

PAZMAN NEWSLETTER
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Aircraft Designer:
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PO Box 80051
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SEASON'S GREETINGS to all my faithful readers out there. My apologies on not getting this out a bit sooner, but thus far my schedule with EAA is still about as busy as it was during the summer. Along with various and sundry duties, I am also responsible for almost all of the snowplowing of the EAA grounds, which means early to bed and early to rise. I am also spending some time as a security guard in the EAA Museum here and there, so it makes for a full schedule. In fact, as I recall we've only had the PL out about 3 - 4 times since the end of EAA Convention, sad to say. We've actually had a bit more time to fly it, but for a while it seemed that the weather would conspire to go IFR whenever we wanted to go out and fly. But then, I'm sure all of you know how that goes. Someday, when my ship comes in, I'll install mucho dollars worth of avionics so I can go when the clouds are low. Meanwhile, ours is strictly a VFR ship.

Meanwhile, I've been getting a lot of correspondence from you readers out there! I have found that if you want to learn something about your PL-1/2, become newsletter editor. I have picked up a whole bunch of good how to do it type tips, and it almost makes me want to take ours apart and do it over again. Almost, but not quite. I plan on putting in a separate page or two of pictures I have received over the past few months also, and I will key the comments in the text to those pages so you can see what I'm talking about. By the way, if any of you who have been so generous as to send pictures wish to have them back, let me know when you send them and I'll return them with the next newsletter. Otherwise, I'll assume you don't need to have them returned and I'll stash them in my files (old shoebox).

One thing I want to point out to all you PL-4 fans out there, is that this newsletter is really not for the PL-4 builder/pilot. For those of you who are into PL-4s, my apologies, and I am returning all subscription checks to you. Now, if you want to subscribe to the PL-2 newsletter, that's fine, just let me know and I'll be more than happy to take your money and give you a newsletter in return. However, at this time, I find that (1) I seem to have plenty to say on the subject of the PL-1/PL-2, without getting into Paz's other designs, and (2) I have received no input from you PL-4 people out there to note in a newsletter. Please don't misunderstand me - I'm willing to help out on a newsletter for you PL-4 people also, but it's kind of difficult for a person who knows nothing about the aircraft and receives no input. Is there a PL-4 newsletter out there? If so, who publishes it? If not, do you want one? Please let me know the answers to the above questions and I'll pass them along to the appropriate people, assuming that there are any out there!

Speaking of PL-4s, I received some interesting correspondence from Bill Mensing, who is the builder of PL-4 N58WM. The really interesting part is that he says he is currently at work on a TWO place version of the PL-4!! He says it will be similar to Pazmany's PL-7, whatever that is. What are you hiding from us, Paz? Anyway, Bill is planning quite a lot of commonality of parts between his new design and the PL-4, and for those who might be interested, he has some hard tooling for the PL-4 (I assume) wing ribs. I'd like to know more about this project!

By the way, I know there are a few of you out there who have considered the idea of retracting the gear on your PL-1/2. I've toyed with this idea myself, but after I sobered up, I realized there's a lot more to it than you might think. To nip this idea in the bud, Paz says NO! Consider the following, if you still think it's a good idea. 1. Weight increase. Just how much, who knows. But it will definitely be much, much more than just the additional weight of a retraction mechanism and drive for it. The gear fittings will undoubtedly be heavier, what with the folding action required, the wing structure would have to be altered in order to make room for the retracted gear, which means more weight, etc. 2. Possible torque box weakening. This ties in with (1) above. If you make the gear solid enough when extended, yet capable of retraction, either you have to add a lot of weight to strengthen the modified structure, or you lose structural integrity - maybe both. 3. Assuming you manage to design your way around all these problems, the wing isn't thick enough to allow for full retraction of the gear anyway. At least some of the main gear would still be sticking out in the breeze, or even if you fitted fully enclosed gear doors you'd have a bulge under the wing when the gear was retracted. If you want to see what this looks like, take a look at a Beech Sierra sometime. They have plastic fairings riveted to the bottoms of the wings in front of and in back of the wheel well, to help streamline the airflow over the tire when it is retracted, since it still sticks partially out of the wing. 4. What about the additional cost? I don't know how much extra such a modification would cost nowadays, but I've noted prices on a couple systems. For example, the Glasair comes in several different versions, both fixed and retract gear. The price difference between fixed and RG is on the order of \$6,000 (that's six thousand), as I recall. There was another operation offering an add on retract gear system at the EAA convention this year, and as I recall, they wanted several thousand bucks for it, also. It seemed to be a pretty well engineered system, but for all that cash, you're only buying the landing gear and retract system engineering, not any engineering for the installation into the aircraft. That's up to you. Consider the above points about structural strength in the wing torque box area again. 5. Maintenance. Your annual inspection cost just took a big jump, because now you have to arrange to get the aircraft up on jacks for a retraction test every year, whether any other gear work is necessary or not. And this is assuming that there's nothing else wrong with the gear. Chances are, there will be. By adding the additional complexity, you're asking Murphy's Law and various gremlins to go to work on your

airplane. And we all know they seem mostly to like to work in the air, not on the ground where you can fix it.

Now, assuming I still haven't talked you out of it, how much speed increase will you get from your hundreds of hours of design/redesign work, and having your PL-2 down for installation for all that time, the extra cost, etc., etc. Well, here are Paz's numbers. If your PL-2 now cruises at 125 mph., you can expect to up your cruise by about 15 mph, or to about 140. Now, this is a reasonably sizeable increase, right? Wait a minute, it's based on starting with completely unfaired gear in the first place. Let's install some really clean gear fairings and pants on all three gear and see what we get. Starting with the same 125 mph, we find that cleaning up the fixed gear gives a speed increase of about 12 mph, or 137 mph! In other words, we only gain a lousy THREE MPH after spending all that time, effort and money! Let's face it, there are more time- and cost-effective ways to clean up your PL. Now as I said, those were Paz's numbers, taken from an article in PL Newsletter #45, from Fall of '74. My own calculations are a bit more optimistic. I figured on a speed increase of 6 to 8 mph by retracting the gear, over gear with pants and fairings. However, I believe Paz's figures are better than mine, because I based my calculations on a completely retracted system, nothing sticking out in the wind, with everything fully enclosed, much like the Beech Bonanza series. After reading that article and finding that such a system is well nigh impossible on a PL, I believe Paz's figures are closer to what would happen in the real world.

This brings me to another point - above I mentioned newsletter #45. Well, I now have copies of Newsletters #41 and 44 through the current issue, thanks to D. J. Schneider. He was kind enough to loan me copies, so if any of you want any of these issues let me know and I'll get them out to you at the same rate as the current newsletter - \$1.00/issue. And I have prospects of getting copies of still earlier newsletters, for which I will do the same. Some of you out there have already indicated that you wish to have your subscription money used on back issues, which I'll be glad to do, no problem as long as I have a copy of the issue.

By the way, one note I hate to bring up is for you overseas subscribers - the inevitable rate increase has come. After mailing the last issue out, I found out how much U.S. postage costs to get something overseas - like, almost a buck! So I'm reluctantly going to have to set up a different rate for those of you who live other than in North America - the new rate for you will be \$1.50/issue. Now the good news: If you've already paid for some future number of issues, I'm not going to change things until your current subscription runs out. In fact, let's just say that anyone who gets a subscription order in by the end of the year will get their newsletters at the old rate until that subscription is used up. So for those of you who are overseas, if you have some current money on my books for a subscription, you'll still get the same number of issues as originally planned until that is used up.

FUTURE ISSUES: I'm not going to have room for everything I have to tell you about in this issue, but I do want to mention

what I have in mind for the next one or two issues, which hopefully will be coming up in the next month or two. First of all, I have some pictures from Bob Bradley on his progress, assuming they copy alright. You can see a couple of them on p. 10 of this newsletter - he has come up with a rather unique structure in which to build his PL! I also plan on a report on military PLs which have been built overseas - you may know that some of these are being imported to the U.S. now. And here's something else for you to think about: Who's got the fastest PL-1/2 out there? How fast can a PL go, given proper cleanup? I'd like to hear some input on this, but I have a few numbers from some of you and some thoughts of my own on this for the next issue.

One more thing I should report on is my own modification of my fuel tanks on N75PL. All is complete now, and the aircraft has been flown at least a few times, with no problems. To refresh your memories, my fuel tanks were in need of overhaul anyway, along with the transmitter units for the fuel gauges. While resealing, installing new transmitter units (Stewart-Warner automotive units), etc., I decided to increase the fuel capacity by making use of the tailcone on the tank, which when built stock is merely a fairing which does not contain fuel. I also relocated the vent line to a point higher in the tank, in front of the filler cap recess, and installed a secondary vent line from in back of the recess to the front. The net result of all this is that I increased my fuel capacity by just about exactly 1.5 gallons (U.S.) with the tailcone mod, and by almost exactly 1 gallon with the ventline relocation. Net result is that instead of having two 12.5 gallon tanks, I now can squeeze exactly 15.0 U.S. gallons in each tank if I fill them up completely into the neck. And I have yet to get any fuel spillage out the vent, either. Having 30 gallons on board really gives one some extra peace of mind on long cross countries, and for those of you who have installed/are installing O-320s, with this mod you can still get 3:45 worth of endurance at 75% power without an aux. tank. After completing this work, though, I was advised that some additional layups of glass over the tailcone area would have been nice - Lee Conlon of Homebuilders Aircraft Associates has done just that on PL-1/2 tanks and has received an STC for installation on the Piper Comanche! From what I understand, that was the only modification required to meet FAA specs.

Before I run out of room, I want to mention what you're looking at on the next few pages. Page 7, top left and left center, are pictures of "Mr. Jensen's" PL-2 in flight over Texas. Unfortunately, I can't seem to find in my notes who "Mr. Jensen" is - but he certainly has a nice looking airplane. You must bear in mind that Xeroxes don't do these pictures justice. By the way, all pictures on p. 7 were supplied by Jim Nieswonger of McFarland Aircraft Co. On the lower left is the same aircraft in the late construction stages. Upper right: This is McFarland's own PL - note the added dorsal fin mod. Should help out spin recovery characteristics, as well as lengthening the lines a bit. Right center: Jim N's notes say "I have this aircraft as being built by Mr. Williams a long time ago. Is this the one you own?" Well, no and yes. No, the aircraft was actually built by the

late Dave Thomas right in the Oshkosh area. It was completed in 1975, hence the registration - N75DT. However, this is the aircraft my wife and I own now, and we have changed the registration to N75PL. I would guess that this picture was taken at Oshkosh the first year we had the airplane there, which would have been 1980. Right around that time we went to the different number and smaller numbers on the vertical fin. Lower right: Here's another puzzle from Jim. He indicates this is "Mr. Grimaldi's" aircraft from Ramona, CA. Compare this picture with the one I received from Milton Grimaldi on p. 10. Near as I can tell, the numbers (N2P) are the same - when did you repaint the airplane, Milt?

P. 8: These, as well as the shots on the right side of P. 9, are of PETE KARMOUCHE's PL-2. I was fortunate enough to meet Pete during the EAA Convention this past summer, and he had a whole album full of pictures of the construction. You can see for yourselves some of the really nifty ideas he has, such as NACA cabin vents, flush rivets, electric flaps, baggage compt. windows (Pete says Paz says it's all right), etc., etc. I wish I had more room to tell you more about this project - I seriously believe from what I've seen that we just might have a grand champion PL-2 show up at Oshkosh when Pete is done! The other two pictures were taken by (and of) MILDRED ARNOLD on a visit "down under" in '84. The PL-2 is one of our subscribers, HENK VAN DEN HEUVEL of Bass Hill, Australia, as is the picture on p. 11 from the Jan. '84 issue of Aircraft Magazine.

That's all for this time - I'll get another issue out soon.

CLASSIFIEDS

The CLASSIFIED section is a FREE SERVICE to all subscribers to the PL Newsletter. I will insert an ad for one issue. If you wish your ad to appear in subsequent issues, just let me know at the time, or send me a card, and I'll keep plugging it in until you have bought/sold/traded/given away/whatever your PL-1/2/3/4/etc. parts/materials/assemblies/etc. I don't have the fancy equipment for display ads, and also, since this is free to subscribers, I'll have to keep the listings down a bit - in other words, please don't expect me to give you half a page listing all your surplus rivets and screws. Other than that, anything goes!

GLENN THOMAS has a good many extra PL-2 parts available, particularly tail surface (I think) ribs - "enough for two more airplanes" (!) he says. Glenn would like to trade for something he can use, but says he is willing to give them to anyone who can use them. He also found some forward fuselage longerons (PL-2) for \$155 from Pioneer Aluminum (Alcoa) in Wichita. He will secure these for anyone who needs them. Alcoa is the only place he found them, but since Alcoa is nationwide, you may be able to do the same locally. Contact Glenn Thomas, 4023 Charron Ln., Wichita, KS 67220.

LEIGH BLAKE has a complete vertical fin and rudder, built by Mike Rushinsky. Leigh has a flush riveted set of vertical surfaces now, which is why he's selling the other (dome head riveted) set. He also has a complete set of form blocks for wing ribs, a good many machined parts, a complete set of internal and accessory

fiberglass parts for fuel tanks, and various sizes and thicknesses of sheet aluminum. Contact Leigh Blake, PO Box 122, Felts Mills, NY 13638.

CASIMER POROWSKI has various PL-2 parts for sale, apparently about everything but spar caps and extrusions for the fuselage. This also includes an engine - didn't say what type. If Cas. gets no takers on his parts, he's looking for spar caps to finish the project. Casimer Porowski, 725 Mapleridge Rd., Milford, OH 45150.

LYLE MUIR is in need of drawings for engine installation and cowl for the PL-1/2. Says he had written to Paz but received no answer. Where are you, Paz?

CHARLES CHAPMAN has a PL-1 for sale, 200 hrs. Lyc. O-290G, 125 hp. For further info., contact Charles H. Chapman, 14190 B Spring Valley Rd., Morgan Hill, CA 95037.

AL JONES has a PL-2 project for sale, whole thing, will not part out. Contact Al Jones, PO Box 202, Orongo, MO 64855. (417)673-3262 after 6:00 pm. Note: This ad appeared in Trade-A-Plane, but just in case the project is still for sale I stuck it in here.

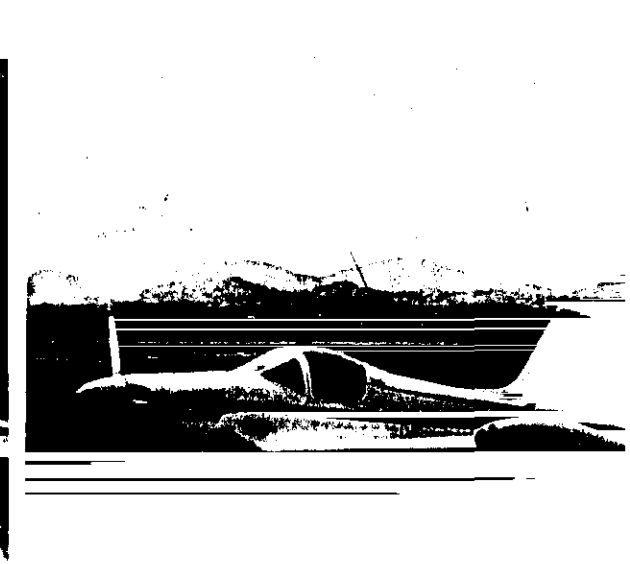
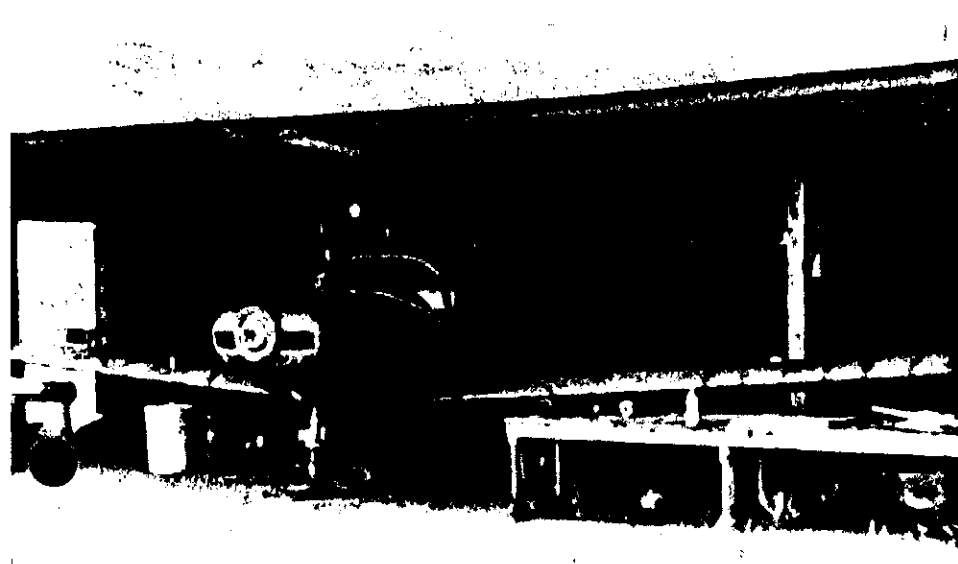
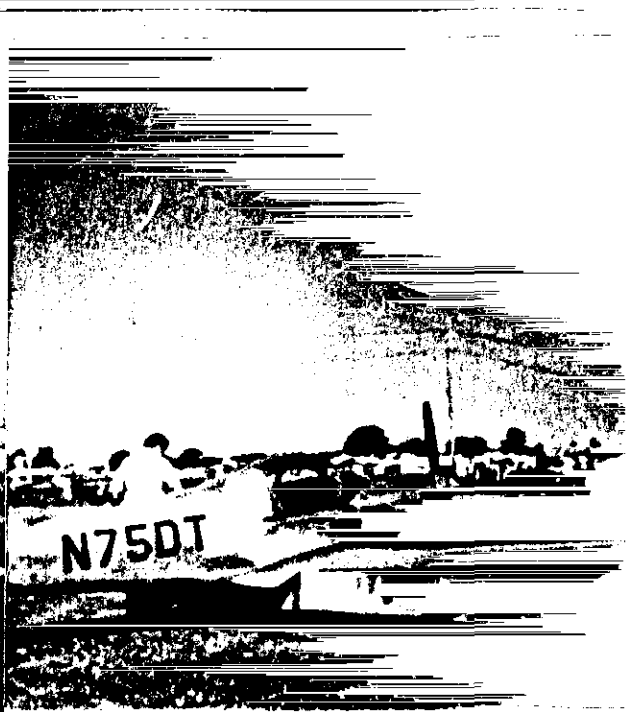
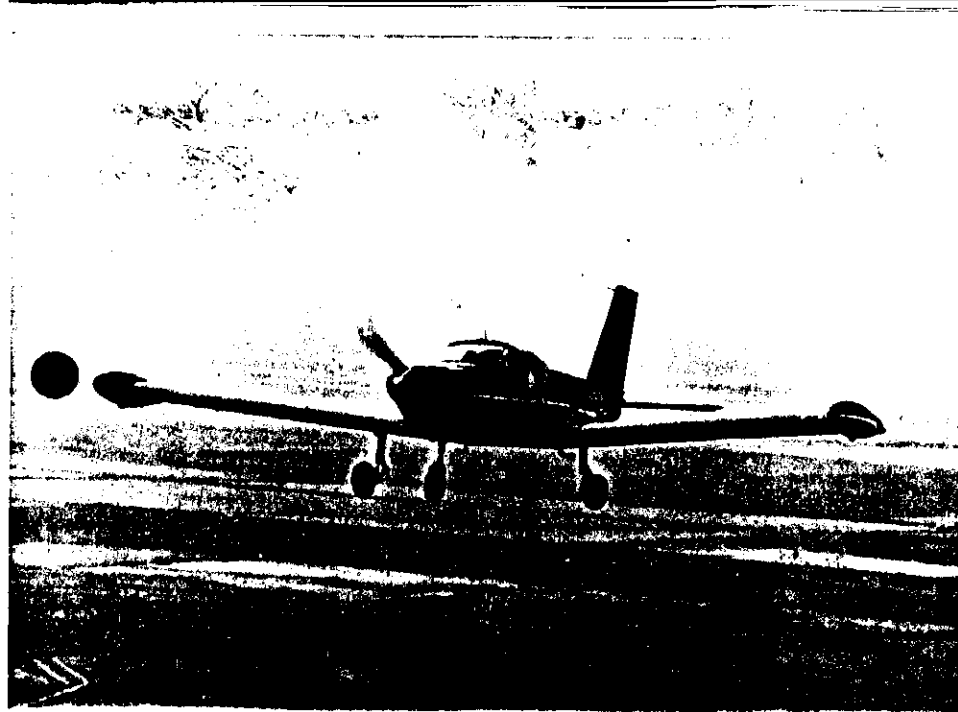
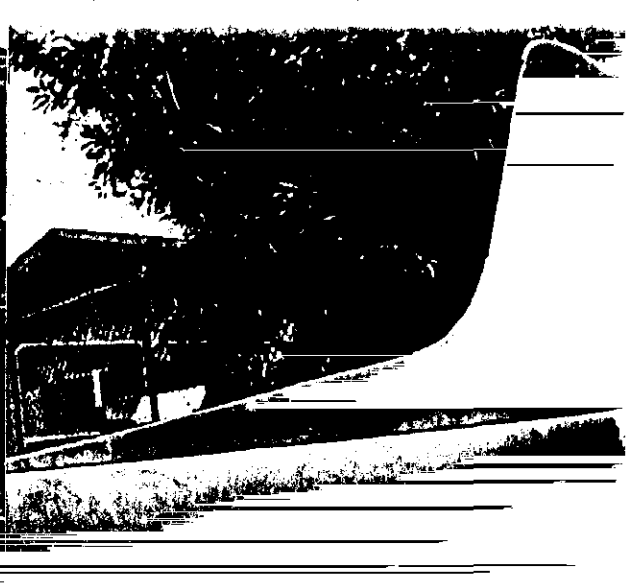
RUSS WELLS has spars, fuselage extrusion kit, and almost all the aluminum needed for a PL-2 for sale - \$2000. Contact Russ Wells, 3001 S. 90th Ave., Yakima, WA 98903. (509)966-7203.

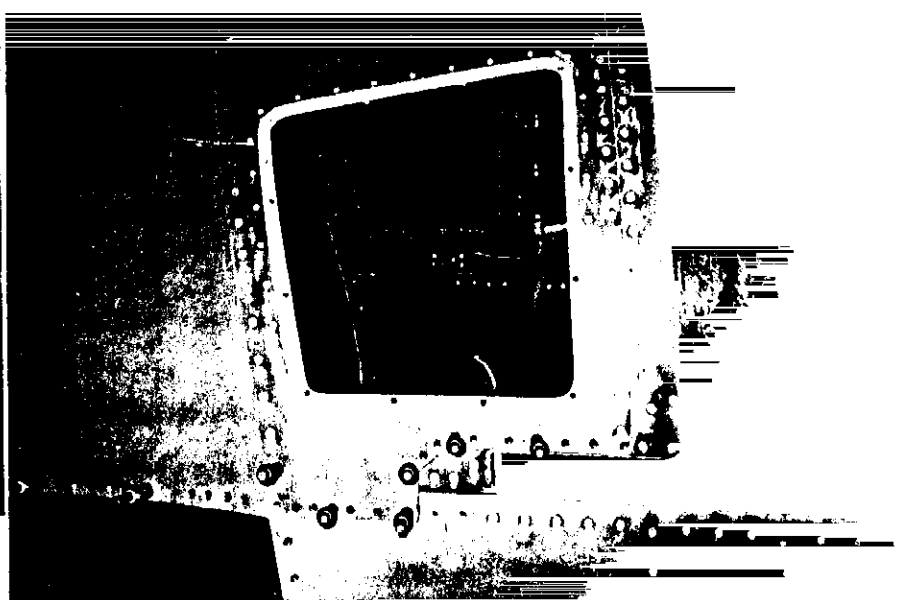
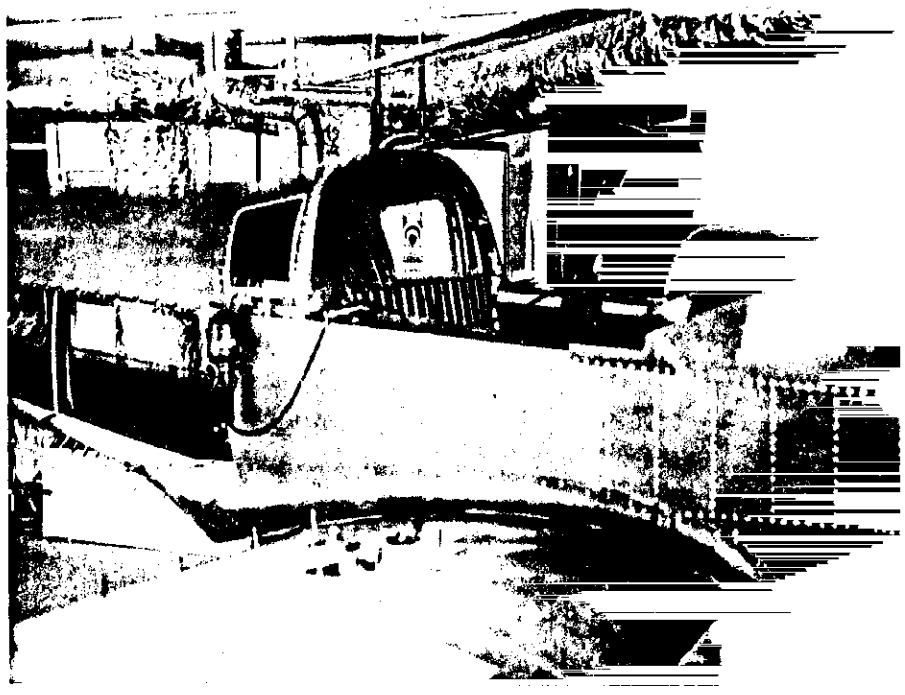
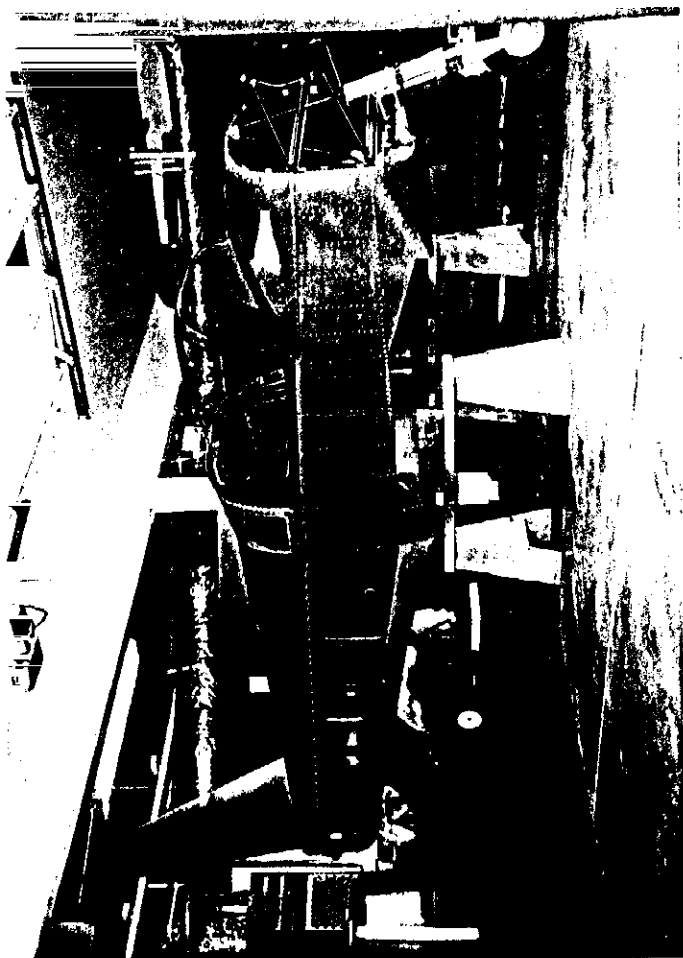
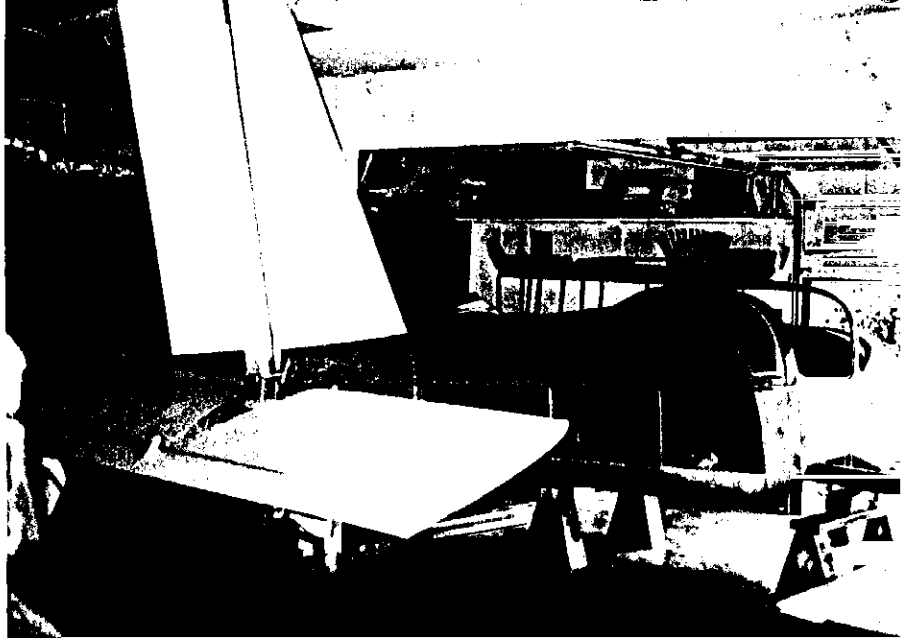
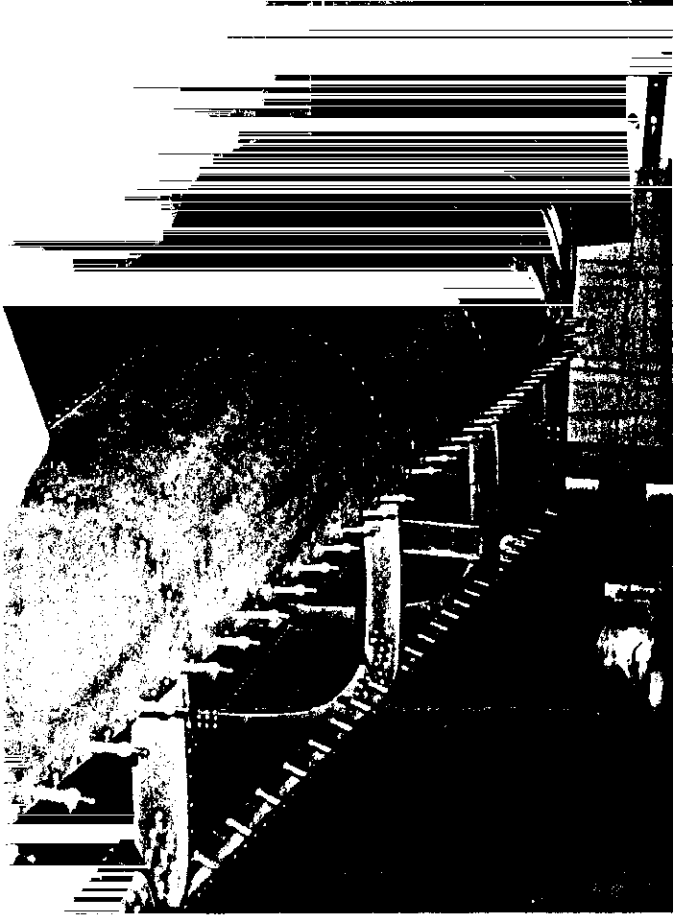
JOHN ROBY deals in new, used, and out of print aviation books of various sorts. He seems to be able to come up with some real rarities - he found a copy of an out of print aviation book for me a couple years back. For catalogs/price lists/info. contact John Roby, 3703 Nassau Drive, San Diego, CA 92115.

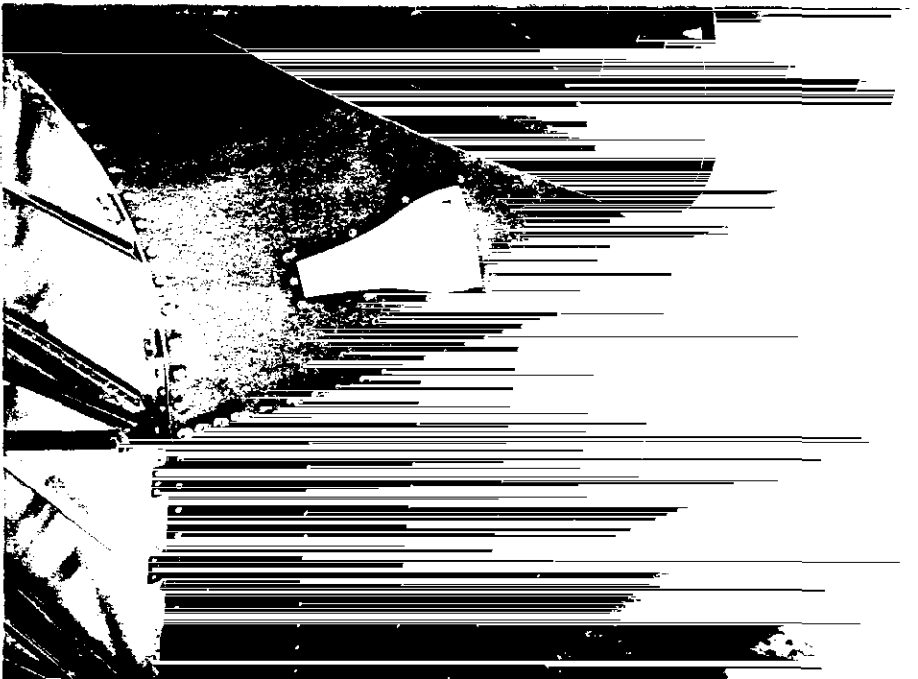
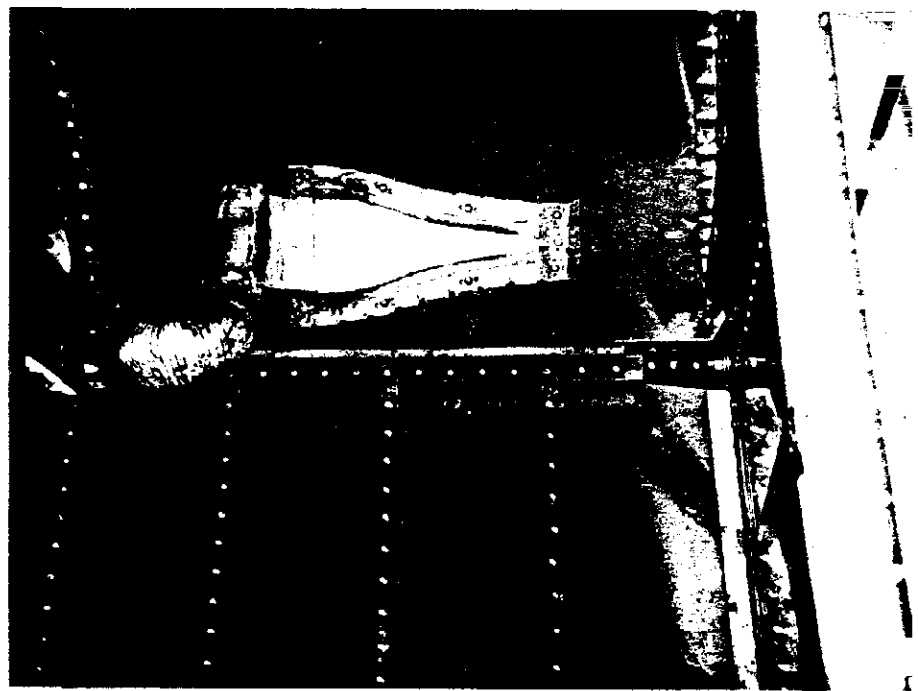
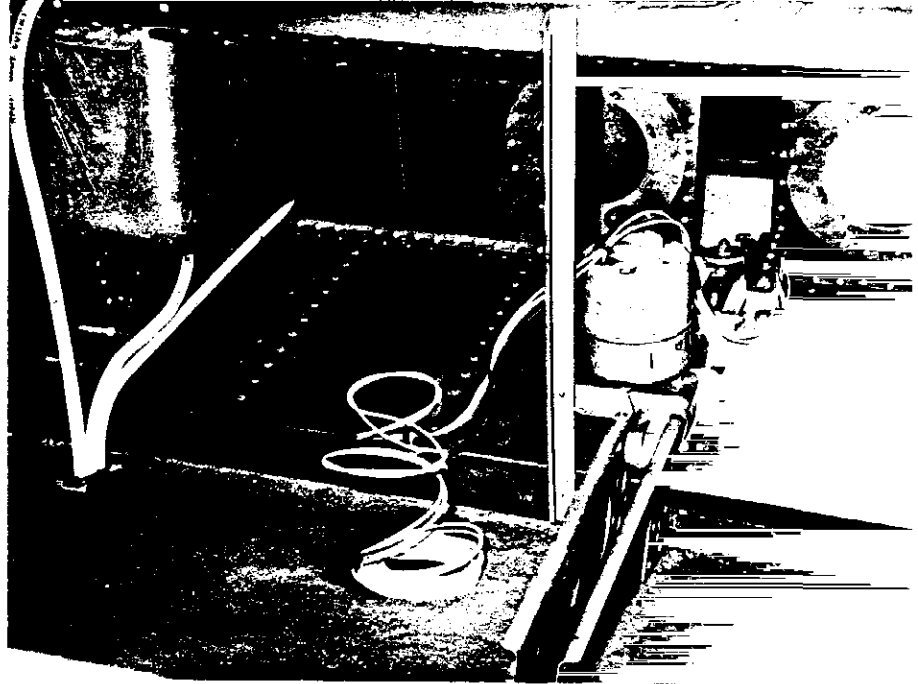
JIM NEISWONGER of McFarland Aircraft Co. is turning out parts for the PL-2. Judging from his list, he seems to have just about any and all metal parts available. I can't print his whole parts/price list here (it runs several pages!) but if you want further info., contact Jim Neiswonger, c/o McFarland Aircraft, PO Box 1353, Spring Valley, CA 92077.

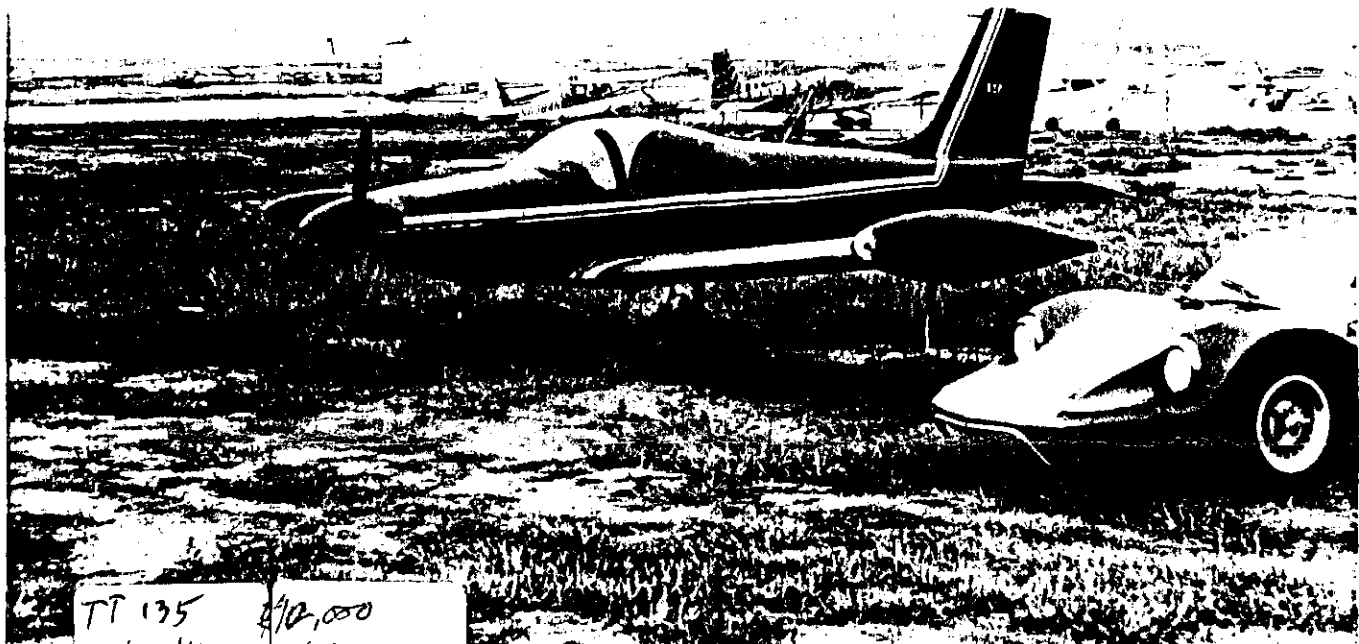
MILTON GRIMALDI has a beauty of a PL-2 for sale, judging by the picture. I don't have any other info other than that the total time is 135 hrs., it has a Narco Mk.2 radio, and he's asking \$12,000. Seems a shame to break up the set, with the kit car shown alongside painted identically. Contact Milton Grimaldi, 233 Prescott Ave., El Cajon, CA 92020.

STEVE JOHNSON has a PL-1 for sale - I understand this one is serial # 1! I don't have any info on total time, etc., but this airplane has certainly been around for a while and has a bunch of flying time on it, mostly in the LA basin as I recall. Asking price is \$7600. Contact Steve Johnson, PO Box 2527, Big Bear City, CA 92314. (714)585-6743.









TT 135 \$10,000
radio MK2 6 + 3-95



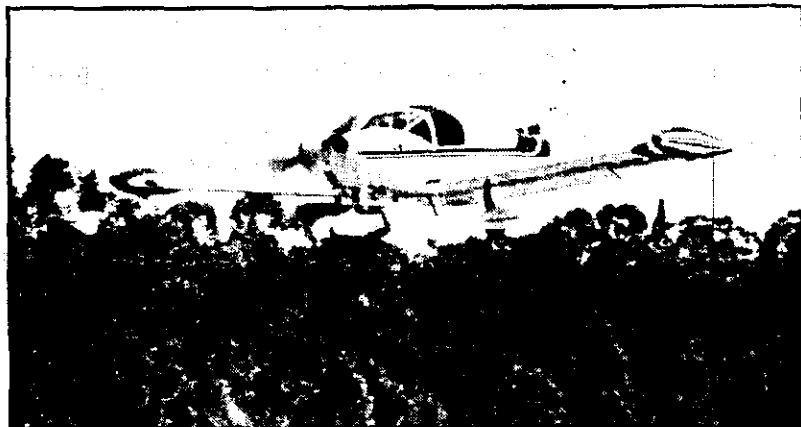


Above: An aerial view showing the new hangars that have been built as well as the clubrooms near the 914 m 17/35 gravel strip.

Top right: A very patriotic Victa Airtourer seen among the parked aircraft.

Right: Michael Warden's racey Sonera II powered with a VW engine attracts a lot of attention.

Below: A Pazmany PL-2 built by Mr Henk Van den Heuvel makes an approach into the bush strip.

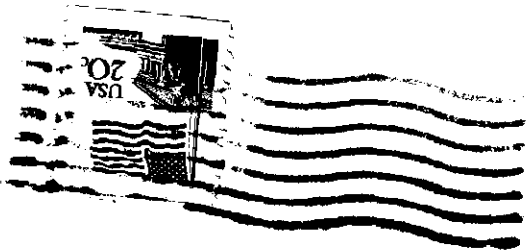


Above: One of the most practical homebuilt aircraft ever designed, the 4-seat Bede BD4, arrives for the fly-in.

Left: A general view of the Wedderburn facility with the Aeronca in the foreground.



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