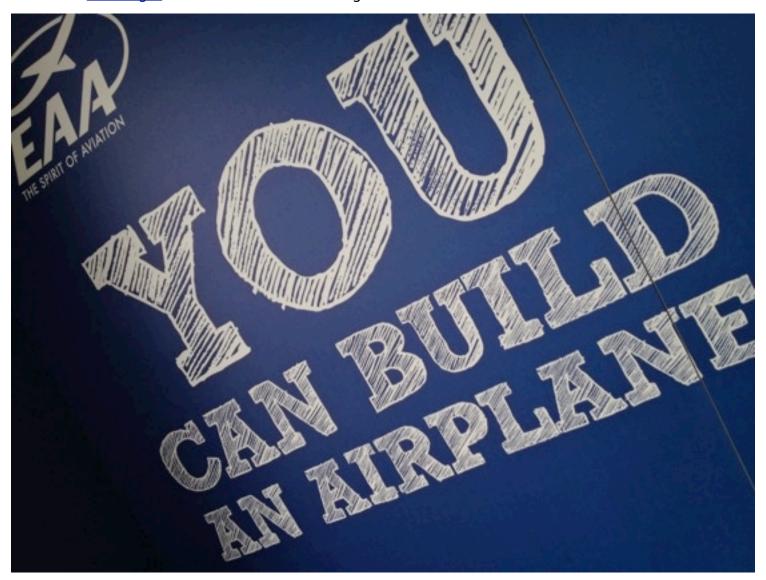


Happy Landings John Maxfield

## **Give Flight 2015**

Robbie Culver

Several weeks prior to Oshkosh (AirVenture for some of you, not me) the Foundation was contacted by Mark Schaible at Sonex Aircraft, LLC, and asked to assist in organizing a group of experienced builders for EAA's "Give Flight" initiative to be held during the show.



#### As EAA described it:

"The Give Flight project at EAA AirVenture Oshkosh 2015 will focus on constructing five sets of wings for five kit-built aircraft in one week, a follow up to last year's successful One Week Wonder project where more than 2,500 volunteers built an entire airplane during the seven-day event.

The goal is to give the completed wing sets to five different EAA chapters to jump-start five building projects that will hopefully lead to the formation of five flying clubs. The project is made possible by the generous donation of wing kits from three leading kit manufacturers, Sonex Aircraft LLC, Van's Aircraft, and Zenith Aircraft Company. Aircraft Spruce and Specialty will also support the Give Flight project by donating many of the tools needed."

Since Sonex was donating a set of Waiex wings for an EAA chapter in New Mexico, it made sense that we could help with their construction. Michael Farley quickly coordinated a group of experienced Sonex and Waiex builders who could commit to the time required for the project.



Mike Singleton, Robert Barber, and Carl Orton

Levi Fischer (team leader), Tony Thompson, Jim Hicke, Carl Orton, Mike Singleton, Bob Mika, Robert Barber, Margaret Hastedt, Eric Seber, Michael Farley, and Robbie Culver worked together to build a set of Waiex wings. (Apologies if I missed anyone!) Members of EAA Chapter 555 also participated in the team effort.



EAA Chapter 555 members, Bob Mika, Tony Thompson and Levi Fischer from Sonex

# **Type Club Coalition Meeting**

Robbie Culver

SBPF Directors Mike Singleton and Robbie Culver represented the Sonex Builders and Pilots Foundation at the annual Type Club Coalition meeting during Oshkosh. This year a two hour meeting was held, and the head of the NTSB, Christopher Hart attended.

Among the many diverse topics of conversation was the emphasis on Loss of Control in GA accidents. The GA accident rate is still too high for federal authorities, especially the Experimental Amateur Built (EAB) community. With the emphasis by the NTSB on Loss of Control accidents, it is important our community focuses on eliminating these. (Which is one of the founding principles of your Foundation)

Each year, the Type Club Coalition has focused on safety topics and how the type-specific communities can enhance safety. It has become obvious that both the NTSB and the FAA are focused on EAB safety due to the accident rate. The head of the NTSB specifically mentioned this topic during his opening remarks, and several NTSB field investigators at the meeting had additional comments in this regard. One of the investigators specifically mention the Sonex, and after a rash of recent accidents we all need

to work to reduce this focus and improve our collective safety record. To quote one insurance broker we have worked with, the accidents have made it a "little more difficult to quote the Sonex. A few of the companies have actually stopped insuring the Sonex."

The link below is worth reviewing.

http://www.ntsb.gov/safety/mwl/Pages/mwl7\_2015.aspx



# **SBPF Membership Meeting 2015**

Robbie Culver

The Sonex Builders & Pilots Foundation held its third meeting of the membership at AirVenture Oshkosh 2015. The voting membership elected Mike Singleton to replace Eric Seber as Director, and also passed the Board of Director's recommendation to add two new board members. Mike Singleton was elected to a three year term, new board member Jim Hicke was elected to a two year term, and new board member Scott Meyer was elected to a one year term.



## **SBPF Picnic**

Robbie Culver

At the 2014 membership meeting at oshkosh, someone suggested having a picnic. I'm not sure who. Wayne Daniels immediately volunteered to host the event at 7th Heaven on the east side of Wittman Field. And so, the picnic was planned.

At first, it didn't seem that many people were interested - we posted on the forum, planned the event, and not much happened. Then, in the weeks prior to AirVenture the event grew. 25 people.....35 people..... 75 people.....

Uh oh. What have we done? How will we get them there from the show? Well, as often happens, it just worked out. We had close to 70 people make it to Wayne's and with a van borrowed from Sonex Aircraft, LLC and a host of volunteers driving their own cars, it worked perfectly. (Next year we will change the pick up location but other than that it was easy!)

Thanks to Wayne and Kathy Daniels for being gracious hosts and to everyone who attended or pitched in to help out! It was a lot of fun and we hope to repeat the event again in 2016.





Many of those in attendance gathered for a group photo in front of Wayne's "Purple Haze" Sonex