Pazmany Newsletter Number 67

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EDITORIAL COMMENT: I982 has not been the greatest of years for us or for the newsletter which is long overdue for a new issue. Our home was broken into and a number of Lib's family history jewellery items stolen. None were of much real value beyond sentimental but we were pretty unhappy about the whole business. Not too much later she had a fall which broke a wrist. It has proven very slow to heal so here I am on the keys trying to cope with her typewriter. In September with arm in a cast we made our forth flying trip to the North Okanagan country in British Columbia. The Paz performed superlatively as usual and we had a very good trip traveling up through Michigan, wisconsin and Minnesota. New U.S. regulations for Canadian homebuilts make this a nice way to travel as we were able to bypass all that wild country of Northern Ontario. Every trip I've had visions of the Paz down somewhere in the bush, a total loss. Our friends are always concerned about the Rockie Mountains but we find they are the best part of the trip and part of the reason for making the flight in the first place.

What happened the morning after our arrival shouldn't happen to any aircraft owner, especially one who has put seven years of his life into building his own flying machine. Two juveniles (read untouchables) who had been involved in several crimes over the summer decided they would be even better off in California. They chose to fly from Vernon airport where there is no airline. They arrived early for their flight, breaking into a store on the way to the field for supplies. Then they began selecting the airplane for their flight by breaking in to aircraft trying to find one they could steal without need for a key. Two singles were unsuited. A Cessna 320 would have been ideal but only one engine would start and they ran into its hangar wall, no matter, there were lots more to choose from. A twin commanche looked good but was locked. A torch was used to melt out the window allowing loading the stolen supplies and entry for departure.

A "How to Fly" book of some kind provided the necessary misinformation and confidence that the whole business was pretty simple.
Both engines started but chocks still in place, a lot of power was needed
to pull out of the open hangar. Without knowledge regarding steering
on the ground, or much else for that matter the aircraft emerged at
a goodly rate, ran wild to the precise spot where our PL-2 was parked.
With two engines running you can imagine the result. I still find it
pretty depressing, An unwanted tribute to Paz's design was that it was
not destroyed. It is truly a very rugged little airplane. It yanked
its tie down stakes out of the ground, bounded forward about fourty
feet and survived. We were over two thousand miles from home and had to
leave it for rebuilding at Kal-Air Repair, a good sheet metal shop
right on the field. We will return next Spring to complete the job
and our 1982 vacation.

The damage mainly was due to prop strikes to the right fuel tank and aileron, also hit by the twin's nose gear causing some rear spar damage. The fuselage had a 3 foot slice just aft of the wing root fairing cutting stringers, rudder cable and bulkhead. The stabilator was chopped by the prop too, shearing off the attach rivets around the bearing housing. the rudder also was damaged as was the tailcone fairing, hit by the lh wing out-board of the left engine. The structure of both wing and fuselage was otherwise unharmed. Had it been a lesser aircraft the whole thing would have been rolled into a ball. Writing about it really hurts.

Jim Neiswonger of McFarland Aircraft has provided all the parts needed for the metal work rebuild and Lee Conlan has a new fuel tank and fiberglass parts on the way. I'm certainly looking forward to getting it all back in the air as we have enjoyed the PL-2 so much.

MAINTENANCE NOTE: During a routine IOO hour inspection last winter I found both rudder cables had developed some broken strands due to a slight reverse bend as they passed the aft cable guards on the rear pulleys. I replaced them and modified the guards to provide just a few thousandths of clearance. The problem is very difficult to spot but can be noted by turning the nose wheel to full travel to move the appropriate cable into view. Even then the strands may behidden by the cable, feel for them and they will be obvious to the touch.

FRANK KRUEZER, 71 Lister, Hamilton, Ontario, L9B IEI paid a visit to Windsor and took me for my first flight in his PL-2 C-GQUS. It is powered by a Lyc 0-320 engine set in a dynafocal mount. The aircraft has very good climb performance and is noticably smoother and more quiet than my own, powered by a Lyc 0-290 D2B. The larger engine is a bit more thirsty so his range is a little less. The wheel pants designed by Paz made such a difference in speed, fuel consumption and range in my machine I encouraged Frank to complete his to get the full benefits of his PL-2's excellent performance.

GLENN THOMAS, 4023 Charron Ln, Wichita, Kansas 67220 is an engineer with Beech Aircraft in mechanical systems and cockpit layout. Glenn has started building PL-2#370 from his own parts and parts from McFarland Aircraft. Even though he is in the industry and in the "Air Capital" he is finding parts are costly and sometimes hard to obtain. Material is easily found except for bulbed angle which was obtained from Paz in a larger size and cut down. A possible source for others to try is an Edo float dealer as they may have stock of the angle needed. It is used extensively in rebuilding damaged floats and is often kept in stock.

DICK CHANDLER, I3 St. Georges Ave., Mont Albert, Victoria, Australia writes he has seen Henk van Den Heuvel's recently completed PL-2 at the Australian National Fly In at Maroochydore and reports he was very impressed with Henk's workmanship. His own project is at the parts making and acquiring stage. He got his heat treating done at Trans Australian Airlines. Others might look at airlines as possible sources for this important service. Dick has bought a Lyc 0-320 E2A for his aircraft.

STAN HURLEY, 9230 Whitaker Ave., Sepulveda, California is completing a PL-2 started by John McDonald. At this time he should be done but he wrote he was spending a lot of time on that last 3%. Stan has access to low cost nut plates. Wire and cables. Write to him if you need some of these items.

FETER KARMOUCHE 9 Cranfield Ave., San Carlos, California 94070 is still working away at his project and concerened about battery location to avoid moving it to get the correct c.g. He asked if a rumour regarding locating it on the fire wall was correct. I can't imagine where the space would come from unless it mysteriously emerged from a time warp, there is just enough room for everything in its place and not a bit more. Mine is located under the baggage compartment floor accessible via a few screws to remove a section of the floor for access. The c.g. was no problem in any load configuration. Peter plans to install a wood prop, possibly a VARI PROP if they have an stc for it by the time he needs it for his Lyc 0-320. Having completed a PL-2 perhaps I can say again, stick to the plans as much as possible, Paz has done one heck of a good job on a small aircraft where there is a place for everything and everything must be in its place.

J.EMERSON NEWTON, II20 N.Hoskins Rd, Charlotte N.C. 28208 is not currently active on his project but is offering Lyc 0-290 cylinders, crankshafts and enough parts for several completed engines. Sounds like a treasure trove worth looking into for builders using this engine (the best for a PL-2 as it has low fuel consumption but lots of climb performance when needed at the expense of fuel of course)

Edward R.Boothe, II5 Locust Drive, Biloxi, Mississippi, 39532 recently bought the PL-2 built by Ed Levy in I975. He is interested in the newsletter and perhaps would be interested in meeting other builders-owners in the area.

D.J.SCHNEIDER,747 White Avenue, Ishpeming, Michigan, 49849 has just embarked on building a PL-2. He is retired so has the time to spend on construction and will be searching for parts and materials. Lib and I recently flew the length of the upper peninsula and passed close by. Next time we'll try to make a stop to see progress and help with hints of construction.

DONALD BIDLINGMEIR 1649 Hampton Road, Grosse Point Woods, Michigan, 48236 has a partly completed PL-2 started by Monty Montgomery some years back. Don has a Lyc 0-235 engine and is interested in the constant speed prop modification proposed by Frank Ciochetto in last newsletter.

LEIGH BLAKE, P.O.Box I22, Felts Mills, New York 13638 has purchased an unfinished aircraft from Mike Rushinsky in Ohio. Leigh has asked numerous questions re construction some of which I will try to answer here. Auxiliary gas tank? Wet bays have been added in the wing roots but it is a bear of a job and not really needed if a Lyc 0-290 is used with a set of Paz's wheel pants and good cruise control such as leaning carefully and keeping the cowl flap at minimum necessary opening. Retractable gear? Forget it, there is no room in either wings or fuselage nor do they really add much beyond the wheel pants speed. Paz has commented on this one in the past and I have to agree completely. Major parts suppliers are McFarland Aircraft (metal parts) and Homebuilders Associates (fiberglass parts). Gee-Bee in seattle supply plexiglass parts. Addresses can be found in EAA publications. The EAA's two sheet metal books (vol 1&2) are an excellent source of information on handling this type of work for aircraft. Leigh lives across from Kingston Ontario where I learned to fly sailplanes and power. Perhaps we can get together there when I get back in the air in 1983, its about 3 hours flight from here just south of Detroit.

ROBERT J HANCOCK 11511 SW.84th St., Miami, Florida is the new owner of PL-2 sn 60 N761W built by R.L.Wood of LaBelle Florida. Woody flush rivetted the whole airframe and installed a brand new 160 hp Lyc 0-320-B2B. Bob is enjoying flying aerobatics and is pleased with the very positive response of the Stick and balanced control system.

WILLOUGHBY GULLACHSEN Site20, Comp28, RR1, Winfield, British Columbia. Winfield is only a few miles from Vernon where our PL-2 was damaged so Willoughby was just about the first person I called. He had a full set of drawings needed for part numbers and had supplier addresses and phone numbers needed to get the insurance and repair estimates going as quickly as possible. He was a big help and provided a goodly bit of encouragement to carry on and rebuild rather than abandoning the whole aircraft on the spot. His project is coming along well and he has a completed fuselage to show for it and is well along building a wing assembly table. All the workmanship is first class and he will have a very nice aircraft when it is finished. I hope he can find a concrete bunker for hangarage out there: Parts for his aircraft have been picked up by driving to California to do personal shopping. In his travels he found RUSSEL D. WELLS of 712 52nd St., Yakima, Washington 98901 has a set of spar extrusions, sheet metal and plans for sale. Russel can be reached by phone at 509-248-3549. While visiting Will showed me a set of the spar cap drawings to be used to make a spar cap set by building them up from sheared strip stock. The design looked good but more work is involved so a set of extruded caps is really the way to go if you can get a set.

T.E.K.WISHART 106 melba st., Downer, A.C.T. 2602, Australia has begun the building process on PL-2 #374. He has found it takes up to four months to get parcels of drawings etc by sea mail and some arrive badly damaged. Take heart, you are not alone even on the same continent we find getting parts from places such as AIRCRAFT SPRUCE & SPECIALTY takes anywhere from six to twelve weeks. In fact, obtaining parts and materials is probably the biggest problem in building any aircraft, it always takes too long and there are always errors in nearly every order neccesitating returns for exchange etc etc. Having the hardware parts on hand as assemblies are built up really helps as they are easily fit together right on the spot. A good example is to have all the rod end bearings on hand to place them into brackets as they are located, drilled and rivetted. When I was building I budgeted purchases and wasted a lot of time ordering piece-meal small batches of parts. Aluminum can be bought much more cheaply if a whole order all at once is placed as warehouses give substantially better prices for large lots. Best of Luck:

Lee Conlon of HOMEBUILDERS AIRCRAFT ASSOCIATES 7858 Arnett St., Downey California, 90241 writes he has PL-1 sn#1 for saleat \$11,500 u.s.f.. It is full ifr and has had a top overhaul 35 hours ago. Also he has information on Five PL-1B's imported from Taiwan for sale in California at \$11,500 each. They all have 150 hp Lyc engines and all have less than 700 hrs total time. There is a catch as there is apparently no known way to get them licensed to fly in the U.S. They were built in 1968 and in good condition. If anyone anywhere has an idea how to license them in the U.S. or elsewhere please write to Lee. Also Lee is trying to locate Wm.H.Smith last address in Greer S.C. as he has a completed parts order for Mr Smith's PL-2 sn#326. Should a reader run into him please pass on the word his parts are ready:

PAZ SEZ he has been working on projects such as wing tip fuel tanks for the Beech Bonanza and on structural design of a remotely piloted vehicle with his employer Teledyne/Ryan Aeronautical. Now he is working through the same organization as Chief Engineer on a contract with Commuter Aircraft Corporation. They are designing a 50 passenger 4 engine turbo-prop aircraft and he is a very busy man with a large staff of design engineers. Paz also notes that considerable numbers of PL-1, PL-2, PL-4

aircraft are being completed and getting into the air. No serious problems, accidents or other difficulties have occurred and all builders have been happy with their finished aircraft. He has also noted the PL-1B's imported from Taiwan where they were built in a factory. Since Paz and Lee Conlon are in touch, you could probably contact either for further information.

PAT AND ERROL JANSEN 13001 Powderhorn, Austin, Texas, 78758 have a new address and new home for their P1-2 at Kitty Hill where it is hangared. They have been flying it on cross country trips for three years and have found it is a very good little cross country ship. Errol writes he has added ½" Scott Afonic acoustical foam to the firewall and other locations. It cut the cockpit noise from 104 db to 97 or 98 db. It is available from Scott Foam Division, Scott Paper Co., 1500 E 2nd. St., Chester PA 19013. Then he added a cross-over exhaust system to replace straight stacks. About 7 mph was added to the top speed but cockpit noise went up to 103 db. This level can be permanently harmful to one's hearing and the solution is to wear hear ing protective headphones such as sold by Telex or David Clark. Then an intercom is used to talk to one another easily and comfortably. The Jansen's have a Radio System's Technology intercom and David Clark H10-30 headset-microphones. They report the system works very well and the aircraft is more comfortable as a result. Lib and I have a similar set and joke about how few people would spend several hundred dollars to talk to one's spouse. It sure helps to have her in constant communication helping with navigation and traffic watching.

EARL HELDT 21917 Oakview Lane, Cupertino, California, 95014 finished his PL-2 five years ago but still sells landing gear scissor links re-designed for casting. They are made from an aluminum alloy A-356 heat treated to T6 condition, X-rayed and Magnafluxed. He also has some Hartwell latches #H-4600 in stainless steel for gas tank doors. Drop him a line if you need these items. I bought a set of links after I found a crack in my built up welded 4130 links. They look good although I have yet to install them, first for lack of time and now my airplane:

DARREL RADFORD PO Box 2112, Paso Robles, California, 93446 writes he has his PL-1 for sale as he has too many airplanes. He has a Christen Eagle 11 recently completed and at ;ast report had flown it 70 hours.

MILDRED ARNOLD 9415 Madison, Kansas city, Missouri 64114 has sold the unfinished wet wing her husband Ken Arnold left at his passing. It was purchased by Glenn Thomas, Wichita Kansas and will likely become the first wet wing PL-2 to fly in due course. She was able to get a flight in the well known N72KA on a recent visit to Houston where it found its new home.

DUANE SEYMOUR 210 Rue Grand, Lake St. Louis, Missouri, 63367 has asked for a bit of advice re building up the stabilator. I had good luck by breaking the skins into the smaller sections noted on the print and using a cage type jig with removable sections on one side to allow access to pull skins back for access by bucking bars. In rivetting your gun should be fitted with a throttle valve in the handle so you can cut its punch down on 3/32 rivets. Also one can drive rivets in several small shots from the gun. In this way there is better control and less chance of the bucking bar slipping off the shop end, an instant disaster. Pop rivets will be needed in several locations in stabilator, anti-servo tab and flaps and ailerons. The monel type are the way to go as they are very strong and durable without being excessively costly like Cherry rivets.

Duane also asked about cockpit heat and ventilation as well as winshield de-fogging. I made windshield defrosters patterned after a Cherokee 140 by making a pair of simple moulds contoured to fit the cowl and laying them up with fiberglass. Underneath a mating diffuser-adapter also from fiber glass off a simple mould connects to 1" dia ducting. A rather complex control valve inside the cockpit on the firewall just above the passengers toes provides a choice between toe heat, full defrost or a mix. engine side a mating valve controls the flow of hot air off the right heat muff. In the off position the ram air from the upper right rear engine baffle blows through the muff, is heated and dumped down through the cowl flap preventing over heat to the shell of the right muffler. In the full heat position all of it is brought into the cabin for split between toes and wind shield. The system works very well and I can fly around at 10 deg F in perfect comfort. To do this the cabin must be sealed with a bit of soft seal around the edges of the trim panels at the seats and the seat back flutes will have to be sealed at the bottom. Also you will have to place your fur hat into the flap handle slot which just can't be sealed and is a source of an otherwise unstoppable draft. The cabin needs no exhaust venting as the flutes in the baggage compartment floor, back and at the seat back provide adequate venting.

An aside on the topic is note-worthy. The wing is a source of pressurized air at the control stick area. At the suggestion of Ross Whitney I used it via a l" dia air hose to feed cool air through the radio stack. Even fully trasistorized radios become surprisingly warm, and a breath of cool air might just help prolong their spells between malfunction. In only 615 hours in my PL-2 I have had three radio failures and been saved from an awkward problem by having a backup. Perhaps mine are too cool.

HAROLD PIO 196 Old Julian Road, Ramona, California, 92065 is a possible source for long nose fiberglass engine nose bowls. He is in possesion of a female mould used to build nose bowls for aircraft incorporating 4" crankshaft extensions.

I had given Duane some hints about joggling the fuselage longerons some time ago and he asked me to repeat it here. Since it has been several years since I did mine, would you send back my suggestions as a reminder so I get it right the second time.

Well I seem to have used up all the letters in the stack to write this newsletter so will have them printed and get them into the mail. They may be posted in Detroit as our mailing cost was boosted from 17ϕ to 35ϕ a short time back. Your subscrption is noted on your address and goes by issue number. There is enough money in the kitty to crank out two or three more and I will holler when more is needed in the meantime I will try to get them out at a \$1 per issue.

Still in my stock of surplus parts is an almost complete set of all the parts to male a pair of fuel tanks. Fiberglass parts are 100% complete but a pipe fitting or two and senders for fuel gages would be needed. I would like to unload them to another builder as I no longer need them even for spares. Best reasonable offer takes:

Latest parts and price list from Homebuilders Aircraft Associates is included as part of newsletter, hope it helps, their parts are very well made and fit well.

Homebuilders Aircraft Associates 7858 ARNETT ST. DOWNEY, CALIF. 90241

DES 11 Date 3000 To 2	
Effective Prices January 1982 F.O.B. [PL-1 PL-1] (All parts formed from the original PL-1 & PL-2 molds)	
Bulletin FG-1	. Bulletin WC-PL-2
(PL-1 Fiberglass Parts)	(PL-2 Plexiglass Parts)
1-20-003-R Stabilator Fairing \$25.00	Packaging charge extra \$20.00
-L " " \$25.00	W2-30-004-7 Windshield one piece
1-20-002-1 Rudder Fairing \$40.00	STD. Tints EZI
1-20-001-1 Vert. Fin Fairing	Gray \$120.00
W/Strobe Mtg. \$55.00	Clear each
1-20-003-1 Horz. Stab. Fairing	C2-30-004 (x) Canopy Halves Right or Left \$105.00
Pair \$70.00	W2-30-400 Windshield & Canopy
1-40-006 Carb. Air Scoop \$75.00 1-30-007-TC Tail Cone Fairing	Set Complete in Std.
(Lower ½) W/Nav. Lite	Tints or Clear \$285.00
Mtg. for two lights \$75.00	Packaging Charge \$ 15.00
1-50-002-MB Mass Bal. Fairing	
Pair \$30.00	
Bulletin WC-PL-1	P. 11-44- PO 2
(PL-1 Plexiglass Parts)	Bulletin FG-3 (PL-1/PL-2 Wing Tip Fuel Tank Kit)
Packaging charge \$20.00 extra	
W1-30-004 Windshieldone piece	KIT "B" 1. Fiberglass parts per Dwgs.
Tints: EZI	2. Mechanical parts per Dwgs.
Gray \$120.00	Starter Kit W/ HAA Constr.
Clear each	Guide.
-1-30-004(x) Canopy-Halves Right or Left	KIT "B" price\$475.00
EZI, Gray and Clear \$105.00 ea.	Optional Accessory Kit:
WC1-30-400 Windshield & Canopy	1. Plexiglass Lens & Nav. Lights
Set Complete in Clear	2. Fuel Sensors (2) 3. Door Latches (4)
or STD tints: \$285.00	10 piece Kit price \$125.00
Packaging charge \$ 15.00	(Packing charge for above kits)\$ 25.00
	Complete Assembled PL-1 / PL-2
PL-2 PL-2 PL-2	Wing Tip Fuel Tank Set \$1595.00
	Crating Charge \$ 65.00
Bulletin FG-2	PL-4A STARTER KITS
(PL-2 Fiberglass Parts)	Kit #
2-20-003-1 Horz. Stab. Fairing	402-3 PL-4A (Rudder) 27 parts \$125.00
Pair \$ 70.00 2-20-001-31 Vert. Fin Fairing \$ 45.00	402-3R PL-4A (Rudder) W/rivets \$155.00
2-20-001-31 Vert. Fin Fairing \$ 45.00 2-20-002-23 Rudder Fairing \$ 20.00	Packaging Charge ea. \$10.00
2-10-011-91 Flap Handle Cover \$ 35.00	402-4 PL-4A Trim Control Assembly \$125.00
2-30-004-9F Canopy Frame \$390.00	ORDER DIRECT FROM:
Crating Charge \$ 35.00	"Homebuilders Aircraft Associates"
2-30-009-7 Tail Cone Upper \$ 45.00 Tail Cone Lower \$ 70.00	All orders Cash, Check or Money Order
2-80-001-49 Air Vent Molding	with order. Orders will be acknowledged
Pair \$ 70.00	by letter with estimated completion date.
2-80-001-49 Air Vent Exhaust	Orders will be shipped C.O.D. for freight charges.
Pair \$ 70.00	Prices subject to change without notice.
2-10-011-47 Console Fairing \$ 35.00	
2-10-013-7 & -8 Wingroot "set" \$225.00 Packaging \$ 25.00	California purchasers add 6% Sales Tax.
2-40-009 PL-2 Engine Cowling Set \$375.00	
Crating \$ 45.00	

Bob Hancock's PL-2 N761W at Sun'N'Fun in Florida 1982.

WHITE WITH DARK
BLUE UPPER FLIGHT
BLUE LOWER TRIM
NARROW GOLD HIGHLIGHT ON EDGE OF
DARK BLUE VERY
CLHSSY LOCKING



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