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YOU SHARP EYED READERS MAY HAVE NOTICED SOME CHANGES in the heading for this issue. Please note that the address and phone for your newsletter editor, upper right corner, have changed. If any of you have mail on the way to the old address, however, fear not; the post office has been forwarding the mail just fine, so it will reach me at the new address - eventually. If any of you have tried calling me and found the phone disconnected, now you know why. No, I didn't take your subscription money and retire to Acapulco. As with any major move, however, things were a bit unsorted for a while before settling down again, and if the move has left any of you at loose ends trying to reach me, I apologize and assure you that I do not plan to make a habit of this moving around business. My wife and I have an excellent excuse for this move, however.

Actually, all this is my wife Anne's fault. We had both been working for EAA for quite some time, Anne in fact in a good many areas including actually working on some of the aircraft. Unfortunately, there was little opportunity for advancement with EAA, so she was unable to advance to aircraft work as a regular thing. Last Sept. she delivered an aircraft to the National Air and Space Museum Restoration Facility at Silver Hill, MD just outside of Washington, DC and was encouraged to apply for work there. The U.S. Govt. paperwork mill grinds on exceedingly slowly, as I am currently finding in my job search, but grind on it did and Anne started work for them on March 21.

Meanwhile, I have finished up my work for EAA, put the house in OSH up for sale, loaded the contents of a small three bedroom house with full basement, two car garage, and odds and ends in the hangar into an 18 ft. rented truck (believe me, it was a tight fit!) and motored across the country to our new home. After returning the truck, the best part of the move began: Ferrying N75PL from OSH to the DC area.

The flight was rather anticlimactic, actually. The day planned for the trip turned out to be beautiful, not a cloud in the sky for hundreds of miles enroute. I departed at just about exactly 8:00 am CDT and climbed out southeast across Lake Michigan at 11,500 ft, detouring around the restricted area. This way I was within gliding distance of shore for the whole crossing and could pick up those 20 - 30 knot westerly winds that always blow at that altitude.

That is, except for this trip. I found that I made the entire trip with no noticeable head or tailwind component at all! This is practically unheard of on such a long trip, but that's how it worked on April 9. With the detour over the lake, OSH to Wheeling, WV worked out to about 450 nm in 4:15 flight time, or about 106 kts. groundspeed - a smidgen less than 122 mph including the long climb. By the way, before you get too excited

about the endurance on that leg, let me remind you that N75PL has 30 gallons of useable fuel when the tanks are full, and fuel consumption worked out to somewhat less than 6 gph, even including the climb, since most of the flight was so high. I had between :45 and an hour reserve left when I arrived at Wheeling.

Next leg, Wheeling to Washington Exec./Hyde Field, was about 190 nm in 1:50, = 104 kts; call it 120 mph GS. This one was a little lower, since it was only about a two hour flight, and I had to detour around and under the edge of the Dulles TRSA and DCA - Andrews AFB TCA, not to mention the Mt. Vernon prohibited area. Seems the farther east one gets in the U.S., the more complex the flying is. I was really spoiled by the section lines and generally relatively good visibility in the midwest. Well, once upon a time Anne and I lived in this general area before, so we'll get used to it again.

Meanwhile, N75PL was fortunate enough to find a hangar, which while perhaps not exactly new and totally leakproof (we had to reattach a corner of the back wall!) at least keeps the birds from using the airplane for a perch - and other things. Hyde Field is a real sport aviation field, which means it's a tad on the shabby side, shall we say. But there's a lot of activity there, especially on weekends, and a PL-2 really attracts attention. For the couple of weeks N75PL was tied down outside, when Anne and I would go out to fly it seemed there was usually someone looking the airplane over. I took an interested party up on a short flight, in fact, when he expressed interest in the design. He was looking to buy rather than build, so I had to refer him to Trade - A - Plane; N75PL is definitely **NOT** for sale!

By the way, the above - carrying passengers - brings to mind a subject that I started on way back a year or so ago, and never managed to fit into a newsletter. While at least from my personal standpoint the issue doesn't appear to be as critical as it was over a year ago, it still might be worth considering:

INSURANCE WOES: Liability insurance seems to be a lot like home ownership, with all its associated problems, cracked basement walls, and other such fun type things. (You hate to think about the hassle and cost, but the problem won't go away no matter what you do - so you might as well try to work it out and cope the best you can.) When we first purchased N75PL back in late '79, I got liability insurance with max coverage of $300,000 per accident and $100,000 per person, along with passenger liability coverage, for a bit more than $300 a year, as I recall. At the time it was through AVEMCO. The following year, EAA arranged a group plan through AIU/AUA out of Greensboro, NC - and I found that AVEMCO had nearly doubled their rates when I tried to renew. The AUA people treated me fairly well over the next few years; as well as can be expected from people who are taking over $300 a year from you with no tangible return, anyway! Their rates always ran around the $300/year range for the same coverage, generally increasing by some few percent a year.

Until last year, anyway. It seems that EAA decided to break it off with these folks and get cozy with AVEMCO. After contacting these two outfits for quotes, I found that AVEMCO was still up there in the stratospheric range (this means anything more than around $350 a year or so to me), asking over $500 a

year for the same coverage - and since the AUA people were no longer close to EAA, their rates went up into the same area.

Now, if you folks have any other thoughts on where to get insurance for a U.S. based homebuilt, please let me know. There are a few other companies out there writing aircraft insurance, but so far as I know these are the only two handling coverage for homebuilts. Actually there is one other company, National Aviation Underwriters, but they're affiliated with AVEMCO - so theoretically, at least, their quotes should be identical. Practically speaking, however, it's another story. Insurance quotes seem to be much like legal opinions: Everybody has one, and they're all different, even in the same office. Why this should be is beyond me.

The strange thing about all this is that after receiving a much higher renewal quote from AIU, that recently one of their agents contacted me with a routine "looking for business" note asking if he could give me a quote. I told him I didn't need any more quotes from his company if they were like the last one, but he called back a few days later with a quote of $319. Like I say, they all seem to be different, even in the same company.

Meanwhile, after discussing the matter with one of AVEMCO's higher ranking types (there are fringe benefits to working at EAA, such as occasionally having the opportunity to get first hand info from the various sources who show up at headquarters from time to time), he indicated that he felt their initial figure of over $500 was much too high for a PL, considering its safety record in this country, its all metal construction, its conventional and conservative design, and tricyle gear configuration. I agreed wholeheartedly with all this, naturally. Matter of fact, guess who pointed all this out to him in the first place. Anyway, I was assured that he would discuss the matter with some of the vice presidents in charge of homebuilt insurance types and get back to me. That was in June, and as of this writing *(Sept., '87)* I have yet to hear from them.

Actually, I wasn't too worried about insurance for N75PL, since it's been down for so long, but now that it's getting close *(I told you I wrote this up quite a while ago)* I wanted to check into it. Also, recently the county *(Winnebago Co., WI)* came up with new contracts for airport tenants, us people who rent hangars and/or tiedown space from them. Among other things, there is a requirement that we carry insurance, including passenger liability, of at least the 300,000/100,000 limits mentioned at the beginning of this dissertation. While in the airport manager's office on a related subject I happened to mention that of course I had let my insurance coverage lapse since the airplane was not airworthy. Well, according to the manager this is a no-no; all tenants must carry insurance whether their aircraft is airworthy or not. His logic on this is that if someone injures him/herself in the hangar you're renting - or trips over your tiedown rope, or whatever - then you must have insurance to cover it.

You can probably guess what the insurance people say about this: (1) Your aircraft insurance will not cover such a situation unless the accident is a direct result of contact with the aircraft. If the hangar door falls on them, forget it; you're not covered. (2) Since the intent of the liability

insurance is to cover aircraft accidents, and since the insurance company will make every effort to weasel out of paying a claim (sorry if I'm stepping on any sore spots out there, just telling it like it is), the first things the insurance people will want to see are the logbooks for both the pilot and the airplane. If the airplane is not currently airworthy, sayonara, and thanks again for all those premiums you paid us, buddy. This means that if someone is requiring you to carry liability insurance on your PL that you recently moved to the local airport for final assembly and inspection, or if it's been over a year since that last annual inspection, or etc., etc. - you're throwing your money away since you're not covered anyway.

The county's intent on this is to cut down their own insurance costs by having the tenants pick up the cost of any claims, up to the $300,000 limit, which is a worthy thought. What the heck, if they don't require insurance from their tenants then they'll just have to carry more, and guess who they'll expect to cover the increased costs of that increased coverage. Very good, go to the head of the class - your hangar/tiedown rates just went up to pay for the insurance they're no longer requiring you to carry. This is what is known as a "no win" situation, so personally I guess I'd rather carry my own coverage which will cover me, rather than see the county pick it up and charge me for it, and not be covered by their policy.

The thing which really dismays me about all this is that the airport tenant contract was obviously written by someone who doesn't know aviation well, and apparently doesn't know aviation insurance at all - and I suspect that this is the case with many of you out there with your PLs or whatever else you may have based on an airport which requires insurance. You just may not be covered at all for the type of mishap which the airport authority is thinking about.

Now what? Well, I checked into what is called **premises insurance.** This would cover me for such accidents as someone tripping inside the hangar, the door falling on them, etc., as the county seems to be considering. Problem: This insurance is primarily designed for FBOs, which means high limits - and high costs. The company called me back after checking into a smaller policy (like the $300,000 the county requires) and informed me that such a policy would cost me over $600 a year - twice what the aircraft liability is costing! Well, scratch that idea.

Another EAA member mentioned that he was covering his hangar through an extension of his homeowner's policy for only about $24 a year. When I checked into this, I was told that such a policy would only cover buildings on the principal property, like garages and storage sheds. No way would it cover a rented or leased building on property owned by someone else - like the county. Who's right? I dunno, but I suggested to the party who told me of this loophole that he check with his agent carefully; he may not have the coverage he thinks he does.

Meanwhile, onward to the specific subject that started me on this insurance thing a couple pages back: Passenger liability. Yes, we carry it on N75PL at this time, because since I first wrote most of this tirade on aircraft insurance things have loosened up a bit; passenger liability is automatically included

with the coverage I currently have. It has not always been thus, however, and I would suggest that you check your policy carefully before carrying passengers to confirm that you're covered. Just because you bought liability insurance doesn't necessarily mean that your passenger is covered; it could exclude passengers and cover only those on the ground who happen to be in the way.

Addendum: Note that I haven't even mentioned hull insurance to this point. There's a reason for that: it costs too much and I can't afford it. I know a fellow with a Cessna 150 of approximately the same value as N75PL - around $8,000 or so (no, I wouldn't part with it for anywhere near that!) who carries liability to the tune of half a million, passenger liability, hull insurance, casualty (fire, theft, hangar falling in, etc.) and all this coverage sets him back around $550 a year. That's what some of these outfits wanted initially just for a lesser amount of liability for our PL-2! And he's a low time pilot to boot. When asked why, the insurance people mutter such things as a greater number of aircraft to spread the risk over, etc. They seem to be fond of asking, "How many PLs do you see on the average airport compared to Cessna 150s?" I'm fond of replying, "How many Cessna 150 insurance claims have you handled compared to PLs?" They don't seem to have a ready answer for that one. I think what it boils down to is that the rates for PLs are so high - and this is probably true of other homebuilts, antiques, and obscure aircraft also, although I haven't checked into it - **because they can get it.** I've come up with some thoughts on how to cut down on this, such as dropping liability coverage if your aircraft is not currently airworthy, or purchasing less insurance (our current limits are only $100,000/50,000) - but these thoughts come only from my own personal experience in this area, and although some of these statements are applicable throughout the U.S., they're probably not universal - especially for you PL people outside of the U.S. If you have any thoughts on what we can do about this, or suggestions of any sort, personal experiences that might help someone else, or some experience with insuring a PL outside the U.S., please let me know, and I'll pass it along in a future issue. Thanks.

Onward to a (slightly) different subject: How many of you are using auto fuel in your PL's - or other aircraft? As you long time readers of this rag know, N75PL has been drinking the stuff for a few years now (unleaded regular, most of the time) and seems to like it just fine. Matter of fact, the only problems I've had that I can recall were when I couldn't get autofuel and had to use 100LL avgas - like on the stop in Wheeling. For the next few flights I occasionally found some evidence of plug fouling on runup and would have to run the power up and lean to clear the plug(s) before takeoff. Before adding the 100LL I also had very clean fuel samples when checking the sumps before flight; at worst I might find a small bubble of water, and clean water at that. Since purchasing the avgas, it's taken me several flights to get all the crud out of the fuel sumps. I end up draining two or more samples from the tanks until it comes out clean, then flying, and the next time I fly I have to repeat the procedure all over again. Fortunately due to the design of the fuel pickups in the tanks, none of this stuff

seems to have worked its way past the tanks; the other sumps check clean. I sure am glad that avgas is so much better quality than autofuel, right?

At least so far as I know (correct me if I'm wrong) aviation insurance companies are not disallowing the use of autogas, providing that the airplane and engine are "approved." For standard aircraft, this means an STC, and since our homebuilts have no type certificate (TC), we can use about anything we like.

Trying to get it into your airplane legally, however, may be a whole different story. Both Winnebago County Airport and our current airport prohibit the refueling of aircraft from portable containers. If the airport supplies equal facilities (underground tanks, etc.) for autofuel as for avgas, fine - but most airports don't do this since it costs so much to install these facilities for such small sales. Meanwhile, if the airport catches you in the act of refueling your own aircraft with your own cans or whatever, they may be able to kick you and your aircraft off the airport. What about all those people who refuel their own boats, off road vehicles, lawnmowers, etc., etc.? Well, I haven't checked into Maryland law thoroughly yet, but at least in WI there was a state law prohibiting refueling of ANYTHING with portable containers - but the only enforcement was with private aircraft owners refueling their own aircraft!

Now, the reasoning behind this was that there were a couple of incidents in which a fire broke out while a person was refueling his own aircraft. Unfortunately, the county chose not to gather facts on these incidents to determine just what went wrong, but instead engaged in selective enforcement. Since the county never published the details I have no way of knowing, but I suspect that the incidents occurred while using a plastic spout and/or plastic can. These things can build up a pretty good static charge and produce a good electrical arc - and they're pretty hard to ground. As for me, I use metal cans and spouts and always keep the spout in contact with the metal neck of the tank when I refuel. What about the fiberglass tank? Well, shortly after purchasing N75PL I installed an aluminum strip in each tank, marked so as to see the fuel quantity remaining. These are riveted to the neck and extend down into the fuel, of course. I honestly wasn't thinking of the grounding benefit of these indicators, but they do produce a good ground path from the fuel can to the fuel in the tank. Anyway, I suggest for those of you who might be doing your own refueling to use metal cans and spouts at the very least. The indicator strips I installed are probably not necessary - your fuel gauge float mechanism is grounded anyway - assuming you have the neck grounded to the rest of the airplane somehow. Anyway, the above procedure has worked out well for me, so far at least. As for the situation at our current home, Hyde Field? Well, they're pretty laid back here, and although the lease agreement here has the standard no-refueling-from-portable-containers clause, the management is looking the other way since they only have 100LL avgas on the field right now. How about the rest of you out there?

Having gotten all that off my mind (I did't know it would hold that much!), it's time to catch up on correspondence. As per usual, I'll take it in chronological order; fortunately,

having pretty much caught up on the last issue, what I have here is relatively current, going back only a couple months.

At the risk of getting riled up about yet another subject, I'll comment on a letter received from **Jacque Fletcher** of Calgary, Canada. Jacque not only took typewriter in hand to send his protest to the FAA over the notorious NPRM 88-2 (we've all got that number memorized by now, right?), but was kind enough to send along a copy to me. Now, if Canadian citizens are sending in their protests to the FAA over this ripoff of our civil liberties, I surely hope that all you American citizens also sent in your words of protest to both the FAA and your two state senators and representative. It's too late now, of course, even with the extension period, but from what I understand - and I'm pretty much out of close contact with the EAA now - the Feds were swamped with mail opposing the NPRM and are still sorting things out. Hopefully they'll come to their senses and design climb and descent corridors for the busier airports and practice the "keep 'em high" philosophy for the big fast ones. Turbos run more efficiently up high anyway - just ask an airline pilot how he likes holding at 5000 ft. sometime. The idea is certainly not unprecedented; the military used climb/descent corridors at most of their high performance fields back in the '60's, and as these areas were all marked on the charts and were relatively small and simple, it was no problem at all to steer clear if they were in use or to get a clearance through otherwise. Jacque's letter was somewhat stronger than mine (I think you have something there, limiting the number of lawyers allowed to hold office!), but hopefully the response will cause the FAA to rethink this NPRM.

We PL people are more fortunate than many others regarding the possible outcome of this NPRM, in that the airplanes we are building and flying all have electrical systems and panel space for a transponder. Mine is still on the desk, but it will probably be the next thing to be installed in N75PL now that we live under the edge of the DCA/AAFB TCA. One can pick up a used transponder for around $350 - 400 if one watches Trade - A - Plane closely (just make sure it's TSO'd, or it won't be legal and you probably won't find a compatible encoder) and one can purchase a new encoder for $200 (ACK, from Western Air Radio, Torrance Airport, Torrance, CA 90505). Trade - A - Plane has ads for the same brand for $235 - 249. But what about those of us who dabble in other aviation fields, such as sailplanes? I can't believe the FAA would in effect kill the sport of soaring with the NPRM written as it is. On the other hand, I'm not going to go out and buy a new high performance sailplane right now.

Meanwhile, **Jim Daniel**, 2985 Comanche Court, Alamogordo, NM 88310, is in need of a set of spar extrusions. If any of you can help him out, please contact him at the above address. Good luck, Jim - I don't know that you'll find an inexpensive set, as Paz found out some years back when he attempted to order more from the manufacturer. As I recall, that's when he redesigned the spar with built up caps. I imagine some of you must be flying with the built up spar caps by now - any pilot reports out there? Jim is particularly interested since he may be taking that route. Contact him if you can help him out.

I have a change of ownership to report - **Mr. Joe Lesch** of

1918 N. Summit, Wheaton, IL 60187, has purchased the PL-1B formerly owned by **Jack Tetrick** of Daytona Beach. This airplane, N830JT, was originally built in Taiwan as a primary trainer for their air force, so it has the 150 hp. Lycoming O-320 engine. As seems to happen with new purchases, Joe is in need of a minor part to get his new toy shipshape, at least for night flying: Anyone out there have a position light lens? Joe specified in his note that it is the left (red) lens - I gather from this that the lenses on Joe's PL are tinted rather than clear, as I am familiar with. If you can help him out, you can reach him at the above address or call him at (312)653-4267.

D.J. Schneider of 747 White Ave., Ishpeming, MI 49849 is in need of a canopy frame and plexiglass for his project and has a goodly lot of other odds and ends to pass on in the way of a fuselage extrusion kit (still in the box), a whole bunch of metal templates, fuselage frame mold, a complete set of firewall gussets, rudder and stabilator fittings and bearings (installed), pitot tube, stabilator mass balance, and numerous other parts. Contact D.J. for prices or trade for his needed parts or whatever.

Remember p. 6 of the last issue, on which I printed a picture of the PL-1 built by Harold Sponaugle - for sale by the (then) present owner, Philip Morris? Well, the airplane has changed hands again; the new owner is **John Barthelmess**, 2235 Ellicott Dr., Tallahassee, FL 32312. John has seen more than his share of problems since acquiring the airplane, in that shortly after purchasing the plane the right main gear strut jammed and broke on a landing. After having another made up at a local machine shop, the new one broke at the same point on only the second landing! Honest, if it's built up properly, the PL gear is really tough; I'm at a loss to explain two consecutive failures at the same point. This is the same landing gear design, by the way, that was used on the Ryson Cloudster motorglider a few years back; the Cloudster has a design gross weight of more than 20% over the PL-1, as I recall, and the Cloudster passed the FAA certification drop tests with a **shorter** strut travel stroke than that of the PL!

Well, after all these trials and tribulations John has decided to go to a Cherokee 140 landing gear - which should certainly be beefy enough to take any loads a PL can put out. I recall seing a PL with Cherokee gear once upon a time; I believe it was **Ross Whitney** of Canada who had so equipped his PL. Unfortunately, Ross is no longer a subscriber, so I no longer have his address. If any of you can help out John regarding his retrofit project, please get in touch with him at the above address.

Now that you have read all the way through this tome, I'll let you know that I have saved the best for last: **PAZ** has a new design out! Well, sort of, anyway. You're all familiar with the PL-1, -2, and -4, but once in a while someone wonders about the missing number in the series. Well, once upon a time it was to be used for a certificated version of the PL-2, but what with certification costs, liability insurance, etc., the plan was dropped. Well, Paz has resurrected the -3 designation for the PL-3 "Guri" (he says this is Argentinian Indian - Gaucho - Spanish slang for "little boy"). The PL-3, as with the -2, is

basically a refined version of the PL-1 - but in this case the refinements cause quite a difference in appearance and some flight characteristics. The most noticeable difference is the most un-PL-like fuel tanks, which Paz has moved to the wings, immediately outboard of the landing gear and between the spars, in the same location as **Ed Boothe's** modification reported in issue #80 of the newsletter and the March '87 issue of *Sport Aviation.* The main difference between Ed Boothe's wet wing modification and Paz's design is that Paz plans on using a separate, built up fiberglass tank for superior crashworthiness and ease of inspection and maintenance. Capacity will be the same as current tip tanks, 25 U.S. gal. total, 23 gal. useable.

Paz has also designed a new drooped leading edge for the PL-3, which he will make available in the form of plans as an add-on for the rest of us PL-1 and -2 drivers if there is sufficient interest. These two changes - the drooped leading edge and relocating the tanks inboard - should go a long way toward making the PL-3 more spin resistant than the PL-1 and -2.

One other big (literally!) change for the -3 will be a move up to 6.00x6 wheels and tires for the main gear, as on the Cessna 150. This should help out those who use unimproved fields regularly (come to think about it, the pavement at our current airport might meet that description). Personally, I have found the 5.00x5 main wheels and tires to work out just fine on the occasions I've flown in and out of grass strips, and I like the lower weight and drag (and price!) of the smaller wheels and tires too. However, this does provide another alternative for those of you who want or need a larger main gear size. If any of you are interested in the above modifications to your present project or flying PL, let Paz know - his address is on the front page of the newsletter - so he can determine the response and see about making these features available to us.

Paz also reported that the stack of parts being shipped to Argentina, pictured in the last newsletter, is now a flying PL-2! Wow, those people work fast! They build airplanes faster than I can report on them, I think. But at least I "scooped" *Sport Aviation* on the ENET story. (When you get word and pictures on the ENET PL-2, Paz, let me know and I'll try to come up with another "scoop.")

In fact, speaking of pictures, you'll note that this issue was a little thin on them. I'm sure you folks must have all kinds of interesting things going on with your projects and flying PLs out there; please pass them along to me and we'll accomplish a couple things that way: Others will get the benefit of your good ideas, and I'll have something more interesting than my own ramblings to stick in the newsletter. It's been said before, but I'll say it again: Remember, it's **YOUR** newsletter, and I need **YOUR** help to fill it out. I'm down to a couple of ideas for the next issue, so please help me fill it up - thanks!

(P.S: A note to you overseas readers: My apologies for making it so difficult to get into your newsletters. Postal regs require overseas/foreign mailings to be completely sealed - and the newsletter weight is such that an envelope would raise the postage by another 50 cents U.S. Let's keep the cost down!)

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Your last issue is #N/A