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AS PROMISED, IT'S "CATCHUP" TIME for your PL Newsletter. I'm currently working a bit later in the afternoon, but going into work somewhat later in the morning - and the time in the morning is working out most successfully for playing "catchup" for the PL newsletter, as well as other matters that never seem to end.

This time around I plan on inserting a goodly number of photographs which you folks have provided over the last couple years or so. I also have some information on the PL-8 which I'll include later on in this issue, complete with a three view! This airplane is somewhat different than the PL designs with which you're familiar, in that its intent was for long distance record flying. (Come on, no fair peeking - read it in order.) As I start this issue, I really don't know if I'll have room for everything or not, but I doubt it. But then, that will give me something for the next issue. Anyway, before we go much further into this, let's review the rules of play a bit.

Subscription expiration: Take a look at your mailing label. On the last issue (#85, which you should have received sometime around March, 1992) you each should have found a number in the lower left corner of the label. That number is the last issue which I show you to be due, according to my records (sketchy, but I believe them to be accurate). I'll try to remind my programmer/wife (sure is nice to be married to someone so versatile - and she can cook, too!) to install the "your last issue is" remark in the label printing program to make the above more clear. (In some cases the above doesn't apply, if I had to hand write your address for whatever reason. Nonetheless, I still try to include a note when you come to your last issue.)

In the past when I have allowed a great gap of time to pass between issues, some of you have gotten nervous and sent money, thinking your subscription had expired. Check out your "last issue" number: If you have more than a few issues to go from the current issue in your hands, **DON'T** send any more money! As you well know, I turn out the newsletter infrequently enough that you'll have plenty of time to resubscribe before the next issue comes out. If for some reason one or two issues go by before you resubscribe, I have all the back issues so I'll make sure you get the intervening issues too. And as noted above, I usually try to remember to put a personal note in with newsletters to those whose subscriptions are expiring (or for whatever reason), just to make sure.

Back issues: Yes, all are available, way back to and including issue no. ONE. Many of you have a complete collection, either through me or by means of having collected them all in the past. There are some idiosyncrasies in the numbering system: At one point early in the game, the same issue number was used twice, (#4 and 4A, I call them) and much later down the road a number was skipped (#56). It all evened out to make for 86 issues so far, including this one.

So, how much do back issues cost? At this point it gets tricky. You see, the newsletter started out small (yes, even smaller than it is now!), with only one or two sheets per issue. It has gradually expanded to the current five sheets (9+ printed pages) per issue, which is pretty much the "magic number" unless we expand and take over FLYING magazine or some such thing. By the time a mailing label and postage is added, each newsletter is closely approaching one ounce - and I don't know if I (meaning you subscribers!) could justify the additional postage cost to include more sheets. Anyway, the bottom line is that the cost of back issues is variable, depending upon which back issues and how far back they go, as well as how many. Typically a whole set shipped in one package will run around \$40.00 US for copies and mailing.

Subscription rates: Still holding the line at \$1.00 U.S. per issue for North American subscribers and \$1.50 U.S. for overseas from the U.S., as noted in the newsletter heading. Postage has gone up a bit, but in a major metropolitan area copy prices are competitive, so I anticipate being able to hold the line on these rates for quite a while.

Advertising: If you subscribe and want to spread the word about something related to FLs, let me know. I'll stick it in the next issue to go out, assuming it still appears to be current. Definitions of "related to FLs" and "current" are left to the discretion of your newsletter editor/publisher. Since I have the personal computer and keyboard, I make the rules. Seriously, from time to time I'll receive a request from someone who is looking for a FL- 1 or -2, project or completed, or parts, etc. In the case of the last newsletter, so much time had gone by that there wasn't much point in including word regarding such items in the newsletter anyway. In any case, be advised that you may see three months or more elapse from the time you notify me of your need and the time the newsletter goes out to spread the word. And the word doesn't get spread very far, since there are only about 40 subscribers. But keep in mind that those 40 are a real hard core group!

There, that takes care of the usual info. that I usually try to remind everyone of from time to time. Next issue I can leave all that out and we'll have more room for airplane stuff. And speaking of airplane stuff, that's just what I'll be doing for the rest of this issue - it's show and tell time. For lack of any more systematic approach, let's take things in alphabetical order (with some exceptions) on the following pages.

# Obituary

## HAROLD E. SPONAUGLE

73, of Vero Beach, passed away October 2, 1989, after a prolonged illness. He was born March 7, 1916 in Salem, West Virginia. He graduated from East High School, Akron, Ohio, and attended Akron University and Kent State University.

His career began as a draftsman to the Steering Wheel Designer at American Hard Rubber Co., Akron. Prior to, and during, WW II, Mr. Sponaugle became senior tool engineer with Goodyear Zeppelin and Goodyear Aircraft Corporation. He later joined National Rubber Machinery Company as designer to the Rubber Machinery Salesman. Later, he joined Hale and Kulgren, Inc., Akron, Ohio, as assistant sales manager of plastics machinery. Moving to Hamilton, Ohio, he became assistant sales manager for Black-Clawson Company.

He was a member of the Society of Plastics Engineers and authored many articles relative to the machines of the trade, making his presentations nationwide to engineers in this field.

He came to Vero Beach in 1965 to begin work at Piper Aircraft in the research and development department.

Mr. Sponaugle was a past president of Toastmasters International, director of Dale Carnegie, member of the Experimental Aircraft Association, and also served on the Indian River Volunteer Ambulance Squad.

He took his first flying lesson at the age of 50 and in 1968 purchased the plans for a Pazmany PL-1 Laminar, an all-metal aircraft designed as a military flight trainer and in use today by the Chinese National Airforce in Taiwan.

It was an impossible dream for someone who had no previous experience working in metal. Completing his 8 hours per day for Piper, Mr. Sponaugle managed to spend an average of 30 more hours per week on his dream. 5200 hours, 3½ years later, on September 12, 1971, his dream came true when he test-flew "The Impossible Dream" at the Vero Beach Airport.

Entering into several Experimental Aircraft Association competitive exhibitions, Mr. Sponaugle was awarded six first place trophies on the workmanship of his plane. While working on the PL-1, he also edited a monthly "PL-1 and PL-2 Mutual Aid Letter," sent world wide to aid those building Pazmany planes.

In recent years, Mr. Sponaugle had his own business, designing many homes for contractors and individuals in Vero Beach and surrounding areas.

Survivors include his wife of 19 years, Susan; one stepson, Edward J. Sellers, USNR; one stepdaughter, Lynne Stephenson; one brother, Lloyd Blair Sponaugle, Roswell, New Mexico; and two step-granddaughters.

A private memorial service is scheduled for a later date.

Before proceeding further, I'd like to include an article which was passed to me from Paz concerning the late **Mr. Harold Sponaugle**. Mr. Sponaugle was the builder of N319HS, a PL-2 later sold to **Dr. John Barthelme**. As you can see from the accompanying obituary, Mr. Sponaugle also earlier edited the PL newsletter. While this may be old news to some of you, Mr. Sponaugle was important to the PL airplanes and people, and deserves recognition for his accomplishments. I'm sorry I never had the opportunity to meet the man.

You may recall seeing some pictures of this aircraft in a newsletter a couple issues back; actually, in issue # 84, which went out back in 1989. This PL was sold to **Dr. John Barthelme**, who experienced some problems with the welded steel scissors on the landing gear. The ultimate solution was to remove the original main gear and install landing gear from a Piper Cherokee 140. I know this has been done on other PLs as well, but personally it seems to me to be a bit much. Considering that the PL landing gear design has passed FAA certification drop tests for an airplane of even higher gross weight, I believe I'll stay with the original gear. However, mine has the machined aluminum gear scissors, which have held up just fine. The only problem I've experienced with the landing gear on N75PL is some rust on the nose gear tube, due (I believe) to improper machining after the tube was chromed. The machining was not perfectly concentric, and took the chrome off in one area to expose the steel beneath - which rusts. One of these days I'll get around to replacing the nose strut to eliminate the problem. Other than that, the only problem I've had is the occasional need to pump up the struts from time to time. With pneumatic struts, there will of course be some slow leakage and a need to repressurize them once in a while, like a couple times a year perhaps.

While the previous page makes for a rather odd juxtaposition, I must point out that your newsletter is a combination of notes and information both on people and airplanes. In the above case, we have an airplane which is still flying (now in the hands of **Mike Wilson**, who purchased it from Dr.B.) while its original builder has passed on. Much the same situation has occurred with our own N75PL, which was originally registered as N75DT for its builder, **Dave Thomas**. Mr. Thomas passed on several years back, but his airplane, although with a few alterations under the hands of the new owners, still flies on. Paz, you certainly designed a great airplane - it seems more than capable of outlasting the builder in many cases.

**Leigh Blake** wrote a couple of times over the last three years, with progress reports on his PL-2. Back in early '89, he commented that "It looks as though the first flight will be this year" (1989). In the next letter of January 20th '92, he tells us that the first flight of N89LB was on May 14, 1990. (Hope you don't mind my pointing out this discrepancy, Leigh - but it always takes longer than you think to finish an airplane! But then, the way we're going with N75PL, we have no right to give anyone else a bad time.)

Anyway, I got a kick out of the "first flight" story: Seems both Leigh and his wife Wanda are pilots, and Wanda was assisting with the taxi testing after Leigh checked her out. According to Leigh, he ended up giving her "far too many directions" for a high speed taxi run, so while she was dutifully monitoring the gauges, some air got under the tires. Only a few inches in the air, but hey, it was good enough for the Wright Brothers and it still counts! Congratulations on getting another PL in the air!

Wait, there's more. Seems that Leigh and Wanda had a deadline to meet on this project, since Leigh retired in August of 1990 and they were making a move to Arizona in '91. The rush was on to fly off the 40 hour local flight requirement. Needless to say, they made it and after a most interesting flight west, Leigh, Wanda and N89LB are now Arizona residents.

I've also received a couple of notes and photos from **Ed Boothe**, whom you may recall forgot to install his tip tanks and had to put the fuel inside the wings. Ed is still not finished with modifications - he has now constructed a heavier stabilator with .040 thick spar material and machined hinges similar to the lighter Beeches and Pipers. He also bonded all parts together, which serves to further increase the strength by some 25%, according to Paz, according to Ed. As Ed is into basic aerobatics, I can see his desire to make the airplane even stronger.

Ed also installed an additional fairing and rear seal on his canopy. (see photos on the next page - I hope this shows up well.) Ed made up a fairing by using a piece of wire screen and laminating plies of fiberglass over it, right on the turtledeck. Once it set up it was secured to the rear of the canopy, as you can see in the picture. With some attention to detail, it comes

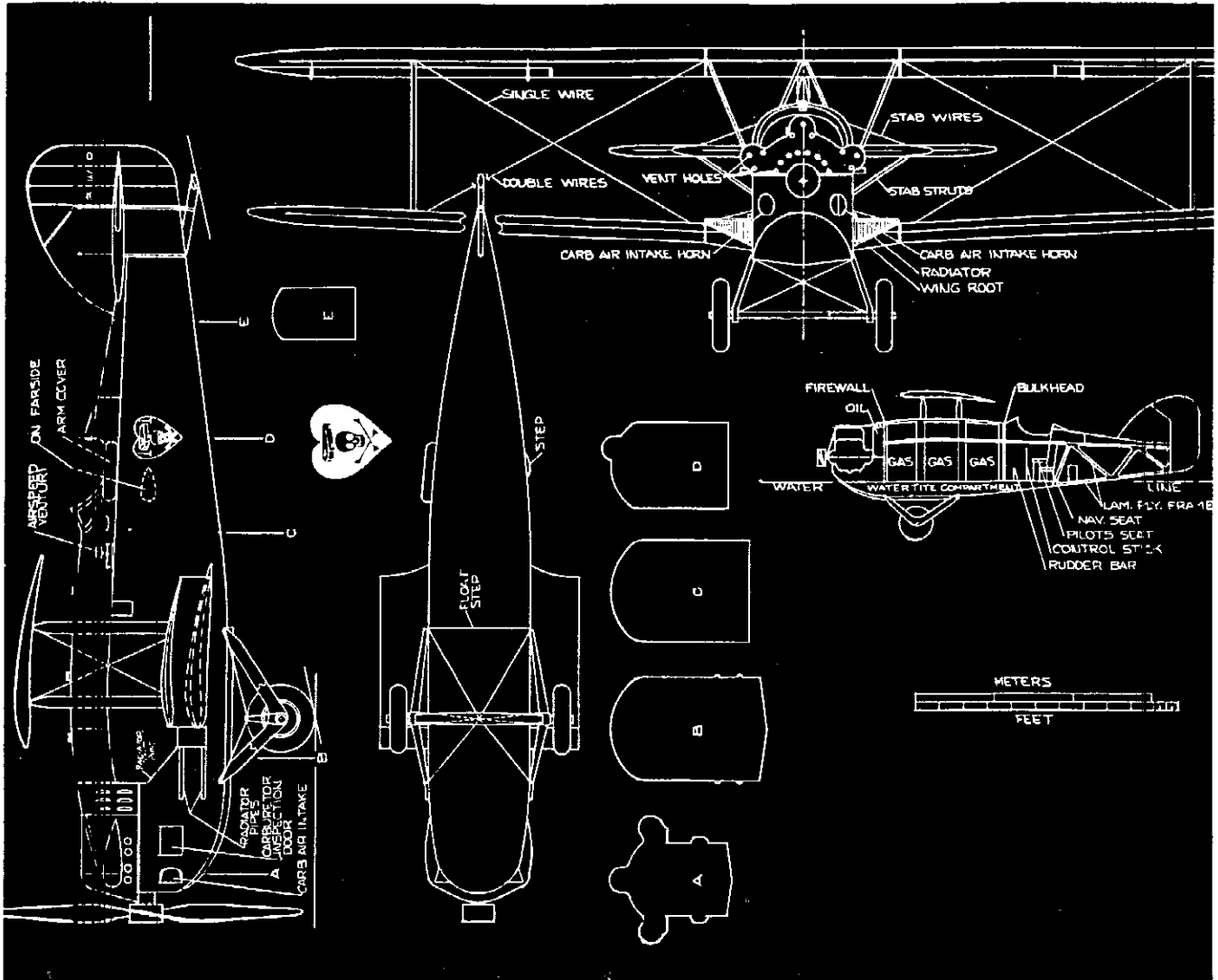
out really nice! By the way, if you want further specific information on this procedure, there's a good article in the April '92 issue of Sport Aviation called "Working With Fiberglass Canopies" by Jim Miller. It covers almost exactly the same operation as that performed by Ed on the rear of his canopy on his PL.



Ed's seal is slotted and is secured to the trailing edge of the canopy fairing in a tongue and groove manner. I think all of us have found the need for some form of seal back there; it's nearly impossible to get a draft free seal at that area, considering you have a rigid canopy frame and fuselage turtledeck. My solution was just the opposite of Ed's, in that I purchased some tubular cross section weatherstripping and glued that to the edge of the fuselage turtledeck at the back of the cockpit. When the canopy is closed, the inside of the rear of the canopy frame bears against this weatherstrip to seal any drafts. It also cuts down on any rattling of the canopy.

By the way, one thing I'd like to point out about building an extension fairing on the rear of the canopy: Be careful if you've already installed an antenna, anticollision light, or whatever on the top of the fuselage back there. On N75PL, I can't add much to the trailing edge of the canopy frame anyway, due to one comm antenna in that location. There's not much clearance between the trailing edge of the canopy as originally constructed, and the comm antenna. It would be a shame to go to all that work and then find out you can't open your canopy all the way!

Alright, before I forget, I better put in that info. on the PL-8 that I mentioned on the first page. Now, some of you may be familiar with this design; I had heard of it before, but I had not seen three views or photos before. Take a look at page 6:

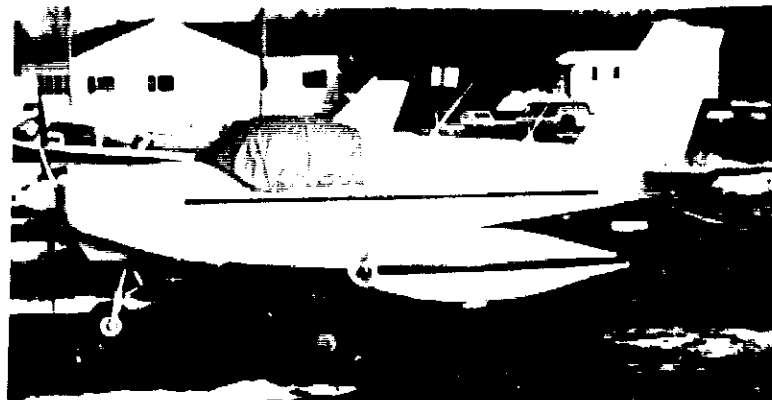


Specially modified from the French navy's Levasseur 4R4b, the PL-8 eliminated one crew position and increased the fuel capacity to 1,063 gallons. Capable of landing in the water, the plane gained 10 mph of speed by dropping its wheels after takeoff.

As you can see from the caption, this is a genuine copy of the three view drawings for the PL-8! Now, wait a minute, where did I say that this is one of Paz's designs? I just said it was different from the PL designs with which you're familiar. This three view comes from the May, 1992 issue of Aviation Heritage Magazine, from an article on l'Oiseau Blanc ("White Bird"). The PL-8 was a modification of the French Navy 4R3b, built by the Pierre Levasseur Aircraft Company - hence the designation "PL-8." See, other designers use their initials, too. This airplane was among the first to attempt an east to west flight between Paris and New York for the Orteig Prize, later won by Charles Lindbergh. Rumor has it that Nungesser and Coli in the PL-8 actually made it as far as New England before crashing. There were uncon-

firmed reports from alleged witnesses, and a group called TIGHAR ("The International Group for Historic Aircraft Recovery") has been tracking down rumors of parts (including the huge Lorraine engine) being removed from the area. At this point, it appears that everything is lost and gone forever, unlike the PL designs with which we are all more familiar.

Meanwhile, onward and (hopefully) upward to further PL (that is, our kind of PL) business. I see I'm up to page seven in this tome already, and I'm still working on the "B"'s in alphabetical order. Oh, well, plenty of material left for the next issue.



Anyway, **Bob Bradley** of Massachusetts provided a couple pictures of his PL-1, taken back in mid- and late 1989. Bob installed a few additional goodies in N3892J, such as hydraulic flaps, automatic tank switching, etc., which have been discussed in previous issues. The airplane is well equipped, including mode C transponder - but then, that's almost getting to be required equipment here in the States, the way the Feds are going with TCAs and positive control. The airplane and pilot are doing fine (at least, as of the last correspondence from Bob).

And we have a (relatively) new aficionado of the PL amongst our ranks - shortly after turning out issue #84 way back when, I received a couple of notes from **Ken Brown**, who purchased the plans for his PL-2 (#284) back in 1975, when he was still in college. As of three years ago, work had begun and progress is being made. In fact, I just received another letter from him (dated April 18, 1992), in which he says that he has mainly been fabricating the steel parts and fittings, with a little time out for some work with aluminum. (I agree, Ken - save the aluminum parts for "dessert"; aluminum is much easier to work with.) His system is to work on the components for a specific assembly, and put each completed component in a box marked with the dash number for that assembly. Unfortunately, he hasn't yet come up with enough parts in any given box to make a complete assembly! Don't feel bad; at least you're making progress, and the fabrication of all those little parts always seems to take forever. Once you can start assembling the components into assemblies, it will seem to go faster. Ken enrolled in a local high school machine shop

class, and for \$30.00 was able to use all their lathes, milling machines, grinders, sand blaster, brake, and welding gear for the semester! This is a great idea for those of you who want to do all of the work yourselves, rather than paying someone else to do it. In most areas of the country, you can enroll in a local college or high school evening class and do much the same thing. The "rental" for the use of the equipment is almost always very reasonable, when you look at it like that.

One thing I find when turning out this newsletter, is that when I do get an issue out, I invariably receive a fair amount of correspondence back from you folks in short order. As noted above, I'm attempting to muddle my way through it all in (sort of) alphabetical order - and then I receive a nice note from **Mildred Arnold**, whose husband, the late **Ken Arnold**, was the builder of N72KA. Mildred notes that N72KA has changed hands again, and is now living in Florida with its new owner, **William C. Barber**. Mr. Barber has been refurbishing the airplane, and Mrs. Arnold reports that it is looking great. Anne and I hope to make it to Oshkosh for the EAA Convention this summer, either flying or driving. Hopefully, we'll get a chance to take a look at it, as well as all you others who are able to make it there with your PLs.

Way back about a year and an half ago, I received a letter from **Walter Butler**, who is coming along on his PL-2. Walt raised several questions, but they may be of general interest to others in our group also.

1. Fuel tanks: Does anyone else make kits for the fiberglass fuel tanks besides George Rattray? I personally don't know of any other kit suppliers myself. My personal experiences with the Rattray tanks on N75PL have been that they are very difficult to keep sealed; I'm still getting a few small bubbles under the paint where the baffles are riveted in place. Now, how much of this is due to the additives in auto fuel, and how much is due to improper sealing when the tanks were built, and how much is due to my not doing a proper sloshing job when I overhauled the tanks several years ago (even though I sloshed them twice), I don't know. By now I'm sure everyone is familiar with the "wet wing" system developed by **Ed Boothe**; see the March, 1987 issue of Sport Aviation, p. 23, for details.

2. Canopy slides: Issue #13 of the PL newsletter series has some material on fabricating canopy slides. I also recall seeing something about someone using file cabinet slides for this purpose, but I can't lay hands on that right now. (P.S: While I was looking for that info., I ran across another early newsletter with a note to the effect that one of the builders was having a bunch of the canopy slides made up - for \$20.00 a set. How times have changed.)

3. Floor panels: I agree, the panels are pretty much a permanent installation. When I installed the Cessna dual pedal and brake system in N75PL, I ended up cutting the plywood floor out



of the airplane so I could get a wrench on the nuts to remove the remaining sections. I then installed nutplates in the floor/belly stringers and used 1/16" aluminum for the new floor. Now, if for any reason they have to come out, there's no major problem. I highly recommend the use of nutplates or some other blind fastening system for any area to which you will be unable to get a wrench when that area is permanently assembled.

4. Engine mounts: Correct me if I'm wrong, but I believe all the Lycoming series from the O-235 through the O-320 have the same spacing for the mount attachments on the rear end of the case. Obviously, one still has to consider whether one has an engine (or mount, whichever comes first, I guess) which is made for the "old style" conical mounts or dynafocal mounts. As for me, some day I'm still planning to upgrade to an O-290 or an O-320 from our present O-235, and so long as I stay with a conical mount type engine, it should bolt up to the present O-235 mounts.

I see I have just about enough room to tidy up a few odds and ends here before closing - and I barely made it through the "B"s in my correspondence! On the bright side, I still have plenty of material for the next newsletter, which you may anticipate seeing around EAA Convention time, the way things look now.

Before closing, I have a favor to ask of you: As you know, there was a long spell between issues #84 and #85, and during that time I've lost track of a couple of our group. Does anyone have a current address for **Bob Busse** or **Joe Lesch**? If you can help me out, I'll make sure they receive the issues they're due. Which of course raises the point, that if you change your address, let me know. (On the other hand, I gave up trying to count all the people one has to notify when one moves, when I ran out of fingers and toes.) It can be tough to keep up with all of these tasks, I know.

And this news flash just in: **Dewey Greene** has completed and flown his PL-1, serial no. 237. In fact, a couple weeks ago (mid April, 1992) Dewey sent me a great video tape of some of the construction process, including the trip to the airport, completion, and first flight. Believe me, this tape is worth watching just to see how Dewey gets his PL out of his basement workshop! Plus, there are some flying scenes with Dewey's PL-1, along with the PL-1s of **Jim Lacina** and **Bill Raksanyi**. The tape is about an hour and 15 minutes long, and I'll go out on a limb here and offer to provide copies for those of you who are interested. (Sorry, Dewey - I would have checked with you first, but I don't have your phone number.) I can provide VHS copies, but I don't have the equipment for Beta or (for those of you outside the U.S.) PAL formats. However, if you can use a VHS tape, I'll be glad to send you one.

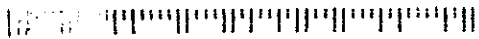
The bottom line is \$8.00, which should cover the cost of a tape, mailing envelope and postage for those of you in the U.S. Figure on US \$12.00 for overseas mailing. And remember, as they say on TV, "this offer will not be found in stores!" (I find

that there's usually a very good reason for that.) And for those of you with newsletter subscriptions extending into the triple digit range or thereabouts, I'll be glad to knock eight issues off your subscription to cover the cost of the tape and mailing, if you wish. Just let me know.

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Well, that about wraps up this issue. Looks like #87 will be out right around EAA Convention time, either a little before or a little after. Meanwhile, keep at it - it's worth all the work!

--Jack McCombs, FL Newsletter Editor



Your last issue is #N/A

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