

SONERAI NEWSLETTER

OCT-NOV-DEC 2000

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(AFTER 6PM CST)



N99FK AT AIRVENTURE 2000

Here's your intrepid editor's Sonerai III parked on the line at the Oshkosh AirVenture 2000. This was the thirteenth year that she's been to Oshkosh. Interestingly, the custom-built parking crew moved us to the north side of the blue arch, only one row away from the old Sonerai row at the jog in the fence. Next year, I'm going to ask for that row to park Sonerai's and Sonex's. Just for old time's sake.

A LOOK AT OSHKOSH 2000

Every year I schedule my vacations around the two big EAA fly-in's, Sun'N'Fun and Oshkosh, and this year was no exception. I allotted 7 vacation days for the big "O" and used 6, and they were days that I enjoyed immensely. For me Oshkosh is always a good time, even with all the "political" junk going on, because I ignore all that stuff and do Sonerai's and all that good airplane stuff. For sure, the food prices were way too high, and it certainly was way too commercial, but that's easy to ignore when you focus on the good stuff. Let me give the highlights of my week:

Sunday, July 23: Since I had taken the entire week off for the event, I decided to come up on Sunday because I didn't feel like staying at home and mowing the grass. (It could wait another week.) I had driven up the weekend before with my friends Fritz and Maggie Jorgenson, and Carl and Pearl Schultz, to set up our camp site in Camp Scholler. So, my housing was already there. The weather flying up was gorgeous, with partly cloudy skies, light winds, and cool temperatures. The Fisk approach was uneventful (unlike last year) with a landing on 36 left and a long taxi to parking. EAA moved the Auto Engine row to the north side of the Big Blue Arch this year, so there was some initial

Sonerai's at OSH 2000



Dave Rawlings Sonerai II "Sporty"



Larry Spicer and his Sonerai II



Jim Phillips' Sonerai II

confusion about where to park, but it was quickly sorted out and I was parked.

Monday, July 24: I spent about half the day relaxing around the campsite, waiting for Carl and Pearl to show up to help them get their rig parked and set up. (They are 82 years old. Carl is EAA #2.) When they didn't show by 1:30 PM (they got there at 2:00), I wandered out on the flight line to check on the airplane, and see if Steve and Linda Bennett needed any help setting up their booth in

Building C. By the time I got there, they were done.

Tuesday, July 25: The day was spent cleaning up the airplane, watching the arrival circus, and wandering around watching everyone else scramble to get everything set up. It's really interesting to watch how everything comes together out of all that chaos.

Wednesday, July 26: Opening Day! As I did nearly everyday, I spent the morning and early afternoon with the airplane, talking to many of you fine folk. This is the part of the convention that I enjoy the most. In fact, as it usually turns out, I didn't really see much of the rest of the convention until the last Sunday when I realized I was going home the next day.

Thursday, July 27: Forum Day! EAA has gone to great lengths to improve the forum area by building new permanent pavilions with audio-visual aids and all that good stuff. This is the first year that we got to use one. It was nice. There were about 35 to 40 folks there, and it's the first year I've been seriously heckled. Apparently, the gentlemen didn't think the Sonerai was a good design because it didn't have a big enough engine or large enough wing. Perhaps an RV-4 would have been a better choice. I thought the forum went well, with lots of good questions that I managed to have good answers for (At least I didn't have to make up too many.).

Friday, July 28: Tour Day and Monnett Party Day! I took my first real look at the entire convention this year by giving my 15 year old niece a tour of the place. My sister and her family live in Oshkosh, and this year my niece got a part time job working in one of the EAA merchandise tents. She wanted to see everything at the convention, but her mom wouldn't let her go alone, so Uncle Fred got the honor giving the tour. It was fun, and I probably wouldn't have gotten down to the ultralights otherwise. After the tour, I hooked up with Steve and Linda, and we drove over to the northeast side

Sonerai's at OSH 2000



Bob Mahieu's Sonerai II



Don Bly's Sonerai IILT

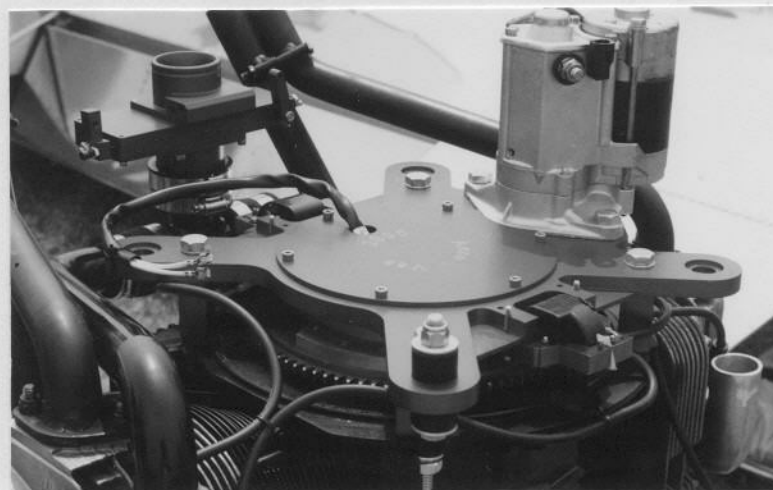
of the airport to eat pizza, drink beer, watch the airshow in the really hazy, scuzzy weather, and wait for the party to start. As has become the norm, John, Betty, Jeremy and the gang threw a very nice party. And this year they had a band from the Bahamas called Sagittarius. Great Bahamian-style, funky music.

Saturday, July 29: Homebuilt Review Day! Earlier in the week, Garry Kingma, chairman of the Homebuilt Review, asked me if I would be willing to fly in the Review on Thursday. I said that I would like to, but the Review and my forum were at the same time, so I couldn't. I suggested that he talk to Dave Rawlings, so Dave flew on Thursday. Well, it turned out that Garry was a Sonerai guy, and since the Homebuilt Review was actually a two day event, he asked me to fly in the Saturday high-speed airplane portion (Thursday was the low-speed event). So, I got to fly Saturday. (The Sonerai was the only airplane represented on both days.) The Review consisted of 14 airplanes,

ranging from my Sonerai to Jim Rahm's V-8 powered Lancair IVP, doing individual fly-bys during a 20 minute period. The airplanes were staged a couple of hours before the designated show time, then at the designated time we were launched at 45 second intervals to make the take off pass, then one full length pass, and then come around to land. It was great fun, but I was only in the air about 6 minutes. That evening after prompting from Sonerai IILTS guys Allan Goins and Chuck Orange, I partook of my first EAA Homebuilder's Dinner. Good food and good company.

Sunday, July 30: Try to See Everything Day! Like I said earlier, I ended up trying to see everything I'd missed so far, because I was going home Monday. I ended up spending some time at the Sonex booth talking to John, Betty, Jeremy, and Pete Buck. Pete talked me into trying the Sonex on for size, and to be honest, if I wasn't working on my Wag-a-bond, I'd be sorely tempted. I'd probably stick with VW power, but the Jabiru

3300 would be a blast. I also spent some time looking at the new VW conversion being tested on the Sonex tri-gear. (See the photo elsewhere.) The engine uses a Great Plains long block with a Force One hub, but has a new mount and a new carb. The mount incorporates a starter along with a new fixed-timing ignition system similar to the one used on the Jabiru (and Briggs and Stratton



The New Aero-Vee Mount and Carb

lawn mower engines, too.) that eliminates the magneto. It will be available with the Diehl mounting hole pattern. The carburetor is a floatless, slide-valve unit similar in operation to the old Posa, but with all the Posa's bad points engineered out. The slide is machined out of Delron. The needle is turned from square stock and fits in a square hole in the slide so that it can't turn. And it has a mixture control and built-in throttle and mixture cable supports. Very neatly done.

Monday, July 31: Going Home Day! Easier said than done. The weather, which had been kinda scuzzy most of the last half of the week due to a big low sitting just south of Chicago, turned bad Monday morning. We had low clouds, fog, and finally, rain. I had packed up my tent and sent it home with Carl and Pearl, and hoped I could fly out later in the day. But a check with the briefer at Flight Service wasn't too encouraging. Fortunately, I ran into Dale Severs, former Sonerai guy and now Hatz biplane guru, at the FSS, and he had a ride home to Chicago. He offered to take me along and drop me off at Burlington to pick up my truck. How could I say no? I didn't like the idea of leaving the Sonerai up there, but figured I could get a ride back up later in the week when the weather got better. So, home we drove.

Needless to say, I brought the airplane home on Thursday, after bumming a ride up to Oshkosh with the folks from American Champion. They had the same weather problem on Tuesday, forcing them to bring some airplanes home on Wednesday, and the remainder on Thursday. Of course the weather on Thursday was very nice, and the trip home uneventful.

Finally, I'd like to thank the five guys who brought their airplanes to the convention this year. They were:

Dave Rawlings - II-2020
Bob Mahieu - II-A65
Larry Spicer - II-2180
Don Bly - IILT
Jim Phillips - II-2180

As you can see I've included photos of their machines. Now, it's time to start thinking about next year's vacation schedule and Sun-N-Fun 2001.

SONERAI NEWS

- First Flights: Got a note from Bob Flippo, whose airplane graced the cover of the July-Aug-Sept 2000 issue. He said, "First flight on 7-17-00; 1hr 24mins; takeoff a little dicey, 3-point landing OK: had fun. Have to fix a few

little things. Now to fly off 40 hrs or so." *Congratulations, Bob.*

- Great Plains Aircraft Supply News: Steve and Linda are now offering several new options for those of you looking to buy wing ribs. The first, and cheapest, is a complete set of laser-cut rib blanks with no forming done, and a full-size wooden template to make your form blocks from. The second is the same as the first but with the stiffening beads and lightening hole flanges bent. And the third is the same as the second but with all of the flanges bent. All that will be required to finish them is to straighten and flute the flanges. If you're interested, give them a call at 402-493-6507.

- Back Issues: **Sonerai Newsletter** back issues are available in two forms. A 3-1/2" diskette which contains most of the significant newsletter articles published by Ed Sterba from 1987 through 1995 is available for a mere \$10.00. There are also hardcopy back issues for \$3.00 each. I have the last two issues from 1994, and all of the issues from 1995, 1996, 1997, 1998, and 1999. If you want any of the above, send me a note requesting the ones you want and a check for the correct amount. The postage is included.

CARB/STARTING PROBLEMS

I got the following letter from Fred DeLacerda back in December '99 about problems he was having getting the engine in his Sonerai I to start and run. My answer follows.

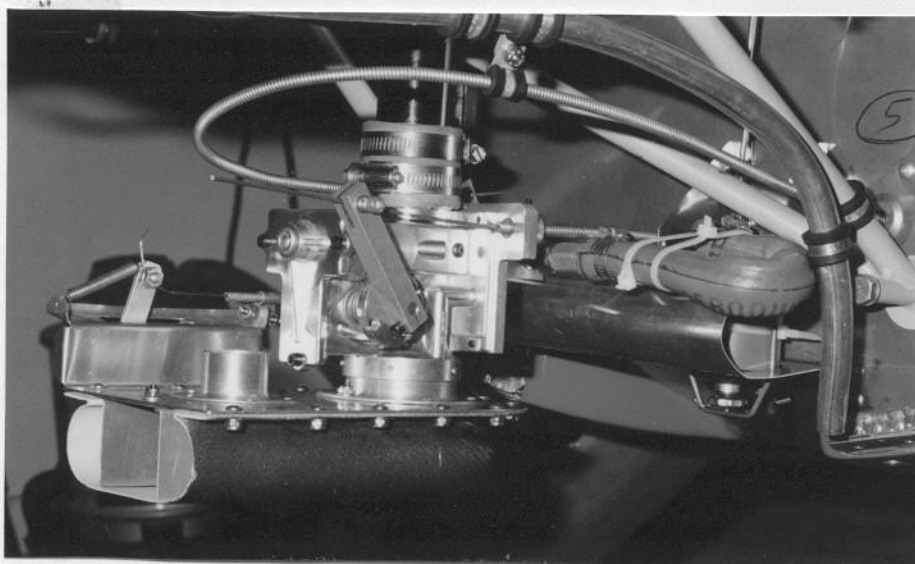
After many years of work and effort, I have finished my Sonerai I. While it is not award winning workmanship, it is better than average, and cost far more than estimated. So you can imagine my frustration in not being able to get the engine to run.

The engine is a VW 1600 cc purchased complete from Great Plains. Supposedly it was test run before I received it. Nothing has been done to change, modify, etc. the engine since I received it.

The carb is a Rev-Flow purchased from Team 38. Enclosed is a photo of the carb set up. I have attempted to start the engine using the procedure recommended by the manufacturer of the carb: throttle cracked, mixture rich (fuel flows into carb), pull the prop through 7-8 times, mixture lean, mag on, pull prop to start. If the engine starts, it will run for 2-3 seconds, runs smooth and then quits by winding down. It takes much effort to get it to repeat this, but each time is the same.

A primer was installed directly into the left (view from the cockpit) intake manifold. When primed in this manner, the engine will not start, in fact, not even fire. Combine the primer use and the carb manufacturer recommendations, the engine does not fire. It would seem it should at least fire if the direct primer is used.

The mag, harness, plugs (Champion REL37B, gap .016") are working. All are new purchase. Mag is timed with the right front cylinder being 1 and the left front being 3. Number 1 timed for 28 degrees BTDC. There are no obstructions (rag, tape, etc.) in the induction system. Fuel flow to the carb is nearly twice what is recommended. Carb and gascolator are level and below the tank outlet. Fuel comes out of the carb if the mixture is rich and the throttle cracked. Valves have been checked and rechecked to be .006".



Fred DeLacerda's Rev-Flow Carb Installation

The EAA tech advisor in OKC was of no help whatsoever. An A&P has looked the system over and checked all the things mentioned above to see if I missed anything and found nothing wrong.

It does have a secondary electronic system but this cannot be used for starting as the timing is 2 degrees ahead of the mag timing.

I need help. Can you give me any suggestions????? I have simply run out of options. Presently, I do not have an airplane, only a display monument.

Sincerely, Fred DeLacerda, Stillwater, OK

Dear Fred: I've read your letter several times now, and given myself a few days to think about your starting problem, and here are a few thoughts:

1. *I've found that the VW engine, as we configure them, is very sensitive to prime. This is particularly true, when the engine is hot. But even on a warm day with a cold engine, it is very easy to over-prime. What I have found to work when it is "flooded" is to turn off the mag, move the throttle wide open, and prop the engine backwards 5 or 6 blades, then return the throttle to the cracked position, and turn on the mag. It will usually fire in 2 or 3 blades.*

2. *Having the primer installed on only the LH side of the engine at the intake manifold may be flooding that side of the engine, while the RH side is probably running very lean. If you are spraying into the manifold piece bolted directly to the cylinder head, raw fuel is probably being drawn directly into the cylinder, which is way too rich. If you really need a primer, I would suggest adding another point to the RH side, or moving it to the crotch in "Y". Moving the primer point further away from the valves will allow time and space to get a better fuel-air mixture. Actually, I'm surprised a primer is even necessary with the Rev-Flow, since I didn't need one with a POSA (see Item 3.)*

3. *When you describe the Rev-Flow starting procedure, it sounds very much the same as the POSA starting procedure. I have never had the opportunity to work with a Rev-Flow but I had a POSA for 3 or 4 years. You stated that you started with the throttle cracked, mixture rich with fuel flowing into the carb, you pulled the prop through 7 or 8 blades, then pulled the mixture lean, turned the mag on, and pulled until it started. (Hopefully.) When it started, it ran for 2 or 3 seconds, then died. With the POSA, I would crack the throttle, turn on the gas until it ran from the carb, and turn off the gas. Then, I would pull the prop through 4 to 10 blades depending on how cold it was (the colder the air temperature was the more blades I'd pull), turn on the mag, and pull until it started (usually 1 to 4 blades). As soon as it started, I had to turn the gas back on to keep it running. Your description of the way it*

quits sounds like it is running out of gas. Also, you make no mention of moving the mixture control back to rich once the engine starts running. I wonder if that might be the missing step in the starting procedure?

4. Sometimes, the hard part is trying to determine if you are over-primed or under-primed, particularly when the engine is cold. When in doubt, assume it's over-primed and back-prop the engine, if it doesn't start, or even "pop", after 5 or 6 blades, then it is probably under-primed. Then repeat the priming procedure. Also, if the engine gets really flooded, and the plugs get wet, you'll have to remove them and dry them off before it will start.
5. Otherwise everything else that you describe sounds like it's where it's supposed to be. A couple of other things to check though: Make sure all the hose joints in the intake manifold are tight, and make sure the cylinders are well oiled. I have a friend who struggled for weeks with the carb on his 1835 VW until he found one of his hose joints on the manifold leaking. Once he fixed it, his carb problems went away. And I struggled getting my engine started the first time because the cylinders were so dry that the engine couldn't fire one cylinder strong enough to get to the next cylinder. Once I put a little oil in each of the cylinders, it started almost immediately.
6. Finally, I reviewed the photo you sent, and it looks like a really clean installation. The only thing that concerns me a little is the 180° loop in the fuel line from the gascolator to the carb. A loop like that will restrict the flow rate a lot, but you say that you have twice the required flow rate, so I guess that's not a problem.

I hope this information is useful. If I can be of any further help, let me know. Good luck.

(If any of you guys are running the Rev-Flow carb, please drop me a note with any comments on my answer, and/or suggestions based on your experience.)

A LETTER FROM RON WRIGHT

I got this letter from Ron Wright back in December 1998. Believe me, I answered it right away.

The Sonerai IIL project I recently purchased came with a new POSA Ultracarb with a float bowl. (GREAT, as I used a POSA Supercarb on my Cougar/Lycoming 290-G for over 3 years with no problems, except "rich" running during taxi, which

could be leaned out.) My question: Does anyone have any info on how to set the POSA Ultracarb? I did not get any instructions with this one. HELP!

Next question: The wings I have only have 10 ribs in them (each); from outboard end of the wing tip to the rib at the root of the wing, which is 1-1/2" in from the edge of the wing skin. Am I missing a rib somewhere? Is there supposed to be a "false" rib at the root end so as not to have this 1-1/2" overhung wing skin? What type of material is used to seal the gap between the wing skin and the fuselage side?

Last question for this session (yeah, right...): A brand new HAPI 1835 cc engine came with this project. It has never been run. What are the suggested "break-in" procedures?

NOW, maybe something for the newsletter! My project came with a trim system installed that is, I think, pretty neat. (Did I say that?) Basically, this system allows one to adjust the entire horizontal stab up/down approx. 3" (Max up/down travel allowed is 3" with stops at the top/bottom of travel arranged on both sides of the fuselage just ahead of the horizontal stab.), ala the system used if one had a jack screw mechanism back there in the tail. Anyway, this one uses a friction-tightened lever, located at the mid-thigh area on the left fuselage side below the throttle unit. This lever has two s.s. cables running/supported along the interior left fuselage side, back to a 5" round disc, attached just below/ahead of the horizontal stab leading edge. A vertical rod, attached to the disc, goes up and attaches to the stab's leading edge. Push the cockpit lever forward, the rod goes up, pushing the stab L/E up, giving nose down trim. Pull the lever back...etc. It looks like it should work. Flight testing should tell the "tail" (pun intended). See the attached drawing.

Ron Wright, Peoria, IL

Dear Ron: Thanks for your letter, and I hope Santa brought you some Sonerai stuff. Let's see if I can give you some reasonably intelligent answers to your questions:

1. Info on how to set the POSA Ultra Carb? I assume that the carb you're referring to is the HAPI Ultra-Carb, which is the carb I've been using for several years now. I've attached a photocopy of the **Installation and Maintenance Procedures** that I received with my carb. The only potential problem I can see with setting up your carb is if the needle is not correct, I'm not sure where to buy alternate needles since HAPI has been out of business

for quite a while. HAPI was bought by Mosler, which was bought by TEC, which, I believe, is now Team-38. They might know where to get them. (Also, I believe the original brand name on the carb is "Lectron". It is probably an after-market carb for a motorcycle or snowmobile.)

2. Ten rib wings? The Sonerai II's have had three basic wing designs. The original, or "A", wing had nine ribs in each wing panel. The rib spacing from the inboard edge of the inboard skin is 2"/10"/12"/12"/12"/11-7/8"/11-7/8"/11-7/8"/11-7/8". There are LH and RH ribs so that all of the rib flanges in each wing (except the tip ribs) face the fuselage. This wing can have the spar modifications installed, or it can be unmodified.

The next wing was the "B" wing which had eleven ribs in each wing panel. The rib spacing from the inboard edge of the inboard skin is 2"/6"/8"/8"/8"/8"/11-7/8"/11-7/8"/11-7/8"/11-7/8". This wing also had LH and RH ribs. This wing had the improved spar from the beginning.

The third, and final design, is the "S" wing. This wing is essentially the same as the "B" wing except all of the ribs are LH ribs. In other words, all of the rib flanges point toward the LH side of the airplane.

My guess is that you have an original "A" wing with an extra rib added, perhaps for a wing walk. The only way to tell which wing you have is to measure the rib spacing. Also, as you can see from the spacing dimensions, there is about 1-1/2" of skin overhanging from the inboard-most rib. This was done to allow the trimming of the skin to match the fuselage fabric, or to allow the attachment of an aluminum gap-filler strip. To protect the fuselage fabric from the aluminum wing skin, install a rubber u-channel over the edge of the skin. It has a 1/32" slot and is 3/8" wide. It is available from Aircraft Spruce.

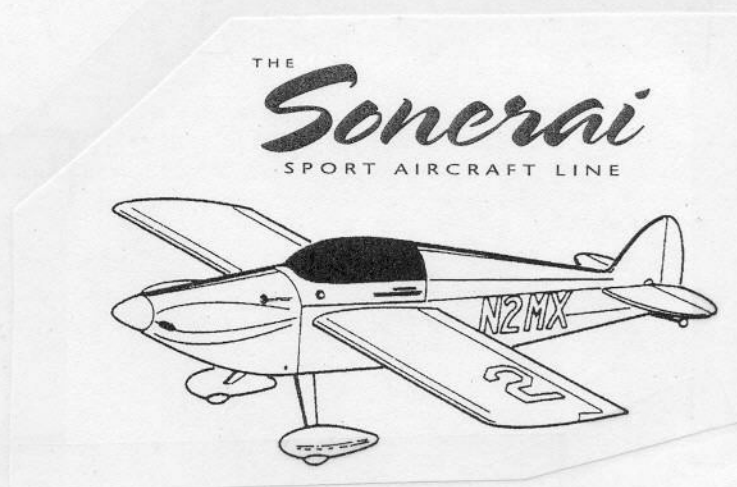
3. HAPI 1835 engine break-in procedures? I checked with Steve Bennett at Great Plains Aircraft Supply, and he recommends the following:
 - a. Put a relatively light weight oil in the crankcase. Either a straight 20 weight or a good 10W-30 is best. Do not run aviation oils. They are too heavy for the small oil galleries in the VW engine.
 - b. Run your engine for three periods of ten minutes each at not less than 2500 rpm.

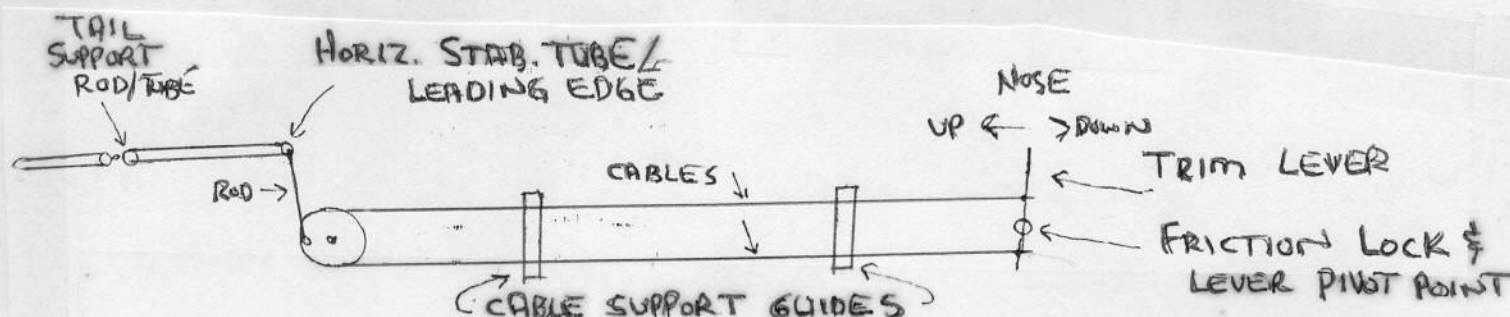
Allow the engine to completely cool between runs, and check and adjust the valve lash after the first run. Be sure the engine is facing into the wind, and keep an eye on the cylinder head temperatures.

- c. After the final run and the engine is cold, retorquer the head nuts, and reset the valve lash. Then, change the oil, using a good brand of 10W-30, and go flying.

One thing I'd also suggest, is to pre-oil the engine prior to running it the first time to make sure there is oil in all of the galleries and bearings. This can be done by pumping oil into the engine at the oil pressure port on the front RH side of the engine. There are several ways to do this. The one that I used was to modify an old VW windshield washer bottle (which used air pressure from the spare tire to propel the washer fluid) with an outlet valve and a hose connected to the engine. You put a quart of oil in the bottle, pressurize it with compressed air, and open the valve to blow the oil into the engine. It works great.

And thanks, for the schematic of your trim system. I'd like to see photos of the actual installation. I am a little concerned about its sensitivity, though. I have a jack screw trim system of my own design, and I've found that only 3/8" to 1/2" of total movement of the stabilizer leading edge is required to deal with the extremes of the loading conditions. (Normally, mine doesn't move much more than 1/4" from a full tank of gas to minimum fuel.) Depending on the actual geometry of your system, you may need to desensitize it to make it easy to adjust trim without over adjusting.





Ron Wright's Trim System Schematic

WANT ADS

These Ads are provided as a service to you, the subscriber, and are free of charge. I only ask to be informed when the Ad is no longer valid, and needs to be removed. Thanks.

TAPER PIN REAMERS FOR RENT:
Brown & Sharpe #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)231-2804

COMPLETE SONERAI RIBS AVAILABLE FROM QUALITY RIBS L.L.C. Orders taken once per year in September. (602)231-2804

SPECIALTY WELDING CAN SUPPLY YOUR COMPLETELY WELDED SONERAI FUSELAGE AND OTHER WELDED COMPONENTS. Contact Greg Klemp at *Specialty Welding*, W6461 County YY, Neshkoro, WI 54960, (920)293-8089 or (920)293-8007 (Fax)

For Sale: #5 B&S taper reamer, \$25; Hamilton vertical card compass, \$200 (new); 40-169 mph airspeed (yellow tag), \$125; altimeter (yellow tag), \$150; Mac trim system, \$125; fuel pressure gauge, \$65 Dick Morrow, (309)755-1495 (1/00)

For Sale or Trade: Older Sonerai kit - tack welded two place low wing taildragger fuselage, all fiberglass, new canopy, etc. Want motorglider for 220 lb person with broad shoulders and beam. M. Lee Wachs, call nights Pacific time, (707)463-0467 (1/00)

For Sale: Used Bogie tailwheel and Monnett tailwheel caster with 2-5 1/2" springs (needs the chains) \$25.00, New unmachined Monnett "Electro X" casting \$100.00, Used Monnett Sonerai I fuel tank (needs cleaning) \$55.00, Used pair of axles, 3/4" shaft, 5 3/4" long \$4.00, Used fuel shutoff valve \$5.00, Used set of rudder pedals asm. with toe brakes (see Sonerai I drawing page 11 and 15c) \$20.00, Used Sonerai I torque tube asm, (see drawing page 5) \$40.00, New (4) 87.5 cylinders and pistons \$75.00. You pay

the shipping. Bob Schank (734)697-7057 (2/00)

For Sale: Sonerai IILTS w/ Great Plains 2180 cc, 95% complete, excellent workmanship, \$13,000. Chris Mullaney (301)872-9308 (2/00)

For Sale: Revmaster 2100 w/ dual Bendix mag, starter, Revflow carb, oil cooler, prop (56x45), approx 400 hrs, came off KR-2, \$2250, Doug Evenson, devenson@mindspring.com, (706)327-4601(H), (706)888-4602(cell) (4/00)

Wanted: 20 amp Syncro magnet ring for HAPI 1834 VW engine and 20 amp Syncro stator for same. Must be in perfect condition. Ken Christian (620)263-7937 (2/00)

For Sale: Plans for Sonerai II midwing. Also have Cassutt & Varieze. All Plans are complete, unused, & with newsletters, \$30 each. Joe Mayer (904)532-0292 (2/00)

Looking For: Sonerai I and Sonerai II or IIL. Both need to be well-built, nice & Clean. Roy Roberts (512)575-2744 (2/00)

For Sale: Sonerai I Project - Welded chromoly fuselage w/ horizontal stabilizer, elevator, rudder, supine aluminum seat, aluminum fuel tank, main landing gear, including additional components to finish either as trike or taildragger; wheels, axles, mech. brakes; elevator push-pull tube, rudder pedals, rudder cables, misc. control system components; plans, builder's manual, supplements, & instructions for installing optional nose gear. Entire project fits into a pickup. \$900. John Borra, 3327 Willow St., Hays, KS 67601 (785)628-0658, johnborra@media-net.net (4/00)

For Sale: Hand held radio power amp, Communications Specialist Inc. CS-10.

1/2 price off Chick Aircraft catalog. \$84.50. Boost hand held transmit from 1 to 10 watts. (602)231-2804 (3/00)

For Sale: 2180 VW with Force One prop hub, dual ignition, 0 SMOH, complete firewall forward from Sonerai II, \$2500, Fred Dube, (203)284-8642 or n99fd@webtv.net (3/00)

For Sale: Sonerai I Project - Std. Wing done; welded fuselage, tail surfaces, controls, on gear; 1600 VW w/ SuperVee mount; canopy; cowl; wheel pants; aluminum tank; \$5000 OBO, John Ricchio, (708)447-0448 (4/00)

For Sale: 2180 cc VW, 451 TT, 357 SMOH, POSA w/ mixture, oil cooler, Slick mag, 10 amp alt. w/ Monnett Electro-X, \$1900 OBO; Sterba 54 x 48 swept tip prop w/ spinner, \$100, Tony Castillano, (845)227-8527, tcastella@juno.com (4/00)

For Sale: New 5/8" Grove landing gear for Sonerai IILTS. Will sell or trade for Sonerai parts, Eric Venissat, (337)536-7225 (4/00)