

PL-1 & PL-2 Mutual Aid Letter #21

Hello PL-1 & PL-2 Builders:

Since I am a PL-1 builder as well as associated with the aircraft industry, it will be a pleasure with your assistance, to act as your editor. I will do my best to assist all of you fellows in your project. Although, I have been interested in Homebuild Aircraft, namely the PL-1 for only the past year and a half. I have found this group is a grand group. My trip to Rockford in 1969 proved to me the PL-1 & PL-2 builders are a live wire group, possessing so much enthusiasm, it's hard to believe.

Again we will do our best in passing along helpful information, but each of you as PL-1 & PL-2 builders will have to help make the mutual aid letter a success. So drop me a line anytime you have helpful information or tips that might be useful to your fellow builders.

We had a nice letter from Jos Dunbar, PL-1 #20, 1196 Pennington Road, Trenton, New Jersey, 08618. Jos tells us he has found a good way to form the mating channels on the main spar. Namely Eng. Change #2, bending the .063" channel to fit inside of the .080" channel. He made a form block for the .063" channel, and then formed the .080" channel directly over the .063" channel, obtaining a good tight fit. He used T3 stock and cracks did not occur. But remember that every time you use 2024-T3 sheet, and mostly heavy gauges, you must penetrant dye check the bends for cracks.

Jos also came up with a home made bucking bar with interchangeable shoes or heads.

You sure meet some fine people building the PL-1. During my visit to Rockford I met one of these people, Mr. Dewey Green, PL-1 #237, Rt. #3, Box 3 Genese, Illinois, 61254. Currently Dewey and his charming wife are on vacation. Wouldn't you know -----Dewey and his wife are stopping along the way visiting PL-1 builders. They all ready visited J.D. Wallers and they came all the way down to Vero Beach, Florida to talk to your new editor. Dewey has most of his parts completed and will start sub assembly after his return from vacation.

Through corresponding with another PL-1 builder, Dr. Bruce Carmean, PL-1 #56, we have become good friends and he and his lovely wife Marilyn visited me in Vero last Christmas. We had a wonderful time discussing our PL-1 projects and have helped each other in many ways. Marilyn just dropped me a note telling me they will arrive in Vero Beach on December 27, for another week of fun and PL-1 discussions. I understand that they are bringing along another couple from Texas, also J.D. and Pat Waller, PL-1 #194, plan to stop here on their way from Brunswick. So it looks like we will have a good time ---- can't you just hear the PL-1 talk?

Pazmany is writting a book on the PL-2 construction. It will be illustrated with more than 200 photos, taken during the prototype PL-2 construction, also many sketches, tables and detailed explanations. Basically will consist of a sheet metal construction chapter, a plaster mold construction chapter, fiberglass part fabrication, and plexiglass molding chapter. Most of the book will be applicable to PL-1 construction and for that matter to any other aircraft construction. Paz hopes to have it ready in 2 or 3 months. The sale of this book will be announced in this news letter and in Sport Aviation.

Mr. Bob Thomas, PL-2 #6, 4573 - 56th St., San Diego, Calif. has made the molds for the PL-2 windshield and canopy, and is supplying fiberglass canopy frames, reinforced with aluminum tubes, according to dwg. 2-30-004. The frame will be delivered untrimmed, but with trim lines all ready molded in the part. You will save many hours of work in making your own molds. The price F.O.B. San Diego is \$142.00.

Paz received a letter from J.G. Anthony, PL-1 #52, next some of his comments:  
 "Aileron mass balance fairings could accumulate water and freeze. Preflight inspection of my airplane revealed aileron control frozen. Removal of fairing disclosed solid block of ice. Drill drain holes (3/8" dia. in each fairing).

I had elongated .196/.191 holes in the -79 tube. Dwg. 2-60-002. This tube is called out as 11/16" dia. x .035" wall, in agreement with Paz, should be changed to 3/4" dia. x .065" wall.

I have about 5 hrs. to go to remove FAA restrictions and relocate ship to New Jersey, but I doubt if this can be done before spring.

At 40° F (OAT) max. cont. RPM is 2100 without running oil temp. too close to red line. I still do not have oil cooler installed. This is necessary for my 135 HP engine.

I understand that many builders are having difficulties building PL-1's. Quite a few EAA members have looked at mine and gone away afraid to tackle the project themselves. This is too bad as it is a very nice flying machine. I am very pleased with performance. My ship exceeds your prediction and my expectation. Perhaps the complete flush riveting is a factor."

Next is measured performance for my PL-1:

Engine: Lycoming O-290-D2 (135 HP)  
 Propeller: 70" dia. - 62" pitch (Sensenich M76 AM-2)  
 Static Max RPM = 2410  
 Max Level Flight RPM = 2540  
 Economy Cruise Speed = 133 MPH at 2250 RPM  
 Max Continuous Cruise = 139 MPH at 2350 RPM  
 Max Speed = 153 MPH at 2540 RPM  
~~At 2500 RPM and 110 MPH (IAS) - Climb = 1250'/min.~~  
 At 2350 RPM and 110 MPH (IAS) - Climb = 1000'/min.  
 Air Temp: 40° F - Aircraft Weight = 1140 lbs.

For those living in the South, it may be of interest that Aero Hardware and Supply Inc., P.O. Box 482 Miami Fla., 33148, can supply all the flex hose required for the PL-1 engine install. Contact Mr. Harold Inglis at the above address for quotations. Aeroquip Corp. / Aircraft Division, Jackson Plant, 300 South East Ave., Jackson, Michigan 49203, can also supply such equipment in that area.

Those interested in obtaining tubing contact Mr. Gil Mitchell of Tube Sales, 175 Tubeway, Forest Park, Ga. 30050. He has been very helpful to me and I am sure he would be glad to hear from you and your needs.

Filter Products Div., North American Rockwell, Air Maze Plant, 25000 Miles Road, Cleveland, Ohio, 44128, offers a suitable air filter for the carb air intake. This is very similar to that called out on Paz's drawings. Tooling for the filter called out on Paz's drawings is no longer available, but thru recent correspondence we were informed that their P.N. 13203 can be adapted to our air intake. Mounting studs and gaskets can be ordered under P.N. 121614. I do not have the pricing at this writing but hope to have a firm quotation within a few

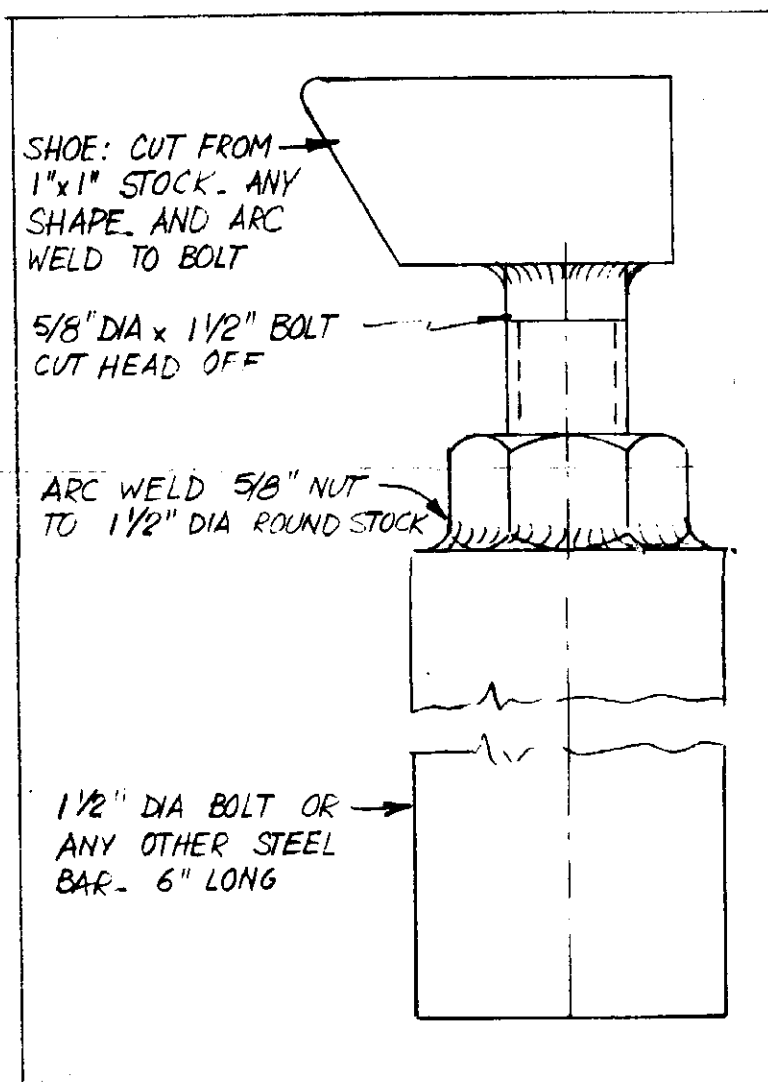
days, I will advise in next letter.

In reference to my bird, the F.A.A. bought off my wing on Dec. 16. All skins have been fit, drilled and dimpled ready to close up. I have also completed Vertical Fin, Rudder, Stabilator, trim, and ailerons. These were approved by the F.A.A. and have been painted and in storage ready for final assembly. Although I have not started the fuselage assembly, all bulkheads, ect., have been completed with pulley brackets, clips, gussets, ect., ready to set into the jig and to attach the longerons and skins. I have all equipment including engine, instruments, radio, ect., ready for final assembly. I still have to purchase a propeller, battery and a few odds and ends. So you can see I am will on the way.

This is about all the news I have at this time. If you have any information or tips to pass along to our group, please drop me a line, and I will see that they are made a part of our next letter, but please do not forget to mention your PL-1 or PL-2 number. Also do this everytime you write to Paz.

Remember that Mr. Pazmany is always interested in any of our problems and has always devoted many hours helping PL-1 builders. In closing, keep the tips and information coming in, be a big brother to the new builders.

Best wishes for a Happy New Year to you all.

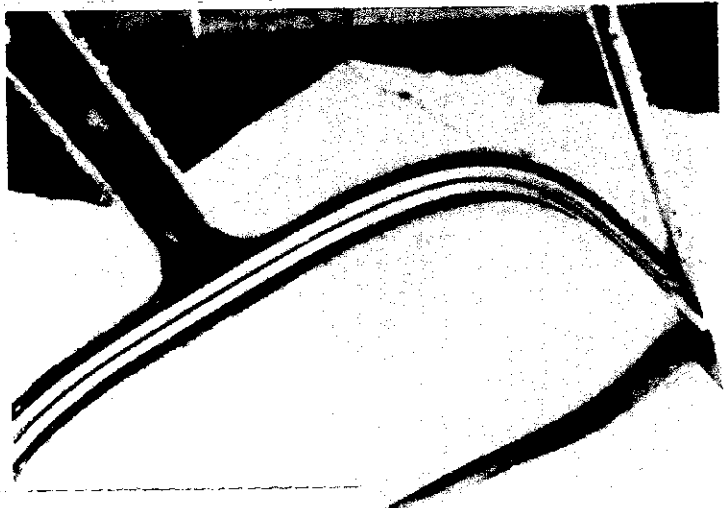
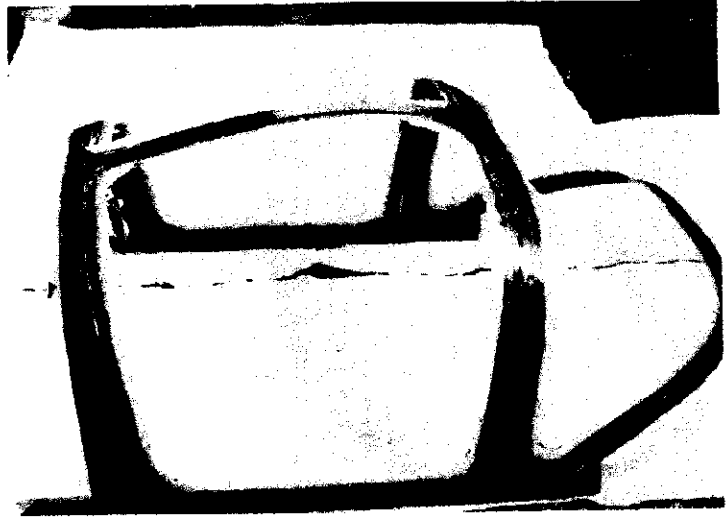
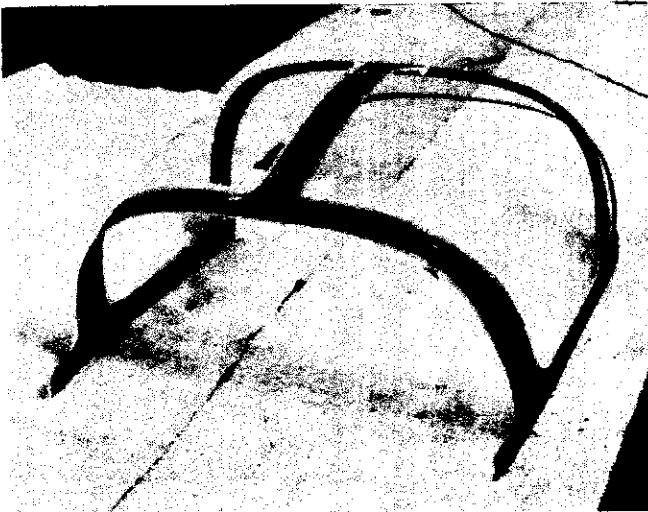


Sincerely,

*Harold E. Sponaugle*  
 Harold E. Sponaugle - PL-1 #302  
 3305 16th St.  
 Vero Beach, Florida 32960  
 A.C. 305-567-6173  
 After 9:00 O'Clock

BUCKING BAR WITH INTERCHANGEABLE SHOES - BY JQS DUNBAR - PL-1 # 20 -

BY USING THIS, YOU CAN CUT ANY SIZE OR SHAPE SHOE REQUIRED. JUST SCREW THE SHOE INTO TOP OF HANDLE. TOTAL WEIGHT SHOULD BE APPROX. 4 LBS. BE SURE TO DISC SAND AND POLISH WORKING SURFACE OF SHOE.



PAZMANY PL-2 CANOPY FRAME  
92110  
BOX 10051  
SAN DIEGO, CALIF. 92106

PAZMANY PL-2 CANOPY FRAME

THIS FRAME IS FABRICATED PER DWG. 2-30-004. (MOLDED FIBERGLASS REINFORCED WITH TWO ALUMINUM TUBE FRAMES). THE FRAME WILL BE DELIVERED AS SHOWN IN PHOTOS ABOVE. UNTRIMMED, BUT WITH TRIM LINES ALLREADY MOLDED.

BY PURCHASING THIS PART, YOU WILL SAVE MANY HOURS OF WORK IN MAKING YOUR OWN MOLD.

PRICE F.O.B. SAN DIEGO: \$ 142.00. + CRATE

FOR INQUIRES, WRITE TO MR. ROBERT THOMAS

4573. 56TH ST. . SAN DIEGO. CALIF.