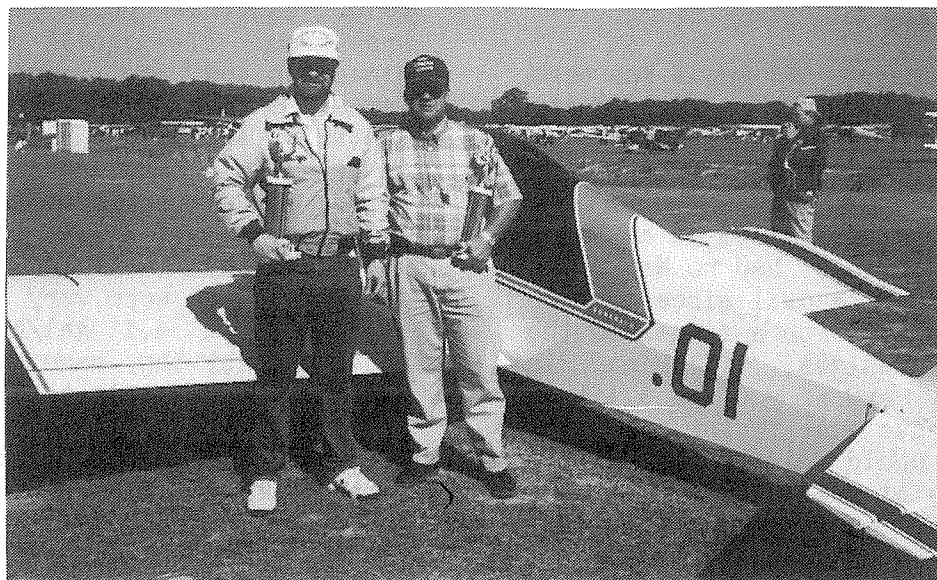


SONERAI

Jul - Aug - Sep 90

NEWSLETTER

Copyright Ed Sterba, 1988



Dave Rawlings and Dean McGinnes after their 2nd and 3rd place showings in the Sun 60 race at Sun N Fun 1990 standing by Dean's Sonerai III. Apparently his race number indicates his top speed relative to the speed of light I, think. Dave Rawlings gives a good write-up of the Race later in this issue.

Is it safe to say it's Summer, yet? This is being written about the middle of June and we are still cutting up tree limbs from the last snow storm. It hasn't been the greatest Spring for flying. I hope you have had better weather, but I know in some parts of the country it has been pretty bad for our type of flying. I just got back this morning from the Sterling-Rock Falls breakfast, we had 6 Sonerai's present for an interesting get-together : Don Liccoci, Dale Severs, John Giordano, Larry Pritchard, Bob Jeager, and me. Hope I didn't forget anyone, or leave too early. A perfect day for flying, I went 35 minutes straight without touching the stick, as fuel burned off I just put my arms forward on the spar box and then to lose altitude to enter the pattern, I just leaned forward to set up a nice descent. I thought about flaring for the landing by climbing into the tailcone, but there was too much traffic to do so safely. Maybe another time.

I'll talk about the flight down to Sun N Fun a bit later, but wanted to thank everyone who showed up for the forums and volunteered their opinions and input. I feel it really helps people unfamiliar with the airplane to hear both the good and the bad especially when both are kept in perspective. I special thanks to Dean McGinnes for setting up our informal Sonerai Dinner. We had about 12 people show up which gave everyone a chance to really get their points across. We all thought it should be done again next year, so get ready Dean.

Oshkosh Information

Sat. the 28th at Noon - Sonerai Builder's Club at the Homebuilder's Corner
Mon. the 30th at 10:00 AM Forum Tent 8 Sonerai builder's Forum
Mon. the 30th at 7:00 PM Butch's Anchor Inn for the Sonerai Dinner, register at the Great Plains Booth. We order off the menu as before. Max. of 100 people. (We had 85 last year.)

How we got there...

by Dave and Ed

The flight down to Sun N Fun went about as smooth as normal considering the type of weather we had this Spring. As stated elsewhere in this issue, I was accompanied by Dave Rawlings in his Sonerai II 2020. He installed an aux tank like mine (6 gal.) but had no Nav radio which isn't that big a deal since most of your time is spent with a finger on the chart anyway. Besides, Florida is basically South, and if you see a lot of blue water you have gone to far, right? Personally, I would gladly trade the radio for plenty of fuel.

The weather, courtesy of DUAT, made it look impossible to make the trip in one day, but I have decided that my body just about can't make it in one day either anymore. To fly for 9 or more hours in one day and then approach one of the world's busiest airports as the sun is setting in the West is not all that smart (so why have I done it so many times, you ask?) The best news was about 15 or more knots tailwind for most of the trip. Overall, this took all the pressure off trying to get there too soon, so we met over The Landings airport west of Chicago and made an easy leg of it to Huntingberg, IN, I believe about 2 hours in the air altogether. We fueled up and then waited for the latest weather reports to come on line. The very helpfull airport manager provided his time and computer to once again get on line with DUAT which confirmed that we wouldn't be going much further than Nashville for the day.

So the plan was to fly until we hit rain and then set down at the most convenient place which the possibility of making it as far as Gallatin, TN. Ed Hasch of Sonerai fame lived in the area and a surprise visit might be in order. As it happened once we passed Bowling Green, KY the clouds got substantially darker (especially through a bronze tinted canopy) but the rain held off until we were calling an entry into downwind at Gallatin. Apparently this was some sort of sign that it was time to

stop for the night. So we called the Hasch residence and spent a very enjoyable time talking flying and Sonerai's.

The clear air and tailwind had their price, and that price was cold air. It was about 17 degrees when we had left Wisconsin and now it was about 28 F in Tennessee but the tailwind was holding. The trip across the high ground was made in relatively smooth air with just a few rather abrupt rolls of turbulence as you would cross past a ridge. It got to be very predictable after a while. Both of our fuel burns were very stable, I would be right at 4.1 gal/hr. and Dave was about 4.3 for the same airspeed, so we rode on past Atlanta and picked up the Interstate south of Macon as usual. The nice part about getting into the lower part of Georgia and then Northern Florida was that all the planes heading to Sun N Fun get funnelled into the remaining airports for fuel so there are usually homebuilts and warbirds scattered across the ramps. You don't have to ask where they are going.

I have been into Oshkosh about 11 times now in the Sonerai and have used the No Radio approach all but one time (when someone in a Cherokee went the wrong way and had me wallowing down final at about 65 mph). The NORDO approach at Oshkosh is not nearly as busy as the Fisk procedure, so for me the approach into Sun N Fun can be the one to get excited about. You need to practice your slow flight and steep turns at about 80 mph because you always seem to be in good shape entering over the powerplant and then just as you pull it in nice and close for the entry into downwind there are three more planes in front of you than you had originally. I can never figure out how that happens, but it did again. Dave and I had to rack it around in a sharp right turn to get behind someone and then immediately make a 180 back to downwind at about 80 mph. We figured it was just part of the early airshow.

We ended up with just at 8 hrs. in the air for about 1100 miles using less than 35 gals of fuel. We flew home separately, and each had weather to contend with, but by now I can only remember the easy trip through Tennessee looking down on the hills. What time is Sun N Fun next year?

A letter from -- Jim Smith
6125 S. 239 St.
Kent, WA 98032

This story really started 20 years ago. During the time I was earning my Private ticket the G.I. Bill was made retroactive to cover the period I served in the Air Force. This was an excellent opportunity for further training and ratings without a great financial sacrifice. After obtaining a multi-engine and instrument instructors rating, age and a slow down in airline hiring left me with part time instructing.

Several temporary out of state work assignments made it unfair to my students to continue instructing not to mention what was starting to happen with insurance and anything connected with airplanes.

During all this time I was exposed to homebuilt airplanes and joined the AA. With the rising cost of airplane rentals and having been heavy into model planes since I was a small child I started looking into building my own plane. It couldn't be too expensive and had to be a two place airplane.

I had several designs in mind and went to Oshkosh in 1976 to look at them. The first plane I saw that I was considering after purchasing my ticket was John Monnett's Sonerai in the fly-by pattern. The looking was all over right then. After the big "O" I stopped by John's business in Elgin and that was the beginning of Sonerai IIL No. 0193.

Although many years in four different garages from Atlanta to Seattle it is now flying. The airplane was actually completed in Witchita, KS and test flown by fellow Sonerai builder Steve Wilkes. I had no tail dragger time and after soloing in a J-3 my job took me to Seattle. One more move for the airplane and a little more tail wheel time brought the first flight by me on Oct. 28, 1989.

The first lift off came a lot sooner than I had expected, actually it was a three point takeoff. When I realized I was in the air I woke up quickly and lowered the nose for a normal climb out. Orbiting the Auburn, WA airport showed all the gauges in the green and no cooling problems. The first landing attempt was a little fast and it floated forever so I went around. The second approach was much better but the landing was a belly flopper. So what, they are getting better, in fact the last one was a three point grease job.

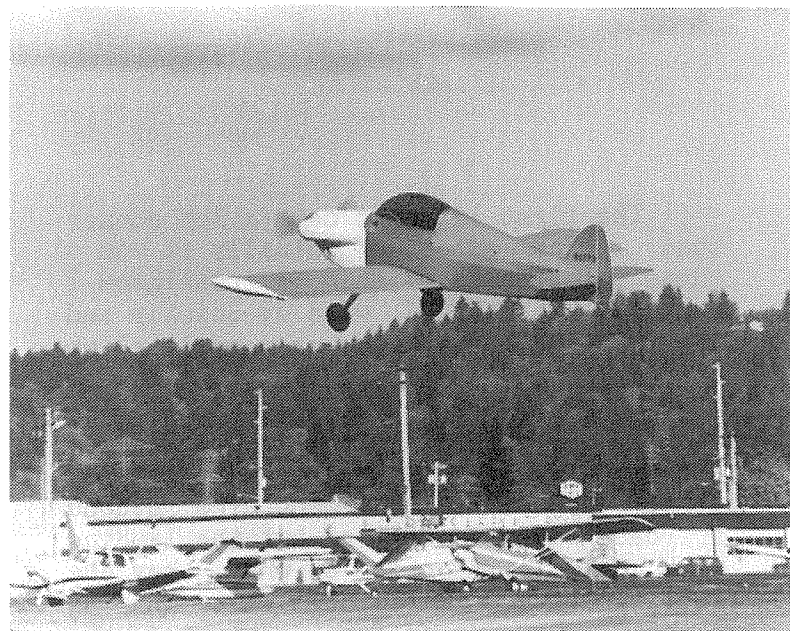
It has taken a long time but I now can understand how there is no way to explain the thrill, excitement and feeling of accomplishment that comes after that first flight in an airplane you have built with your own two hands and just a few shop tools.

The airplane was built strictly per the plans. With only about 9 hours of tail dragger time I felt the tiller bar connection between the rudder and tail wheel caused the steering to be a little quick for me, so I installed hardware store compression springs from a door opening stop kit. Works great for me.

The lengthy storage between KS and WA without fuel caused the gascolator cork gasket to dry out and get hard. The first time I turned on the fuel it poured straight on the ground. Also the fuel tank stopper had shrunk badly. Rather than buy a new one I dropped it into a can of gasoline for a couple of days. Result -- just like new.

Just a few numbers -----
Empty weight in silver -- 541 #
Engine -----1700cc VW
Propeller -----Sterba
Max CHT during climb -----375°
Indicates 135 mph at 3200 RPM

Am I happy? YES! A great little airplane for the investment.



Jim Smith's Sonerai IIL making noise the way an airplane was meant to be.

So you bent the gear, huh?

O.K., I did it once too, on Bob Brown's Sonerai IIL, on the grass of all things. He wanted me to fly his airplane so he could see what it looked like and sounded like in the air. Well, he asked for it! It was my first flight in a low winged Sonerai and I was to find out the first time it flew with a full tank of fuel also. Everything seemed fine except for the fuel steadily dripping from somewhere behind the instrument panel. But that really had nothing to do with me dropping it like a stone onto the grass at Lake in the Hills airport and spreading out his gear legs. I had never done that before to an airplane. I think the view with the low wing threw off my depth perception. Hey, it's my only excuse.

So we jumped on the problem, had the gear off, straightened, and reinstalled in about 1 1/2 hours. There are a number of ways to solve this problem. The first one is to hope that whoever built the airplane did not cover over the landing gear with the belly fabric; that makes the problem a lot harder to fix. Some folks have used a Come-a-long fastened to both gear legs, rigged up the wheels so they could slide together and then started pulling the gear inwards. This

can do the job, but if you haven't seen this spring aluminum before you may be surprised how far you have to suck the wheels in. The amount of spring-back is incredible! It's a matter of measuring, pulling it in, remeasuring, and doing it again until it's right. Of course they may not pull in together the correct amount and the angles may be wrong. You are not controlling any of these factors. And I have always wondered what would happen if your Come-a-long snapped, would you go to Sonerai Heaven? So we have used a 25 Ton hydraulic press over the years.

It takes about that much force to really do the job. These presses are the hand-pump type seen in many metal working or maintenance shops. You need about a 4" diameter piece of steel stock (not tubing), a few pieces of hard wood, and a few measuring tools (distance and angles). The metal of the gear is protected from the metal of the press by the wood and the 4" steel bar is pressed into the bends where needed to correct the problem. This also means counting the strokes on the press handle and then letting the pressure off to see what has happened. You then pump it up again just a little more and recheck. After a while you get a feel for the amount of pressure needed. In the course of manufacturing gears from scratch, we will break one every so often (it breaks our heart, too) but they never seem to break in the landing crunch or when being repaired. A few hints however are in order:

Don't try to bend the metal when it is colder than room temperature, and 85 degrees is better.

Make sure you have the gear straight in the press.

On the 1/2" gear, we also put a slight bend about 8" down the leg to preload it for the weight of the airplane itself.

One final note: My 1/2" gear is about 12 years old now and hasn't changed much over the years. I feel that the heat treating and therefore the strength of the metal is quite variable, some better than others. The obvious choice in the future is the 5/8" gear and that is why Great Plains only sells that gear.

Sun n Fun 60 in a Sonerai
by Dave Rawlings

The trip to Florida began at 6:59 AM Friday morning as I began my take-off roll. I joined Ed Sterba overhead one minute later in a perfectly timed rendezvous. Lakeland was now only 8 flying hours away.

I was planning a 3 day stay, but I got caught up in the activities and terrific people at Sun N Fun so I decided to stay and "post enter" the Sun 60 sprint race. Charlie Gray, the race director, was glad to admit my entry after telling him I had preflown the race course, (with Al Bertellmann) and understood the landmarks and race rules and of course gave him the \$20.00 entry fee. I was surprised at the lack of good emergency landing areas in the race course terrain, which was a triangle south of the airport. The two lane roads which were very close to the course line appeared the best bet, because the open areas were all surface mines with many holes and dirt.

Here's a little background on Sporty, my Soneria II midwing. I bought Sporty in 1985 without an engine from the builder, the wings were modified per Monnett service bulletin and a 2020 cc Monnett EconoVee engine was installed along with a Posa Supercarb. Empty weight is 525 # but was up to 560 # with the aux tank, fuel pump and extra battery. I removed the alternator when the Mode C rule became effective. The needle on the Posa 29mm has been "stoned" away from a pure flat surface to give me the mixture characteristics I want as the throttle is advanced. The mixture adjustment range is limited and equals four turns. CHT and EGT are on number 3# cyl. and will vary from 325 to 440 F and 1200 to 1400 F depending on power and mixture. Prop is a Sterba 52x46. Measured, calibrated performance at 2000 MSL is:

2900 RPM and 9" suction	= 125 mph
3000 RPM and 8" suction	= 130 mph
3100 RPM and 7" suction	= 135 mph
3300 RPM and 4" to 5 "	= 144 mph
Max. level 3600 and 0" to 2"	= 166 mph

The airplane is carefully rigged to fly hands off with 8 gals and will do so for as long as 1 1/2 min. if the air is calm. All gaps are sealed and the ailerons are rigged at 1/4" down. Stall at this rigging is 61 mph indicated and is sharp but recognizable. Left wing drops first. For racing, I have gained 1 to 3 mph with the ailerons raised 1/8" but the stall increases to 64 mph. For this Sun 60 race the ailerons were at cruise setting of 1/4" down.

The day before the race I pre-flew the course with Al. We showed identical airspeeds at 125, 140 and 150 mph, then we "rolled it on" side by side and I pulled away, indicating 3600 rpm and 165 mph. Al had to throttle back slightly on his 2180 to get max. speed. I can fire-wall my 2020 and hold speed.

The race day performance was quite different. The best I could show was 3500 rpm and 161 mph ind. Temperatures were middle 80's, humidity was 100% and winds were gusty. My race day speed was 154.37 mph from a standing start around a 90 mile triangular course. Dean McGinnis gave a great run of 153.80 mph. We both felt pretty good about being a little faster than Monte McClean in his KR-2 at 151.12 mph.

The race began with the 32 competitors lined up three abreast across the runway with the fastest first and slowest last to minimize passing. Planes left at 20 sec. intervals. In the 99 hp and less class, an 85 hp Tailwind left first then the KR-2 1834 then myself in Son II 2020 followed by Dean in his Son IIL 2180. At my turn I had brakes on and 3000 RPM. I released the brakes at the flag and accelerated to 80 mph with the tail up. My climb was minimized to just have 500 ft. at the East airport boundary so I could legally turn to the South heading. I climbed to 1000 ft at 140 mph then let it go as fast as possible by leaning to about 420 F CHT and 1400 F EGT. This gave 3500 RPM and 161+ mph ind. Controls were held as steady as possible because 50 ft altitude can equal 1 to 2 mph lost for a few moments. About every 5 minutes I backed the throttle to 2 to 3 inches

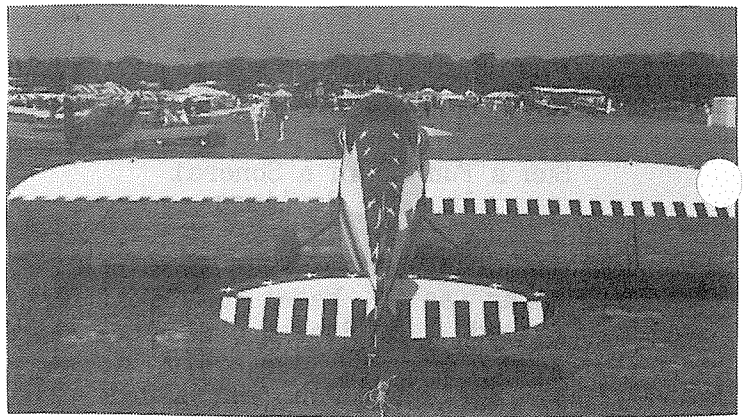
suction and richened the mixture to 375 F to keep the valves from closing down a few thousands by the end of the race. (I once had the valves tighten up .004" in a 200 mile efficiency race when I kept the CHT at 420 F to 450 F and EGT at 1450F!) Ind. airspeed dropped to 159 to 160 mph during these 1 minute periods.

By the first turn I could see the KR-2 in the distance. He was so close to the course track, I guessed he must have Loran, so this made my navigation easier. A few moments after passing the first pylon I heard Dean report the turn. Checking my watch it looked like I had been 5 seconds faster, so I set my sights on Monte in the KR-2. 28 miles later, Monte reported pylon 2 and turned then I reported number 2, did a wingover turn directly over the video camera on the ground and headed Northeast on the final 38 mile leg. I was now only 4 seconds behind the KR-2. Dean reported pylon 2 and I was momentarily stunned that he had caught up 6 or 7 seconds. I looked back and saw, to my relief, he was reporting about 1/2 mile early, so decided to keep up my engine cooling routine.

I caught and passed the KR-2 about 5 minutes later - under a black cloud and a truly torrential downpour of rain. I could see the cell coming, which is common in Florida. Knowing that Ed Sterba had a spare prop, I decided to give the urethane leading edge a true test. Six minutes later at W.O.throttle, I emerged into clearing air, made a final turn and passed the finish line. The prop was still there and showed no rain damage. I had to wait off to the East about 15 minutes before returning because the field went IFR just behind me.

After the field cleared there was a big backlog of arrivals. The controller lined up a Beechcraft A35, the Tailwind, my Sonerai and the other Tailwind and got all four of us to touch down at the same time on the same runway in trail and the rollout was nicely spaced! He said that we had made his day!

Dave Rawlings
530 W. Helen Rd.
Palatine, IL 60067



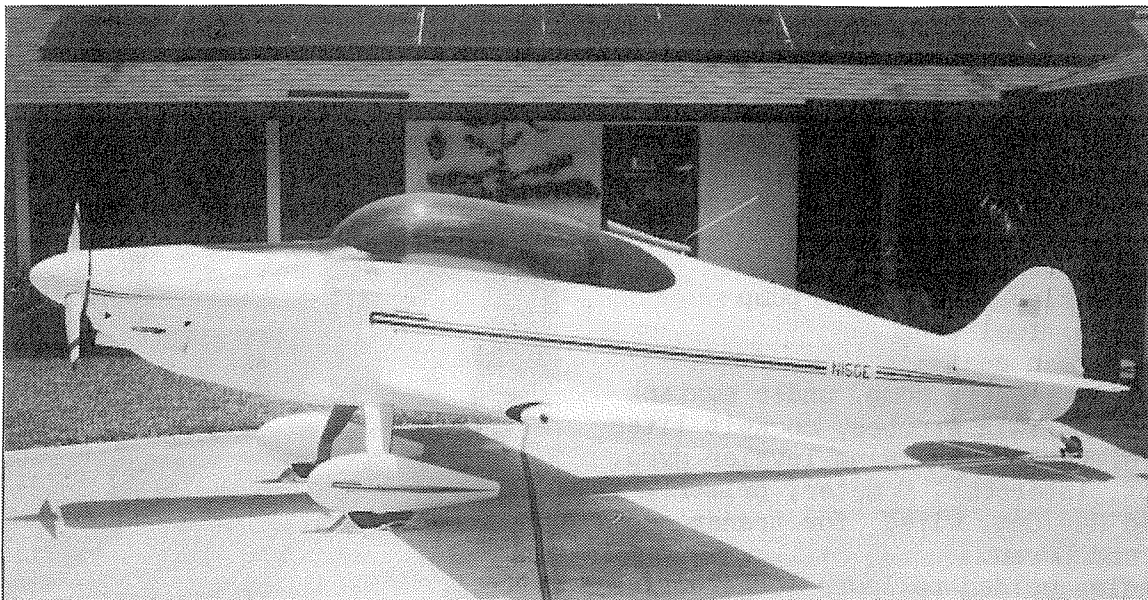
Al Bertelmann's Sonerai at Sun N Fun

Plastic Fuel Quantity Line

Clyde Schnars writes:
10435 Turner Rd.
Roswell, ga 30076

I just completed an annual on my Sonerai. During the inspection I noticed the clear tubing for the fuel sight and vent lines were somewhat discolored and were very brittle. When attempting to remove the sight tube from the top fitting on the tank it snapped with very little movement. If this line should rupture in flight it could get real exciting and possibly ruin your day. Sonerai owners should check the sight gauge and replace it if it has become brittle. I was able to change my sight tube without even draining the tank. I did it by first removing the tube from the top and then routing the new tube down to the point where it attaches to the bottom of the tank. By putting a pan under the tank and slowly sliding the tube off - and a quick finger to cover the fuel fitting - I probably didn't lose more than an ounce of fuel. I then slid the end of the new line on the fitting and tightened the clamp.

Ed's Comment -- Clyde didn't let us know if he was in level flight or a constant bank turn when he was changing the fuel line, I find it much easier to maintain level flight for this type of maintenance. I know it is a fine point, but I feel an important one. Also, if you should decide to drain the tank to do a the plastic sight and vent lines it is a good time to lubricate your fuel valves if they are the type needing the Fuel-Lube grease.



A Letter from Gary Eichhorn
4680 Glenridge Tr.
Stuart, FL 34997

Dear Ed,

Well it's done! Sonerai IILS #0065, N15GE was declared finished on May 15, and went on the scales the same day. That was 4 yrs. 5 months after I purchased the plans and material kits. I didn't keep track of my building hours, but I'd guess it's somewhere around 2000 hrs. Like most builders, I'd work on it when I had the time - and just kept plugging along.

Emily and I realized after talking to many Sonerai owners that most Sonerai's were nose heavy and therefore needed varying amounts of tail ballast. Not wanting this, I did some CG calculations and decided to move the firewall 3" aft. I figured this would help in 2 ways. First, it would move the engine CG 3" aft and secondly I could use the heavier and longer Revmaster engine under the standard cowl.

Somebody up there must like me because this mod. worked perfectly! I am using the Revmaster 2100, CDI engine. The cowl fits and I require no fixed ballast in the tail. The only disadvantage is the 3" reduction in front seat legroom. I'm sure this would be noticed by tall folks, but I'm 6' and for me, the leg room is fine. I also shortened the main fuel tank 2" to give more room to the engine bolts. This cost me about 1/2 gal. in fuel capacity, but after the tank was installed I found that shortening the tank was not necessary.

My plane came in at 595.5 lbs. without oil. I have the standard Wal-Mart Harley motorcycle battery & solenoid in the tail and a #4 cable to the engine. That's it! No ballast and it's impossible to load the aircraft out of CG. I can have a 75# pilot, 2 gal. of main fuel and not be out of forward CG. I can also load a 225# pilot, 200# pass., full main and aux. fuel and 50# of baggage and not be out of aft CG or over the 1150 # G.W. (Ed see below) I could then fly all the fuel out of either tank and still land within C.G. Everything within these 2 extremes is O.K.

To cure ballast problems -- move the firewall aft. One more tip I found very helpful. I rigged the airplane using a very expensive (borrowed) laser transit. With this instrument, I was able to get everything within a 1/10" (waterlines, prop disc, dihedral, incidence, rudder post vertical, wing leading and trailing edges and wing tip to prop disc and stab. measurements). Also used it for wheel alignments.

I'm currently closing engine runs, system checks and taxi tests and will get final FAA inspections next week. Hope after all this fancy CG work it flies good. Only time will tell.

My Sonerai is a standard stretched low wing tail dragger except for the following mods or equipment:

✓
Revmaster 2100, dual CDI oil cooler, oil filter, geared started, 25 amp alternator, mixture control and carb heat.

Warnke 56x50 prop

Gravity and elec. fuel boost pump

Main and Aux. fuel tank

Toe brakes rear seat

18 x 18 x 14 baggage comp. under aux tank

Nav, landing, twin strobes, cockpit lites alt., a/s, vert. speed, wing leveler gyro,

voice act. intercom., G meter, primer

Hand held Nav/Com, wired for transp. and encoder and Loran.

Lift handles welded to lower longerons

Pitts type elevator trim tab

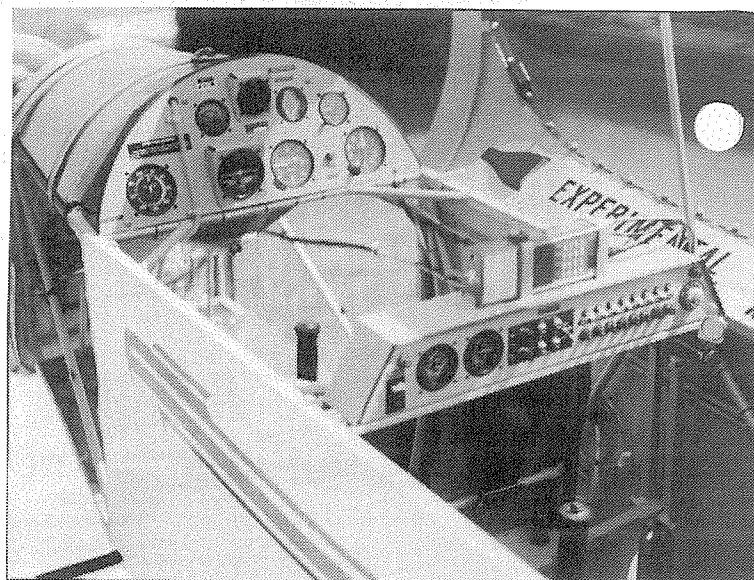
Wing walk-way and fire extinguisher

Hope to see you at Oshkosh 90. I'll have the Sonerai at Sun N Fun 91 for sure.

Ed's Editorial: Sounds like you have a well equipped Sonerai, Gary. I have my front rudder pedals disconnected with quick release pins most of the time since there are very few passengers who can dance on the pedals as well as I feel I can. And I really don't care for any help with those sensitive little beasts during T.O. and landing. They also are out of the way when my 6 gal. aux. tank is on the front floorboards. All of this is to try to see if 3" less leg room up front would be a problem. Of course in the Stretch Sonerai, you start off with 6" more than the rest of us have so it sounds like a reasonable compromise. For those of you who haven't sat in a Stretch the normal 6" extra makes an incredible difference.

As to flying at the 1150 lbs. gross weight, I would be careful to approach that limit slowly. I'm not sure if you included the full main tank in your empty weight. (I came up with 1178# loaded.) You have the same wing area as my standard Sonerai II 1850, 200# more is quite a load increase. Do some rate of climb, take-off run testing on warm days to see what effect a 150 lbs. passenger makes. My rate of climb gets cut in half.

It sure looks great in the photos!



Gary Eichhorn's cockpit and panel. They just keep getting better, but you have to watch your weight in these little airplanes. The bigger engines help.

Kline-Fogleman Airfoil

by Kel DeVries

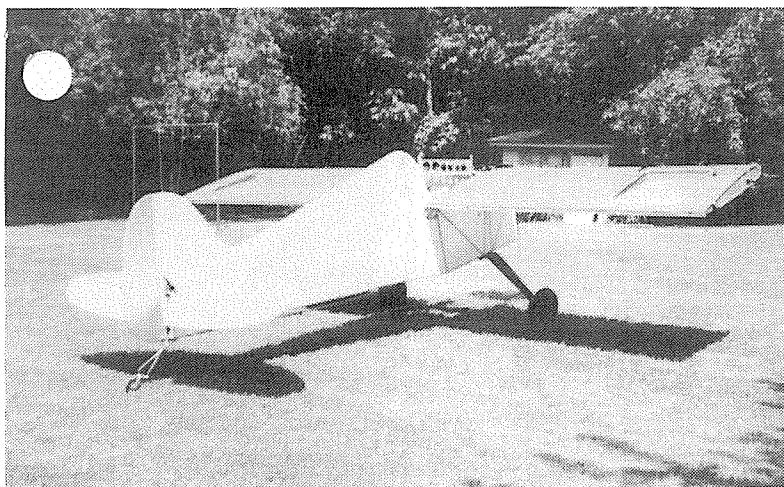
3239 Brooklyn SE

Grand Rapids, MI 49508

Dear Ed,

I have received several inquiries concerning the airfoil on my custom Sonerai, printed in the March issue of Sport Aviation. The idea behind the airfoil is to delay the boundary layer separation that occurs at high angles of attack, thus lowering stall speeds, and landing speeds. The Kline-Fogleman airfoil is not a specific airfoil, but an airfoil concept, which could be adapted to almost any airfoil, dependant only on construction constraints, so as not to lessen the structural strength of the wing.

The principal that is behind the concept is that the areas that possess the 90 degree "discontinuity" area, produce a lower low pressure area than the rest of the top surface of the wing.



The line-up of Sonerai's at Sun N Fun 90

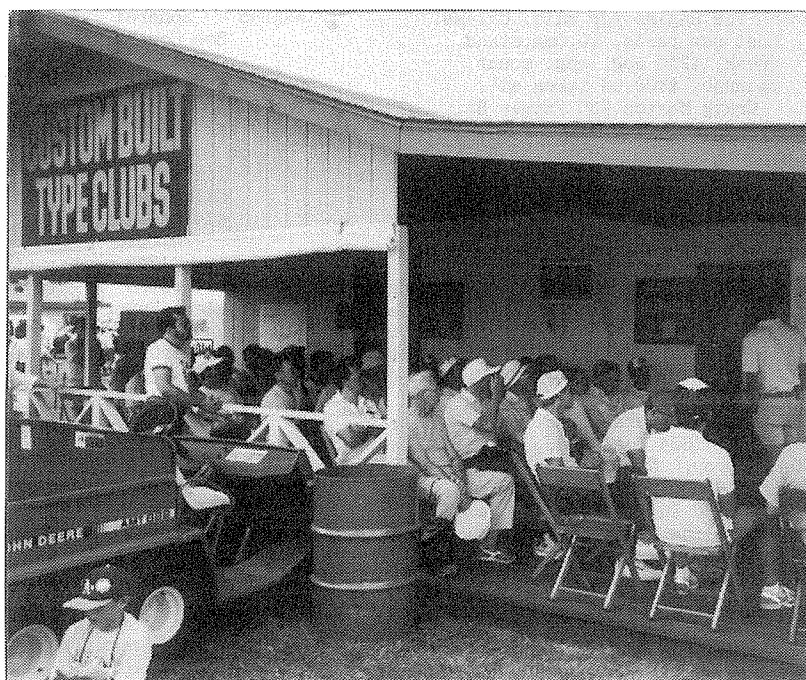


The airflow in this portion of the wing travels a longer distance, since it tends to follow the shape of the cut-out. This then delays the amount of boundary layer separation and a higher angle of attack can be had before lift becomes less than weight. Stalls should be mild since the loss of lift would be gradual, in my case the inboard portion stalling first, the outboard cut-out portion last. My wing contains no washout, so the test data does not have to take this into account.

This aircraft started out as a Sonerai II midwing. However, after an engine failure on takeoff, the resulting landing and going around with a "Jaws" tool, it required major repair. I learned that Monnett was not going to be around to supply parts, so I decided to rework it to accept a new wing, which I could modify to test the Kline-Fogleman concept. No test data exists as of yet, as to the performance of the concept, but it is well worth checking into. Who knows? If it works well, it might become useful.

Of interest is the fact that the concept has two patents, held by Kline and Fogleman, who possess the only data concerning it. To contact Dick Kline for more information, his number is 1-914-968-0176. If you have any questions regarding this project, please feel free to call me at 1-616-241-5365.

See you at the Sonerai Meeting on the Flight line at Oshkosh, Sat. at Noon.



FRED KEIP PD 90
11428 SIX MILE RD
FRANKSVILLE WI 53126

To:

414-728-1367
Delavan, WI 53115
412 S. 5th
C/O Ed Sterba
SONERAI NEWSLETTER
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Sonerai News



WANT ADS

Econo Vee Engine for sale, disass.
most new parts, 90.5mm, stand.
crank, 4216 mag., eng. mount,
spinner, \$900.00 takes all.
Craig Morton 200 Pitman St.
Nacodoches, TX 75961

Wanted--- Monnett ABS Wheel Pants can be
new, used or slightly damaged
Bob Schank 35 Clarence St.
Belleville, MI 48111

For Sale -- Sonerai IILS 2180 Monnett
Conv., 55 hrs. TT, Exc. workmanship, needs
prop, canopy, minor tail damage. \$5500.00
Larry Hurley 2153 Foxhill Dr. Apt 11
Grand Blanc, MI 48439 313-695-0414

For Sale -- Sonerai II midwing, taildrag-
ger, Hapi 1834 dual ign., Ellison T-Body,
Sterba prop, Narco 830, Loran -- 360 TT
Asking \$6000.00 or trade on T-Craft etc.
Fred Kugel 810 Kensington
Celina, OH 45822 419-586-4956 ev.

For Sale -- 1/2" Monnett Landing Gear
and Monnett Tailspring
John Symons 4933 Lowry Ct.
Union City, CA 94587
415-471-5930

Wanted -- Sonerai I for Formula Vee
Bob Cowart Rt 1 Box 1346 A
Columbus, TX 78934

For Sale -- Unused Son. II Main Fuel
Tank -- \$150 also Aux. Tank \$125
or Both for \$250
Tim VanAckeren 8039 W. Howard
Milwaukee, WI 53220
414-546-0986

For Sale -- 1700 cc Monnett VW Engine
w/ Electro X, tuned exhaust, oil
cooler, Super-carb, Slick mag,
spinner a/ prop from Q-2 77 hr TT
\$ 2650.00 complete
Bill Slattery 17119 Wentworth
Lansing, IL 60438

For Sale -- Diehl Supercase \$80, late
mod. Type 1 Case \$80, Ritz 54x36
hrs TT, rebuilt 2020 VW engine,
prop drilled for G/P hub \$100,
Set Azusa mech. brakes \$30.
Stewart Bergner 6015 Brentwood
Arvada, CO 80003

For Sale -- Sonerai IIM, original two
seat, midwing prototype, NZMX, 730
hrs TT, rebuilt 2020 VW engine,
recent annual by certified A&P
mechanic. \$6000 or best offer.
Gilbert Polnow 205 S. Eagle St. #10
Oshkosh, WI 54901 414-231-3479

Wanted to Buy -- Tubing Kit for Sonerai
either II or IILTS, also spars and
ailerons
Mike Drake 414 Asharoken Blvd
Bayshore, NY 11706

For Sale -- Sonerai II Mid-wing 1700 VW
Alt., Strobe and Nav. 60 hrs TT
Ron Pfeil W 199 N11525 Rosewood
Germantown, WI 53022
414-628-4716

For Sale -- Sonerai II LT 95% complete
Hapi 1834 dual ign., Great Am. Prop,
Trade up or down f/ flying airplane
\$ 6500 or best offer
Roy Johnson 26 Raleigh Rd.
Framingham, MA 01701

For Sale -- Sonerai IIL project on gear
2180 Monnett VW, canopy, cowling,
Sterba prop. Everything but wings.
No time to finish. Best offer over
\$2200.00 Wisconsin.
Phil -- 715-276-6476

Wanted -- Electro-Vee Magnet Ring
Mike Huff Rt 1 box 193
Fair Grove, MO 65648

For Sale -- Sonerai IILT almost ready to
fly, will finish and sell with special
roll-on trailer, or trade for something
slower Up or Down, 2 place. My equity
\$8000.00 Claude Icard P.O. Box 274
Rutherford College, NC 28671
704-874-2033