

SHOP TALK

THE NEWSLETTER OF THE SONEX BUILDERS & PILOTS FOUNDATION
SONEXFOUNDATION.COM



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347 Members
38 Voting members

www.sonexfoundation.com

Submissions are always welcome at
robbie@sonexfoundation.org or
eric@sonexfoundation.org

Shop Talk

Robbie Culver, President - Sonex Builders and Pilots Foundation

We now have 347 members, with 38 voting members.

Club membership is [free](#), 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.

In this issue, we are proud to continue showing member aircraft. Featured is Kip Laurie's gorgeous (and now famous) Waix, along with Bob Mika's beautiful Sonex "Katie". We would like to continue to do this each issue, and we encourage everyone to contribute.

William Wynne gave us permission to reprint a fine article he wrote about EAA's founder, Paul Poberezny. I think his words echo what many think and I hope you enjoy them as much as I did.

William also has some thought provoking and heartfelt articles on his website. I invite each and every one of you to read these stories at <http://flycorvair.net/2014/01/21/risk-management-reference-page/> -- as the foundation continues to pursue its goal of assisting members and non members alike in building and flying safely, these are the types of stories we hope you read.

Anyone who has been close to an aviation accident - and clearly, William has - will tell you of the emotional strain of sorting out the results. It is a delicate and sometimes difficult task to accept that someone you know, respect, and - yes - sometimes love was killed in an accident involving an aircraft. I applaud William's writing and urge all of us to learn from each and every incident and accident involving the aircraft we build, own, and fly.

To quote William in one of his articles, *"Ask a 5,000 hour pilot what is the most important risk management factor, and he is sure to tell you it is experience, yet I will tell you that I have had 2 personal friends with more than 25,000 hours each die in a plane because they chose to do something unnecessary and foolish."* These are powerful words.

Having uncomfortable personal experience with this is something I am certain many of you share with William. I know I do, and it is one reason I reached out to Eric Seber, Carl Orton, and Michael Farley to initiate what eventually became this foundation. I know our efforts are important, and I realize that as we begin to discuss these incomprehensible events that there will be moments that are both uncomfortable and personally difficult for some of our members.

Even with that realization, we will continue to address safety and transition training, even with the recognition that these events are often difficult and emotionally raw.

Now that Oshkosh has come and gone, the photos from the Sonex Aircraft LLC open house are posted at <http://sonexbuildersandpilotsfoundation.zenfolio.com/p545668097> and photos from the 2014 membership meeting are also posted at <http://sonexbuildersandpilotsfoundation.zenfolio.com/p619934265> A very special thank you to member Larry Overstreet for taking the photos at the meeting.

The American Sonex Association (ASA) fly in is held annually at the Crossville, TN airport (KCSV). Please visit <http://www.americansonexassociation.org> for details on this year's event, scheduled for October 10th and 11th. Every year this event grows and hopes are high that this year can be an even bigger and better event. Sonex Aircraft LLC has committed to flying the Turbo powered Sonex to the event, weather permitting. Your foundation is presenting a forum on safety as part of the event, and once again will be photographing the event extensively and posting the results on the photo sharing website <http://sonexbuildersandpilotsfoundation.zenfolio.com>



Finally, Eric Seber updates us on the Pathways to Flight Foundation he has organized to help kids get into aviation. As discussed in the May issue, its intent is to introduce youth to aviation, aircraft construction, and career fields in aerospace by building an experimental Sonex kit aircraft. Eric's effort is designed to teach students not only aircraft construction and aviation concepts, but also teamwork, business skills, and relationship building. As Eric so aptly states, "Aviation desperately needs young people, and young people need aviation."

Recent updates

Jeremy Monnett, CEO of Sonex Aircraft, was recently elected as President of the Aircraft Kit Industry Association. Click this link to view EAA's news article. In addition to Jeremy's election, the FAA reported on the work it is doing to improve transition training. According to the EAA, the FAA would be "simplifying the LODA process that allows for training in homebuilt aircraft. The change would allow builders an opportunity to purchase instruction in an aircraft that is identical or similar to the one they are building."

Loren Sievila, Onex 33, sent us some information on his challenges during the assembly of his AeroVee engine. See the [tips and tricks files page](#) for his submission.

We continue to work on tee shirts based on member feedback, and yes – we are trying to make sure they have pockets!

The Sonex Builders and Pilots Foundation welcomes any and all affiliations with regional organizations, international communities, and other Sonex aircraft oriented groups.

We are not seeking any exchange of finances or to charge members for this, we would offer free membership to members of existing organizations that choose this option. Any member joining the foundation receives the newsletter as soon as it is published.

Also, there are now regional and international sub topics on the forum for use in local communications and to discuss regional events and fly ins.

As part of our follow up to Oshkosh Airventure 2014, we wanted to once again get back to part of our core initiative of helping all Sonex/WaieX/Xenos/Onex builders, owners, and those who purchase one of these aircraft transition to the type in a safe manner. This is especially important for new owners of previously built aircraft.

We co-authored a transition training document with Sonex Aircraft LLC that is intended to provide a syllabus for those looking to learn how to fly these aircraft. One key focus of experimental aviation safety initiatives is to learn how each type differs from aircraft you may already have experience in.

The link to this document is below.

http://sonexfoundation.com/uploads/Flight_Training_Syllabus_RevA_052113.pdf

In addition, we continue to actively pursue additional Letter of Deviation Authority (LODA) holders to provide this transition training. To date, we are only aware of three LODA issuances for the type.

http://sonexfoundation.com/Sonex_LODA_Holders.html

If you are a CFI or Sport Pilot instructor who is looking to obtain a LODA, please see the following:

http://sonexfoundation.com/Obtaining_a_LODA.html

Blue skies and hope to see you in Crossville!

Featured Aircraft

Waix 82 - Kip Laurie

The concept of building my Waix began in 1983. As a teenager, I subscribed to "Homebuilt Airplanes" magazine and I vividly recall the article featuring John Monnett and his Moni motorglider. Something about the looks and design philosophy of that airplane really clicked with me. I did not have the money for a kit back then but a seed was planted and many years later, fate had me cross paths with John's evolved version of his little Moni.

What is your Sonex model and Serial number? When did you start building and when was the first flight?

My Waix is serial number 82 (W0082). It was delivered on February 5, 2007. The first flight was May 20, 2010. It's an easy answer for the most often asked question..."how long did it take to build"- "Three years, three months, three weeks". I chalked up 1880 hours if you want to go by that figure.

Unlike most builders (I'm guessing), I built the airplane at work! I'm employed at Epps Air Service in Atlanta and found some cheap shop space in one of Epps' seven large buildings at the DeKalb-Peachtree Airport. As an "on call" pilot, I was cutting metal while getting paid! A huge benefit was that my shop was adjacent to a piston aircraft maintenance facility where 15 or so A&P's were available for advice and did I mention the awesome tool room (!)?



What gear configuration do you have? Any modifications to the stock setup?

My Waiex is a standard gear version. A personal rule is to never own an airplane with a nosewheel unless it retracts. The only change from the plans is a larger tailwheel for more clearance. I found that scraping the tailwheel pivot bolt on taxiway imperfections made passengers nervous.

What modifications and customization did you do?

Perhaps the only significant modification was to move the pitot tube to the tail from the wing. I have no good reason for doing this other than it looks cool, sort of like the "Y" tail itself. By using a phenolic block as a base, it's easily removable at fly-ins and has proven to be very accurate.

What do you have installed? Engine, electronics, etc.

Jabiru 3300 engine (SN 1637)

AeroCarb

K&N air filter

Prince propeller

Dynon D-180 (horizon/"compass"/g-meter/engine monitor/slip/skid/airspeed/altitude

Becker radio and transponder

Garmin 495 with Air Gizmos dock

ACS ignition switch

AveoFlash nav and strobe lights

Ameri-King 406 ELT

What else do you have planned for the airplane?

There's always a small list of things to tidy up but they are so insignificant that I may never check them off. I did recently add a baggage area blocker to keep things from flying back into the turtleneck area in turbulence. I should have done that a long time ago. The airplane is completed as I envisioned it, it's flying well, and I have no special plans for it other than to not let it sit and keep it in great shape mechanically.

Where are you based?

I live in Atlanta but base the airplane 50 miles away at Monroe, GA to keep hangar costs down. I prefer the small airport atmosphere anyway. I'd rather mingle with the dropzone traffic and local glider club than wait for a tower to tell me what to do.

What made you choose a kit (or scratch build) from Sonex?

The Waiex is only available as a kit and that's what I prefer. My hat is off to the scratch builders!

What did you find most challenging about this build?

It's patience, really. A project of this magnitude requires a lot of which I don't have. I'm reminded of that daily with my current project, a Pitts Special. Specifically, it comes down to materials that I was unfamiliar working with...Plexiglas and fiberglass. When working on the details, I had to think about the thousands of people that would be inspecting my work in the future. That mindset tends to make one produce above average workmanship but at the expense of extra materials.



What would you do differently looking back?

One thing, really. I'd install a panel mounted intercom. I was counting on the integrated intercom in the Becker radio but it is not voice activated. It's annoying to use so I have a portable that I use with passengers. Wires everywhere.

What advice could you offer to someone currently building a Sonex/Waiex/Onex/Xenos?

You have selected a proven, safe, and efficient to operate aircraft and you will be rewarded when it's complete. One can be a millionaire and buy a P-51 but the feeling of the first flight can be had only with the input of many hours in the shop. The greater the struggle, the greater the reward. Your pride of ownership will be many times that of a factory airplane. Keep at it and get help when you get stuck!



What can you tell us about the first flight? How did it feel? Did anything surprise you about the airplane? How did you prepare for that first flight?

Fortunately, the first flight was very uneventful for a couple of reasons – all of the important things worked as they should and I had flown another Waix before. I had a friend with a Waix who was doing the spar modifications on the Zeniths and when we'd go pick up one for repair, we would take his Waix and I would fly it back while he ferried the Zeniths. So, I was pretty comfortable in the design. The only hiccup on the first flight was some false oil temperature readings that prevented me from staying up until sunset.

Now that you have flown the airplane, does it match your expectations?

Overall, yes. But, I was hoping for bit more speed. I can muster 160 mph at the cost of running the engine all-out. I've evolved into an "econo-cruise" pilot (when I'm paying for the fuel) so I generally pull it back to 2700 rpm which gives me about 145 mph using 5.2 gallons per hour. Still respectable. However, my expectations have been exceeded with regards to low operating costs. Fuel, oil, filters, plugs, and tires are about all it has needed in four years. Simple airplanes are easy to maintain.

What goals do you have now? Trips? Completing the 40 hours? Going to Oshkosh?

The aircraft will be four years old this month (May, 2014) and I have about 490 hours on the engine and

about 450 hours on the airframe. The time difference is because I use a Hobbs meter for flight time while the engine time is recorded by the tach. I have flown to 48 states in the USA and landed at 186 different airports. I have been to Oshkosh four years in a row and plan for a fifth in 2014. I have also been to Sun n Fun four years straight. I would like to do more long cross countries in the future and the Bahamas is always in the back of my mind.

Bob Mika's Sonex "Katie"

What is your Sonex model and Serial number

Sonex S/N 178



What gear configuration do you have?

Tail dragger with 4" wheel

Any modifications to the stock gear setup?

Yes, I have installed the larger tail wheel and wood vibration dampeners on the mains :

<https://www.flickr.com/photos/53052604@N03/sets/72157635125454107/>

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

September 1999 start - Fly September 2008

What do you have installed?

Engine - AeroVee 2180 SN: 114

Starter - Sky-Tech Model: 122-12AV

Oil Cooler - B&M Supercooler Model: 15K GVW Jegs PN: 130-70265

Carburetor - AeroCarb Model: ACV-C03

Propeller - Sensenich 55x44 Model: W54JJ5L44

Battery - Odyssey PC625

ELT - AmeriKing - AK-450 ELT



Engine Info System - Stratomaster Model: HX

Air-Oil Separator - Mika Mark II

Compass – Airguide

Communication Radio – Micro Air Model 760

Transponder – Micro Air Model T2000SFL

Encoder – ATC Model A-30



What modifications and customization did you do?

Bob's Shading System. See Flickr Sets <https://www.flickr.com/photos/planeolbob/sets/72157626368189084/> <https://www.flickr.com/photos/22345371@N06/sets/72157603591634977/> <https://www.flickr.com/photos/24014066@N06/sets/72157626337388654/> <https://www.flickr.com/photos/39943786@N02/4443721879/in/set-72157623647494720>

Canopy Hold Open Fixtures. See Flickr set <https://www.flickr.com/photos/24014066@N06/sets/72157626212293545/>

Fuel Shut Off System. See Flickr set <https://www.flickr.com/photos/22138162@N07/sets/72157626206932201/>

Air / Oil System. See Flickr set <https://www.flickr.com/photos/24014066@N06/sets/72157626212277081/>

Camera Mount. See Flickr set <https://www.flickr.com/photos/53052604@N03/sets/72157627302274895/>

Baggage Area. See Flickr set <https://www.flickr.com/photos/22138162@N07/sets/72157603582894493/>

Fuel Fill and Vent area. See Flickr sets <https://www.flickr.com/photos/22138162@N07/sets/72157626206891441/> <https://www.flickr.com/photos/32288421@N06/sets/72157619998890631/>

Gun Ports. See Flickr Set <https://www.flickr.com/photos/64768042@N07/sets/72157629694471038/>

Charging System. See Flickr set <https://www.flickr.com/photos/53052604@N03/sets/72157627424242601/>

Tail Wheel Push Rod, Brake Plate Fix and Landing gear reinforcement. See Flickr Set <https://www.flickr.com/photos/53052604@N03/sets/72157626343703412/>

Fresh Air System, Oil cooler intake grille, 4" tail wheel. See Flickr set <https://www.flickr.com/photos/32288421@N06/sets/72157619998890631/>

"Panic Bar" for passenger comfort. See Flickr Set <https://www.flickr.com/photos/24014066@N06/sets/72157605980213964/>

Side panel upholstery panels. See Flickr set

<https://www.flickr.com/photos/24014066@N06/sets/72157605980213964/>

Head Sets hanger. See Flickr Set <https://www.flickr.com/photos/24014066@N06/sets/72157605980213964/>

B-29 Skin Piece <https://www.flickr.com/photos/24014066@N06/3622184443/in/photostream>

<https://www.flickr.com/photos/24014066@N06/3622184377/in/photostream>

Tow Bar: <https://www.flickr.com/photos/32288421@N06/5245062420/in/photostream>

Information Display: <https://www.flickr.com/photos/64768042@N07/8054544776/in/photostream>

What else do you have planned for the airplane?

I am working on a few things right now but will share them "soon".

Where are you based?

Johnson County Executive (OJC)

What made you choose a kit (or scratch build) from Sonex?

Sonex is an airplane that I not only can afford to build but also to fly.

What did you find most challenging about this build?

Canopy.

What would you do differently looking back?

Build lighter, as a first time plans builder I did not pay close enough attention to weight.

My design of the panel was too large and heavy. The lower sub panels interfere with taller people. Keep your panel area as shown on the plans.

I also used circuit breaker switches instead of a fuse block panel.

I could have used .020 sheet on several areas I used .025.

Stay with 4x5 tires. Unless you are based on a turf field, you don't need the 5x5 tires.

Don't put in a heater. I have removed mine. Go to a store and buy some insulated ski pants. It is all you need.



What advice could you offer to someone currently building a Sonex/Waix/Onex/Xenos?

Just work a little every day. It took me 9 years to build my plane. Every day was fun. Be sure to join a local EAA chapter. I could not have built this without the help of many great members giving me their years of experience

Do you have an online build log or web site?

Yes, the Flickr sites listed above show the build and flying fun. I also have a youtube site:

<http://www.youtube.com/user/Planeolbob>

What can you tell us about the first flight? How did it feel? Did anything surprise you about the airplane?

After the inspection and sign off by the FAA, I checked out the aircraft one more time. As the wind was picking up I planned just once around the pattern. I had a wide 5000 runway at Lawrence, Kansas so I advanced the throttle slowly. The aircraft left the ground smoothly and flew without any problems. The engine was running a little hot as they always do during break in. Slowing for base and final was normal and the landing was easy. No surprises.

How did you prepare for that first flight?

I flew with Charlie Radford in his Sonex. We shot around 5 landings. I was checked out on an Aronaca 7AC back in 1976. A Sonex is twice as easy to land.

Now that you have flown the airplane, does it match your expectations?

Totally, it has hit the published numbers. It is easy to maintain. It is small enough to share a hanger with another aircraft.

What goals do you have now? (Trips? Completing the 40 hours? Going to Oshkosh?)

I have been to OSH 5 times and Crossville once. Someday I would like to fly to both coasts and on to Alaska. We will see.....

(Editor's note – make that 6 times to Oshkosh as of August 2014, and congratulations to Bob for flying in the homebuilt review during the show!)

Speaking of Paul Poberezny

By William Wynne, <http://flycorvair.com/> - <http://flycorvair.net/>

This article was originally published on <http://flycorvair.net> and is reprinted here with permission.

AUGUST 20, 2014

Builders,

This week marks one year since the passing of the founder of the EAA, Paul Poberezny.



I stand next to EAA and SAA founder Paul Poberezny at the 2003 SAA Fly In. Paul passed away last August 22nd at age 91. The 25 years I have spent working in the field of Experimental Aviation could not have happened without this man's tireless efforts to promote and protect our right to build and fly planes.

At Oshkosh this year, 1,000 guests gathered in the Eagle hangar for the Lifetime member dinner. The subject of the evening was a remembrance of the life of Paul Poberezny. There were a number of very moving tributes from people who knew him well. The common thread through all the stories was that Paul was a regular guy, He was the 'average' EAA member.

The Lifetime dinner is by and large, a gathering of long time members, but mixed in are a few new arrivals. Two of these were seated at our table were new to the EAA, but had opted to contribute the large sum to become a lifetime member. One of them was a Cirrus owner the other a corporate pilot. Each of them were making their first trip to Oshkosh. I listened to them because I was interested to understand their attachment to the EAA, strong enough to motivate becoming a lifetime member.

Both of them cited the EAA style and Oshkosh as motivators. Neither of them had any exposure to Homebuilding. Although it was the Cirrus owners first trip to Oshkosh and his membership number was literally a 1,000,000 numbers higher than mine, He didn't hesitate to say that he was OK with some homebuilders, referring to them as "Those people" and "People who couldn't afford a real plane." I bit my tongue pretty hard. The icing on the cake was Mr. Cirrus offering that the current EAA president was a lot better at speaking with "those people" than the last one (Rod Hightower).

Being polite, I told him that I actually agreed with him, but pointed out that neither man could vaguely hold a candle to Paul Poberezny when it came to speaking to "those people, " and they never would because, Paul was one of 'those people', and he was very proud of it.

Had Paul not founded the EAA, his adventures would have been pretty good anyway, it is our lives that changed more than his because of the existence of the EAA. Yes, there were plenty of benefits to being the founder, but if I contrast what I have done in aviation to what my options would look like without the EAA, and it is a stark difference.

I met him only a few times, Spending only a few hours in his company. However, I felt I knew something about him because read almost all of the things he wrote over the years. He was opinionated, and I was from a different generation, but I spent more time listening to our common values than trying to find small points that illustrated that we were born 41 years apart.

Grace and I were present at the SAA gatherings, Paul's core group of people who he thought were the keepers of the original spirit that founded the EAA. At one of these meetings he took to the podium after dinner and gave an hour long speech. He spoke about the changes in aviation, and how newer aviators were not the same. I easily could have found it offensive, as his remarks were sharp, and about my era, but instead, I was awakened to the fact of how rare it is to see the founder of any organization, a major member of any party, any CEO, or head of any large organization stand up in public and say anything real at all. Paul was over 80, and I figured he had earned the right to speak his mind. Some people present were taken aback, but that was just because they wanted Paul to be a squeaky clean Santa Clause character. Not me, I was thankful for the real man, warts and all, a human with opinions and passions, one of "those people."

Grace was invited to be the first guest speaker at the first SAA Gathering. She spoke on carb ice. I also gave a Corvair presentation. The first year, the gathering was well attended. The second year terrible wet weather poured on the Midwest, and I was hesitant to drive the 1,000 miles each way in the old truck, a few weeks before Oshkosh to speak for what was sure to be a tiny group. I was about to pick up the

phone and bow out, when I went to the mailbox and found a small hand written card from Paul that contained the masterful phrase that precluded canceling. It simply said "I told my friends you are coming."

Our friend Jake Jaks built a Corvair powered Jr. Ace, one of Paul's designs. I always told Jake that when he got it done, I would have Paul greet him personally at his first fly in. This was a joke between Jake and I, it was mentioned it nearly every time we spoke. When Jake finished it and flew it to Sun n Fun, by chance Paul was on the grounds. He was older, had many old friends to see and things to do, but it took exactly 1/2 a sentence to explain it to Paul before he got in the golf cart, drove over and warmly greeted Jake and his son. They spent 30 minutes speaking. I stood back out of earshot, but smiles, laughs and hand gestures were all there, just two regular homebuilders on a sunny morning at a fly in.

Paul's tribute at the lifetime dinner was filled with such stories, of the head of a 150,000 member organization stopping to speak with the rank and file in the middle of a giant convention. It is very hard to imagine any of the recent heads of the EAA doing this simply because it is textbook poor use of managerial time. That is what any CEO or manager would tell you. But Paul was not from that mindset. Homebuilders and members who saw him in his element understood that this might have been bad management but it was certainly brilliant leadership, especially in an organization driven by volunteer efforts. This is the very core of what made him the right man to found the EAA.

There are more than 300 million Americans, but I don't need to feel brotherly love with all of them to be a proud American. I try to think about the things we have in common, but don't always find a lot of bonds. In an era where it is popular to judge the 'value' of people by the thickness of their wallet, I still believe that people are to be judged by the content of their character. If a number of people in this country don't see it that way, it doesn't bother me, nor diminish my pride in being an American.

In the same way, I am proud to be in the EAA, and this doesn't change if there are members who don't understand the values of the EAA the way I do. That's ok, I was fortunate enough to have known the founder, and I can say with some confidence that he was at heart, a regular member, and he valued aviators by the content of their character. My continued attachment to the EAA through all its changes is based solely on my belief that homebuilding was the very heart of everything to Paul, and it attracted the very best of people, and I am proud to consider myself, first and foremost, a homebuilder, just like Paul.

William Wynne has been continuously building, testing and flying Corvair engines since 1989. Information, parts and components that he developed and tested are now flying on several hundred Corvair powered aircraft.

William earned a Bachelor of Science in Professional Aeronautics and an A&P license from Embry-Riddle Aeronautical University, and has a proven 20 year track record of effectively teaching homebuilders how to create and fly their own Corvair powered planes. Much of this is chronicled at www.FlyCorvair.com and in more than 50 magazine articles.

The Sonex Builders and Pilots Foundation would like to thank William for his permission to reprint this article. It has been printed here in its original form without editing the content.

AirVenture 2014 Summary

By Jeremy Monnett

Your foundation asked Jeremy Monnett for an update following Oshkosh, and he supplied the following:

“Sonex has continued to be extremely busy in the weeks following AirVenture. As promised at AirVenture, Sonex has begun ordering production parts for the AeroVee Turbo and will be delivering upgrade packages and complete turbo AeroVee kits before the end of the year. Final confirmations on shipping dates will be sent in the next 4-6 weeks...we expect most of them to ship in November of this year.

Sonex continues to test the AeroVee Turbo installation in Sonex N123SX and we continue to be pleased with the performance. Some additional FAQ's and Answers will be posted in the next week or two along with actual performance summaries of our test flights. We are about to run our second turbo set-up with a 7:1 compression ratio and will be doing testing on auto fuels in the coming weeks. This will then be moved to our factory Tri-Gear Onex late this fall.



The SubSonex is taking a lot of time with a very ambitious delivery schedule for our launch customers on the project. We are also on track to deliver these by year end with a lot of work ahead in the next few short months. The SubSonex flight test program also continues as SubSonex JSX-2 is prepared to take this on the road for Airshow performances in the near future.

If you are thinking about building a Sonex, Waix, Xenos, Onex, Turbo AeroVee, AeroVee or SubSonex the best thing you can do is come to our next builder's workshop! It's happening on October 4th and 5th at our factory here in Oshkosh."



Sonex Builders and Pilots Foundation Membership Meeting

The annual EAA convention at Oshkosh (some call it AirVenture) has once again come and gone. Your foundation held its annual member meeting on Monday July 28th, with 33 members present. Vice President Michael Farley was re-elected to another term.

Sonex Aircraft, LLC CEO Jeremy Monnett was kind enough to join us and share his thoughts on the foundation, and to our delight and surprise, to share his thoughts on Sonex models powered by alternative engines. His comments welcomed all aircraft, regardless of the powerplant, as part of the Sonex family. All the feedback the foundation received was positive, especially at the annual Type Club Coalition (TCC) meeting. More on this later.

We've posted photos of the event on our [photo sharing site](#), along with photos from the Sonex Aircraft, LLC open house and mass taxi. Again, a special than you to Larry Overstreet for taking the photos at the membership meeting.

Thanks to all those who attended the 2nd annual membership meeting and to many people that made lasting friendships. We look forward to seeing many of you at ASA's gathering in October in Crossville, TN!

Robbie Culver
Mike Farley
Carl Orton
Eric Seber

New Offerings from Sonex 2014

By Mike Farley

As most of you have already seen, Sonex Aircraft LLC. had two big presentations for the attendees of Oshkosh AirVenture 2014. Both are exciting new products that I'd like to offer a quick review of for this edition's newsletter. Please visit the official company website at www.sonexaircraft.com for more information.

SubSonex JSX-2

In the months leading up to Oshkosh AirVenture 2014, Sonex Aircraft LLC began flight testing on the newest version of their revolutionary Very Very Light Jet (VVLJ), the SubSonex. Officially named the JSX-2, this newest version of the SubSonex hosts multiple updates over the original JSX-1 prototype. These updates include:

- A larger cockpit area
- Fully retracting landing gear
- A larger fuel tank
- Removable outer wing panels

- A re contoured nose
- A BRS parachute system
- Multiple options, new MGL iEFIS display options, cabin heat, and an oxygen system

The JSX-2 is available as a QuickBuild aircraft that still maintains compliance with the "51% Rule" for registration as an Experimental Amateur Built aircraft. For a small surcharge, customers can also purchase the non-compliance EAB JSX-2 and register their jet in the Experimental-Exhibition Class. This speeds up the build time even more as tail surfaces, wiring, and other tasks will be completed at the factory.

Throughout the week of Oshkosh AirVenture 2014, test pilot Bob Carlton flew the JSX-2 as part of the afternoon airshow including one special appearance just moments before the Wednesday evening night airshow. Bob wowed the audience as he showed the capabilities and speed of this amazing little aircraft!

AeroVee Turbo Kit

Over the past several years, Sonex Aircraft LLC has been working on a turbocharger installation for their popular VW based AeroVee engine. After many months of test running prototype engines in a factory test cell, this spring saw the installation of the AeroVee and turbo package onto the company's Sport Acro demonstrator. After months of successful test flight and data gathering, Sonex Aircraft LLC is now accepting deposits for the new AeroVee Turbo kit!

Customers can choose between an "add on" kit for existing AeroVee owners, or they can purchase the entire engine and turbo installation as one complete package. Initial performance numbers look very promising and many customers are very excited for a 100 h.p. option for the AeroVee!

Features include:

- Available for any Sonex aircraft that uses the AeroVee regardless of landing gear orientation
- 100 h.p. at 3400 RPM
- Two propeller options; one tailored for extra climb performance, and one for optimal cruise numbers.
- A total weight increase of only 25 lbs.
- Initial deliveries by the fourth quarter 2014

Please stay tuned to www.sonexaircraft.com for additional updates and information!

My Oshkosh 2014 Trip

By Mike Farley

Well, another successful Oshkosh is in the books! With an estimated 500,000+ attendants and over 10,000 airplanes all gathering for one week, this year's Oshkosh was a show not to be missed!



Early this spring my family and I decided to attend Oshkosh, hopefully with our split flight and ground crew making the journey. In other words, this meant that I would fly my fun and economical AeroVee powered Waix alongside my dad as he flew his sleek Wheeler Express to Oshkosh AirVenture 2014, while my wonderful wife, son, and mother would constitute the "ground crew" portion by driving with a lot of camping gear packed into the back of the family's SUV. Our general plan was to arrive at Oshkosh the Saturday or Sunday before the show so we could take advantage of the wonderful gatherings Sonex Aircraft LLC. offers, especially Sunday's Open House and Monday night's Hangar Party. Having attended these festivities in years past, we knew they were too good to miss!

As spring slowly gave way into summer, everyone in my family was approved for the vacation time, and it was time to begin prepping for our travels. For me, preparation for this year's Oshkosh AirVenture trip began months before the beginning of the actual show; in fact, I spent most of this spring and summer slowly polishing and buffing the bare metal exterior on my Waix. For those of you who have polished an airplane before, you know as well as I that it's a time consuming, never-ending task!

As our planned departure date grew near, I began regular reviews of the weather forecast for the trip. Approximately one week before the beginning of Oshkosh, the forecast wasn't very promising, but

much to my relief the forecast updates continued to improve as the week progressed. By the Friday morning before the show I felt comfortable planning for an early morning departure the next day, even though several cities along our projected route of flight still had scattered rain showers in their forecast. Overall however, the weather looked favorable, the airplanes were ready to go, and I was excited to begin this year's journey.

On Saturday morning my alarm went off well before the sun began to rise. Shortly thereafter, I was on my way to the hangar for a predawn departure. After one final preflight check of the Waix, I ensured all necessities were packed for the journey, pulled the airplane in front of the hangar, closed the hangar door, and started the engine.



While I didn't write down the exact time, my father and I departed our home airport just before the sun began to rise. Quickly climbing up to our initial cruise altitude of only 3000', it quickly became apparent that we were going to be fighting a rather annoying headwind. While my indicated airspeed hovered in the 125 miles per hour range, my Garmin GPS was telling me that I was only covering the ground around 95 miles per hour. After sampling different altitudes to see if the winds slacked off anywhere, I finally accepted this minor inconvenience and settled in for a slightly longer than planned first leg. The good news was that the AeroVee was running strong, everything was working properly,

and the weather that had been so questionable the whole week turned out to be no factor. In fact, other than some slight haze, it was a beautiful, calm morning.

Soon enough we crossed the border from Ohio into Indiana a little south of Fort Wayne. By this time I knew that, given these pesky headwinds, our first intended fuel stop just south of Chicago was going to be a little out of reach, so I began looking at the map for a suitable alternate. By this time the surface winds were very light out of the south, so my preference was to try and find a nice north/south runway. After chatting things over with my dad, we elected to divert to Starke County, Indiana (OXI) which fit the bill nicely. I could have traveled a little farther on this first leg but after 2 hours, I was ready to get out and stretch my legs, so Starke County it was!

As soon as we shut down our engines, we were greeted by a friendly smile and hand shake from the FBO supervisor. He proceeded to offer us an "Oshkosh Special" fuel price and graciously helped us pump our fuel. After just over 2 hours of flight time, my Waix had burned around 11 gallons, giving me an hourly fuel consumption of a little over 5 gallons per hour. Normally, when I'm just out enjoying a nice evening flight around home, I'm at or less than 5 gallons per hour, but on this trip I kept the power up to make things a little easier for my dad who was flying in loose formation in the speedy Wheeler Express.



After being on the ground for around 30 minutes, it was time to depart Starke County and head towards the southern edge of Chicago's airspace. Once again we settled in at only 3000' to try and keep the headwinds to a minimum. As we continued on our second leg of the morning, we stayed only a few miles outside of Chicago's Mode C Veil, and soon we began hearing other airplanes on the radio as they were also making their way towards Oshkosh.

After listening to reports from other airplanes ahead of us it seemed that no one was having any weather issues even as people were getting into southern Wisconsin, so my dad and I pressed on towards our next fuel stop.

Once we were north of De Kalb, Illinois, we proceeded directly towards our next fuel stop at Watertown, Wisconsin (RYV). Two years ago we elected to stop here and were greeted with excellent service and special fuel prices, so making the decision to stop here again was an easy one. Despite being a busy airport with a lot of Oshkosh participants making this a final fuel stop, we had no issues landing and refilling our fuel tanks.

Before we left Watertown, my dad and I took a few minutes to review the Oshkosh Arrival NOTAM once more to ensure there were no last minute changes or surprises. With Watertown only being 40 miles south of RIPON, we knew there wouldn't be much time for a thorough review in flight. After around 40 minutes on the ground, we made our final departure of the day and quickly turned due north towards the infamous little town of Ripon, Wisconsin.

To me, this last leg of the journey is the most exciting yet most nerve racking of the whole trip. At this point you have to constantly be on your toes as other airplanes can pop up nearby at any time. This year however, we were lucky; the next time either of us saw another airplane was only a few miles south of Ripon, and I quickly fell in line behind them as my dad fell in line behind me. The airplane I was following turned out to be a Taylorcraft so the 90 knot required arrival airspeed became closer 80 miles per hour, but thankfully we could see the situation early and easily made the adjustment.

As I overflew Ripon, I kept a watchful eye out for other arrivals; thankfully no one materialized out of the blue right in front or beside me. Maintaining proper distance behind the Taylorcraft was easy given the slow speed capabilities of my Waix, and as we approached Fiske I heard the Taylorcraft being issued directions to head east for runway 36.

A moment later I heard "Silver Bonanza, rock your wings" which I knew was me, so after a vigorous wing rock I was told to "Follow The Railroad Tracks for the Downwind Runway 27." Given light surface winds right out of the west, this assignment worked quite well for me! I was also able to speed back up a little bit as the Cessna I was following was already on Final Approach.

After turning onto the Downwind Leg, I was once again referred to as a Bonanza as I was instructed to begin an early descent and keep my Base Leg close to the runway. Apparently a KingAir was on the IFR arrival from the east and I was to sneak in before him, so I tightened up my Downwind, turned Base Leg early, and before I knew it I could feel my wheels touching down on Runway 27 at Oshkosh! I had made it!

Shortly thereafter I was marshaled into the Sonex parking area, immediately behind the Sonex display booth. I was fortunate enough to park next to Bob Mika and his beautiful Sonex 'Katie' who had just

arrived from Kansas. At this point, I believe I was the fourth customer built Sonex aircraft to arrive at the Sonex parking area. By the end of the day Saturday, that number had more than doubled as other Sonex aircraft joined us near Sonex display booth while still more chose to camp next to their airplanes in the Homebuilt Camping area.



This week was off to a great start!

On Sunday morning, it was time to enjoy the first Sonex tradition of the week, the Homecoming Party and Open House. My dad and I taxied my WaieX over to the Sonex factory area where nearly a dozen customer owned examples were already parked.

As I shut down my AeroVee I looked behind my WaieX and was delighted to see Wayne Daniels shutting down his Jabiru 3300 powered Sonex, Purple Haze, right behind me. Wayne has a very long way to travel in order to attend the Homecoming and this year he was ecstatic that he set a new personnel best record of only taxiing 5 minutes! (Wayne calls Oshkosh home and lives right on the airport grounds)

As the morning continued, we were all treated to news regarding the new SubSonex JSX-2 jet, as well as the new turbocharger application for the AeroVee engine. I have loved my AeroVee ever since I've started flying my Waix, but the thought of a little more horsepower is very enticing! Needless to say, I paid close attention to Jeremy Monnett's presentation on the new Sonex offering.

By early afternoon it was time to partake in the next Sonex tradition; the mass Sonex taxi back over to the Sonex parking area. This year I was lucky enough to follow good friend Kip Laurie and his gorgeous Jabiru 3300 powered Waix back over which gave me the opportunity to park next to him. After all airplanes were shut down and secured, it was time to set up camp and have some fun!



As the airshow began, my family and I had a wonderful time visiting old friends, making new ones, and exploring the exhibits. I tried to spend as much time as possible close to my Waix so that I could answer questions as there was a very high level of interest in the different Sonex models.

In addition, I was able to attend the second annual Sonex Builders And Pilots Foundation meeting held late Monday morning, as well as the Sonex Open House party on Monday evening. Thank you Sonex for being such wonderful and gracious hosts!

By mid week we were checking the weather forecast to determine the best time to start the journey home. Both my father and I really wanted to stay long enough to watch the USAF Thunderbirds

Demonstration team, but the weather in the Oshkosh area as well as back at home forced us to reconsider. By Wednesday evening it was decided that a Thursday departure was going to be ideal and if we waited longer, we might be facing weather challenges throughout the weekend.

On Thursday morning camping gear was packed up, airplanes were loaded, and it was time to head home. Kip Laurie had also decided that Thursday was to be his departure date, so both Waiexes were pushed out at the same time.

Unfortunately an accident on Thursday morning delayed departures as the Oshkosh airport was closed for several hours, thus pushing our departure back. Neither Kip or I wanted to be stuck there during the afternoon airshow so we joined a long line of departing aircraft shortly after 1:00. As we slowly taxied towards the runway, I was delighted to see Rick Wantz right behind me!

This was the first Oshkosh Rick had flown his recently completed Sonex to, and if anyone ever doubts these airplanes are real traveling machines, just ask Rick. Not only had his wife Alicia joined him on the trip, but they had packed all camping gear needed for a week's stay into their AeroVee powered Sonex! Congrats Rick!

After nearly 45 minutes in line and several engine shut downs to prevent overheating, it was time to depart. I was able to line up with Kip and perform a nearly formation takeoff right behind him before the required right turn to clear the airspace.

Once clear of the Oshkosh area, I turned due south and climbed up for the first leg home. My father departed approximately 10 minutes behind me but was able to close the distance by the time I hit the Illinois border. As we continued around Chicago's airspace it was time for a final fuel stop, so we elected to land at Bult Field (C56). We were also more than happy to spend a few minutes in the FBO's amazing air conditioned lobby.

Finally, it was time for the last leg of our journey. Now mid afternoon, the weather was once again cooperating as we departed and turned east towards home. Indiana passed beneath our wings as we headed towards central Ohio. After an uneventful final leg, both airplanes were parked, put into their hangars, and unpacked.

Even now, after looking back at the trip in general, I'm thrilled more than ever that I built my Waiex. In nearly 10 hours of flight time total, I didn't have a single mechanical issue on either the airframe or engine. I continue to be impressed with the economy and versatility of the Sonex airplanes in general, and can't wait for my next adventure!

I'm already looking forward to next year's trip to Oshkosh but hope to make the trip a little faster after I install the turbo on my AeroVee this winter! I can't wait!

Type Club Coalition Update

The following update was provided by Tom Charpentier of EAA. The Type Club Coalition (TCC) met at Airventure, and our foundation was used as an example of how to organize a type club.

-Dick VanGrunsven (*"Van" of Van's RV fame*) was gracious enough to share some time with us as the President of the Aircraft Kit Industry Association. He suggested we need to do a better job of telling the story of how type clubs can contribute to operational safety and other benefits they offer. We discussed running a Sport Aviation feature story at some point in the future, highlighting some success stories. I will be working with our publications staff to start fleshing out a proposal.

-Van also voiced AKIA's support for the TCC effort and we pledged to keep information flowing between our two organizations so that we can work together moving forward, particularly as more and more manufacturers offer transition training and other familiarization programs for kit aircraft.

-I think we're up to date on this but I may have missed something in the pre/post AirVenture shuffle - please check the TCC website and ensure your club is listed and the link points to the correct page. If there is a discrepancy please let me know.

-Our internal listing of clubs is getting stale. At your convenience, please email me a listing of your club officers (can be as comprehensive as you wish but at least your top executive or two) and email/phone contact info for your POC to the TCC. This will be helpful moving forward

-There is significant interest, as the recent email thread alludes to, in type clubs having more involvement as subject matter experts in accident investigations. I had in my notes Jeff Edwards (LOBO), Rick Beach (COPA), and myself as volunteering for a small working group to create a guide for type clubs if and when an accident occurs. There have been others involved in the email discussion, so if you would like to participate please let me know.

-There is also interest in developing a "how to start a type club/how to run a successful type club" document. Robbie Culver (Sonex Foundation), Reiff Lorenz (Velocity), Jeff Edwards, myself, and Coyle Schwab volunteered for a working group to tackle that. Again, if there are additional volunteers let me know.

-Relating to the publicity item above, I can serve as point of contact for any stories from TCC clubs for publication in EAA media. Cool fly-in? Unique pilot resources? Great build/restoration? Send them my way and we can work out the best venue to get the word out.

-Effective communication between TCC members has been a persistent challenge since we started this group, which is a bit of an issue as a primary reason for founding the TCC was to promote communication between type clubs. We discussed that the best short-term solution is a private forum, which I'm working on setting up. It would be hosted on the EAA forums page (www.eaaforums.org) and accessible only to approved members. Other private groups have done this and it has served them well. This would allow us effective mass communication that doesn't clog up our inboxes and would allow us to share members-only documents, such as newsletters, in a confidential setting. Long term I have an IOU for Coyle and I to develop a year-round communications plan, which may include conference calls, newsletters, and/or additional meetings.

Update: Pathways to Flight Foundation, Inc.

By Eric Seber - Builder, Waix 153

Well, time has flown by since my last message which was posted in the May issue of Shop Talk. I can't believe that it is late summer here in the Northern Hemisphere and fall is approaching fast. While the Pathways to Flight youth aircraft build project has not yet officially started, we are moving forward with planning and fundraising.

To date, we have raised just over \$5000 toward the purchase of our Sonex kit and necessary equipment to build the aircraft. In order to keep the momentum going, we will be placing an order for the tail kit soon so that youth participants can begin assembly. Our goal is gain more awareness which will hopefully lead to an increase in fundraising.

Speaking of awareness, we will be hosting a Saturday morning fundraising pancake breakfast and fly-in at the Huntingburg, Indiana Airport (KHNB) on September 27, 2014. We invite anyone with an interest in Sonex aircraft, our youth build project, or aviation in general to join us! I'll have more details as we work out the logistics of putting together this event.

Pathways to Flight Foundation, Inc. was formed as an Indiana non-profit corporation in April 2014 by three founding members: Eric Seber, Heather Seber, and Jim Kulbeth. These three individuals currently serve as the Board of Directors. PFF is currently pursuing IRS tax-exempt 501(c)3 status.

If anyone is interested in donating toward to this project, you may send funds directly to the our fund partner, Dubois County Community Foundation at 600 McCrillus Street P.O. Box 269 Jasper, Indiana 47547-0269. Please include "Youth Aircraft Build Project" in the memo line. Or you can visit our project fund page by [clicking here](#) and using the PayPal Donate button.

<http://www.dccommunityfoundation.org/currentfunds/youth-education/aircraft-youth-build-project-fund/>

Best regards,

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