

SHOP TALK

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



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Shop Talk

Robbie Culver, President - Sonex Builders and Pilots Foundation

In May 2014 the Sonex Builders and Pilots Foundation marks its first anniversary. In the first twelve months of our efforts, we have come a long way.

We now have 318 members, with 34 voting members, and a healthy bank account to keep the websites going. Our main website - sonexfoundation.com - continues to grow and add technical content, member-authored articles, regional event listings, and RSS feeds from Sonex Aircraft LLC, AeroConversions, and the forum at Sonexbuilders.net. Club membership is [free](#), and for those who wish to participate in elections and help direct this member-run organization, a voting membership is only \$25 annually.

Recently, we launched a new photo website - sonexbuildersandpilotsfoundation.zenfolio.com - where we want to share as many photos as possible with the community. Each of our websites continues to grow thanks to each and every member of the foundation. We would love to add your Sonex-related and event photos, so please [send](#) them our way!

In this issue, we are proud to launch a new feature we hope all of you will enjoy. Each newsletter will feature one or more aircraft - and we kick it off with excellent examples of each model sold by Sonex Aircraft LLC. We are proud this month to share with you Onex 0056, a 50/50 Partnership of Derek Hodges and Phil Davis, Waix W0162, Jim Hicke's example of the Y tail model, Sonex 814, Jim Reichard's shining straight tail, and Xenos 019, Frank Davis example of the long-wing model. We have also included one of our growing international contingent - Rodger Connolly's Waix #155 from Australia.

We would like to continue to do this each issue, and we encourage everyone to contribute.

Mike Farley wrote a great article about his thoughts on training and how we can apply real-world scenarios to our fun flying, adding to our safety (especially as the flying season begins!). Mike flies for a living and has an insight into the professional approach required to successfully fly high performance aircraft in challenging situations.

Another article was written by Mike with contributions from the Sonex Builders and Pilots Foundation team about flying into AirVenture Oshkosh. The NOTAM is out and may be downloaded [here](#). Several of the SBPF staff have flown the FISK VFR approach and if you plan on doing so, especially if it is your first time, we hope this article and the NOTAM can help you prepare for the experience. It can be stressful and exciting, but it is a rite of passage for many of us and is something that you will never forget.

Finally, SBPF Director and Waix builder Eric Seber shares with us his new foundation, the Pathways to Flight Foundation, Inc - 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, teamwork, business skills, and relationship building. As Eric so aptly states, "Aviation desperately needs young people, and young people need aviation." We hope many of you agree and will join us in supporting this endeavor.

Recent updates

The Sonex Builders and Pilots Foundation *still* continues to patiently wait for IRS status on our Not for Profit status. At last word, the IRS was over a year behind on approving these submissions, but we will continue to wait and will post progress updates as they are received.

Recently, we worked with our partners at Sonexbuilders.net to make a daily email digest available.

The 2nd Annual Great Lakes Sonex Fly-in at Bolingbrook's Clow International Airport (1C5) Bolingbrook, IL will take place on June 28, 2014. It is being sponsored by the Illinois Aviation Museum and hosted by EAA Chapter 461. For more information contact event organizer Al Eidukas at greatlakessonex@gmail.com.

Jeff Shultz, Sonex builder and event organizer announced the first-annual "Sonex Mile-High Fly-In"! The event will be held May 17, 2014 near Colorado Springs, CO, at Springs East Airport (A50, or more recently CO49). Fly-in's and Drive-in are welcome, arrivals will start around 8:00 am, and the programs at 10:00am. Drinks and snacks will be available all day, and the BBQ will be fired up for lunch with burgers and dogs.

Springs East Airport is situated south of Denver's airspace at the foot of the Rocky Mountains. It's easy to get in and out, and makes a great destination. If you plan to stay overnight, accommodations are close by and dry camping is available on the field.

The first annual North Central Sonex Fly-In will be held June 7, 2014 in Buffalo, Minnesota. This will be a one-day regional fly-in event for Sonex pilots, builders and others who are interested in learning more about the Sonex line of aircraft. It will be held at the Buffalo Airport, Buffalo, Minnesota. This is a convenient and active airport, located west of Minneapolis, outside of ClassB airspace.

If you are interested in attending this fly-in and would like to be added to an email information and invitation list, please respond to Wayne Flury at wflury@wh-link.net, or at 763-670-6021.

Check out the **[SBPF Calendar & Events](#)** page for more information!

Rob Barber, Sonex N157SX, has shared another great Sonex experience with us. Rob and fellow Sonex/Onex builders Mike Singleton and Derek Hodges made a trip to Big Bend Ranch State Park recently. You can check out their trip [here](#)! Thank again Rob for sharing your experience with us!

Featured Aircraft

Onex 0056 is a 50/50 Partnership of Derek Hodges and Phil Davis.

According to Derek, “Phil is my Dentist. About 8 years ago I was in his chair wearing one of my t-shirts from a fly in I had been to, which brought up aviation. At the time I was working on an RV-7 Empennage in my garage and he was actually in the process of building a shop so he could build an RV-7.”

“I already had a lot of the tools accumulated so when he started his Empennage, I helped him with it. During this process, Sonex introduced the Onex and started taking deposits. We both figured it would be the perfect project for us to do together.”



“We could go halves on everything, splitting the cost... The pop rivets would be like cheating compared to solids! It would be a great project for us to learn about building and we would have a fun, economical plane to fly while going back to finishing the RV projects. Partnership has been a wonderful experience for us.”

“We have found that 1+1 is more like equal to 3. Having an extra set of hands and eyes really speeds up the process and increases quality control. Even things like one person pulling Cleo's and inserting rivets while the other pulls them is tremendous. Phil is very task oriented so he kept me motivated. We would meet every Saturday morning at 7 for breakfast at our favorite Mexican restaurant before starting a 12 or 13 hour day of hitting it hard. We were able to build the Onex in about 13 months working on it on the

weekends.”

“Phil earned his private while he was in high school. I got my training for commercial pilot after 9/11. Since the industry was still so soft at the time, I went to work driving for UPS and now fly all I can for fun! Phil is back at work on his RV and I am considering scratch building a Sonex!”



What is your Onex model and Serial number?

Onex 0056 50/50 Partnership of Derek Hodges (UPS Driver) and Phil Davis (Dentist)

What gear configuration do you have?

Tail dragger. Aerovee 2.1

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

Picked up complete kit with aerovee at the Conway terminal in Waco,TX, November 15, 2011
First flight December 22, 2012. 13 months to build. First flight test pilot: Mike Singleton

What do you have installed?

MGL Xtreme Mini EFIS and Mini EMS
MGL V6 Comm radio
Garmin GTX 327 Transponder
Aveo POWERBURST 3-N-1 Nav Lights/POS/Strobes
Feniex Police LED Lightbar for landing lights



What modifications and customization did you do?

Added a remote oil filter and oil cooler which has since been removed. We were still having high oil temps with the hot Texas summer so we exchanged that setup for a 2nd oil cooler. We currently fly with one cooler blocked off but will open it up when OAT is above 85.

What else do you have planned for the airplane?

Paint!

Where are you based?

We share a hangar at Temple Airport with David Clay (Sonex 1095) ...Nice to have the folding wings!

What made you choose a kit from Sonex?

Went with the kit with all Quickbuild options available to maximize discounts and speed of build.

What did you find most challenging about this build?

The canopy

What advice could you offer to someone currently building a Onex?

Stick to the plans! Any modifications or additions will multiply complications and increase build time greatly!

Do you have an online build log or web site?

[Phil Davis - Experimental Aircraft Builder's Log](#)

First Flight Video:

[Phil and Derek's Onex First Flight](#)

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

No surprises. Felt just like the Sonex I had been flying in previously. It has always handled wonderfully. At the time we were still sorting out the fuel mixture issues and burping from the Aeroinjector throttle body.

How did you prepare for that first flight?

Phil and I both spent several weeks flying dual with Rich Hewgley in his Corvair powered Sonex for our Taildragger Endorsements and transition training.

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

Definitely! Handles like a fighter plane. Could use a little more power but we left some power on the table by building the engine at 7:1 compression for longevity and fuel options.

What goals do you have now?

Just got back from the big 805nm trip to Big Bend and back with Robert Barber and Mike Singleton. Other than some more local fly-ins, I am looking forward to flying to Crossville this year!

Jim Hicke built Waix 0162. Here is his story:

I'm a recreational pilot with around 700 hours of time. My flying went through ups and downs but it was something that was in my blood and I always long to be in the air. I started flying sailplanes at UCSD back in 1977. We had an amazing club there at the time and I earned my pilots license while in the club.

We were based out of Jacumba CA but were privileged to fly from Torrey Pines once a year. During that time I got to meet Burt Rutan in Tehachapi at the homebuilt sailplane contest where his Solitaire took first place. I didn't pursue homebuilding at the time as I didn't perceive it to be attainable to a college student and when I started my career I turned instead to hang gliding which offered me affordable flying. I had some amazing adventures in hang gliding including many trips to Telluride and pioneering a new flying site down in Mexico from the Sierra de San Pedro Mártir mountains.



Once I was making enough money I added single engine land to my license and got my instrument rating but I ended up buying a DG303 sailplane and getting back into soaring. I flew that for around 10 years at Warner Springs and rented Cessna 172s from Plus One Flyers (a great San Diego club). Meanwhile I was dreaming about higher performance aircraft like the Lancair and I started reading everything I could about homebuilding. I went to Oshkosh in a rented 172 in 2009 to fulfill a dream of flying to and camping at Oshkosh. It was an overwhelming experience and rekindled in me the desire to have my own powered airplane.

I knew what it was like to own instead of rent with my sailplane experience, and I definitely wanted to own a powered plane. I didn't think I could afford to do so. When I was at AirVenture, I saw the Sonex booth with the big affordable price tags and started researching them. Earlier in my soaring career I had looked at the Monnet Moni and was familiar with John Monnet's sailplane design. This is probably what drew me to the Y tail; that and the good looks. My wife and I went to a builder's workshop in 2010 and we were sold. I sold the sailplane to fund the Waix and 2 1/2 years later I had a great flying aircraft and am avery pleased with my decision.

What is your Sonex model and Serial number?

Waix W0162 N716WX Hangared at Ramona KRNM outside of San Diego, CA

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

Standard Gear - upgraded to the hydraulic brakes



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

I started building in November of 2010 and finished in May 2013 and the first flight was on June 16, 2013 and logged 1300 hours of build time.



What do you have installed?

Jabiru 3300 with the Aerocarb and gascolator
Dynon Skyview 10" Display with ADAHRS and GPS
Fuel flow, fuel level, engine monitoring, 2 axis auto-pilot
SV-XPNDR-261 with the Dynon ADS-B in/out solution
MGL V10 Radio
ELT Ameriking
Lift Reserve Indicator
AeroLED Landing Light
Aveo Andromeda NAV/POS/Strobe

What modifications and customization did you do?

I modified the panel to fit the Skyview, added fuel tanks in the wing to add 10 gallons of usable fuel with a transfer pump plumbed to the main tank, an aluminum baggage compartment, cabin heat, and a simple rod to hold the canopy open.

What else do you have planned for the airplane?

I need to add additional heat muffs to the heating system, am going to switch from the AeroVoltz Lithium Iron battery to the Odyssey, and am going to add the winter start kit from Jabiru

Where are you based?

Ramona CA

What made you choose a kit from Sonex?

I was dreaming for years of having my own airplane and was looking at used production planes and high end kits like Velocity, Glasair, Lancair, etc. I had decided that I couldn't afford anything and was ready to give up the dream and just continue renting when I went to Oshkosh and saw the Sonex line up in person. The aircraft grew on me and I went to the builder's workshop with my wife and we were sold. The company, the product, the simplicity, and the low cost made the dream possible.

**What did you find most challenging about this build?**

It may sound like a silly thing, but there were lots of places where access to the nuts was very tight and hard to reach. There were many frustrating attempts to get a nut on a bolt only to have it fall off to the floor or fall into the aircraft. I can remember putting tape on my finger to install nuts, creating custom fixtures to hold nuts, taping wrenches to the inside of the fuselage and crawling out to tighten the bolt.

What would you do differently looking back?

I can't really think of anything that I'd do differently - ask me after a couple of years of polishing!

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

The biggest advice is to try and filter out the 'noise' on the internet. Take all reports with a little skepticism and call or email the factory if you have an issue or question. Other than that, the standard advice of doing at least one thing every week on your build - it will eventually get done.

Do you have an online build log or web site?

<http://www.n716wx.hicke.com/index.php/uploads/Waix-Builders-Log?page=3>

<https://www.youtube.com/channel/UCD2u1d8zc3wTR70Wvb2cPLA>

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

My first flight was exhilarating. It really was a proud moment, but it had to be handled with professionalism and some detachment. I knew that I was emotionally invested in the aircraft and that it could affect my judgement.



I tried to plan for that feeling during my first flight rehearsals. I used X-Plane with a Waix model to practice engine out procedures around the Ramona airport. I told myself over and over that the aircraft was expendable but that I was not. This put me in the right frame of mind to conduct the first flight with a safety-first attitude.

The biggest surprise to me was how stable the aircraft was. I had expected the controls to feel sensitive but they were very solid. The aircraft quickly became an extension of my body and is a joy to fly. The other surprise was the power of the 3300. I had never flown an aircraft with a high power to weight ratio and I loved the acceleration and climb.

How did you prepare for that first flight?

I took the transition training from Sonex, flew with my instructor, and practiced on X-Plane.

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

The aircraft has exceeded my expectations in all areas except load carrying ability. I had hoped for a lighter build but I came out around 700 lbs which limits my ability to travel with two guys (granted - I added a lot of extra stuff!).

That being said, I can take me and a buddy flying with no luggage, me and my wife with luggage, or just me with an extra 10 gallons of fuel and as much camping gear as I need. I have 135 hours on the aircraft and the engine is running strong.

The aircraft meets or exceeds the advertised speed and climb rate. I experienced the take-off engine hesitation in hot conditions that some people report but have tamed it with an aggressive run-up before takeoff. The aircraft does everything from aerobatics to sightseeing to cross country. I love it.

What goals do you have now?

I have been to Oshkosh, Las Vegas, Lake Havasu, Big Bear Lake, Catalina, Sedona, Lone Pine, Kern Vally, and Mojave. I plan on going to the Rio Linda fly in and back to Oshkosh. My bucket list includes San Francisco, Oregon, Idaho, Alaska, and finding as many aircraft camping locations as possible around the Southwest.

Xenos 019 built by Frank Davis over an 8 year period

Xenos 019 builder Frank Davis started flying in 1955 with an aero club called the USAF as an Aviation Cadet, and retired in 1975. In between, Frank was an instructor pilot, was sent back to school for a BS and MS in EE, logged about 500 hours of combat time in A-1 Skyraiders during the Vietnam war, taught EE at the USAF academy, and held several staff jobs.



After retirement, Frank lived in Salt lake City where he was active in EAA Chapter 23 and got his glider rating. Frank later moved to Minden, NV for the gliding/soaring and flew as a commercial glider ride pilot for Soar Minden.

Frank built a 32x48' shop at his home which he said really helped as he had enough space to completely assemble the Xenos inside and had "about zero travel time to go work on it."

Xenos 019 is a conventional gear aircraft (as are all Xenos) that was started in December 2004 and completed in November 2012.

It is powered by a Jabiru 3300 with a Sensenich wood prop with fiberglass. Instrumentation includes a MGL Extreme EFIS, Grand Rapids EMS, XCom 760 VHF, TRIG Mode S Transponder, Tasman V2000 Variometer, Flight Data FC10 G-meter/clock/timer, and Ameri-King ELT. He says the most challenging part of the build was the cowling and canopy. The aircraft is based at the Minden-Tahoe Airport (KMEV), NV.



Frank says he did not modify or customize the design, choosing instead to leave “well enough alone.” He does intend to add Sonex hydraulic brakes in the future. Looking back at his project, Franks says the one thing he would do differently is to “worry less about perfection. I built 4 ailerons (only two required), 3 spoilers (only two are needed), and went through several extra leading edge skins. All of the first ones were probably good enough.”

The advice Frank would offer to someone currently building a Sonex/WaieX/Onex/Xenos is to “Be just and fear not. (As one of my college professors liked to say.) “

When describing first flight, Frank says “It went well and as expected. It was a sense of accomplishment, not a big thrill as some have said. (Being shot at while flying is a thrill!)” To prepare for the first flight, Frank said “ It’s a motor glider, so I needed a self-launch endorsement. (I have a commercial glider rating.) A good friend who is a CFIA and CFG worked with me on powered patterns and landings in a Diamond. It had been many years since I had flown power in the USAF.”



And as for the all-important question - does it match your expectations - Frank added “Yes. I had flown in one on several occasions, so knew what to expect. I'm still in the test phase, so I haven't checked out it's soaring potential.”

When asked about his goals with the aircraft, now that it is flying, Frank said “My main motivation is just to fly. As Antoine de St-Exupery said, "I fly because it frees my mind from the tyranny of petty things." Probably mostly local as I am at a premier soaring location and there is some spectacular scenery in the Lake Tahoe area.”

Jim Reichard spent 8 years building a Sonex



What is your Sonex's Serial number

My Sonex is Serial #814, N1906R.

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

It is standard gear, with a 6" light weight tail wheel purchased from Vans and a Kip Laurie tail wheel bracket. This was changed after the first five hours and two hard surface landings. The new wheel is much quieter on pavement and gives smoother ride in grass and on pavement. The rest of the landing gear and brakes are as per the plans and came in the kit.

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

My wife and I attended the Sonex workshop in February of 2005. We ordered the kit at Sun n Fun and it arrived in July of 05. Construction started immediately after Oshkosh. The airworthiness inspection was in March 2013 by a local DAR. The first flight was on July 20, 2013. Would have been sooner but had to get a tail wheel endorsement first. Got the tail wheel endorsement one week earlier and took my wife for a ride for the first time in eight years in my good friends Luscombe.



What do you have installed?

The panel is an Enigma from MGL, I have my Sporty's hand held radio mounted to the panel for now, eventually I will add the MGL V6 Com and a transponder. The ELT is a ACK E-04, 406 model. I added a channel under the baggage sling over the elevator push rod to protect the pushrod from stuff. The ELT is mounted to the channel. The lighting is Aveo Engineering LED nav/position and strobe lights on the tips. no landing lights are installed. There are four simple switches in the panel and four circuit breakers to the left of the Enigma. The ELT control panel is at the right side of the instrument panel. The engine is a Jabiru 3300 with an Aerocarb and K&N air filter.

The firewall forward is exactly to the Sonex installation manual. I have the gascolator mounted to the firewall and heat sleeved fuel lines and oil lines. When I first ran the engine, it ran very hot EGT's. I was told that it was running lean. After trying to richen the mixture a slight amount, about an eighth of a turn richer the engine was harder to start and puffed a hit of black smoke when started.

I found that the carb was actual rich and the high EGT's were due to fuel still burning in the exhaust. Leaning the carb a quarter turn helped the starting and I decided that if the engine would take full throttle it would fly and I would check temps and leaning in the air with cooling air flow. After the first flight was a complete success, and a few short successful flights, and the test flights got longer there was lots of soot on the exhaust.

On one flight after flying an hour I started losing power, slowly the max rpm dropped until I could only get 2600 rpm. I made it back to Hinckley, where we removed the cowl to find the inside covered in soot, the air filter clogged with soot and the spark plugs fouled from running rich.

To solve this issue I replaced the spark plugs, installed a much larger K&N air filter, leaned the carb another eighth of a turn and the biggest part was sealing the leaky Jabiru exhaust by cutting copper strips and installing them in the collectors to act as gaskets. so far with twenty hours after the running problems were corrected there have been no issues and I have complete mixture control.

What modifications and customization did you do?

It is built as per plans with the only changes being the fairings at the rear of the fuselage, and rudder cable fairings. the bigger tail wheel, I am currently working on installing Skybolt cowl fasteners, hidden hinges on the fuel and oil door and getting the cowl finished and painted.

**Where are you based?**

I keep it at the beautiful Hinckley Airport 0C2, in Hinckley, Illinois. We finished and flew it for the first time there.

What made you choose Sonex?

We decided to build a Sonex because it is really the best performance per dollar, the plans are excellent, the lack of need for complicated jigs. and the biggest reason at the time was a fear of solid, bucked rivets. Who knew that bucking rivets would be the only reason to fade after having built it.

What did you find most challenging about this build?

I would have to say the hardest part of building was the cowl which is why its not painted or finished yet. Good enough to fly but looks terrible. The most painful part was cracking the first canopy, but the replacement was made of the new material and much better to work with.

The scariest part was rigging the wings but it went fine and turned out as I hoped it would. I had purchased the piloted drill bit from McMaster Carr as per Sonex specified part number and when it arrived it was to short for the job. I decided to drill the main spar bolt holes with normal long drill bits, up drilling several times, and finally reaming the final holes through all the parts together. to get the holes to come through straight, I used one inch thick guide blocks clamp in place. The holes in the guide blocks

increased in size with the hole in the spar parts. If you don't hit the sides of the hole in the guide blocks the hole will have to come out straight.

Drill slowly and be patient. Clean out the chips often to prevent binding. Lube the bit with Boelube often and the end results are snug fit precision mounting holes. The landing gear rods are fun to drill. Make sure to use lots of cutting oil on new high quality cobalt drill bits. Drill with steady light pressure, avoid overheating the bit. I melted an eighth of an inch off the point of a quarter inch drill bit before I realized I was no longer drilling.

The most difficult part of the build for me was the distance. My wife and I live in a condo and have no place to build. The first two years we rented space in a friends barn/shop with enough room for the work table and a small walk way around it. The tail surfaces and wing spars were built there. We started building the wings there, but realized we needed more space. The barn was on the way home from work and that helped.

We next rented the office space in a building in Hinckley and moved the project there. The space was great and I shared it with another builder working on a Sonerai, but this was an hour drive from work and forty five minutes from home. I was told on several occasions I'd never finish with that kind of drive.

After five years working there a hanger became available and we moved both projects to the Hinckley Airport. It was good and bad. with gliders operating all day every weekend and transient traffic coming and going there was plenty of distraction but also with so much flying happening, for everyone else, we found motivation. We did prove the nay sayers wrong and flew it after eight years of fun.

What would you do differently looking back?

I wouldn't change any part. But I wish I had driven a more efficient car over those years.

How did you prepare for that first flight?

To prepare for the first flight I flew a few different tail draggers with their owners. The Luscombe 8E, a Citabria, and a J3 Cub. I would have liked to fly something closer in performance to the Sonex but none were available locally. I spoke to Kerry Fores and he gave some solid advice about air speed when landing.

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

Flying the Sonex has been the most fun I have ever had flying.

What goals do you have now?

I hope to finish with phase one in the next month. After that and taking my wife for her first ride in our new plane, we hope to fly it to the Sonex open house to start AirVenture 2014. I am planning on Crossville in October this year as well.

Rodger Connelly is an Australian member of the SBPF.

“I'm a 54 year old mechanical engineer, married and the father of two adult children. Flying started for me around 30 years ago when I gained my unrestricted private pilot licence, but over the years with family responsibilities and a mortgage, I have only accumulated a little over 300 hours. Almost all of that time has been in Cessna's 152/172 and Piper PA28 aircraft hired from my local aeroclub.”



“The weather in Australia is generally benign allowing for year-round flying in some of the world's most remote and sparsely populated areas. This is both good and bad...good in that there's little congestion but bad in that navigation services are limited. Despite the relatively small number of private aircraft and the wide open skies, Australia's Civil Aviation Safety Authority (CASA), our equivalent to the US FAA, has succeeded in turning aviation bureaucracy into an art form. Over the past decade, this has led to a massive increase in the popularity of Recreational Aviation and Light Sport Aircraft (LSA) which are less encumbered by government regulation.”

“Around 3 1/2 years ago, with the kids leaving home, I started dreaming about owning an aircraft and began reading the aviation classified ads for LSA. I quickly discovered that the prices for good LSA aircraft were difficult to justify and investigated experimental amateur built GA aircraft. Sonex appealed because, a: it was relatively inexpensive, b: no special tools were required, c: at +6/-3G it was as strong as an ox, and d: the Waix variant just looked cool. Ironically, although it qualifies in Australia as both a RA and GA aircraft, I ultimately followed the more regulated GA path under the guidance of our EAA equivalent, the Sports Aircraft Association of Australia's, Builder Assistance Program.”

"I had convinced myself that the project would occupy me for about 2 years or 1000 build hours and cost ~AU\$40,000. It's now 3 1/2 years, 1800 hours and AU\$50,000 later, but I have with the assistance of my TC (Technical Counsellor) John Lucas and patient support from my wife Kay, achieved a beautiful well built and hopefully reliable aircraft."

What is your Sonex model and Serial number

Waix #155 AeroVee #625

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

Standard tailwheel

When was the first flight?

First flight Thursday, 3rd April, 2014

What do you have installed?

AeroVee 2.1 #625, Dynon D180, XCOM Radio, Garmin 196



What modifications and customization did you do?

Only non-standard modification is Kip Laurie's larger tailwheel

What else do you have planned for the airplane?

Nothing at this stage...Just started Phase 1 flying

Where are you based?

YKCY (Kilcoy Airfield) www.kilcoyairfield.org

What made you choose a kit from Sonex?

It's affordability

What did you find most challenging about this build?

Trimming the canopy and fitting the engine cowling are the two jobs I never want to tackle again

What would you do differently looking back?

Leave the glareshield out until all electrics are finished

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

Just stick with it...you'll finish eventually

Do you have an online build log or web site?

No..sorry...But here is a link to a Youtube video of my first flight <http://youtu.be/X08Sfs2gX-c>

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

The first flight was a little disconcerting, due to high CHT indications....I suspect these are simply due to the under spark plug ring terminals supplied by Dynon, registering spark plug temperature rather than CHT. The plane is VERY sensitive in pitch but handles sweetly.

How did you prepare for that first flight?

I took some refresher training in a Decathlon Extreme and prayed hard!

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

Pretty much...I haven't taken it on any flights longer than 1 hour yet but am looking forward to once I have flown off the first 10 hours

What goals do you have now?

Finishing Phase 1 testing is the biggest goal...I was granted a 25 hr test period rather than the usual 40 test based on the quality of the build and the fact that I had 17 inspections by my technical counsellor during construction.



Thoughts on Training

By Mike Farley, Waix 0056

As I slowly taxi the jet onto the runway, I take a mental assessment at the current weather conditions. Not only is it night time, but with the reported visibility at less than 1/4 mile, I can only see the first few white runway edge lights before the rest slowly disappear into the gloom. The ceiling is currently being reported at 200' AGL, and if that's not enough, I'm also looking at a steady 15 knot crosswind combined with light snow showers. What a night!

Regardless, it's now time to get down to business. After all of the checklists are complete, I line up with the runway centerline, ensure it's all in order, and smoothly advance the throttles to the stops. The whine of two turbofan engines gets noticeably louder as the Honeywell/Garrett TFE 731's start pushing us down the runway. As I make gentle corrections using the nosewheel steering tiller to keep us on centerline, I listen for airspeed and power callouts from my copilot sitting across from me in the right seat. The first thing I hear is "Airspeed Alive" which happens around 50 knots, quickly followed by "80 Knot Cross Check" which is my call to release the nosewheel tiller and assume command of the control yoke.

By this point, the rudder has sufficient authority to keep me on the centerline so direct nosewheel control isn't needed. Maintaining centerline, the jet quickly accelerates to our next calculated airspeed milestone, V1. For those who are unfamiliar, V1 is commonly defined as 'Takeoff Decision Speed', or the speed at which it's normally safer to go ahead and continue the takeoff if something bad happens as opposed to aborting the takeoff and trying to stop on what's left of the runway. Not that anything bad ever happens, right?

Well, this must have been my unlucky night. As soon as my copilot calls "V1" and I move my right hand from the throttles to the yoke, I find that the bright red Master Warning System lights start to flash, and immediately the airplane wants to start swerving for the edge of the runway. I stomp on the rudder to maintain directional control as my copilot states "Rotate", so it's time to apply back pressure and get the jet off the ground. As we slowly start to climb, my copilot raises the landing gear as I concentrate to keep us on proper heading and airspeed.

"Right Engine Failure" is the next callout I hear from my copilot, and after a quick scan of the engine gauges, I agree with his assessment. Immediately we run through a series of memory checklist items and procedures designed to deal with this situation while the jet slowly continues its climb to a minimum safe altitude.

Once there, I slowly pitch the nose over to accelerate, complete our checklist items, and determine our safest course of action to get our sick airplane back on the ground. Given the dismal weather conditions, I will most likely be shooting an ILS approach to minimum decision height altitudes and hope the runway comes into sight early enough that I can attempt to make a safe landing.

The good news is, this isn't happening in real life. This particular situation is one of many I find myself facing while undertaking annual Recurrent simulator training through FlightSafety International which has training centers located all around the world. In this instance, I'm at the Wilmington, DE airport. FlightSafety has a simulator of the Hawker 800XP I fly located here, so every spring I make the journey to this location in order to practice various abnormal and/or emergency situations.



This year, in addition to the standard array of stalls, steep turns, and instrument approaches, I also face multiple scenarios involving engine fires and failures, avionics outages, pressurization issues, and hydraulic failures among others. Needless to say, it's an intense and tiring few days!

As I endure this training course, my mind constantly goes back to the fun I have flying my Sonex designed Waix kit-plane. Things seem to be much simpler and more fun in my 1100 pound sport plane as compared to a 28,000 pound mid size business jet.

Even though my trusty little Waix and a business jet are two very opposite ends of the flying spectrum, I can't help but wish there was a way to take advantage of the knowledge and skills I've learned and practiced here at FlightSafety and apply them to flying my homebuilt Waix. As much as I love flying both, at first thought I have trouble finding any similarities between high altitude, IFR jet flying versus buzzing around the local traffic pattern behind the mighty AeroVee in my Waix.

Yet, the more I think about it, the more I realize that there are some valuable lessons learned while flying jets that can have a positive correlation to small general aviation airplanes and the way we operate them. Regardless of the size of airplane you fly, taking the time to consider different safety aspects of flying can have a major influence on the procedures and mindset we use to operate our airplanes. After all, safety is always important regardless of what model of airplane we fly!

After consideration, the following is my own personnel list of safety oriented subject areas that we emphasize while flying jets but, in my opinion, can also be very important factors to safely flying your Sonex as well.

Preflight Planning

As you can probably guess, there's never a situation where we simply hop into a jet and go for a joyride. With a fuel burn of slightly more than 300 gallons of fuel the first hour of flight time and a cruise speed of around 450 knots, the Hawker jet isn't the best platform for a Saturday morning pancake run with the local EAA chapter!



In the corporate world of flying, preflight preparation usually begins several days in advance of the trip with overviews of forecast weather conditions, passenger manifests, as well as constant updating of enroute and arrival NOTAMs. Fuel calculations are made, weight and balance forms are filled in, and in today's world, safety audits are all completed well prior to engine start.

Now I know what you're thinking; this all sounds like fun, but how does all this stuff apply to a simple evening fun flight in my Sonex? Technically, FAR 91.103 states that "...the Pilot In Command shall, prior to any flight, become familiar with all information concerning that flight...", and even though this can possibly be somewhat vague in defining our actual responsibilities, it's important to remember that it's our duty to ensure the flight will be accomplished in as safe a manner as possible.

When's the last time any of us actually considered weight and balance, let alone actually crunched the numbers to make sure we are within our aircraft's envelope? How about calculating fuel requirements for your flight, remembering you are required to land with at least 30 minutes of fuel at normal cruise power fuel burn? In my Waix, this means I always try to land with at least 3 gallons of fuel as an absolute minimum; more if possible. Like any other model of airplane, people have inadvertently ran their Sonexes out of fuel; don't let it happen to you!

For obvious reasons, it's always important to obtain a thorough check on weather conditions, even if you're only going on a local flight. As spring and summer begins to arrive throughout the US, morning

fog conditions are destined to occur, and in the very near future thunderstorms will start to become much more common.

I believe we can all agree that while it's no fun, sometimes the best decision we as pilots can make is when to stay on the ground and wait for a better day, and having a thorough knowledge of the current and forecast weather goes a long way in making the proper go/no go decision.

Finally, I have to include one final check that should be completed prior to any flight; no matter where you are or where you're flying, always check for Temporary Flight Restrictions, aka TFRs. These pesky airspace restrictions have a nasty habit of popping up at the most inconvenient times, and even experienced pilots have been caught unaware when they accidentally violate these airspaces. Don't fall into that trap; give Flight Service a call to make sure there are no TFRs in your area or along your route of flight.

Takeoff Considerations

On the surface, considering takeoff options in a single engine airplane is pretty straight forward. If the engine runs, you fly; if the engine stops running, you land. Simple and easy, right?

When flying a jet, there's a lot more to the decision making process than that. Prior to each takeoff, the flight crew briefs possible scenarios for different phases of flight, as well as any considerations that may need to be accounted for when planning the takeoff and initial climb.

For example, what will the pilots do if, early on in the takeoff roll, they determine one engine isn't producing appropriate takeoff power? If it's raining, how does a wet runway affect the aircraft performance? How will the crew plot their course so they can avoid possible rising terrain issues?

When dealing with our trusty Sonex airplanes, we can also use these "what if" scenarios to determine our reaction if faced with some sort of abnormal situation. Based on my previous training, my recommendation is to divide your takeoff into multiple segments and brainstorm potential issues during the following possible scenarios; before liftoff, after liftoff but when you can still land on what's left of the available runway, and finally after you have no more usable runway available.

The first segment of takeoff is to consider anything abnormal prior to liftoff. What will you do if a sudden crosswind catches you and pushes you towards the grass? What happens if you're accelerating down the runway and the canopy pops open, or you suddenly experience a shimmy in a wheel? Or how about you suddenly start to smell something electrical burning?

In any of these situations, your best bet will most likely be to maintain control of the aircraft, reduce throttle, and abort the takeoff. It's much better to troubleshoot possible issues on the ground, even if that means a long taxi back out to the end of the runway.

Our next scenario is what we will do when we've already left the ground, but there is still usable runway ahead of us. In this case, if minor nuisances pop up they may potentially be temporarily ignored, but if something catastrophic happens, our safest bet will probably be to try and get the airplane back on the ground, even if that means we run over the departure end of the runway at a slow speed.

The three main scenarios that should result in an immediate descent and return for landing is an engine fire, an engine failure, or a loss of aircraft control. If any of these happen, maintain control to the best of your ability and get the airplane back down in order to land on whatever's left of the runway.

Finally, we must consider our options if we're climbing out well beyond the airport environment and we experience some sort of emergency situation. The general consensus is that, if your engine quits, attempting a turn back to the airport below pattern altitude is a very bad thing and should be avoided, so have you considered safe areas where you may try to land your airplane at your home airport if said engine failure occurs?

For example, at my home airport I know that I can take off to the east and have plenty of suitable landing fields straight ahead, but if I take off to the west my best bet is to turn left around 45 degrees which will put me in line with open fields and away from the new housing development located just off the end of the runway.

Hopefully we never have to deal with an emergency situation on takeoff or early in the climb, but when seconds matter, having a well thought out escape plan may be the difference between a non-event and a serious catastrophe.

Enroute Scenarios

When considering emergencies during cruise flight, the good news is that there aren't often many accidents during this phase of the flight. On the other hand, continuing the "what if" game of questions is still a worthwhile idea, even if no surprises are currently taking place. When I was training to become a Cirrus Standardized Instructor Pilot (CSIP), we utilized "Scenario Based" training to help get new Cirrus owners accustomed to their airplanes.

For example, rather than flying along and having your instructor simply reach over, pull your throttle to idle while announcing "engine failure", how would you react if you're flying along and you notice your oil pressure very slowly start to fall?

Perhaps, as you're flying you notice the in-flight weather visibility start to slowly fall, and even though it's still VFR, conditions are slowly getting worse? Or, what would you do if you're flying along and your passenger tells you they are starting to feel ill?

Ultimately, a good safe bet is to always have contingency plans in the event of abnormal situations. When training in the Hawker jet this may involve emergency descents from high altitudes to deal with systems failures or medical emergencies; in our Sonexes, it's always a good idea to have local suitable airports in mind, just in case something bad happens and you need to divert to get on the ground quickly and safely.

Descent and Arrival Planning

Every once in a while I still get to exercise my CFI rating by providing flight reviews (they used to be called BFRs) to pilot friends at my home airport. One common weak point I notice in decision making technique among these pilots is how to enter the airport environment at an uncontrolled field. When flying my Hawker jet, this doesn't happen very often; landing at uncontrolled fields is fairly rare in and

even if it happens, the local Air Traffic Controller will not only direct you to the airport, but they will often maintain radio contact with you until close to landing.

When flying VFR however, things can be a little different. Let me ask you, when arriving at an airport for landing in your Sonex, when do you make your first radio call? Or, how far away from the airport do you start a descent to get down to traffic pattern altitude? Quite often I observe pilots fly 'GPS-Direct' right to the destination airport and after they overfly it, only then will they begin to consider the proper traffic pattern entry procedures. I guess it works, but as much as I hate to say it, that's not a very professional procedure.

A much better technique would be to obtain the destination winds and weather report well prior to entering the airport environment and, once you determine the active runway, plan out how you want to maneuver to join the downwind leg on the standard 45 degree pattern entry leg. This will involve flying to that initial point of entry, even if that means slowly circling around the airport to get to the other side.

Also, don't forget that you want to be established at the traffic pattern altitude well before actually entering the pattern. You don't want to be descending after you're already in the pattern since you may not be able to see if someone is directly below you.

Finally, in terms of radio calls, I always try to make at least 3 calls before entering the pattern. The first should be done at least 10 miles from the airport; the second maybe 5 or 6 miles away, and then finally a radio call 2-3 miles away as you begin your 45 degree entry onto the Downwind leg. This way, anyone listening on frequency knows right where you are and can keep track of your progress. At the same time, this also allows you to listen for others operating in the same area.

Stabilized Approaches

I'll begin by saying this right up front; flying stabilized approaches are very important when flying jets. When you first learn how to fly and land a jet, you are taught that once established on final approach, all configuration changes, airspeed changes, heading changes, and rate of descent changes are to be completed before you descend through 1000' AGL (normally at around a 3 mile final approach point). Once you're beyond this point, only small corrective changes should take place or else you should perform a go-around and try again.

The reason for this is simple; given the size and weight of a large aircraft as well as the amount of inertia the pilot is managing, the pilot needs to be well ahead of the airplane during the final approach and landing. If a jet is about to land and not properly configured, too fast or slow, too high, etc., this generally does not end well.

I hate to bring up the recent Boeing 777 crash at San Francisco, but it's a good example of what I'm talking about. Remember, when flying any airplane the goal is to touch down in the first 1/3 of the runway, on speed, and at a proper rate of descent.

In the Sonex, we seem to have more "wiggle room" based on the airplane's performance capabilities and landing speeds, but I do feel that flying a stabilized approach is a good idea regardless of the airplane you're flying. For the record, there have been instances where pilots of Sonexes have landed short of the runway because they were not stabilized.

Once you're on final approach and only a few hundred feet above the ground, try to hold a consistent airspeed and power setting and don't worry about changing the flaps or trim. Your focus should be outside on the runway environment and getting ready to transition the airplane in the flare. Remember that if anything doesn't look or feel right, you should perform an immediate go around and try again. As the old saying goes, a good landing is the result of a good approach. You never want to try and salvage a bad approach!

Postflight Inspections

Last but not least, a good safety tip is to perform a quick check of the airplane after you've arrived at your destination. Think of this as a quick preflight/postflight inspection just to make sure nothing is amiss that you may accidentally miss the next time you prepare to fly. When flying jets, checking oxygen levels, hydraulic pressures, and oil levels happens after every flight. With our Sonex airplanes, checking for oil leaks, low tire pressures, and nicks in the prop (for example) may save you the annoyance and heartache of not catching these items until the next time you want to fly.

Also, always make sure your fuel valve is turned off, and all switches are off before closing and locking the canopy. We all know pilots who have killed their battery by accidentally leaving something switched on; don't be that person!

Hopefully these guidelines have helped you develop some of your own possible training scenarios in your Sonex, or if nothing else, they have given you some safety considerations to ponder. As owners and pilots in such a wonderful community of friends and builders, we should all strive to make ourselves a little safer and more careful as we enjoy our fun little airplanes. If anyone has additional thoughts or topics of conversation, I would love to hear them! Please feel free to email me at any time with questions or comments.

Thank You and Fly Safe,

Mike Farley
Waix 0056
SBPF Vice President
Mike@Sonexfoundation.org

AirVenture 2014!

By Mike Farley and the SBPF staff

As this edition of the Sonex Builders and Pilots Foundation newsletter heads towards final editing, we all have less than 90 days before the start of the biggest aviation gathering in the world begins. That's right, less than 3 months until Oshkosh AirVenture 2014 begins!

We hope you're all as excited about this year's show as we are. Right now, the initial schedule includes multiple world class aerobatic performers, military demonstrations, and as of now, even the United States Air Force Thunderbirds demonstration team are scheduled to perform!

For all of us Sonex aircraft builders, pilots, and enthusiasts, AirVenture at Oshkosh, Wisconsin holds a special place in our hearts. Sonex Aircraft LLC, the factory responsible for producing our wonderful airplanes, has called Oshkosh home for over 15 years. Located on the east side of Whittman Regional Airport, the Sonex Aircraft LLC headquarters now encompasses three different buildings which are put to use as meeting areas, staging areas, and party headquarters for any Sonex enthusiast who is able to attend Oshkosh AirVenture.

Two very important factory traditions have developed over the years; first, on the Sunday before the actual airshow begins, Sonex Aircraft LLC hosts a "Sonex Homecoming" where owners and pilots of their own Sonex airplanes are invited to arrive early and park their airplanes right at the factory. Once there, Sonex enthusiasts are invited to take tours of the factory, engage in discussions of new products, and catch up with old friends. After lunch, the Sonex factory demonstrator airplanes lead the way as all aircraft taxi single file over to the main airshow grounds en masse. Once there, airplanes are staged, tied down, and then the real show begins!



The second Sonex factory tradition takes place on the following evening, Monday night. On this night the gracious hosts at Sonex Aircraft LLC open their hangar doors for a wonderful evening "Hangar Party", and all Sonex customers are invited! Check the upcoming events schedule on www.sonexaircraft.com for additional times and details. We hope to meet you all there!

Flying To The Show

Now that we have your undivided attention, we'd like to spend a little bit of time and discuss the methods and procedures used to fly your own airplane into the big show. If you're thinking about flying in, now is an excellent time to discuss the EAA AirVenture Oshkosh Arrival NOTAM. Go to www.airventure.org and if you look at the top of the homepage, you will see a drop down menu titled 'FLYING IN'. Click on that and then immediately click on the link titled 'NOTAM'; once there, you should see an option on the page where you can either order a printed copy of the NOTAM, or simply download one and print it off yourself. Either way, get a copy of the NOTAM and start studying it!



Throughout the pages of this booklet you will be guided on all the proper procedures, radio frequencies, routes of flight, and contingency plans that you may need when flying into Whittman Regional Airport. No matter how many times you've flown into AirVenture Oshkosh, you are REQUIRED to keep a copy of this

NOTAM book with you while you're arriving. You will also notice that departure procedures are included in this book for whenever you decide to head home.

Our Tips On Flying In

While we're in no way an experts on flying into AirVenture Oshkosh, several of us have flown into the show and want to pass along our tips and recommendations on a safe arrival. It's important to remember that each arrival is different, but here are some all-encompassing tidbits of information that may better prepare you for your arrival.

Re-read the Arrival NOTAM! We've said it before and we will continue pressing the point; having a thorough knowledge of the arrival procedures prior to beginning the approach is of vital importance. Every year it seems that the vast majority of pilots do an excellent job and follow the NOTAM to the letter, but occasionally we still see the random pilot attempt to land at Oshkosh without following the procedures. Trust us, you do not want to be that person!

Always remember that there are a lot of airplanes operating into and out of a fairly small piece of airspace. No matter how far away you are from AirVenture Oshkosh and the beginning of the arrival procedure, keep your eyes outside and be vigilant for other aircraft, especially as you approach the town of Ripon, WI.



FISK APPROACH OSHKOSH 2010

If your airplane has a GPS or you have some sort of GPS capability, you can superimpose the arrival procedures via GPS waypoints. The town of Ripon, WI (the location where the arrival procedure begins) has the GPS waypoint 'RIPON' in the national database. Also, the next waypoint, the town of Fisk, WI

has the waypoint 'FISKE'. Please note that these GPS waypoints are for situational awareness only and should not supersede the EAA Arrival NOTAM visual procedures.

Make sure you have plenty of fuel. Hopefully you won't have to enter a holding pattern during the arrival procedures, but have enough fuel for a prolonged delay, just in case. Each pilot has their own comfort level of fuel, so fuel reserves are up to you. Personally, we recommend at least 90 minutes of fuel remaining prior to beginning the AirVenture approach procedure.

Have your arrival signs made up and ready to use. Once you land and clear the runway, the parking crew will need to know where you want to park, and parking sign codes will help them direct you to your parking area. Refer to the Arrival NOTAM for appropriate sign codes, as well as a link to pre-made signs you can download and print. If you decide to make your own signs, please do the ground crew a favor and make the signs easy to read from at least 50 feet. A blank piece of paper with writing from a ball point pen simply won't cut it! These signs need to be legible from a long ways off or else you run the risk of stopping traffic while an annoyed grounds crew member walks up to your airplane to read where you want to go. Be courteous and help them out!

Regardless of where you park your airplane, you are required to tie it down. There are many different tie down kits available or you can make up your own. Don't forget to pack your tie down kit, hammer (if needed), and anything else you may need.

Be flexible on the arrival. You will most likely be given rapid fire instructions in terms of who you're following, which runway to use, pattern entry instructions, etc. As you listen to the arrival frequency, be prepared for anything!



Most importantly, have fun! You are living a dream that few pilots get to actually accomplish. Be safe, enjoy, and have fun.

Arrival and Camping List

Below is a basic list of items you may want to carry on board for parking and camping at Oshkosh. This is merely our recommendations and is not an inclusive list:

- The NOTAM!!
- Appropriate tie down kit for your airplane
- Aircraft canopy cover (if applicable)
- Aircraft tool kit (if applicable), and you may want include the following:
 - Spare tube and/or tire
 - assortment of wrenches and screwdrivers
 - assortment of pliers
 - assortment of spare AN hardware including nuts, bolts, washers, and screws
 - flashlight
 - hammer (may also be used in the airplane tie down kit)
 - tape (electrical or other)
- Extra engine oil
- Tent/air mattress
- Clothes/shoes/toiletries
- Phone charging cords/Batteries
- Credit Cards/Cash

We hope to see you there!

Robbie Culver
Mike Farley
Carl Orton
Eric Seber

Pathways to Flight Foundation, Inc

By Eric Seber - Builder, Waix 153

As I'm drilling away on my Waix S/N 153 fuselage parts, I keep being reminded of all the opportunities, both professionally and personally, I've been fortunate to have had. Without many of my great mentors exposing me to aviation at age 13, I don't know that I would be building my own aircraft now that I'm in my thirties. I am a licensed airframe and powerplant mechanic and aviation is still my passion!

After thinking about how lucky I have been, I began to ponder ways that I could "give back" to make sure other youth become exposed to aviation and the technical skills necessary to succeed in many careers today. After discussing this desire with my wife and our local airport manager, we decided to form our own non-profit which is now named [Pathways to Flight Foundation, Inc.](#) (PFF). The sole purpose of this organization is to engage local high school students in building an experimental kit aircraft. Specifically a kit designed and sold by Sonex Aircraft, LLC.

The official goal for the Foundation is to introduce area youth to aviation, aircraft construction, and career fields in aerospace by building an experimental Sonex kit aircraft. This project will be designed to teach students not only aircraft construction and aviation concepts, but teamwork, business skills, relationship building, and will link concepts learned in the formal school setting to the real world. Aviation desperately needs young people, and young people need aviation.

Personally, being a member of the Sonex Builders and Pilots Foundation (SBPF) has allowed me to connect with a fantastic group of like-minded individuals who also have a passion for aviation. This connection has made it significantly easier to get the word out about the youth project and to engage the homebuilt community.

This project will take place at my local airport in Huntingburg Indiana, USA. We have partnered with the airport authority to utilize shop space in an existing hangar. Also, having recently formed the non-profit entity, we do not expect to be granted IRS tax-exempt status quickly. To clear this hurdle, we have partnered with our local community foundation to take advantage of their IRS status and wealth of experience in handling group/project funds.

Current Project Champions:

[Pathways to Flight Foundation, Inc.](#) (PFF)

[Sonex Builders & Pilots Foundation](#) (SBPF)

[Dubois County Airport Authority, Huntingburg, IN Airport](#) (KHNB)

[Dubois County Community Foundation](#) (DCCF)

About the Project Champions:

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.

Sonex Builders & Pilots Foundation was formed as an Illinois non-profit corporation in February 2013 by three founding members: Robbie Culver, Michael Farley, and Eric Seber. These three individuals currently serve as the Board of Directors. The initial goal of the SBPF was to form a recognized, legal organization that can help accomplish the goal of bringing all things in the Sonex community together.

SBPF is pursuing tax exempt 501(c)3 status. SBPF currently has a membership base of approximately 300 Sonex builders, owners, pilots, and enthusiasts. <http://www.sonexfoundation.com/>

The Dubois County Airport Authority owns and operates the Huntingburg Airport (KHNB), a facility three miles south of the City of Huntingburg in southern Indiana along US 231. US 231 and Interstate 64 intersect three miles south of the Huntingburg Airport, while I-69 is 22 miles to the west. Currently, KHNB is home to 33 corporate, business, and personal certified and experimental aircraft.

The Dubois County Community Foundation is a public charitable foundation that supports donors in their charitable giving and which awards grants to effective nonprofit organizations serving Dubois County in southwestern Indiana. The DCCF's goal is to connect community members with the causes they care about most and empower them to make a difference in Dubois County through philanthropy. The DCCF accomplishes this goal through donor opportunities and grantmaking.

PFF's Current Status:

Pursuing IRS 501(c)3 tax exempt status (expected late 2015 or early 2016)

Entered into a lease agreement with Huntingburg Airport for shop space (completed May 2014)

Entered into a fiscal sponsorship agreement with the DCCF (completed April 2014)

Purchased premises liability insurance for airport operation (completed April 2014)

FUNDRAISING!!!!!! (ongoing)

While we expect to build a Sonex kit aircraft, we are estimating that a total of \$40,000 - \$50,000 will be required to complete the entire project. These initial numbers include the necessary tooling count to enable 10-15 youth participants to take part in the project.

Another goal of the project is to make it sustainable. Sustainability is possible by selling the completed aircraft. Currently, completed Sonex kits are selling for between \$25,000 and \$50,000 depending on build quality, condition, and configuration. The funds available after a successful sale would then be used to purchase a second project kit.

If anyone is interested in donating toward to this project, you may send funds directly to the 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/>

I will be keeping everyone up to date as we progress toward seeing this project takeoff, literally!

Best regards,

Eric Seber

Builder, Waiex 153

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