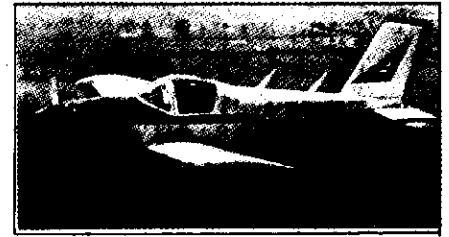


PL-1 PL-2 NEWSLETTER



NUMBER 46

CHRISTMAS 1974

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PAZ STZ

Oct. 28 - 74

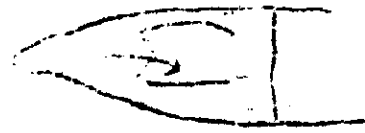
Dear Errol and Pat,

Yesterday I went in Harold Pio's PL-2 for a speed run over Torrey Pines Beach - between the Navy markers at 1 N. M. separation.

Harold's just put up the wheels and strut fairings and eliminated the air intake for air filter. Now he takes the air for carburetor from a hole at the baffle in front of a cylinder -



BEFORE



NOW

His airplane has a LYC-0-290-G (125 H.P.)

This is what I measured:

CRUISE at 2400 RPM - 24" Man. Press - 131.9 mph.

MAX at 2750 RPM - 27.5" Man. Press - 156.0 mph.

These are average speeds - two runs each way. One going North - one going South to compensate for wind (which was almost negligible). The best speed I timed was 26 sec. for one N. M. - which is 159.8 mph. - Not too bad! We had 22 Gal. Fuel. Pio weighs 205 LB. and I weigh 175 LB. Temp was 12 C - Runs made at approx 900 ft. over the ocean.

So, my advice: Keep it light - clean it - Use wheel fairings - strut fairings - Minimize protuberances such as antennas, etc. Use a light weight, engine like the O-290- or the O-235. Don't load up the airplane with too many goodies.

Sincerely,

Paz

P.S. By the way you may compare these measured speeds with ADVERTISED speed in my brochure! I guess I am not a very good salesman. V max 144 V cruise 128 mph. Sorry about that fellows, I goofed again!

POOR MAN'S ADF - FORREST RICE, 309 East Main Street, Glasgow, Kentucky, 42141 has developed a navigation radio designed for use on homebuilt air craft (with or without electrical systems). It operates on the same idea as the expensive ADF navigation radios, but the price is less than \$80.00. In a two-page brochure Forrest gives more details about his radio which he calls the Radio-Homer. FORREST WRITES:

Dear Pat & Errol:

We are always pleased to receive a letter from people associated with Paz's airplanes....

We are well along on our PL-4 project. ...

We homed all the way to Oshkosh in 1973 using only our radio homer for navigation. We taped a four turn, 5 inch loop temporarily to the top of our Cherokee fuselage.

The radio homer is not to be compared with the modern A.D.F. However it is a valuable navigational instrument especially for planes without electrical systems.

I would be happy for you to list it in the PL-1 and PL-2 newsletter. I am a member of Louisville E.A.A. Chapter 110 of which 2 of the members are building PL-2's. ...

Sincerely,
Forrest E. Rice

PARTS FOR THE PL-2 ACRO MACHINE & PLASTIC, INC. Aug. 29, 1974

Part No.	Designation	*Unit Price Per Each
2-10-001-27	Rudder upper hinge bracket	\$14.50
2-10-011-37	Flap Lever ratchet doubler	\$8.50
2-10-011-41	Flap Lever shaft bushing	\$10.00
1-10-011-43	44 Seat Belt attach gusset	\$6.50
2-10-011-75	Filler	\$1.65
2-30-007-79	Tapered Filler	\$2.00
2-30-007-87	Tapered Filler	\$2.75
2-30-007-97	Stabilator Bearing Housing	\$7.25
2-30-007-173	Canopy Slide Stop	\$3.00
2-30-007-105	Rudder - Bottom Hinge	\$25.00
2-50-003-59	Elev. Trim Control - Worm Shaft	\$14.00
2-50-003-63	Elev. Trim Control - Indicator	\$8.00
2-50-003-73	Elev. Trim Control - Screw Jack Housing	\$45.00
2-50-003-177	Elev. Trim Control - Fork	\$14.00
2-60-003-25	L. Gear Shock Absorb. Bushing Housing	\$10.00
2-60-003-39	Main L. Gear - Adapter for Axle	\$102.00
2-60-003-107	Nose L. Gear - Adapter for Fork	\$45.00

* Price is for single item only, if print no. calls for two items double the price.

EDWIN LEVY, 506 Forest Ave., Savannah, Georgia 31404 called recently to subscribe to the newsletter since he had not gotten around to writing. He has been spending all of his time in the PL-2 workshop. He reports that 542L will be ready to fly soon. The plane has a 108 hp. engine, full gyros, Cherokee landing gear painted yellow with black trim and was built in 3½ years (2150 hours) without any outside help. Edwin who is a flight instructor plans to test fly PL-2 542L very soon. We'll keep everyone posted on Edwin's progress.

BACK ISSUES OF THE NEWSLETTER from numbers 44 back are not available.

MATERIAL SUPPLIERS

MERRILL ROTH
P. O. Box 456
Hillsboro, Oregon

PL-1, PL-2 fiberglass parts, LG scissor nylon gromets, PL-2 rudder and fin ribs and much more.

STANDARD PARTS AND EQUIPMENT
P. O. Box 4600
Ft. Worth, Texas 76106

Cherry rivets and Cherry rivet guns

WAG-AFRO
P. O. Box 181
Lyons, Wisconsin 53148

Aircraft parts and accessories, instruments

EARL'S SUPPLY CO.
14611 Hawthorne Blvd.
Lawndale, Calif 90260

Bolts, hardware, hydraulic fittings and surplus items, clecos

Does anyone have information about converting Corsair tailwheel struts for the PL-2 and if any are available? Please contact Newsletter editor.

TRANSFERRING FROM THE SHAPE OF A PART from the blueprint to the form can be done easily and quickly with carbon paper. (1) Place the wood or material that is to be used as the form block down on the table first. (2) Next place carbon paper over the wood with the carbon down. (3) Place the blueprint with the figure to be transferred over the wood and the carbon paper and fasten the blueprint and carbon paper to the wood with thumb tacks. (4) Trace over the lines of the blueprint with a pencil which will transfer the drawing directly to the wood.

PAZ SFZ

In the past I have published two books: LIGHT AIRPLANE DESIGN, which describes the PL-1 preliminary design, and LIGHT AIRCRAFT CONSTRUCTION, which describes the building of the PL-2 airplane. Both books were bought by thousands of amateur builders just as you.

Now I have published a third book: PL-4 A CONSTRUCTION MANUAL, with 104 pages and illustrated with 394 figures. This book will guide you through every step in building a sheet metal aircraft. You will find a very detailed list of tools, including their catalog numbers. Also: Aluminum handling. How to make ribs, frames, fittings, form blocks, jigs. Construction tips. Forming of parts. Assemblies. "Pop" riveting techniques. Fitting and drilling of Plexiglas. VW ENGINE assembly instructions, parts list, installation photos, etc.

This book is not a repetition of LIGHT AIRCRAFT CONSTRUCTION, but a supplement. It is profusely illustrated with hundreds of photos and many sketches. As were my two previous books, it will be useful not only to PL-4 builders, but to anyone interested in light airplane construction because most of the techniques used in the PL-4 are also applicable to many other light airplanes.

Price (including postage within USA) - \$10.00. Add \$1.00 for surface postage to other countries. California buyers, add 50¢ for State Sales Tax.

PL-1 PROTOTYPE 1962 - 1974 REPORT BY LEE CONLAN

In the interest of those present and future PL-1/PL-2 builders, this is an up-dated report on the status of the original PROTOTYPE PL-1.

PL-1 S/N 1 (N4081K) was purchased 5 years ago for its salvation. It was built and completed in May 1962 by my old friend for the past 20 years and to date, Keith Fowler. Keith is a PA 24 PIPER COMMANCHE owner now since my acquiring his great PL-1 pride and joy. I have tried to up-date it ever since and keep it flying so that any PAZMANY builders could have a demo-flight if they happen to be in this area. It's an open invitation and you are welcome if you would call me (213) 869-0536 for arrangements, Keeping N4081K flying hasn't been very difficult which is due to the extraordinary design and workmanship that made N4081K a reality. N4081K has never been hangered in it's 12 years.

About a month ago Keith and I got together to run some tests to see how N4081K still performed after 12 years of operation. Remember it still has the original engine a Cont. C90-12F with a total time of 1440 HRS 9-26-74 with out any overhauls to date. It's painted twice without ever being stripped and now sports a polyurethane 3 tone paint -- white, competition orange with brown stripes. It has all electric instruments, except for airspeed, altimeter and rate of climb, fully IFR EQUIPPED.

The major repairs or overhauls to date consist of the following AIRFRAME:

1. Replaced 2 sets of windshields (700 hrs ea.) due to crazing.
2. Replaced 1 plexiglass canopy (1200 hrs) due to crazing.
3. Replaced all "O" ring seals in main gear (1100 hrs) - due to leaks.
4. Repainted 3 times - twice to wear.
5. Replaced nose gear "o" rings seals (1200 hrs) - due to leaks.
6. FAA annual inspections each year (no charge)

ENGINE

1. Replaced battery at 3 yr. intervals.
2. Overhaul both mass at 1340 hrs.
3. Replaced Aux. fuel pump at 1426 hrs.
4. Performed 100 hr. engine checks at every 100 hrs operation. Engine compression on last check (1400 hrs.) all cylinders 75/00 with one exception 71/80.
5. Replaced all starter and generator brushes at 1400 hrs.

SYSTEMS

1. All comm and nav. equipment replaced with solid state types reduced weight by 20 lbs.
2. Repaired electrical att. gyro and D. G. instruments/1200 hrs.
3. All other original instruments check for operation and calibration for IFR operation.

CONCLUSION

This has been a very safe & economical, homebuilt airplane to fly and operate.

The results of our sea level test with Keith Fowler the original builder at the controls and myself doing the timing showed that N4081K is still performing great at 12 years. Over a measured 6 mile course at approx. Pacific sea level our cruise speed with 75% power was 118 miles per hour. Climb from sea level to 3000 ft was 1000 ft/min temp 68 F. Fuel at cruise speed at altitude 7500 to 9500 ft MSL is 4.1 to 5.5 gals/hr.

If any builder wishing specific information as to how a specific assembly, bearing etc. is functioning, please send a self addressed stamped envelop and I shall refer to N4081K log and send you an answer.

FROM OUR REPORTER IN FORT WORTH, TOMMY PHELPS, 1200 Hamsted,
Fort Worth, Texas 76115

It is wonderful having a PL-1, PL-2 newsletter again. The progress of the Pazmany Air Fleet is thrilling to read about. Good to hear from the old timers and a hearty welcome to all the new builders. Thanks to Pat and Errol for a difficult job well done.

I cannot over stress my admiration and appreciation for Mr. Ladislao Pazmany. He has always answered inquiries with a cheerful and prompt reply.

FOR HE'S A JOLLY GOOD FELLOW. Dr. Bruce Carmean has been most helpful lending tools and helping with technical advice. Any PL-2 builder that wishes to use Bruce's fuselage frame molds may contact Mr. Louis E. Normand. 416 Oak Vista, Friendswood, Texas 77546.

Mr. Richard Thompson has furnished hard to find hardware and metal. Dick has also been an active participant in past newsletters giving many helpful hints. Thanks to both of you.

There must be a better way to finish the inside of the canopy. Shape roughly with drill motor, sanding drum and disk. Finish with wet or dry sandpaper and sanding block.



Sanding block - Shape wood, glue and seal with shellac to water proof.

AIRCRAFT SUPPLIERS

Cook Paint and Varnish Company
2524 White Settlement Road
P.O. Box 271
Fort Worth, Texas 76101
Phone 817-332-3305

5 gallons fiberglass resin
1 gallon PVA parting film

G. P. Waggoner Sales Company
233 S.E. 14th Street
P. O. Box 1107
Grand Prairie, Texas
Phone 264-1601 or 274-7337

Half or full roll 181/38"
fiberglass cloth
(Half roll is sufficient
to make all parts)

AIRCRAFT SUPPLIERS

Sargent-Welch Scientific Company
5915 Peeler
Dallas, Texas

Antimony Trioxide

Trinity Coatings Company
P. O. Box 721
Fort Worth, Texas
Phone 926-6811

5 gallons Metil-ethyl-ketone
(MEK)

Univair Aircraft Corporation
Route 3, Box 59
Aurora, Colorado 80010
Phone 364-7661

Air Filter 40599 (13203)

WHERE DID YOU BUY YOURS?

Metal for exhaust system
Bronze wire .041 Dia. (#22)
Flat sheet spring .015 MIL-S-7947

Brass screen #16 mesh
Aeroquip hose assembly
Electric wire and hardware

SAVE TIME AND MONEY. In some cases you can build a tool in less time than it takes to build a shipping container and for less money than it takes to ship it. It may pay you to carefully look into this possibility. Always specify that your material should be insured when ordering.

DONALD F. BECH, 4227 N. 24th St., Phoenix, Arizona 85016 is not building now, but would like to at some time in the future. Thanks for your interest.

H. D. GINTER, R R #1, Leesburg, Ind. 46538 started PL-2, Plan #180 in November, 1972 and gives late 1976 as his estimated completion date. He has completed his flaps, ailerons, fin, rudder, stabilator, landing gear, wing spar, and has fabricated almost all metal parts. He is one of the lucky builders with a shop. He is in need of instruments, radios, and prop for O-290-D2.

J. EMERSON NEWTON, JR. 1120 N. Hoskins Rd., Charlotte, N. C. 28216 is among the PL-1 builders with Plan #339.

R. A. BRUNERMER, 2553 Frostwood Drive, Youngstown, Ohio 44515 has claim to PL-1 Plan #32.

PL-2 PROJECT FOR SALE One of the PL-2 builders had to give up because of moving. If you are interested in parts or in completing the remainder, you may contact PAZ for the details.

D. J. PANTON, 3565 Askin, Windsor 21, Ont. Canada N9E-3K1 began PL-2 #150 in February 1971 and hopes to complete it in the fall of 1976. He needs the wing and fuselage assembly, the rest is done and many sub-assemblies are done. His working areas include both the garage and the basement.

RICHARD S. OLSON, 5051 Emerson Rd., Canadaigua, N. Y. 14424 is still in the deciding stage. Welcome aboard as a new subscriber.

BARRY LEMBKE, RR 3, Ayton, Ontario NOG 1C0 Canada, began his PL-2 this September, hopefully he will finish in 1977. He is a basement builder.

PAZMANY PL-2 PLANS AND DRAWINGS AWARDED NASAD SEAL

THE NATIONAL ASSOCIATION OF SPORTS AIRCRAFT DESIGNERS, 1174 Ranchland Dr., Cleveland, Ohio 44124 makes the following comments:

PAZMANY PL-2

NASAD certified Plans and Drawings: Class AA

Qualitative Ratings: DWG-2; DSN-2; PLT-1; PRF-2

This is an all-metal low wing two place side-by-side monoplane. It features a tricycle landing gear and a 150 hp powerplant.

Plans and Documentation: The PL-2 drawings are without a doubt one of the most complete and definitive airplane Plans on the market today. They are simply excellent. The Manual for construction can be, and actually is, used as a textbook of fabrication of metal airframe. The performance data are also complete and professionally presented, leaving nothing to chance. This total package not only meets NASAD Class AA requirements, but far exceeds them in many respects.

Reviewers' Comments: We feel that a few areas, such as landing gear legs and spar caps may necessitate special machine operations beyond the scope of the average home-builder. However, with access to a good machine shop with aircraft type tooling, the builder could have these and a few other components done for him. Because of the professionally produced drawings and the ultimate in detailing of components (which other plans usually leave to the builder's ingenuity) the initial impression of the PL-2 Plans is one of great complexity. However, after an in-depth study, one recognizes that, taken part by part, the aircraft is not a complex aircraft at all.

This aircraft is capable of conventional maneuvers, such as loops, slow rolls, wingovers etc. However, we feel the basic intent of the designer is an aircraft that is safe, efficient, and easy to fly, rather than an aerobatic trainer, and it should be treated as such.

PL-1 BUILDER'S REVIEW

R. S. Sinclair, 2006 So. Baker, Ontario, CA. 91761 began his PL-1 #358 on April 24, 1969, and quit construction on August 26, 1973. He's spent approximately 1900 hours construction to date and including a rebuilt O-290G engine total cost to date \$2700.00 Dollars. Its a beautifully constructed PL-1. Colors are cream with brown trim. All thats remaining is final assembly of wing and fuselage as soon as a hanger can be aquired along with engine installation, nose cowling and wiring. Flight test late 74 or early 75 depends on aquiring hanger. We asked Steve what desirable feature he would recommend for improving the PL-1? He said that it should have been designed with a center section and two outboard wings; that would expedite,--ease construction, handling and storage problems.

EXCESS FIBERGLASS can be trimmed from around the edges of molds after it has firmed up but not completely hardened with a sharp razor blade. This is much easier than cutting it with a saw after it has hardened.

HELLO WIVES,

Well, Oshkosh is over for 74 and I hope everyone had half as much fun as I did. It was such a joy to meet all of the people especially those who are building the PL-2.

As the wife of a PL-2 builder I know there will be times when you will wonder if you still have a husband around the house. Oh yes, he is still there. Just look in the garage or shop under all of the aluminum and airplane parts. You'll find him studying those precious plans. If it's any help this won't last forever and then all of those things you thought had to be fixed four years ago will get fixed.

I feel the best way for us to enjoy our husbands is to get in there and help. I know we feel terribly dumb when he yells for the tenth time that something isn't straight but after so long we either learn or he gives up. I think Sam gave up. I think it is interesting to look at the pieces and ask what it is, how does it work.

Three years ago I laughed at Sam when he said I'm going to build an airplane. Well six months later he was looking for plans. At first he was thinking about a Teenie Two which is a one place. Well, I was too selfish to let him have all the fun of flying.

After deciding to build an airplane there was a problem. No one to fly it when it was finished. Sam got busy and got his private. Then I got mine-that took lots of courage, because Sam does everything right-I do everything wrong. In 35 hr. he was the proud owner of a private ticket. After 55 hours of hard work, I have a private too. So any of you gals who think you would like to fly get in there and get started, don't worry if it takes you longer than it did your husband. Who knows, maybe you will be a safer pilot (don't ever tell him that). If you think you just don't have any desire to fly, go with your beloved a few times. Try to talk him into telling you what's going on. Who knows, maybe the bug will bite you and you will be the next one to say-let's go flying, it's a beautiful day.

Mona McKee, 5311 Seymour Hi.,
Whita Falls, TX 76310

FRANK BURY, 2 Indian Rd. Ottawa, Ont. Canada K2G 1N4 has discontinued on PL-1, Plan # 46. He completed the tail fin, rudder, control stick, flap box, spars, Parts for main spar, and numerous small items. Frank does have parts and materials to sell, and some forms to rent.

PETER P. GACH, RR#8, Box 182, Evansville, Ind. 47711, has just received the drawings for PL-2, plan #265. He will be working in the garage.

FRANK M. ARNOLD, 52 Klamath Place S.W. Calgary, Alberta T2V 2J3, Canada is making headway on PL-2 Plan #61 which he started in 1973. He hopes to finish in 1975. All his "O" material is cut and $\frac{1}{2}$ formed. He has some "O" material left and offers it for sale. Presently he is working in the garage and the basement, but he will finish in the hanger.

ALBERT F. PEARCE, 10 Sturgis Rd., Kendal Park, N. J. 08824 has PL-1 Plan #116. Having started in May, 1965, he estimates 1976 as his completion date. Working in his garage, he has completed all except wings, stabilizer, and engine cowling and nose piece. He purchased wing spars and ribs from Don Dale.

A. F. BOUFFARD, Box 802 Maple La., Mattituck, New York 11952 joins the ranks of PL-2 builders subscribing to the newsletter.

Ronald R. Shoemaker, 1310 Willow Valley Dr., Brandon, Fla. 33511 sent the editors some beautiful pictures of his wing, before and after skinning. Having started in November, 1970, he has 90% of the aluminum parts made. His working areas include both the garage and back yard.

Charles S. Smith, Box 571, Rockmart, Georgia 30153 has done nothing yet but gone - gotta build a house first.

DUANE C. SEYMOUR, P. O. Box 16012, Tel Aviv, Israel began PL-2 Plan #25 in September, 1972 and has accomplished 40% of the work now. The garage is his working area.

W. C. GRAMATZKY, 9304 Sarrento St., Dallas, Texas 75228 is the proud owner of PL-2 Plan 100. Since January, 1970 he has manufactured 95% of the parts. He has 1 - 4'x8' sheet of 2024 x .032 A 1 for sale for \$25.00. He offers fiberglass molds for loan or rent.

RICHARD C. COOK, 6435 Alhambra CT, McLean Va. 22101 is a new subscriber

DON ROBERTSON, 9 Sulgrave Creek, Willowdale, Ontario, M2L-1W5 CANADA is completing PL-1 Plan #254 working in his garage and basement. Over 90% of the parts are made. He says - am currently rebuilding a 10 year old Sportsman and am trying to stop working on it to finish an Emerald that is 99.99% completed that is sitting in my garage. The PAZ I bought a year ago from Fred Derry whose workmanship is above average. Fred has done all the hard work & my job is mainly one of assembly. I hope to have the Emerald and Sportsman flying by next summer and in the fall to start on the PAZ. I'm guesstimating two years at my rate of speed and if it takes longer its a marvelous hobby and a labor of love and I don't begrudge the time.

EARL L. HILDT, 21917 Oakview Lane, Monta Vista, Calif. 95014 started with a PL-1 about eight years ago and converted to PL-2 with the release of plans. He hopes to complete his project in December, 1974. He is all done except the finishing. He is willing to loan jigs or tools to people locally and offers to sell landing gears, tip tanks, and fuselage bulkheads. Earl works in his garage - but hopefully not for much longer.

MARY MIDDENDORF, 6934 Ohio Ave., La Mesa, Calif. 92041 acquired PL-2 plan #94 in October 1972. Working in the garage and patio she has cut out some aluminum parts.

CLIFF WROPP, 135 Greyhorse Rd., Willow Grove, Pa. 19090 is working on PL-1 plan #24 which he began in July, 1974. Now he has 8% of the work done in subassemblies. He is a garage builder.

ROSS G. WHITNEY, RR #2, Lambeth, Ont. N0L 1S0 CANADA is progressing on PL-2 plan #189 which he began in January, 1973. The wing is nearly finished including landing gear, tip tanks, controls, ailerons and flaps next. Ross is a basement builder.

KIETH CAMPBELL, 115 Park Ave., Cheyenne, Wyo. 82001 has just joined the ranks of PL-2 builders by purchasing plans.

92138

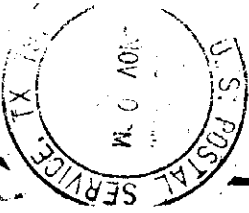
San Diego Calif

P.O. Box 80051

J. Janssen

FIRST CLASS MAIL

18



NOV 9 '76

PAT JANSEN
510 W. 14TH
MONAHANS, TEXAS 79756
USA