

April, 1978

Dear Plansholder,

From the response we had to the Jan. & Feb. sale, there should be quite a few Sonerai's flying this summer. On some of the items we are just now getting caught up. As usual it's the landing gears and cowlings. Gears were the worst as aluminum of any kind is really getting hard to come by. Also they had some problems with the plainer at the machine shop which delayed them further. As for the gas tanks I don't know what to say. I can't even get in contact with the fellow that makes them to see where we stand. We've tried to find a new supplier, but nobody is interested in them at the price we need to have them made for, plus the ones we get now are really super.

Most of this newsletter will be devoted to corrections in the plans compiled from the letters and calls I receive. Before I get into them I'll give you a brief status report on the Monerai Sailplane. It has been flown, in fact John has been out to Colorado twice now. He has between 15 & 20 flights so far. It is performing very well. On the initial flights the elevator was very sensitive but it was easily corrected. The flaps and ailerons need some re-rigging and he is just finishing this now preparing for the last series of tests where he will try to determine all the Polar's. Next after that will be to install the power pod and take-off under its own power. We are still hoping to have everything completed by June. We do not have a firm price yet but the unpowered version will be right in the area of \$2,700.00. We still do not know what the engines and propellers will cost in quantity.

The following are corrections to the plans or extra hints to make building a little easier and keep me off the phone some. Also enclosed with this newsletter is a new correction sheet we had printed. This is in with the new plans, since we had to have some more printed. This should answer alot of questions as to how to attach the turtle deck cover, how to make the adjustable rudder cables and why you don't need to use shackles, and what to use for stringers besides the expensive hat section.

#### SUMMARY OF OTHER CORRECTIONS

- 1.) Drawing No. 18, new tail springs mount with a 5/16" through bolt and nut.
- 2.) Drawing No. 4, detail "C" of station 115 3/8 where tubing size #10 is shown, it should be #8.
- 3.) Drawing No. 6 at top of page the six 1/8" X 1 weld

3.) cont.

beads are to help fit the stabilizer when it is slid on over the tail spar. They are not there to hold the 12" piece of 7/8 X .065 in place. It will be retained in place when spar itself is welded to longerons.

4.) Drawing No. 11, spar material for horizontal stabilizer should be 1 1/8 X .035 and not 1 1/8 X .059 as shown.

5.) There is no such material in fuselage kit anyway. Drawing No. 12, Pivot Asm. - 2 Req. height should be 1 3/4". Width is as shown 29/32".

6.) Drawing No. 14, Spar carry-through structure the 3/4 sq. tubing should be .058 wall and not .035 as shown. There is no 3/4 X .035 in the fuselage kit anyway. This is already outlined on Drawing No. 20, the correction sheet. Drawing No. 16, on trailing edge of rear spar, rivets marked with heavy dots for center aileron hinge should be moved over to the right one rib so as to be in the center of wing.

8.) Drawing No. 17, bottom of page, dimension of aileron should be 96" and not 96 1/2" as shown.

9.) Drawing No. 20, correction sheet, center of page the aluminum engine mount stand-offs should be 2 3/8" and not 1 1/2" as shown. The one exception to this is if you have purchased an early cowling made by Rattray. These cowls were made short for some reason and require the 1 1/2" stand-offs. The cast ones we supply are 2 3/8".

10.) Drawing No. 3, rudder post and tailspring mount detail. The 1 5/8" at the bottom of the rudder post is a variable figure. Do not weld tailspring mount in until you have fuselage on the gear, so you can determine the angle the tailspring will come out, so it mounts nearly 90° to the tailwheel castor which should be parallel to the ground. Several people have welded it in exactly as shown and since the bonds in the tailsprings do vary a little the tailwheel castor wound up sitting at an angle with the nose digging into the ground. The dimensions for the rudder post 37 5/8" is not critical and more likely than not you will only get 36" or 37" of material. There is plenty of rudder and stabilizer area.

#### BUILDERS WORKSHOP

We will have another Sonerai builders workshop. It will be Saturday, June 3, 1978. 8:00 A.M. to 5:00 P.M. In the past we have held them over two days but we are going to better organize it and drop some of the unrelated material. There will be a \$10.00 charge and a limit of 50 people. If you plan to attend please call and let us know.

On Sunday, June 4, 1978 we will have an official introductory Monerai Seminar. This too will run from 8:00 A.M. to 5:00 P.M. and will have a limit of 50. There will be a

\$10.00 charge. If you would like to stay for this or just come for it, please call and let us know.

While I do not know the exact number, there are over 100 Sonerai's flying now including one in South Africa. I have received photos from many of you, but not even half of those completed, so the rest of you send me a photo. I have a real nice collection on our board in the lobby and will have them all at Oshkosh. Enclosed at the end of this newsletter is a small questionnaire. Even if you have sent a photo already and told me when your first flight was, please take a minute and fill this out and return it to me. I've never really started a separate file on the completed Sonerai's and want to do so now. If your so close you expect to fly yet this year, fill out the form now and then let me know when you fly and I'll fill in the date and any other info left blank. But please, even if you don't have a photo to send, get the form back to me.

PLEASE RETURN FORM BELOW:

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Sonerai I or II \_\_\_\_\_ Registration No. \_\_\_\_\_  
Date of First Flight \_\_\_\_\_ Hours Flown So Far \_\_\_\_\_  
Empty Weight \_\_\_\_\_  
Size of Engine and Conversion Used \_\_\_\_\_  
Make and Size of Propeller \_\_\_\_\_  
Cruise Speed and R. P. M. \_\_\_\_\_  
Static R. P. M. \_\_\_\_\_ Max R. P. M. in Flight \_\_\_\_\_  
Radio's Installed \_\_\_\_\_  
Any other Mods or Neat Ideas you have installed: (over)

We now have copies of "Engines for Homebuilt Planes" \$3.95. One-half of the book is on VW Engines, mainly our conversions, and the remaining is on small Cent. & Lyn. Engines.

P.S. Our new Spring Catalogue is now available, please send \$1.00 for postage and handling if you would like one.

Gregg

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## CORRECTIONS TO SONERAI PLANS

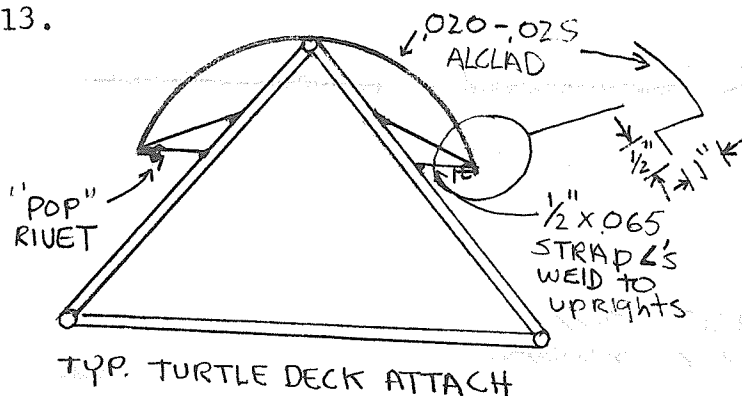
1. Drawing No. 6 - Section "AA" Stabilizer Leading Edge Bolts should read: 3/16" ID.
2. Drawing No. 9 - Wing hinge tube station 47 3/8" NOT 49 1/8". Also item 54 on drawing No. 2.
3. Drawing No. 9 - Front step and gear spacers 2024 T3 aluminum.
4. Drawing No. 12 - Rear spar carry-through should read: 1 piece 1/8" X 1 1/4" X 7 9/16". The length of 1 X 1 X 1/8 aluminum is 24" NOT 24 5/8". Adjust the other dimentions accordingly. Drill to fit assembly.
5. Drawing No. 18 - Axle bolt is 6 1/2" long.
6. Wing fold tube is on the forward side of the spar. (This is a change from the prototype.)
7. Use a No. 5 and No. 3 Brown and Sharpe Taper Reamer for AN threaded taper pins. Use Morse Reamers for unthreaded taper pins.
8. Aileron travel should be 2" up and 1" down at trailing edge.
9. Elevator travel should be 20° up - 15° down.
10. Rudder travel stops should be set for maximum travel without hitting the elevator.

### 11. Fabric Required:

18 yards of 54" wide Dacron  
1 Roll 2" Tape  
1 Roll 3" Tape  
Suitable rib stitching  
(AAL-42 "Pop" Rivets will work)

12. 1/2" X .035 6061 T6 Tubing may be used in place of "Hat" section stringers on fuselage.

13.



14.

