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CANADA

MUTUAL AID LETTER #36

JANUARY 1972

Dear Fellow Builders:

In Newsletter #35, Harold informed you of an editorial change in this publication and so I shall prevail upon your patience to introduce myself and pledge my best efforts. Harold and Sue have produced an act that is very difficult to follow so please forgive me if I fumble my lines a few times. The professionalism exhibited by this pair of delightful people has established our publication as a true aid to the amateur aircraft builder. I personally have enjoyed a lot of correspondence with the Sponaugles and hope one day to be their guest in sunny Florida.

Thank you very much Harold and Sue for your patience, tolerance and unselfish giving of time over the period of your tenure as editor.

To fill you in on my personal history, I am building PL-1 #266 which is coming right along. All component parts are completely fabricated; wing spars are completely assembled; rudder and stabilator are assembled; fin is complete and riveted to fuselage which is 75% complete; machining is 100% complete but several assemblies have yet to be welded; instruments have been purchased but do not yet have an engine.

I am 45 years old; my wife's name is Florence; the children are Brenda 16, Donald Jr. 14, and Brian 12; and I earn my bread as a computer salesman.

There are no planned editorial changes now that the Newsletter is "made in Canada" - it will continue to be a friendly, informative method of exchanging ideas, tips, material, parts, etc. and provide a communication link between Paz and PL builders.

It is expected that with the release of the PL3 and PL5 (and whatever follows) our numbers will grow greatly because these two birds sound very exciting and attractive to builders "in a hurry to fly". Your new editor plans to invite all plans - buyers to join our group so I ask you to send me any big or small tid-bits of information you have, specially those pertaining to the construction of jigs, sources of hard-to-find pieces, etc. etc. I will try my best to get these into printable form.

There are two PL-1's flying in Canada; in fact, one is right here in Ottawa with only 45 hours logged (there will be pictures and data of this one in another issue). There should be two more in the air by fall and then mine and a couple more a year later.

Andy Andreason, PL-2 #93, of Normal Illinois had some questions about joggles, etc. on the flaps and ailerons which he is forming. Paz viewed his sketch and suggested we publish it so I hope the PL-2 readers find it informative. All contributions are greatfully received, Andy.

In the last couple of years I have answered several letters and phone calls from persons having trouble locating materials. Quite frankly, I have not had too many problems so perhaps I will devote a little space to this problem.

EXTRUSIONS:

- (1) General Aerospace Materials Corporation,
95 East Bethpage Road,
Plainview L.I., New York 11803

Write and ask them for a catalogue but they will not quote prices unless you have a specific request.

- (2) Aluminum Co. of America (or in Canada, Aluminum Co. of Canada) have lots of branch outlets and my experience finds them to be sympathetic and eager to help. Alcan in Toronto have a "scrap bin" near their cutting area and I have found it a real treasure chest of bar stock, scrap sheet, rod, tube, etc. Buying scrap at 50¢ per pound with no cutting charge is a real bonanza but be careful and don't buy any without a water mark showing the alloy type.
- (3) Solway Scrap Metal in Toronto has every alloy of aluminum, brass, 4130 steel, aluminum-bronze, magnesium, titanium etc. etc. in bar, round, extrusion, sheets of every thickness and they have it by the ton. I bought my spar caps there complete with water-mark and made by Reynolds for a price of \$17.00 as compared to Alcoa price of \$78.00. My .020 and .025 sheet cost me 35¢ a pound. My secret here was to apply my best sales technique and enlist the sympathy of the warehouse foreman so he allowed me to "browse" around the storage area. After the first time he would let me come in any time I wished; in fact, he even cuts up bar stock for me so I don't have to buy too much. I later discovered he liked Havana cigars.

SHEET 2024:

- (1) Small sizes of sheet (.016, .020 etc.) are as easily available as loaves of bread but a small piece of .080 is a horse of another stream. In this area, my success was found in the storeroom of moderately-sized aircraft overhaul shops. Adjacent to Toronto International Airport there is a company known as Field Aviation where they overhaul Lear jets, light twins or anything else and the shop foreman is most co-operative. He sheared a piece 6 inches by 4 feet off the end of a partial sheet of .080 and charged me \$4.20 only. Other repair shops such as Personal Plane Service in Ottawa are smaller but just as eager to help. Take along a picture of the PL you are building and a couple of relevant drawings; this sparks their interest and the excellent professional drawings really open their eyes.

MACHINING:

In this area I was technically my head for most parts but I found a trade school shop teacher who likes Canadian Club and works to aircraft standards. He fully appreciated having a real project of close tolerance to use as a final exam for his graduates. Surplus bar stock and his prices make the medicine go down easily. I bought a used 9-inch lathe and made my own rod-end adapters, teflon rings etc. The lathe will be sold one day. One of the Toronto builders signed up for a night course in machine-shop and for \$12.00 had the use of every known machine all winter.

BENDING & FORMING:

Small jobs such as rib-attach angles can be made by sweet-talking a small sheet metal shop owner. I found a roofing and tin-smithing outfit who guaranteed thousands of an in tolerance. They took some strips of .032 as test pieces to determine spring-back etc. and bent all my spars (wing, tail, rudder), all the hat-sections, wing spar angle and some spare .032 stiffeners for \$22.50. Their measurements were exact and I found out later that the shop foreman was an ex-Air Force airframe specialist and just loved the feel of 2024 after all those years.

This turned out to be longer than planned but I do hope it helps someone. In all cases but one where I requested help from someone, my problem has been treated with sympathetic understanding and people are really anxious to help.

I would very much appreciate information for publication along the lines of "how I did it". Even if it seems trivial, please submit it because it may save some poor soul a lot of think-time. If possible, send also a sketch or illustration to support your hint and preferably have it in some form that does not require re-drawing because I have no drafting support and my drafting is very crude.

PAZMANY NEWS:

1. The Aero Industry Development Center, Taichung, Tiawan, Republic of China is now building 10 more PL-1B's to be used by the Chinese Army. 40 PL-1B's were built previously and are used by the Chinese Air Force as trainers.
2. The South Vietnam Air Force is flying their first PL-2.
3. The Royal Thailand Air Force is building two PL-2's for evaluation as trainers.
4. The Republic of South Korea is building one PL-2 for evaluation as a trainer.
5. Miyauchi Manufacturing Co. Ltd., Tokyo, Japan have completed a PL-2 and it is now undergoing flutter tests previous to flight testing. This company intends to obtain a type certificate for the PL-2 and start commercial production in Japan. The prototype was shown at the Nagoya Air Show last November, creating a tremendous interest.
6. Col. Robert Loeffler tried a high-altitude flight on his PL-1 with the following results.

Engine: O-290-G
Load: Pilot, 20 gal. fuel, 15 lb. baggage
Gross: Estimated at 1300 lb. at take-off
Temp: 32° F

Col. Loeffler took off from Colorado Springs - airport altitude 6180 feet:-
21 minutes later he reached 17,600 feet altitude with R/C indicator showing 350 ft/min
He had to stop the climb because he ran out of oxygen. He started down fairly fast
but at 16,000 feet he did a quick aileron roll to see how the control response was.
It was excellent.

Milton Grimaldi, builder of a PL-2 here in San Diego is ready now for weight and
balance. He probably will be flying within one month. I will send news and
photos as soon as he is in the air.

Sincerely,

"PAZ"

Geo. Rottray has parts completed for tip tanks (Fibreglas only) and these are
available in a set for two tanks at \$175. Other parts will be coming soon. I
bought my tail-feathers fibreglas parts from George and they are of first quality.
You may contact him at this address -

George and Jim Aircraft Parts,
R.R. #3 Afton Road,
Beloit, Wisconsin 53511

PL-2 #33 PROJECT FOR SALE

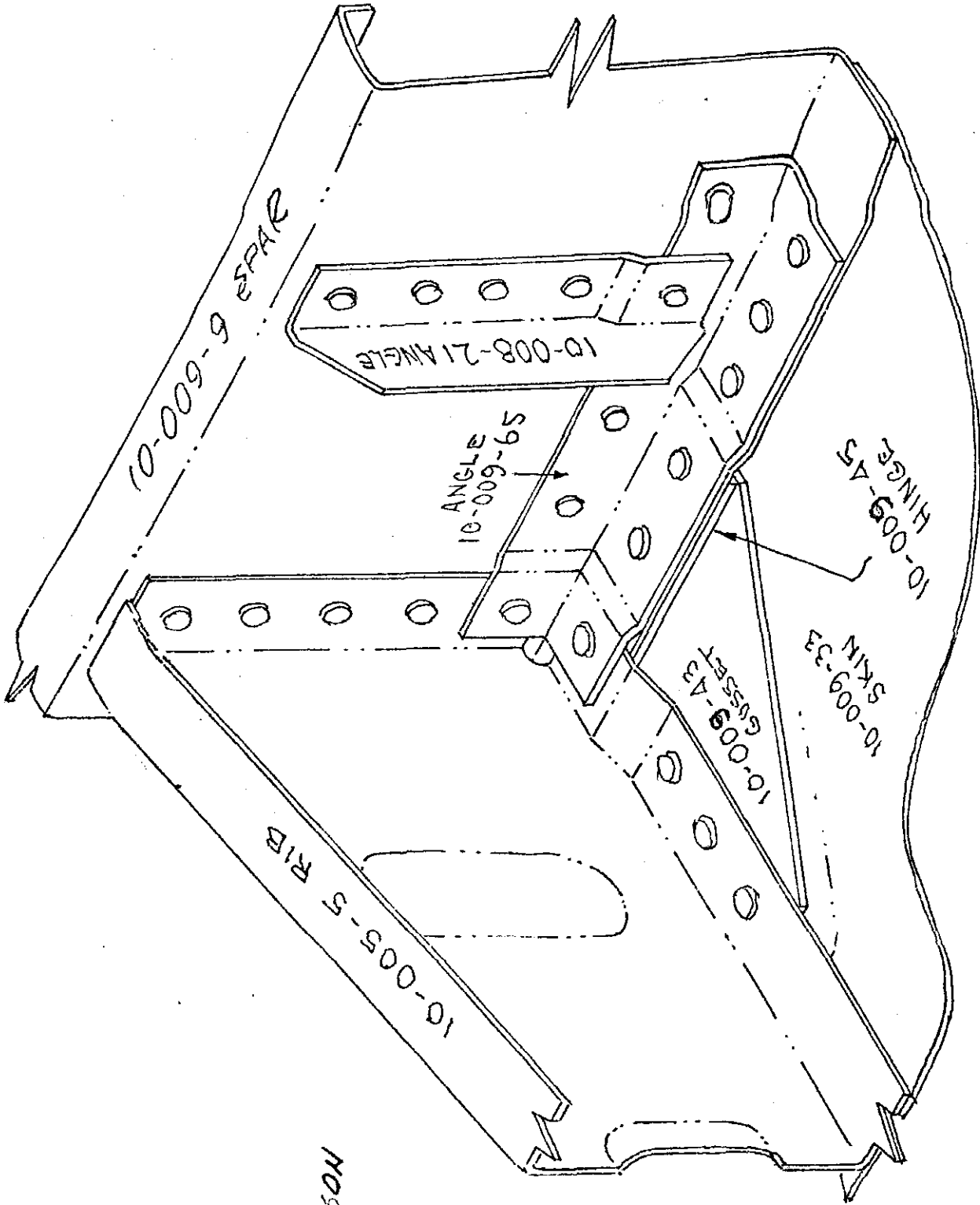
Preference will be given to inquiries for entire project over separate parts.
Entire list of parts available upon request. Flaps 3/4 completed; all parts
cut and bent; Ailerons - all parts cut and bent; mass balance completed;
stabilator 3/4 completed; all parts cut and bent; mass balance completed;
fin and rudder - completed both parts and ready to skin; wing - main spar
completed, all ribs complete and located, landing brackets located, aileron push-
pull tubes completed with rod ends, most all other wing parts cut and bent,
as rear spar, seat pan & etc....; fuselage - control stick assembly completed, one
set of Paz longerons, and many other machine type parts. Most of the metal necessary
to complete and skin airplane. Plans \$150.; Main wing spar \$325.; wing ribs \$200.
control stick assembly \$45.; aileron push pull rods with rod ends \$45.; fin and
rudder \$80.; stabilator \$80.; flaps \$50.; metal \$300-\$400.

C.V. Brock, 6115 Blue Ridge Blvd., Raytown, Mo. 64133.

See you next month.

Best regards,

"DON DALE"



PAZMANY - PL-2
 INSIDE VIEW OF CENTER FLAP SECTION

A. ANDREASON
 PL-2 # 93