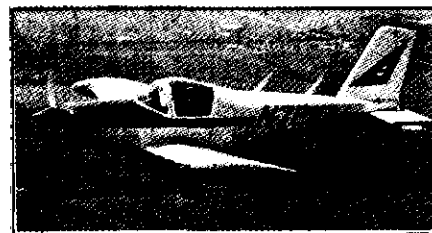




# PL-1 & 2 Newsletter



Pat Jansen  
NUMBER 58

SPRING 1978

AIRCRAFT DESIGNER  
Ladislao Pezmany  
P.O. Box 80051  
San Diego CA 92138

PL-1 EDITOR  
Lee Conlan  
7858 Arnette St.  
Downey CA 90241

PL-2 EDITOR  
Pat Jansen  
2514 Munger  
Houston, Texas 77023

PETER KARNOUCHE - 2715 Concord Way, San Bruno CA 94066  
Jan. 26, 1978

In the upcoming newsletter, would you please ask if anyone out there has done anything about wheel and strut fairings on the PL? I am getting ready to fabricate molds so as to be able to make the nose wheel and main wheel fairings - quite a job, if you've no one to borrow molds from! I'm hoping that someone can loan me the molds, or maybe trade me the parts for some of my parts.

My PL-2 no. 175 (if you need fill for the next newsletter) is coming along fine. All control surfaces, tip tanks, landing gear, inboard 12 gallon tanks, engine mount, rudder peddels and all other weldments, engine cowls, fuselage formers and bulkheads and the wing are complete and signed off by the Feds.

I just purchased a first time run out 'O-320 engine, an E2D Lycoming with just 1900 hours TT. This engine will be majored and fitted with the H. C. pistons to bring it up to 160 H.P. later this year.

In the mean time I'll be working on the fuselage and environs.

You two must be nearing completion of your bird and how exciting it must be for you! I don't think people realize how much fun it can be to build, from scratch, something as great as the PL-2. All I seem to hear these days, is, ...'how long will it take?' Or, ... 'the such and such can be built in 18 months!'

THE FOLLOWING MATERIAL IS A REPRINT FROM PL-1/PL-2 NEWS LETTER #44, MAY, 1974. THE INFORMATION CONCERNING SPINS SHOULD BE OF INTEREST TO MORE RECENT SUBSCRIBERS.

SPINS: The Nationalist Chinese Air Force (Taiwan) conducted extensive spin tests with one of the 58 PL-1 Airplanes already built and in service. This airplane was specially instrumented and prepared for these tests including the installation of a spin chute attached to the tail cone.

TEST RESULTS: (Direct translation from Chinese Air Force Report)- After reviewing and studying the test report, we found that even with reduced fuel, removed ballast, added ventral fin to achieve better IYMP (inertial yawing moment parameter), C. G. and TDPF

(Tail Damping Power Factor): the spin characteristics of PL-1 (And PL-2) Still differs greatly from other airplanes for the following reasons:

- 1) - Spin is difficult to enter: The pilot must achieve complete stall and maintain back pressure on the control stick in the direction of spin, until auto-rotation occurred. Otherwise, the airplane will recover from spin automatically. At Partial stall, or with less than  $\frac{1}{4}$  fuel in wing tip tanks, the spin becomes a spiral dive, not real spin.
- 2) - Particular spin pattern: First, it is quite slow and starts with a side slip. When the nose is down 75° to the ground, the spin begins. At the end of 2nd turn, the dive angle increases. The rate of rotation is up to 360 O/sec. radius is about  $\frac{1}{2}$  wing span. At 3rd turn, the nose starts to rise, and the spin flattens. At 8th turn, the spin is completely flat. Indicated air speed is as low as 25 mph. The spin turns into a slight yawing side turn (similar to turns with excess rudder). Spin rate is reduced to less than 180 O/sec. At the 9th turn, the engine can stop. During the flat spin the "g" loads are not uncomfortable.

#### SPIN RECOVERY:

- 1) - Push control stick forward quickly, ailerons neutral, and then neutral stabilator.
- 2) Conventional recovery of "First rudder against spin and then control stick forward" - can recover from spin in the 1st turn, when the nose is still down. After 3 turns when entering a flat spin, this recovery procedure would adversely increase the rise of the nose and go into a flat spin.
- 3) - Tendency to go into a flat spin could be noticed by the increase in control stick pressure, timely correction can lead to recovery. When flat spin is fully developed, the controls alone will not recover from the spin.

#### CONCLUSIONS AND SUGGESTIONS:

- 1) - Prohibit spins with the PL-1 and PL-2
- 2) - Because it is difficult to enter spins, when the fuel quantities in both wing tanks are same, there should be no fear of stalls or entering spins while performing aerobatics.
- 3) From experience, when the aircraft is stalled in an inverted position, it will automatically turn to a normal position (positive "g" loads).
- 4) - When a spin is started accidentally, the pilot should reduce power, release back pressure in the control stick and with neutral stabilator, the airplane will automatically dive out of the spin.

#### NOTICE -

- 1) When entering a spin from inverted position, a sudden push of the control stick could lead to an "outside spin". This should never be done. The control stick should be let loose and the airplane will recover by itself.

PAZ SEZ

Dec. 24, 1977

I received a letter from N. Zealand, indicating that the first PL-1 completed in N. Z. will be flying soon.

Also, as you probably know, a PL-1 won the 1977 Sywell Air Squadron Trophy for the best homebuilt - (PL-1 #211 built by Harold Jones - Stafford - Staffs - England). Engine: Sport 48 Franklin 130HP - Propeller: Hoffmann 70" x 47" - Vc-125 m.p.h., V max - 135 m.p.h. Max speed reached in a dive: 180 m.p.h. - Empty Weight: 901 LB. Gross: 1460 LB. - Initial Rol C. -1000 FPM @ 90 m.p.h.

Another: PL-2 #42-built by HANS NIELSEN - Sweden-won trophy for best homebuilt in Sweden - 1977.

I still have 3 sets of spar cap extrusions (PL-2) at \$410.00. Next batch will be more expensive.

Also Fuselage extrus. kit at \$110.00

FLT./N. Gugratnan, SQN/Ldr., Officers Mess, SRI Lanka, Air Force, Katunayaka, Sri Lanka has just purchased plans to build a PL-2 and has become a newsletter subscriber.

RON AND SHIRL SHOEMAKER, 1310 Willow Valley Dr., Brandon, Fla. 33511 are progressing well with PL-2 #89 and are hoping to start 1979 by flying their PAZ. They have assembled the fuselage, vertical fin and instrument panel. Wings are also assembled and attached.

J. R. DILLON, 42 Willcox Av., Prospect, South Australia, 5082 is a new addition to the PL-2 builders.

FRANK KREUZER, 71 Lister Ave., Hamilton, Ontario L9B1E1  
Feb. 26, 1978

I am progressing at a slow but steady pace on my PL-2 #141. Right now I work on the installations of motor and instruments. Stabilator, rudder, flaps, ailerons and landing gears are finished. In another few months the fuselage should be completely done. The wing will be next. I have the spar finished including all sub assemblies for the wing. I like to think that sometime next year the aircraft should take to the air. Otherwise I will end up with an antique airplane.

As you know Ross Whitney of Lambert has his aircraft flying and Dave Panton of Windsor should be able to do same this year. There is another PL-2 in Kitchener at or near completion state. So soon we will have a PL-2 squadron in southern Ontario.

FROM THE EDITOR

April 9, 1978

I made a mistake in numbering the newsletters. We did not mail out an issue #56.

Errol is fitting the engine cowling this afternoon. During the Easter holidays he was able to hang the engine - an O-290-D - what a way to celebrate! Now that spring has come he is better able to stay out of the coffee shop at Clover Field and concentrate on getting the plane in the air.

NOTICE -

2) The PL-1 rudder, due to the friction of the nose gear, can not return to a centered position by itself. Must use foot pressure to center it.

When continuing spin, and if the pilot does not feel negative "g" loads, should push the control stick all the way forward and maintain ailerons and rudder neutral. When a dive is reached and the spinning has stopped, pull the stick gently.

If it is not possible to obtain a dive, and spin continues, and if altitude permits, the pilot should keep trying the previous procedure. It may require 10 turns to recover from the spin.

3000 ft. is the lowest height for parachute jumping. After entering a developed flat spin, and when the canopy is locked in the open position, there is no problem parachuting.

Fuel level is not an absolute factor, although low fuel condition makes it difficult to enter a spin should not be tried. If a spin has been started with full fuel tanks, the airplane can be recovered if corrective measures are applied in time.

Above test results are now included in the pilot's handbook.

ROSS WHITNEY, R. R. #2 Lambeth, Ontario, Canada NOL1SO  
My orange, yellow and white PL-2 serial #189 C-G QNW flew for the first time Nov. 16, 1977. It flies and handles beautifully, of course I should expect that of a Paz. It has an O-290 converted ground power unit for an engine and McMauley prop purchased through Paz. I had a great deal of help from Dick and Chris Coves getting the plane to the airport assembled and painted. Dick flew the first flight with no problems at all.

Chris and I flew the Paz to the Sun & Fun fly in at Lakeland, Florida at the end of January. I was fortunate enough to win the award for the best low wing home-built at the show.

Vivian and I hope to be at Oshkosh this year with the PL-2, Hope to see you there. I wonder how many PL-1 & 2s we can have lined up this year?

DELMAR LUST, St.R. 5 Box 436, Dunnellon, Fla. 32630  
I have just finished a B. D. 4 and am now cleaning out the shop of the accumulation of scrap and junk to make room for the PL-2 project.

N. GLEN WHEELER, PL-2-86, 119 N. Washington, Enid, Okla. 73701  
Just a slow progress report on PL-2-86.

I have been working on components at the Votech Airframe Shop until the beginning of the second semester when I managed to fall on the ice and break my right hip.

I am out of the hosp after three weeks and back at the office but I am still fragging my right rear corner a little.

I hope to be back in the shop in another week or so. I got a lot of rivet holes to fill up. - Best regards to the other Paz builders.

AIRPARTS, INC., Experimental Aircraft Supply House, 1430 S. 33rd St.,  
Kansas City, Kansas 66106

Following is a list of merchandise offered by Airparts, Inc. Prices  
effective through April 30, 1978.

Good Used Microcounterstops: 10 at \$6.50 ea; 50 at \$4.75 ea;  
100 at \$4.15 ea.

Excellent Used (Look like new) Countersinks: 3/32", 1/8", 5/32",  
3/16", 1/4", 5/16"; 50 for \$1.65 ea: 100 for \$1.25 ea.

Excellent Used Rivet Shavers (Look like new): 50 for \$1.65;  
100 for \$1.25

New Temporary Sheet Fasteners: 3/32", or 1/8", in lots of 500,  
29¢ ea; 1,000, 27¢ ea. 10,000, 25¢ ea.

Good Used Sheet Fastener Pliers: \$2.95 ea.

Good Used Wire Strippers, strips wire size Nos. 16, 18, 20, 22,  
24, & 26: 50 for \$4.95 ea: 100 for \$3.95 ea.

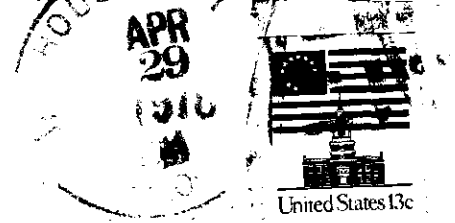
New ESNA Nuts: 10/32-IM \$35.00; 5M \$150.00; 10M \$250.00

1/4-IM \$43.00; 5M \$205.00; 10M \$380.00

5/16-IM \$87.00; 5M \$385.00; 10M \$670.00

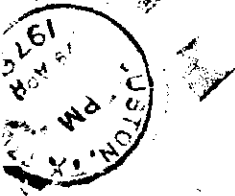
3/8-IM \$115.00; 5M \$525.00; 10M \$950.00

PAT JANSEN  
2514 Munger  
Houston TX 77023



FIRST CLASS

LADISLAV PAZMANY  
P.O. Box 80051  
SAN DIEGO CA 92138



NATIONAL CHILDREN'S  
GENERAL HEALTH SURVEY