

SONERAI NEWSLETTER

JULY-AUG-SEPT 1997

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(AFTER 6 PM CDT)

25 YEARS OF PERFORMANCE



JOHN MONNETT'S PROTOTYPE SONERAI II

CALLING ALL SONERAI BUILDERS AND PILOTS!!

You are cordially invited to be our guests at the
Sonerai 25th Anniversary Party
Friday, August 1, 1997, 8:00 PM
John & Betty Monnett's Hangar
Greet old friends, swap photos & stories
Please RSVP
Office - (414)231-8297
Hangar - (414)426-8333
E-Mail Address: sonerai@vbe.com
John and Betty Monnett

John says they will have light snacks, soda, beer, and wine. There will be videos, slides, and some presentations, and of course, a great opportunity to

socialize with your fellow Sonerai-ophiles. I would ask that if you know Sonerai people out there that aren't getting the newsletter to please spread the word about the celebration. Also, you guys with flying airplanes, **FLY YOUR AIRPLANES TO OSHKOSH '97**. Imagine having a whole row (or two) of Sonerai's!

OSHKOSH '97

Warning! Warning! Oshkosh '97 is only a couple of weeks away. I hope you've made your plans to be there. Remember, it starts a day earlier this year: Wednesday, July 30, thru Tuesday, August 5. There are several Sonerai-related events planned for the week. First, of course, is the Anniversary party on

Friday, the 1st (see the invitation above.) Second, the Sonerai Forum is scheduled for Thursday evening, July 31, at 7:00 PM. Check the program for the tent number. And finally, the Homebuilders HQ Back Porch session is scheduled for 12:00 to 1:00 PM Saturday, August 2. I'm planning to spend as much time as possible with my airplane on the flightline. So, please stop by and chat.

SONERAI NEWS

- Craig Merrill of Beaufort, SC flew his Lycoming 65 powered Sonerai II for the first time on April 9. He said, "Yes, I flew it for about 45 minutes. Everything went OK and I would say we were sixty percent successful. It handled OK on the ground with regular aircraft tail wheel springs. Lifted off at 60 or so, climbed at 90, cruised at 90, and landed at 90! Anyway, I am glad that is behind me." *Congratulations, Craig!!!*
- Dave Wilcox of Gilbert AZ flew his Continental A80 powered Sonerai IILTS for the first time. He writes, "On May 2, 1997, I performed the first flight of my Sonerai IILTS. This culminates a 20 year love affair with the Sonerai. In 1975 a friend of mine and I drove from Kalamazoo to Elgin to see Monnett's new Sonerai. Ever since, this little plane has been in my dreams. I now have 25 hours and 80 landings on N136DE." *Congratulations, Dave!!!*
- For all of you folks who dabble in the Internet, Great Plains Aircraft Supply now has a website for you to peruse. Look into greatplainsas.com.
- John Monnett reports that he now has five sets of Sonex wings on the floor of his hangar, and is starting to work on fuselages.

SUN'N'FUN SOJOURN

Getting to Sun'N'Fun has always ended up being some sort of an "adventure" for me. It was never planned that way, but it always turned out that way. Well this year was no exception.

My plan was to fly my IIL down in the company of a couple of friends. We were going to leave on Friday, arrive on Saturday, stay until Wednesday or Thursday, and hopefully, if the weather cooperated be home by Sunday. Well, you know what they say about the best laid plans...

We did leave Friday morning, April 4, between 6:00 and 6:30 in the morning. Keith, my hangar partner left first in his 85 hp WagAero Cuby, followed by his

brother Merv in their Cherokee 140, and then by me. I was loaded to within a few pounds of my 925 lb gross, so my rate of climb was not very sprightly, and my cruise IAS was down 3 or 4 mph, but the air was smooth and we were headed south. The only problem was that at 2500' msl we had 20 to 25 mph headwinds. It looked like it would be a long day.

Everything went well until my first gas stop. I was only making 108 to 110 mph over the ground per my GPS, so I had to stop one way point earlier than planned for gas. This was at Washington, Indiana, about 50 miles north of the Ohio river. The landing was uneventful, I put in a little over 12 gallons of gas, visited the little boys room, checked the weather, bought a candy bar, and got ready to leave. I'd been on the ground about a half hour. The engine started well considering it was hot, and I taxied out for takeoff. While I was taxiing, the idle seemed to be a little off, like the engine wasn't running exactly right, but it was nothing I could put my finger on. So, I rolled out on the runway and brought in the power. Everything seemed to be normal as I brought the tail up, but just as I started to rotate, the engine just died. Not quite dead, but there was not enough power to fly with.

At that point I throttled back, set the tail back down, rolled down the runway to the first taxiway, taxied back to the ramp, and shut down. Having no idea what the problem was, I decided to tie the tail down and do a full throttle run-up to see if I could isolate the problem. Guess what? It ran fine. Now what do I do? Well, I decided to try to fly again. Only now she didn't want to start. After about five minutes of trying various starting techniques, I got her running again and taxied back out to depart. This time everything went as it was supposed to, and I climbed out over the top of the airport until I got to cruising altitude and throttled back.

Here I was, 300 miles from home with an undefined, temporary power loss, 25 mph headwinds, a whole pot full of bad weather to the west, and a bad back. (You see, it's got this big yellow stripe that runs down the middle of it.) I had to decide whether to press on, or to turn around and go home. Well, I decided to go home. I made between 145 and 155 mph over the ground, and the engine ran fine all the way home. The funny part was that about a half an hour into my flight back I got a call from Keith on the radio. He was checking in and wanted to know where I was. He was, needless to say, surprised to find out I was heading home. His Cuby at this point was making 58 mph over the ground, and his GPS told him it was going to take another 17 hours of flying to get to

Lakeland. He decided to turn around, too. (Merv, it turned out, flew all the way to Florida that day in 13 hours of flying time.)

To make a long story short, when we got back to Burlington, we decided it would be much better this year to fly to Florida on the airlines. ATA got us there on Sunday in two and a half hours, despite 115 mph headwinds, for only \$235 round trip. Oh well,

So what's the moral? What was the cause of the power loss? I'm not absolutely positive, but I believe that it was a heat generated bubble of vapor in the fuel system ahead of the firewall. (Even though the fuel lines are insulated with fire sleeve and there's a blast tube on the gascolator.) It was reasonably warm that day (around 70°F), I was only on the ground for half an hour after three hours of flying, and I didn't park the airplane with the nose into the wind. That bubble placed just enough restriction in the fuel line that the system could not flow enough fuel to the carb at full throttle to develop full power. Once the fuel in the float bowl was gone, she leaned out and nearly died. Lucky for me it didn't happen 15 or 20 seconds later.

I don't think it was due to an over-full gas tank either, as was suggested to me later, because I hadn't filled it all the way to the top (never do), and besides I have a float bowl carburetor which virtually circumvents the problem of fuel blocking the vent tube during takeoff acceleration. I have watched my fuel gauge on takeoff, and by the time I bring the tail up, the vent is uncovered and working. That's not to say that the temporary blockage of the vent didn't play a part. It might have. I don't know. All I do know is that on my next long cross country (Sun'N'Fun 98?), I'm going to spend more time on the ground at fuel stops, point the nose into the wind to help cool the engine compartment, and maybe even take off the top cowl. John Leone's firewall-mounted exhaust fan is even looking interesting.

SO, WHAT ABOUT SUN'N'FUN?

Now that you know I got there, you probably want to know what Sun'N'Fun had to offer this year. As usual, the weather in Florida was great. It was shorts and tee shirts time the whole week, and except for a couple hours of rain Monday afternoon, sun block was required every day (particularly for us pale-skinned northerners.) Unfortunately, the weather was crapola in the rest of the country for most of the week. This was reflected in the overall turnout. It

seemed to me that there were fewer homebuilts this year than last year. And a few air show acts weren't there because they couldn't beat the weather.

The Sonerai turnout, though, was twice as good this year as last year. This year we had two Sonerai's as compared to one last year. Danny Kight was the first to arrive in his IILT. He flew down from Anderson, SC. Al Bertelmann showed up on Tuesday with his II, after flying to Florida from New Orleans via the airlines on Saturday because of the weather, and then returning home Monday to get his airplane. Now, that's dedication. I'd like to thank you guys for bringing your machines, and taking the time to talk to everyone who had Sonerai questions.



Danny Kight's IILT & Al Bertelmann's II

We did have a Sonerai Forum on Tuesday, even though I was told there wasn't one on the schedule a few months ago. There were between twenty and thirty of people there. I hope that it was of value to everyone since it was the first one I've done solo, and it was totally unrehearsed. On Wednesday evening we had the annual Sonerai Dinner at Vito's. Again, we had about twice the turnout as last year, and I think everyone had a good time. The Italian food was terrific, and the socializing was even better. Thanks to Dean McGinnes for setting it up for us.

Since I didn't have my airplane to hang around this year, I had a lot of time to look at just about everything that anyone had to offer, and my focus this year was engines. Particularly engines suitable for the Sonerai. As most of you know, I do generally recommend installing the VW engine as the design calls for. It works very well, is light weight, and is reliable. But some of you ask about various alternative engines, so I thought it would be fun to look at some non-VW engines. There were two

interesting air-cooled engines, and several liquid-cooled engines. The first air-cooled engine was the 80 hp Jabiru from Australia. It only weighs 123 lbs, has dual electronic ignition, and a starter and alternator. The main drawbacks that I could see were price (over \$7,000) and parts availability. The second was the 85 hp JPX engine from France. This engine is certified in Europe, weighs 177 lbs, uses a dual Bendix mag for ignition, and has a starter. Again, the significant drawbacks to this engine, that I could see, were price (\$11,900) and parts availability.

The liquid-cooled engine was well represented this year. Of course, there was the almost ubiquitous Rotax 912. I've always wondered how well the Sonerai would perform with this 80 hp engine in the nose. It's light and reliable, but it's just a little too pricey (\$9,000). Next, the Subaru conversions are really intriguing, particularly the EA-81's. The prices and horsepower ranges vary all over the place for this 1800 cc engine, but it appears to be reliable. A friend of mine is installing one in an 80% scale Tiger Moth. He has built it up using an RFI cog-belt reduction unit and expects to get a conservative 85 hp. He expects to have \$3500 in it when it's running. The only problem, from the point of view of using it in the Sonerai is weight. It will weigh in the neighborhood of 220 to 230 lbs complete. This compares with the 165 lb weight of the VW in my Sonerai. The last liquid-cooled engine I looked at was the 3-cylinder Geo conversion. There were two different conversions. Both claimed 65 hp and 165 lbs total weight. These are neat little engines, but their profiles would require massive cowling changes, and more importantly to my somewhat conservative mind, they have to be run at 5700 rpm to obtain that horsepower. I question the long term reliability of an engine run at those speeds.

Of course, in the three days that we were there, we looked at a lot of other aviation goodies, watched the air shows, and did our best to make sure the Hooters franchise stayed in business. Unfortunately, when it was all over, ATA had to take us back to Milwaukee. When we got there Friday evening, the temperature was 34°F and there was a raging snowstorm. Sometimes, you just want to turn around and go back.....

"QUALITY RIBS"

The following is a letter from Dave Wilcox in which he introduces his new company, **Quality Ribs L.L.C.**

For those of you looking for excellent quality pre-built wing ribs for your Sonerai project, read on. As he says in the letter, he sent me a sample front and main rib to critique, and they were very nicely done. I would have no reluctance in recommending them to anyone.



QUALITY RIBS

a limited liability company
11006 Valley Dr., Fountain Hills, AZ 85268

**Fabricators of Aircraft Ribs
and other Quality Components**

David Wilcox

Design & Fabrication (602) 892-7189 voice
105702.2156@compuserve.com fax by request

Thanks for providing the Sonerai Newsletter forum to Quality Ribs L.L.C., and allowing us to present our news release. I'd like to take the opportunity that you provide to describe our new company, its origin, members, and our product.

Although I have a career with a big aviation company, it has not satisfied my passion for flying and flying machines. I've always wanted to be bucking rivets and boring holes in the sky like the nostalgic days of aviation. I built the Sonerai because it was beautiful, tube and fabric, sheet metal, small, and simple. The Sonerai is a tribute to simplicity and aviation. I intend to make Quality Ribs into a company that supports the Sonerai and other such honorable aircraft.

Quoting a well known philosopher... Dirty Harry..."a man's got to know his limitations." I made a good set of ribs for my own Sonerai. I made good tooling for those ribs. I saw an opportunity...nobody sells pre-fabricated Sonerai ribs. I sent off a somewhat impromptu offer to fabricate ribs to Great Plains Aircraft and received no reply. I knew I had an excellent rib, but was not presenting myself to my advantage. This, among other things, was my limitation.

I needed a business man, a quality man, and a technical man. The entire story is lengthy, but the result is:

David Wilcox	Design	Myself,
Sonerai builder and pilot, A&P, MS Aero Science-Embry Riddle		
John Ballard	Business	B.S. Embry
Riddle, MBA U of Phx		

Ted Kilbury	Quality	FAA	25
Designated Engineering Rep			
Barney Wurm	Technical	MS	Matls
Engineering			

We are equal partners in Quality Ribs, a limited liability company. The Sonerai rib is our first product. We intend to specialize in formed sheet metal components for all aircraft.

To expedite acceptance of our product, we fabricated sample ribs for prominent people involved in the Sonerai, including Fred Keip, John Monnett, and Steve Bennett. From them, we received encouraging feedback.

Our rib is cut by numerically controlled water jet machine; the water jet easily cuts with $\pm .005$ accuracy. The lightening holes, airfoil shape, tooling holes, and spar web rivet pilot holes are all water jet cut into the rib blanks. We form the rib over a proven mold, flare the lightening holes, and emboss the vertical stiffening ribs. The rib is then completely finished and straightened. A strict quality control system assures the final shape and tolerance of the rib. Material certifications are provided with the order.

Great Plains Aircraft will soon offer our ribs in their catalog. However, until the catalog is published, we will provide the ribs directly to builders at a discount, \$750. In addition to the standard 22 rib set, we also offer individual ribs for construction mistakes or wing walk. Of particular interest to us, Donald Jester of Mt. Vernon, MO has become our first customer.

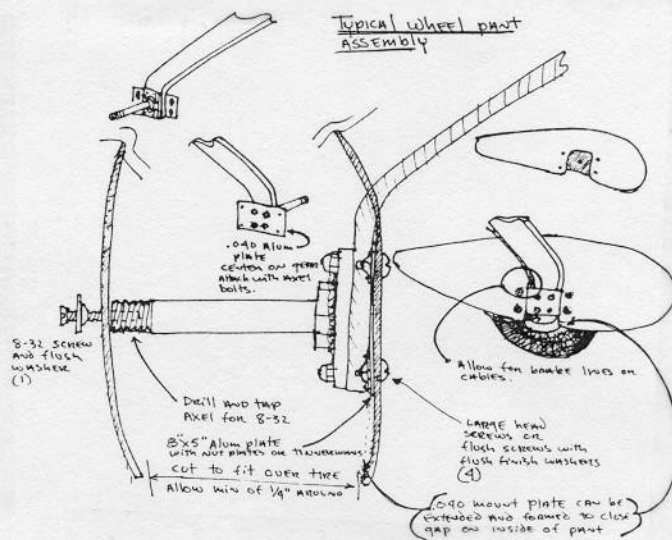
We are very happy to be providing a quality product for the Sonerai Aircraft. I am looking forward to meeting some more Sonerai builders.

FROM THE ARCHIVES

*From the March/April 1982 issue of the **Monink**, written by Randy Novak, this is an excellent explanation of the process of mounting the "Wheel Pants."*

"There are several different ways in which the wheel pants can be mounted to the landing gear. The method used on our low-winger seem to work well and the procedure is fairly simple. For attaching the outboard side of the pant, simply drill and tap 8-32 or 10-32 threads in the axle end. There you can use a countersunk machine screw and countersunk washer

to hold the wheel pant down tightly to the axle end. For the inboard side, we've used a small piece of aluminum (about 8" x 5" x .040") bolted to the inside of the gear leg using the four 1/4" axle attach bolts. A cutout must be made in the inboard side of the wheel pant to allow the wheel pant to slide down over the gear leg. Your small piece of aluminum should now be on the inside of the wheel pant wall, and after blocking up the wheel pant to hold it straight, you can drill through the pant into the aluminum. (Two holes on each side of the gear leg.) Now you can install nut plates of your favorite size in the aluminum and use four machine screws to hold the inboard side of the wheel pant in position. Your brake arm, cable retainer, and housing are now inside of the wheel pant, making a clean installation. [Ed. Note: If you are careful in making the gear leg cutout, you can trim the piece you removed, and reattach it to the aluminum strap, thus hiding the strap.]



THE FINAL COVER (CONT'D)

In the last issue, we got the fabric and tapes on the fuselage, and it's really beginning to look like an airplane. This time, we'll cover the tail surfaces, prime everything, and paint. But before we do that, we need to do one more thing to the fuselage: install the drain grommets. This is necessary to drain off any water that might leak in. Drain grommets come in two styles: the plain washer type and the seaplane type. The plain ones look like a nylon washer, while the seaplane type look like a washer with a cover that has an outlet on one side. To install them, you need to determine the lowest point, or points on the bottom of the fuselage when it is sitting on the ground. On

the taildragger, that is back in the tail. Next, take a hot pencil-type soldering iron and make a 1/4" hole at each location. Then using the fabric glue, attach the grommet around each hole. If you use the seaplane grommet, make sure the opening faces aft. On my airplane, the lowest point is the towbar crosstube where I put two seaplane grommets just forward of the tube.

Covering the rudder, elevators, and the horizontal stabilizers is done using the same techniques as you used on the fuselage. Each part is covered using one piece of fabric. This piece of fabric is wrapped around the spar of the part and then glued to the leading or trailing edge. For example, for the rudder, cut a piece of fabric 3" to 4" longer and 3" to 4" wider than twice as wide as the part. Fold the piece in half and drape it over the spar so that you can locate the cutouts for the rudder hinges. Mark the locations with a pencil and carefully cut the openings with a scissors. Next, glue the fabric to the spar, and then proceed to glue the fabric to the trailing edge. This is done the same way as you applied it to the fuselage. If there are curves, use the iron to shrink the fabric around them. Make sure you have the proper amount of overlap (1" minimum) to guarantee a good glue joint.

After the fabric has been shrunk, you will need to attach the fabric to the ribs using rib stitching cord, pop rivets, screws, or Martin fabric clips. (If you plan to use pop rivets, screws, or clips, the holes should be laid out and drilled in the rib flanges prior to covering.) For rib stitching, layout the pattern as shown in the plans, marking each stitch location with a pencil. Then cut a piece of 3/8" reinforcing tape about 1" longer than the stitch pattern and stick to the fabric over each rib on each side of the control surface. This tape is self-adhesive. Now proceed to stitch the fabric down using the techniques shown in the manual. I prefer the method shown in the Stits manual because it hides the knots.

Once the stitching is complete, install the finishing tapes as you did on the fuselage. Install the rib tapes first, followed by the trailing edge tapes, and finally the leading edge tapes. Make sure the tapes overlap each other to prevent the slipstream from trying to lift them. Now the fabric work is done, and it's time to get ready to paint.

Paint Prep

The first thing to do before any paint is applied is to go over all of the finishing tapes one last time to make sure there are no edges sticking up. Use the tip of your iron where necessary. Also, you want to

make sure all of the other parts are ready for primer and paint. The wings, ailerons, cowlings, spinner, canopy frame (take the canopy out, there's much less masking and no risk of solvents damaging the plexiglass), landing gear, and wheel pants should have all filling, sanding, and other prep work complete.

Next, you will want to find a good clean, well ventilated, and well lit paint booth, or possibly build one. The first time I painted my airplane, I built a booth using half of my two-car garage. (My wife refused to park her car outside, so compromises needed to be made.) I used 2 x 2 pine framing, covered all sides and the top with plastic sheeting, installed an exhaust fan in one end, and covered the opposite end with a removable frame covered with furnace filters. This kept out the dirt and bugs, and made for easy access to take parts in and out of the booth. Also, make sure there are plenty of lights so you can see what you are doing.

The next to the last thing to do to the fuselage before primer coats are applied is to mask off the entire cockpit area and the openings in the rear end. For this you want to use masking paper and good quality masking tape. Do not use newspapers, as you risk the possibility of transferring newsprint. Masking paper is available at any automotive paint supply store. Finally, the last thing to do before applying the primer to the fabric, is to wash the entire surface to be painted with Spic'N'Span to remove any dust, dirt, and oily finger prints. Rinse, let the fabric dry, and you should be ready to paint. One of the advantages of washing the parts just before painting them is that it allows you to wet the floor of the booth well to keep down any dust that might be there.

Painting the Fabric

Just a reminder at this point: I'll be describing the Superflite II process because that is what I used to recover my Sonerai a year and a half ago. Other processes are similar. Just make sure you follow the instructions. Here is what you'll need for materials:

1 gal	SF250	Primer Base
2 qt	SF325	Primer Catalyst
1 gal	SF450	Primer Reducer
1 gal		Superthane Color
1 gal	SF350	Superthane Catalyst
1 gal	SF410	Superthane Reducer
1 gal	SF220	Flex Agent
1 qt	SF10	Epoxy Primer
1 gt	SF320	Epoxy Catalyst

Priming the fuselage with the Superflite II primer only takes two wet cross coats. For those of you who

haven't heard of a "cross coat" before, it is actually two coats of paint, one right after the other. The first pass is done by spraying the paint along the length of the part, with the second pass made perpendicular to the first pass. This provides for complete coverage. What Keith (my hangar partner and spray painting artist) and I found was necessary on the first coat of primer was that it was necessary to really flood each surface with paint to get the primer to soak into the weave of the fabric and minimize the number of pin holes. In order to do this effectively, it was necessary to have each surface as close to horizontal as possible so that the primer wouldn't run. This means you have to be able to rotate the fuselage so that the bottom and each of the sides can be facing up when painted. We did this by setting the fuselage on a couple of saw horses and flipping it as necessary.

After the first coat of primer has dried, inspect it for contamination and pin holes. If you find pin holes (and you will), get some automotive spot putty (it's usually dark red in color, and comes in a squeeze tube), and fill them using your finger. Then wet sand the entire surface using a 320 or 400 grit sand paper. Wash the fabric again with Spic'N'Span, rinse, dry, and spray the second primer coat. After it dries, inspect again, and wet sand again using a 3M Scotchbrite pad. It should now be ready for the finish colors.

Generally, the base color is put on first. Two wet cross coats will give a very nice, wet-looking finish. Make sure you wet sand between coats. You can put more paint on, but it's not necessary, and besides more paint equals more weight and we are trying to keep the airplane light. After the base color is dry, you can mask for the trim colors. Use 3M Fineline plastic masking tape to define the edges of the trim. This tape gives a very sharp edge with no bleed-under if you make sure the edge of the tape is pressed down with your finger nail. Again use a good quality masking tape and masking paper to cover any areas not requiring the trim colors. After the trim color has been applied, remove the tapes immediately, while the paint is still wet. This will eliminate the sharp raised edge that you get if you leave the paint dry. Be careful, though, so that you don't touch the wet paint.

An alternative to painting the trim is to use vinyl, particularly for the "N" numbers and other lettering. Find yourself a good sign shop that works with vinyl and the job is easy. The trim is usually computer-generated, and mounted on sticky-back paper, with everything properly aligned. To install, all you do peel the paper off the sticky side of the vinyl, locate

on the airplane, squeegee down, and pull off the backing paper. I installed the two sets of "N" numbers in less than five minutes. My sign shop said that they could develop complicated trim designs and install them. As a matter of fact, the trim that is on the Stoddard Hamilton Glastar on floats that has been in the magazines the last couple of months is all vinyl.

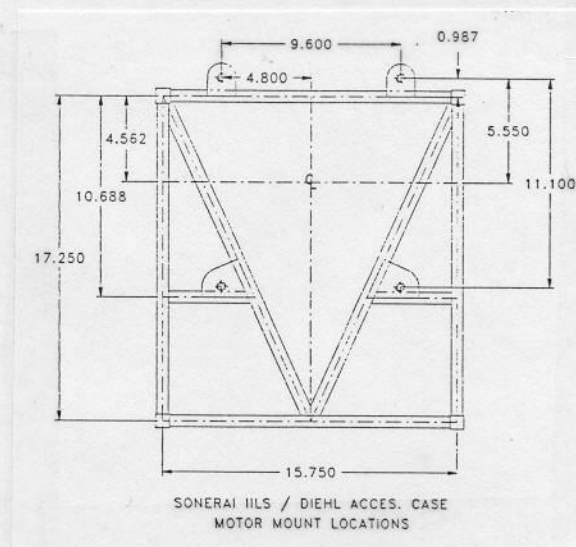
Painting the Rest

Finishing the wings, cowling, canopy skirt, wheel pants, and all the other bits and pieces is really straight forward. All parts should be washed and dried to eliminate finger prints, etc. They should then be primed with a light cross coat of zinc chromate epoxy primer. Although the Superflite II instructions don't call for it, we sprayed on one cross coat of the fabric primer. This was done make sure the finish colors matched on all of the parts. Next, finish paint and trim the parts.

And that's all there is to it. If you don't feel confident enough to paint it yourself, go out and find a good painter. You do all the grunt work, and let him shoot the paint. You won't be disappointed.

SONERAI II THRUST LINE

I've had a couple of people ask about the proper location of the thrust line of the various Sonerai II designs, so that they could determine the correct motor mount locations for the engine they were using. The plans assume the use of a Monnett Electro-X mount. The thrust line is located 4.562" below the centerline of the top longeron. Below is a drawing showing the thrust line location as well as the mount locations to suit the Diehl mount.



WANT ADS

For Sale - Sonerai I, 4 Hrs T.T., less Engine. \$3,900
Jim Jaeger, Box 438, Kewaskum, WI 53040, (414)626-2611

For Sale - Set of Engetics brakes with 5" wheels. \$175.00
Dick Foster (515)287-2554

Air Schank Going Out Of Business Sale - New and used Sonerai parts, Engine parts, Tools and hardware, New and used instruments. Call or write for 5 page list.
Bob Schank, 35 Clarence St., Belleville, MI 48111, (313)697-7057 after 5 pm.

For Sale - 1600 VW engine, 0 TT. Disassembled - all new parts. Complete engine. Mexico universal AS41 case, Case inserts. Case machined for Great Plains Force One Prop Hub. Has Force One Hub Parts. Dual Port Heads. Forged counter weight balanced crankshaft. Balanced pistons and rods. Pauter performance cam. Horz oil cooler and adapter plate. \$2100
Bob Schank, (313)697-7057 after 5 pm

For Sale - Limbach 1700 Engine.
Don Brinkley, (414)335-6519

For Sale - Sonerai II midwing, Supervee cowl, Sterba prop, 2100 engine w/ Revmaster prop ext. Also 4016 Slick Mag w/ 100 hrs, and misc. instruments.
Eddie Eiland, 1350 Thunderbrook, De Soto, TX, (214)230-8475

For Sale - 1 Type 3 Supercase by Claudes Buggies, 1 forged crankshaft w/ hub and prop extension, 2 cyl. heads w/ S.S. valves, 1 set NPR piston rings. All for \$500.00
(217)935-5345

Wanted - Variety of good used or new Sonerai parts: cowl, canopy, 5/8" landing gear, spinner, S wing kit. Also interested in a Sonerai ILL project.
Mike (219)534-2900

For Sale - Sonerai ILL, A&P built, Dual ign., hydraulic toe brakes, wing mod., much more, AeroVee 2020 w/ 60 hrs.
Russ Larson (406)857-3304

For Sale - Sonerai I fuse. and flt. controls, complete except cover. Wings complete and skinned, 1600 VW rebuilt, SuperVee casting, spinner and prop, L.G., most everything else.
John Ricchio (847)413-4962 or (708)447-0448 evenings.

For Sale - Sonerai I kit, welded fuse., wing kit, cowl, canopy, gear, wheels and brakes. \$2000
John Dialogue (801)571-3063

For Sale - SoneraiII bubble canopy, smoked brown, complete with latches, etc. \$300 (US)

(613)632-9601 home, (514)437-6129 work

Wanted - 5/8" landing gear and fuel tank for Sonerai II.
Jerry Campbell, 722 N. Main, Aberdeen, SD 57401, (605)225-8675

For Sale - Sonerai ILL, 275 TT, 1834 HAPI, Aerobatic tested, light damage. Must sell \$3750
(309)944-2366 weekends

Wanted - Sonerai engine, instruments, and airframe parts.
Gene Cook, 114 Imperial Ave., Friendswood, TX 77546

For Sale - HAPI motor mt., Bosch starter, Alternator, 3" prop ext, ignition switch, tailwheel assy., taper pins, #8 pin reamer
Greg Jannakos, 994 Vineyard Circle, Stone Mtn, GA 30083

For Sale - Sonerai ILLT fuselage approx. 85% complete. Sticks, rudder pedals in, tail feathers on. \$850.00
Bill Waters (770)466-2464

Wanted - Sonerai prewelded or tacked fuselage with tail feathers. Also, landing gear kit.
Joe Burr, 4098 Eddystone Dr., Cincinnati, OH 45251 (317)827-7195

For Sale - 2 Ray Jeff Lorans, PL-99 w/ self contained battery packs, both w/ new chargers. \$175.00 ea or both for \$300.00. In cartons w/ manuals.
Mike (219)534-2900

Wanted - Cont. A65 taper shaft prop hub and professionally welded fuselage for Sonerai (set up for Cont.) Also, I have Bendix mag rotors to correct the S-20 AD. For Sale - Cont. A75-8, 300 SMOH.
John McLaughlin, 25839 Tallwood Dr., North Olmstead, OH 44070 (216)734-5578

For Sale - Revmaster 2100D with prop, all acces. included, starter, alternator, oil filter, carb, eng. mount. \$3975.00
Len (616)676-9711

Wanted - Early style Monnett SuperVee motor mount (not x-mount), 32mm Posa Supercarb w/ needles, AC42 sparkplugs, broken tapered rod tailspring.
Dave Patterson, N 3280 Hwy 146, Fall River, WI 53932

For Sale - Assembled wing spars w/ mod parts, nose rib blanks w/ holes cut. \$900 invested, will sell for \$500.
Frank Dwelley (860)653-7106

Wanted - Monnett Super Vee prop hub extension assembly and magneto/engine mount unit.

Please call with price and condition of available parts. Mike Smith (601)324-2801 Daytime

For Sale - 1700 VW Engine. Posa super carb, mag, shielded ignition, Sonerai motor mount, alternator. Sonerai II landing gear complete with wheels, axles, and pants. Gas tank, all flight instruments, stab. Complete. Prop, spinner and more. Wm. Ziegler, 2 Theresa Ann Court, Albany, NY 12205 (518)869-0137

Taper Pin Reamers For Rent - Brown & Sharp #3 and #5 for AN386-3 and AN386-5 taper pins. \$1.00 per day for both reamers, \$150 deposit.
David E. Wilcox, 517 E. Saratoga St., Gilbert, AZ 85296, (602)231-5824,

For Sale - 1992 Sonerai ILL, 300TT, dual ignition, electric start, new tires, brakes; has S-mod, basic VFR instruments. Not a show plane, but well built and flies great. \$6000.00 firm. Also have new in the box Bendix/King KX99, Garmin GPS-90, intercom. Dennis Barnette, (601)256-9767 or e-mail at dennis1@mail.tsixroads.com

For Sale - VW remanufactured block, late model, line-bored .010 under, case savers, etc. \$250.00; Rare Sonerai I Ratray cowl, straight check, firewall and engine mount to match. Buyer pays freight & crate. \$450.00 Elliot Willoughby, (502)477-2466

For Sale - Sonerai II project, Monnett's N22MX. Disassembled, new Ceconite fabric, 1835 cc engine, prop, spinner. Ready for filler coat, paint and final assembly. 200 hrs TT. Located 20 miles west of Atlanta. (770)949-7789 or DonaldTurner@worldnet.att.net

Wanted: Sonerai ILLS with large engine
Ed Collins, (916)873-4400

Wanted: Single-port Sonerai intake manifold, Zenith or Ellison Carb, 12" spinner assembly.
Steve Prosser, (702)436-0245 after 3 PM Pacific

For Sale: Sonerai II kit. Welded airframe with tail feathers, flight controls, and gear. 1835 cc VW with Electro-X mount (10 amp alternator), 4016 Slick Magneto, Posa carb, propeller, spars finished, Super-Vee cowl, fuel tank, most instruments. \$2750.00 OBO Zeke Zechini, (703)707-1949(work), (703)830-1046(home), or mark.zechini@lmco.com

For Sale: Complete Sonerai II kit. Fuselage and tail welded, some instruments, all parts to complete except engine and paint. \$3800.00
Ed Torbett, (815)895-3888

Wanted: Any Sonerai parts to help add to Sonerai/KR-1 Museum, tax deductible. Call or write: Tom Hall, 3503 N. Marwin Ave., Springfield, MO 65803, (417)833-6513