

J. D. Waller
200 Howard Dr.
Brunswick, Ga.
31520

PL-1 Mutual Aid Letter 13

Hello Fellows:

Once again it is time to take a rest, relax and do a little finger and pen exercise to pass on a few notes, and ideas and information I have accumulated in the last few weeks.

With this letter, we are starting our second round of subscriptions and looks like we are off to a booming start for this round. We have many new fellows that are contributing many very helpful ideas.

Here goes with the goodies. O. K.

Our good friend Mr. Harlie Reynard, 5248 39th South, St. Petersburg, Fla. 33700 is responsible for several good deals to pass on to you fellows who might be interested

Harlie is tooling up to make instrument panels, ~~with bonded Walnut~~ and several other small tedious items that might be sort of difficult to do and would either sell or trade these for machined parts.

Parts being made are as follows: Instrumental panels, with bonded Walnut facing and die cut holes. This will be complete and ready to install for \$28.00 or trade for machine parts. Four of these will be made. Also Harlie will have four sets of stabilator fins, and rudder ribs (less trim tabs) for \$42.00 per set, or trade for machine parts. These will be heat treated, zinc-chromated and ready to assemble. All you have to do is to make a deal with Harlie and add postage and you will be in business. There will be only four sets of these.

To assure you of the quality of work you will be getting, I'll tell you a little about Harlie. Informants tell me he is a top notch violin maker and does beautiful work on these instruments as well as just about anything he tackles. Enough said? O. K.

Another hot tip from Harlie is as follows: Aircraft components, Inc., Benton Harbor, Michigan, 49022 has a liquid quantity gauge kit, Item K-1208, for \$7.60 plus 75¢ postage. Kit consists of 2 level transmitters, one dual indicator meter, and the voltage stabilizer. Installation screws, gaskets, and washers are included. These are surplus but new and unused. Cost to government was \$160.00. Sounds like a red hot one. What do you fellows think? I understand all you have to do is increase the length of the float arms. Thanks a million, Harlie.

Another good one, Palley's Supply Co., 2263 E. Vernon Ave., Los Angeles, California, 90058 has an excellent buy on piano hinges that are very close to what we need. Hinges are 1 1/4 inches across and six feet long for \$1.00. These are aircraft aluminum and look brand new.

A very clever suggestion or method of assembling tip tanks has come in recently from Mr. J. G. had his form fitted before he ever started the assembly. First lay up flat material (fiberglass) to be used for bulkheads, including the tab for attachments to the wing. Lay up on formica surfaced plywood, waxed and cover work with paper and roll strips. After curing scribe, the exact location of the bulkhead lines and horizontal center lines. Remove, and lay up duplicate strip of each bulkhead. Remove and cement these together to make one set of elliptical rings. Cut .050 relief notch at the tab locations. Third, on plywood, lay out the same bulkhead and cover with wax paper. Now place flat bulkhead and wed in place. Then lay up three layers of cloth to bulkhead and inside of elliptical rings. Let cure, remove tacks, and trim flange and you should have a perfect fit on the bulkheads.

A jig was made to hold the bulkheads. The filler neck base was cemented to the main bulkheads and the pressure vent lines installed. At this time fit both upper and lower shells to jig and cleco together to get proper fit. After this disassemble shells and install fuel lines and bulkhead fittings. Then cleco the bulkheads into the lower shell. Cut and fit the wiring conduit through the forward section.

Now for the finished assembly. Cement bulkheads into the lower shells. Put pressure line through bottom hole forward and wiring conduit through shell, and bulkhead. Cement seams bulkhead in top shell. Cleco and allow to cure. Don't forget to fill the cleco holes with a good filler and finish the rest as per dugs.

Forward and after bulkheads should be flanged toward center to avoid problems with joggle at end of shell.

From J. W. Dunbar comes the good news of the availability of what appears to be the Corsair struts.

Corsair strut and the strut mentioned by J. W. looks identical, but dimensions are slightly different. I'm sure one would work as good as the other.

Dimensions on both are:

Corsair:	Bore 2 1/4 in.	Stroke 8 1/4 in.
	Shaft 1 1/4 in.	Lgth. 20 in.
Others:	Bore 2 1/8 in.	Stroke 8 1/2 in.
	Shaft 1 1/4 in.	Lgth. 22 in.

Only noticeable difference in dimension is the length, which could have been measured from different point.

Address of party who has these is: Roberts Electric Co., 849 Grand Avenue, Chicago, Illinois, 60662. Order number for these is HC-105 and price is \$8.75 each. This still sounds like a real bargain. Thanks a million. J. W.

A letter just in from Thor Engineering, Inc. Box 107, Alexandria, Minn. 56308 which stated they have equipment to make just about anything for the PL-1 and would consider most anything on a contract basis

If anyone is having trouble with landing gear parts, fuselage longerons, or long spar angles, or any machine work just let these people know. When sufficient number is obtained to set up to do this a reasonable price they will give you a quotation. Letting these people know if you are interested as quickly as possible, it will be a great help to us all.

Mr. J. G. Anthony of Lexington, Mass has come up with another mighty good idea. It is an idea of making your own canopy slides. A drawing of this was sent to me on this and I will pass it along to you with this letter. Thanks for another good one J. G.

A suggestion has just recently come in on the material used in these rails. It was to consider using aluminum tubing (square) instead of the square 4130 tubing.

A very clever suggestion came in from Bob Bushby. Recently I have been having trouble forming the inside curves with a T-3 material and requested help on this from Bob. He was glad to oblige. A workable method to use in situations of this sort is the stretching method. It goes like this.

Gently work the inside flange up a few degrees at a time. Do not attempt to bend the full 90° at one time. Before starting flange be sure the edges of blank rib is free of cracks and is polished.

As you progress with the angle of flange it will tighten up. To cope with this, you stretch the outer edge by using a light plastic mallet to tap with and a good smooth bucking bar as back up. Tap lightly on the outer portion of flange to get the proper stretch affect. Use a slightly rounded mallet so as not to dent flange. If flange is over stretched, you can flute flange to take up the slack.

If plastic mallet doesn't give you the proper stretch, try a small ball-peen hammer. Plastic or hard rubber is good for the flanging though.

Nice suggestion and thanks a lot, Bob.

Mr. Bob Todd suggests that a good place to get long angles and channels bent is an awnings shop, or heating and air conditioning shop. Most of these places have a press type brake that is good for this. Don't forget to take along a few pieces of scrap for raidii practice.

D. E. Greene was real pleased with clecoes obtained from Jack R. Huey - 3 High Point Road, Valley Center, Kansas, 67147. Price is 10¢ each.

Also from the above address you can get scissors for the Corsair struts. Scissors are complete with bushings, bolts and grease fittings. These are not the same as shown on modification prints. The difference is the ears which are not on the scissors shown on print. You would have to change the attachment fitting slightly to adapt these.

A suggestion came in from our good friend, Mr. James Lacina of Berwyn, Ill. James suggests that the bottom flange of the root rib be bent outward to provide easy bucking of rivets when installing skin. This rib has no lightening holes and this makes bucking rivets a problem. The bottom 080 main spar plate scallop will have to be moved to coincide with flange.

The BL-9.60 rib and root rib can be done this way. Thanks Jim.

I have finished with my fiberglass molds. Would anyone be interested in trading almost anything of value that I can use for them. This is a full set of molds from the tip tanks right on through the cowling to the tail end of plane.

Molds are made of plaster and are solidly built with the majority having plywood skeletons. Finish is a glass smooth coat of about 10 coats of lacquer, with sanding between each coat to get the smooth finish. Molds will need very little work on them, none that you cant do with auto body miller.

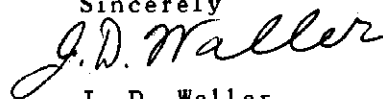
I have about 200 hours in these molds and the only reason I want to move them is storage space and I just don't need them anymore. This will be a time saver for someone.

I would settle for a set of Cleveland or Goodyear late model wheels, tires, and brakes and master cylinders and nose wheel. I plan to use 6:00 X 6 wheels, all around. I'll be waiting to hear from anyone on this.

Wheels and brakes don't have to be new but undamaged and usable.

That's about it for this time fellows. Lets hear from you all. So long until next time.

Sincerely

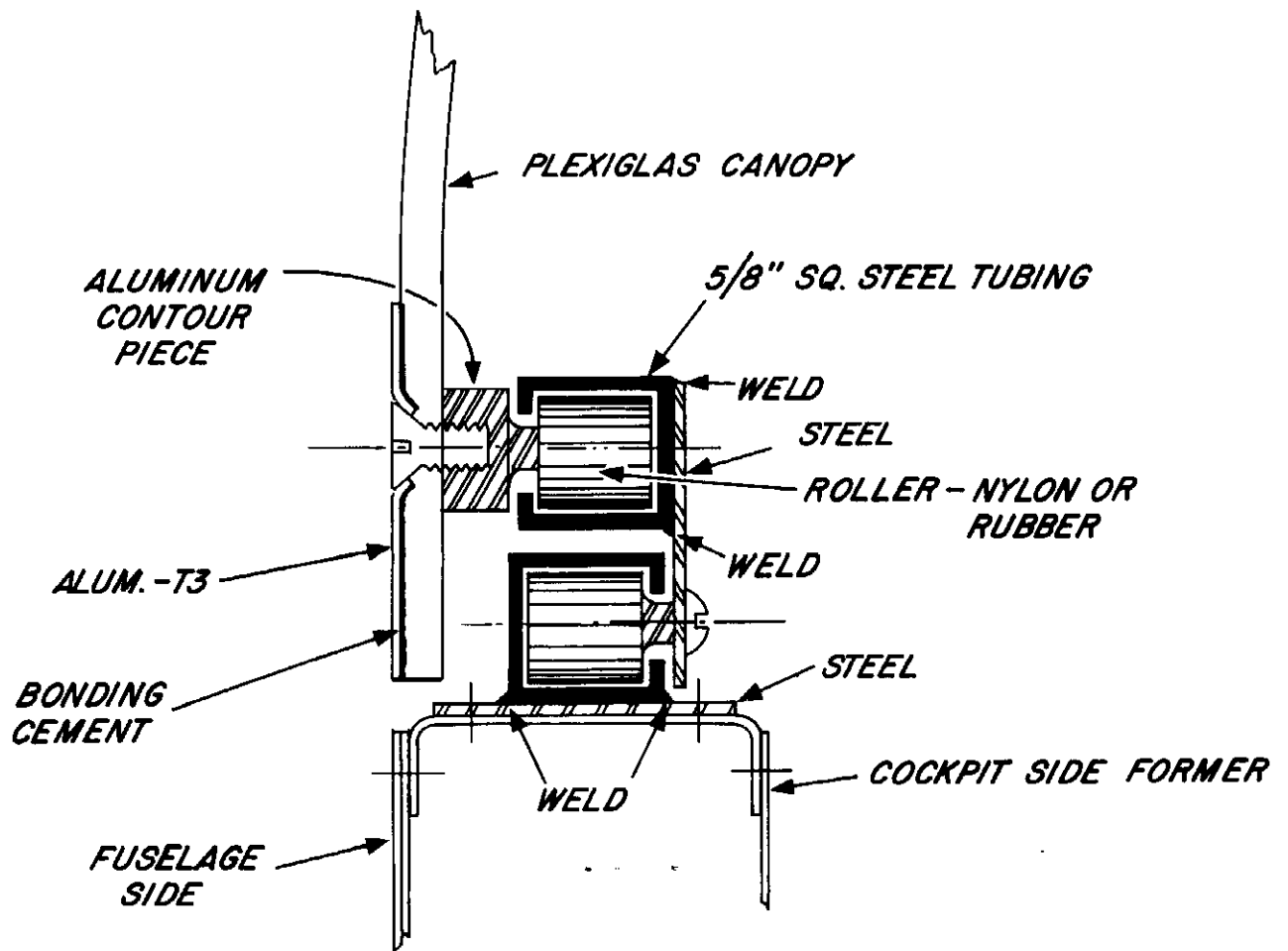


J. D. Waller

P. S. If the ones using the Corsair struts will drop me a card to let me know, I will send you a drawing to modify the spar attachment to add extra strength. A stamped envelop will be better.

J. D. W.

alternate SLIDE TRACK for CANOPY...



...another Pazmany Club idea!