

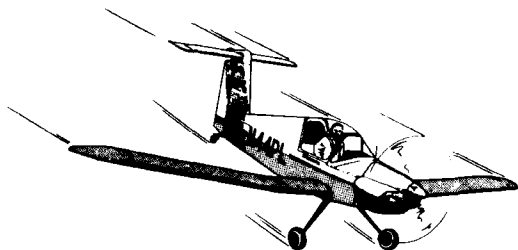
Pazmany PL-4 Newsletter

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JULY 1975

OPERATING THE PL-4 FROM A HIGH ALTITUDE AIRPORT IN WINTERTIME

BY EVAN MCCOMBS

NOVEMBER 1974 LT. COL. ROY WINDOVER (CANADIAN AIR FORCE) WAS ON HIS WAY FROM CANADA TO SAN DIEGO FLYING THE PL-4, WHEN THE LITTLE V.W. ENGINE DEVELOPED STARTER PROBLEMS. HE DECIDED TO STOP IN COLORADO SPRINGS (WHERE HE HAD BEEN STATIONED AT ONE TIME AND KNOWS MANY PEOPLE IN THE AVIATION BUSINESS) TO GET HELP. IT TOOK SOME TIME TO REPAIR THE STARTER AND STILL IT WAS NOT SATISFACTORY TO MAKE THE LONG TRIP WITH SEVERAL STOPS BETWEEN COLORADO SPRINGS AND SAN DIEGO.

COL. WINDOVER'S TIME FINALLY RAN OUT AND HE WAS FORCED TO RETURN TO CANADA, SO HE DECIDED TO LEAVE THE PL-4 IN COLORADO SPRINGS. IT WAS AT THIS TIME THAT COL. WINDOVER CONTACTED LT. COL. ROBERT LOEFFLER (USAF RET.). COL. LOEFFLER IS A FRIEND OF PAZMANY, A RESIDENT OF COLORADO SPRINGS AND HAD FLOWN THE PL-4 IN SAN DIEGO. LOEFFLER, IN TURN, CONTACTED SEVERAL MEMBERS OF THE EAA CHAPTER 72, WHO OWN HANGERS AT MEADOW LAKE AIRPORT, TO FIND A PLACE TO STORE THE PLANE. A HANGER WAS FOUND AND IT WAS AGREED THAT IN RETURN MR. PAZMANY WOULD LET QUALIFIED PILOTS FLY THE PLANE. THIS WAS A GOOD OPPORTUNITY TO EVALUATE THE PLANE'S PERFORMANCE AT THE HIGH ALTITUDE OF COLORADO. IT WAS WINTER AND THERE WAS AN ADVANTAGE WITH THE LOWER DENSITY ALTITUDE THAN IF IT WERE SUMMER OR WARM WEATHER. THE FIELD ELEVATION AT MEADOW LAKE AIRPORT IS 6825 FT.

BESIDES LOEFFLER, EVAN MCCOMBS, PETE GONZALEZ AND BRUCE MCCOMBS, ALL OF WHOM HAVE HOME-BUILTS OF THEIR OWN, FLEW THE PL-4 FOR A TOTAL OF 15 HOURS. EVAN FLEW THE PLANE ON A COUPLE OF CROSS-COUNTRY FLIGHTS, ONE TO DENVER'S EAST COLFAX AIRPORT WHERE THERE ARE MANY HOME-BUILTS. IT DREW MUCH ATTENTION THERE. HOWEVER, THE STARTER DID NOT WORK MUCH OF THE TIME. BRUCE AND EVAN MCCOMBS DID NOT HAVE ANY PROBLEM STARTING THE ENGINE BY HAND PROPPING. IT TAKES TWO PEOPLE AND A LITTLE DIFFERENT TECHNIQUE THAN CONVENTIONAL ENGINES BECAUSE OF THE APPROXIMATELY 2 TO 1 REDUCTION FROM THE ENGINE TO THE PROPELLER.

DURING THE FLIGHTS FROM MEADOW LAKE THE PERFORMANCE WAS FOUND TO BE AS FOLLOWS: TAKE-OFF DISTANCE - 1500 FT.
RATE OF CLIMB (AVERAGE) - 300 FPM AT 70 MPH

ALL PILOTS AGREED THAT TAKE-OFFS WERE A LITTLE DIFFERENT DUE TO THE PROPELLER ROTATION OPPOSITE TO CONVENTIONAL ENGINES. THE ELEVATOR IS VERY POWERFUL AND LIFTS THE TAIL VERY QUICKLY, BUT THE PLANE WILL NOT FLY UNTIL IT REACHES 60 MPH, IAS. IF LIFT-OFF IS ATTEMPTED SOONER, IT SIMPLY GOES BACK TO A 3 POINT ATTITUDE AND TAKE-OFF MUST BE EXECUTED AGAIN. GROUND HANDLING ON BOTH TAKE-OFF AND LANDING IS VERY DOCILE WITH NO PROBLEMS WHATSOEVER. CONTROL RESPONSE AND HANDLING IN THE AIR

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ARE VERY NICE WITH QUICK AND EASY RESPONSE, BUT NOT OVERLY SENSITIVE. IN A FORWARD SLIP, TO LAND IN A CROSSWIND (WHICH WE HAVE MANY IN COLORADO) IT SEEMS TO BE JUST A LITTLE SHY ON THE RUDDER CONTROL. YOU CAN'T HAVE EVERYTHING IN AN AIRPLANE WHEN YOU CAN FLY ALL SUNDAY MORNING ON NINE GALLONS OF GAS.

ON MARCH 1, 1975, DAVE NOLAND FROM AIR PROGRESS MAGAZINE TOOK THE PL-4 BACK TO CALIFORNIA. THE FOUR OF US WHO FLEW IT WERE SORRY TO SEE IT LEAVE. IT WAS GREAT FUN FLYING IT AND IT WAS ALWAYS A GOOD CONVERSATION PIECE. WE UNDERSTAND THAT PAZMANY IS INSTALLING A LARGER ENGINE AND WOULD LIKE THE CHANCE TO EVALUATE THE LITTLE PLANE AT THIS ALTITUDE. DURING ITS STAY HERE WE WERE ABLE TO GET SOME AIR TO AIR PHOTOS, TAKEN BY LARRY DALE, ANOTHER EAA MEMBER. THE PHOTOS ARE GOOD QUALITY AND SHOWING THE PLANE FLYING IN SOME OF COLORADO'S FAMOUS SCENERY. THIS SHOWS THAT THE PL-4 PERFORMS WELL, AS THEY WERE TAKEN AT 9000 FT. ASL.

NOTE FROM PAZMANY: THE FIRST PL-4 BUILT FROM PLANS BY MR. FRANK RONCELLI OF GRANADA HILLS, CALIFORNIA, IS COMPLETED, 75 HOURS OF INITIAL FLYING FROM MOHAVE AIRPORT. THE AIRPLANE IS EQUIPPED WITH A CONTINENTAL A-85 ENGINE. PLANS FOR THE INSTALLATION OF THE CONTINENTAL A-65 HAVE BEEN RELEASED BY PAZMANY AND USED BY MR. RONCELLI (WITH SOME MODIFICATIONS) FOR THE A-85 INSTALLATION. PAZMANY JUST RECEIVED A SPORTAVIA-LIMBACH SL-1700E ENGINE (V.W. CONVERSION) AND IS NOW PREPARING THE INSTALLATION DRAWINGS FOR THE PL-4. THE SL-1700E DEVELOPS 68 HP AT 3500 RPM, AND IT WILL BE DIRECT DRIVE (NOT V-BELT REDUCTION). THIS ENGINE ARRIVED ABOUT JUNE 1, 1975. RIGHT NOW THE ACTUAL AND EXACT DIMENSION DRAWING OF THE ENGINE IS IN PROGRESS. THEN THE MOUNT AND COWLING DRAWINGS CAN BE MADE. YOU WILL BE KEPT INFORMED ON THE PROGRESS OF THE INSTALLATION DRAWINGS.

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TEFLON BEARING "PROBLEM" MOLT TAYLOR'S ANSWER GIVES THE WHOLE STORY: DEAR PAZ: WE HAVE HAD SOME TROUBLE WITH TEFLON BEARING INSTALLATIONS IN THE COOTS WHICH WE FIRST THOUGHT WAS DUE TO SWELLING OF THE MATERIAL ITSELF. WE RESEARCHED THIS AND FIND THAT THERE ARE SEVERAL TYPES OF TEFLON AND THAT WE DID APPARENTLY GET SOMETHING THAT HAD A SLIGHT SWELLING TENDENCY THAT THEY CALLED TEFLON BUT WHICH WAS APPARENTLY NOT TRUE TEFLON MATERIAL. ANYWAY, WE HAVE FOUND THAT IT IS NECESSARY TO SET THESE PARTICULAR BEARINGS UP WITH ABOUT 0.01 CLEARANCE TO GET THEM TO RUN FREE. THIS IS DUE TO THE FACT THAT WE HAVE A 1½" BEARING I.D. THAT RUNS ON AN ALUMINUM TUBE WITH THE BEARING FACE ¼" WIDE. THE WHOLE TEFLON STRIP LAYS IN A GROOVE TO RETAIN IT AND THE GROOVE IS IN AN ALUMINUM BRACKET. FURTHER, WE FOUND THAT DUE TO TEMPERATURE CONDITIONS THAT WE HAD TO SET THE THING UP WITH ABOUT THE SAME END PLAY CLEARANCE DUE TO THE WOOD THAT THE BEARING MOUNT BOLTS TO APPARENTLY SWELLING WITH MOISTURE. THE RESULT IS THAT SOME PEOPLE APPARENTLY GOT CONFUSED IN REGARD TO WHAT THE WHOLE THING WAS ABOUT. WHAT IT GETS DOWN TO IS THAT IN THIS PARTICULAR INSTALLATION THINGS MUST BE SET UP QUITE LOOSE AND WITH A LOT OF CLEARANCE TO GET THEM TO CONTINUE TO RUN FREE IN SERVICE. I HAVE HAD NO EXPERIENCE WITH TEFLON ROD ENDS SO CAN'T MAKE ANY REMARKS ON THOSE. WE USE HEIM ROD ENDS WITH BRONZE INSERTS OR SURPLUS BALL BEARING ONES IN EVERYTHING THAT WE HAVE BUILT TO DATE. THE MINI-IMP IS ABOUT READY TO FLY BUT WE AREN'T SAYING MUCH ABOUT IT UNTIL IT HAS FLOWN. NICE TO HEAR FROM YOU. SINCERELY, MOLT.

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DEAR MR. HIRMAN: THERE IS THE ANSWER. OBVIOUSLY, YOU CAN USE THE TEFLON COATED BEARING AS I SPECIFIED. SINCERELY, PAZ.

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CONSTRUCTION OF A HOMEBUILT AIRPLANE - MANY OF US WHO WANT A HOMEBUILT PLANE ARE NOT BUILDING ANYTHING. WHY? WE HAVE CROSSED THE FIRST HURDLE BY BUYING PLANS. THAT STEP ALONE REQUIRED THE DECISION THAT A HOMEBUILT PLANE WAS THE ONLY ANSWER. THE EXACT REASON FOR THAT ANSWER VARIES GREATLY. THERE MAY BE AS MANY REASONS AS THERE ARE PEOPLE WHO HAVE MADE THE DECISION.

NOW THAT YOU HAVE THE PLANS, WHY THE INACTION? THE PLANS MUST MAKE ONE FEEL THAT THE JOB IS TOO AWESOME. YOU MUST REMEMBER THAT A GOOD SET OF PLANS FIRST TELLS YOU HOW TO BUILD EACH PART. SECOND, HOW TO ASSEMBLE EACH PART INTO AN AIRPLANE. THAT LAST ACT PRODUCES THE DESIRED OBJECT--AN AIRPLANE.

IT WOULD SEEM THAT WE LOOK AT THE TOTAL PLANE FIRST. THAT DOES PRODUCE A FEELING OF DOUBT OF ONE'S ABILITY. JUST AS A BEACH IS A LONG EXPANSE CONSISTING OF A MULTITUDE OF GRAINS OF SAND, AN AIRPLANE IS ALSO AN ASSEMBLY OF MANY INDIVIDUAL PARTS.

LET'S LOOK AT THIS BY READING PARTS OF OTHER BUILDERS' LETTERS: WILLIAM WALTHIER, 1119 TILGHMAN STREET, ALLENTOWN, PA. 18102, WRITES, ". . . I HAVE BEGUN CONSTRUCTION OF MY PL-4. THE CREDIT FOR THIS PUSH HAS TO BE GIVEN TO CHAP. 122 AND THE FANTASTIC WORKSHOPS THEY HOLD OVER THE WINTER AT THEIR CHAPTER WORKSHOPS IN DILLSBURG, PA. (OUTSIDE OF HARRISBURG). THE CHAPTER HAS ABOUT SIX PL-4S UNDER CONSTRUCTION SO IT'S EASY TO GET HELP WITH ANY PROBLEMS. THE MAIN THING THAT THEY IMPRESSED ON ME WAS TO BUILD ONE PART AT A TIME, NOT A PLANE. I BOUGHT ONE SHEET OF ALUMINUM AND WILL DO AS MUCH WITH THAT AS I CAN. THEN I'LL BUY ANOTHER SHEET. IF IT WEREN'T FOR THESE WORKSHOPS, I MAY NEVER HAVE STARTED BECAUSE OF LOOKING AT THE PROJECT AS A \$3 - 4,000 AIRPLANT---NOT AS A GROUP OF PARTS WHICH ADD UP TO A PLANE OVER A PERIOD OF TIME. MAYBE IT SHOULD BE MENTIONED IN THE NEWS THAT YOU DON'T HAVE TO PUT OUT A LOT OF MONEY TO START. BUY A SHEET AND START CUTTING. . . ."

THREE IMPORTANT INGREDIENTS OF SUCCESS WERE REVEALED IN THIS LETTER. DON'T LOOK AT THE COMPLETED PLANE UNTIL IT IS COMPLETED. DO JOIN A LOCAL CHAPTER OF EAA AND ATTEND THEIR WORKSHOPS; AND GET THE HELP OF OTHER BUILDERS. REMEMBER THE COST CAN BE SPREAD OUT BY BUYING ONE SHEET OF ALUMINUM AND START MAKING THE PARTS THAT CAN BE MADE FROM THAT SHEET.

JIM O'NEIL, 4186 STAATZ DRIVE, AUSTINTOWN, OH. 44511, WRITES, ". . . . I HAVE A WINGS SKINNED WITH CONTROLS INSTALLED, STABILATOR SKINNED, FIN AND RUDDER SKINNED, FUSELAGE SKINNED ALONG WITH THE TRIM CONTROL IN (AND WORKING) I MADE EVERY PART FOR THE WHOLE PROJECT BEFORE I PUT ANYTHING TOGETHER. I HAD MY DOUBTS AT TIMES, BUT WHEN I STARTED ASSEMBLING, IT'S REALLY FUN ONCE YOU CAN SEE THE RESULTS AFTER TWO YEARS OF MAKING NOTHING BUT PARTS. I HAVE DONE IT ALL BY MYSELF EXCEPT I GET MY WIFE PAT TO HELP WITH RIVETING ONCE IN A WHILE."

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PAZ HAS ALWAYS SAID THAT AN AIRPLANE IS A LOT OF DESIGNERS' COMPROMISES FLYING IN TIGHT FORMATION. WE CAN PARAPHRASE IT TO "MY PLANE IS A LARGE NUMBER OF SMALL PARTS (THAT I MADE) FLYING IN TIGHT FORMATION." JIM IS WELL ALONG IN HIS PROJECT. IN FACT, BY NOW HE MAY HAVE HIS PLANE OFF THE JIG AND ON THE GEAR. JIM MADE A PLANE ONE PART AT A TIME---THE CARDINAL RULE OF PLANE BUILDING.

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EDITOR'S TRIP TO ENGLAND - THE TRIP WAS MADE TO ATTEND THE 30TH YEAR REUNION OF THE SECOND AIR DIVISION OF THE EIGHTH AIR FORCE. THE 2AD WAS COMPOSED OF THE HEAVY BOMBARDMENT GROUPS WHICH FLEW THE B-24 LIBERATOR BOMBERS AND THEIR SUPPORT FIGHTER GROUPS. THE RE-UNION WAS HELD AT NORWICH, NORFOLK, ENGLAND, 30 MAY 1975 THROUGH 3 JUNE 1975. THE PEOPLE OF NORFOLK WERE MOST GRACIOUS AND MADE THE REUNION A TREASURY OF PLEASANT MEMORIES.

DON LEE AND DERRICK HILL, WHO ARE BOTH BUILDERS OF THE PL-4A, CAME UP AND SPENT AN EVENING VISITING ABOUT THEIR PL-4S. BOTH ARE TOO MODEST ABOUT THEIR PROGRESS. EVEN SO, DERRICK GAVE ME SOME SNAP-SHOTS OF HIS PROJECT THAT SHOW WHAT HEADWAY HE IS MAKING. IT WILL BE INTERESTING TO FOLLOW THEIR PROGRESS. THEY HAVE A PROBLEM GETTING SUPPLIES. MANY MUST COME FROM THE U.S. SHIPPING IS COSTLY AND TAKES FOREVER.

THE TRIP TO THE SOUTHERN COAST TO VISIT POPULAR FLYING ASSOCIATION AT SHOREHAM-ON-THE-SEA WAS A DELIGHT. PFA IS THE BRITISH EQUIVALENT OF OUR EAA AND IT WAS ESTABLISHED IN 1946. MR. WALKER, THE VICE-PRESIDENT OF ENGINEERING, IS VERY IMPRESSED WITH THE QUALITY AND DETAIL OF THE PL-4A PLANS. HIS ONLY NEGATIVE COMMENT WAS THAT THE VERY COMPLEXITY OF THE PLANS WOULD LIKELY FRIGHTEN OFF THE "TIMID" BUILDER. THAT SHOULD NOT BE THE CASE, FOR THE "TIMID" BUILDER IS THE VERY ONE WHO NEEDS A VERY DETAILED SET OF PLANS. THAT SUBJECT WILL BE COVERED MORE COMPLETELY IN THIS ISSUE OF THE NEWSLETTER.

THE EDITOR OF POPULAR FLYING, THE PFA MAGAZINE TOOK ME ON A TOUR OF THE PFA HANGER TO SEE THE SHOREHAM BASED HOMEBUILTS AND RESTORED PLANES. THEY HAVE BEEN RESTORING A LOT OF PLANES RECENTLY. THE SOURCE OF THESE PLANES IS FRANCE. THE AIRCRAFT MANUFACTURING INDUSTRY IN FRANCE IS OWNED BY THE GOVERNMENT. THE GOVERNMENT JUST WON'T RELICENSE A PLANE OVER TEN YEARS OLD, THUS CREATING A NEW PLANE MARKET. THIS TEN YEAR RULE HOLDS FOR ANTIQUE AIRCRAFT. THE LAST STOP WAS A HANGER ACROSS THE FIELD. THAT WAS TO SEE A DE HAVILLAND LEOPARD MOTH. IT IS AN IMMACULATELY RESTORED PLANE. THE PLANE HAD ITS WINGS FOLDED, SO IT WAS EASY TO SEE HOW DE HAVILLAND ACCOMPLISHED WING FOLDING. THE ULTIMATE ITEM IN THE RESTORATION OF THE LEOPARD MOTH WAS THE ANTI-MACASSARS ON THE TWO PASSENGER SEATS. THE ANTIMACASSARS WERE COMPLETE TO THE FAMOUS DH SYMBOL.

I MISSED CONNECTIONS WITH PAUL L. MORELEY, YATELEY, NR. CAMBERLEY, SURREY. THAT WAS SAD FOR HE HAD EXTENDED A VERY GRACIOUS OFFER OF HOSPITALITY AND DESIRE TO TALK ABOUT THE PL-4A. PAUL HAS NOT STARTED BUILDING AS YET. MAYBE YOUR EDITOR WILL GET TOGETHER WITH PAUL AT A LATER DATE TO VIEW HIS FINISHED PLANE.

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CORRECTION TO LAST NEWSLETTER - THE PICTURES OF FRANK RONCELLI'S AIRPLANE SHOWS A MICARTA CHAFING STRIP TO STOP THE RUDDER CABLES FROM THE SIDE SKINS. THE RUDDER SPRINGS ARE THE COMPRESSION TYPE USED ON OUTBOARD MOTOR BOAT TILLERS. IF THIS SPRING SHOULD BREAK, RUDDER CONTROL CAN BE MAINTAINED.

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BUY AND SELL - PAZ (PAZMANY AIRCRAFT CORP., P. O. BOX 80051, SAN DIEGO, CA. 92138) HAS THE FOLLOWING ITEMS FOR SALE:

PL-4A MAIN WHEEL FAIRING DRAWING (A 27" X 58" SHEET)

THIS FIBERGLASS FAIRING IS FOR THE GO-KART WHEEL, TIRES AND BRAKES. IT IS ESTIMATED THAT IT WILL INCREASE CRUISE SPEED AT LEAST 5 MPH, MORE LIKELY 10 MPH. PRICE \$20.00

PL-4A TRAILER - PRICE \$20.00

PL-4A ENGINE INSTALLATION AND COWLING FOR THE CONTINENTAL A-65 (THIS CAN BE USED WITH YOUR MAKING THE SLIGHT MODIFICATIONS NEEDED FOR A-75, A-80, C-75, C-85, C-90, 0-200) PRICE \$20.00

PL-4A LOT OF PARTS CONSISTING OF THE FOLLOWING ITEMS:

ALL NOSE AND CENTER RIBS FOR THE WINGS (FORMED AND ZINC CHROMATED--EXCEPT 13-8 RIBS, WHICH HAVE NOT BEEN ZINC CHROMATED

ALL BLANKS FOR AILERON AND TRAILING EDGE RIBS (NOT FORMED)

ALL VERTICAL FIN RIBS AND SPARS

ALL RUDDER RIBS AND SPAR

ALL STABILATOR RIBS AND REAR CHANNEL

THREE LANDING GEAR BEAM EXTRUSIONS

MISCELLANEOUS FUSELAGE, EMPENAGE, LANDING GEAR ATTACHMENT, FITTINGS, GUSSETS, BRACKETS, ANGLES, CLIPS, ETC.

PRICE F.O.B. SAN DIEGO \$220.00

NOTE: NORMAN E. PONDER, JR., 2204 DEERWOOD ROAD, BIRMINGHAM, AL. 35216, REPORTS THE FOLLOWING PRICES FROM FUTURE METALS, INC., 7828 N.W. 53RD ST., MIAMI, FLA. 33166, WHICH IS STILL A VERY GOOD SOURCE OF EXTRUSIONS:

-1403 @\$3.25/FT. (20 FT. LENGTHS ONLY)

-0703 @\$2.25/FT. (12 FT. LENGTHS ONLY)

-0601 @\$1.24/FT. (12 FT. LENGTHS OR 20 FT. LENGTHS)

THESE ARE SHIPPED WELL PROTECTED IN A 20' FIBRE TUBE. 2-20'-1403'S, 2-12'-0703'S, 3-20'-0601'S, AND 1-12'-0601'S CAME TO 45 LB. NORMAN WOULD LIKE TO KNOW A SOURCE IN THE SOUTHEAST U.S. FOR ALUMINUM PLATE AND TUBE OR ANYTHING ELSE FOR A PL-4A.

LEE CONLAN CALLED ON 21 JUNE 1975. HE HAS SOLD 13 OF THE 30 RUDDER KITS MADE UP. OF THOSE WHO RESPONDED TO MAJOR TRAEGER'S SURVEY, 23 SAID THEY DEFINITELY WERE INTERESTED IN THE KIT ROUTE. ONLY 7 OF THOSE HAVE BOUGHT A RUDDER KIT. THE NEXT KIT WILL FOLLOW WHEN THESE ARE SOLD. THAT WILL DETERMINE HOW MANY VERTICAL FIN KITS ARE MADE UP AND SO ON TO A COMPLETE PLANE. THOSE WHO DECIDE THAT THEY WILL BE INTERESTED IN THE KIT ROUTE AFTER THE 30 KITS ARE SOLD WILL HAVE TO WAIT UNTIL A NEW GROUP FORMS WHICH IS LARGE ENOUGH TO WARRANT A PRODUCTION RUN. LEE FEELS THAT HE HAS A CHEAP WAY TO BUILD A PL-4A. REMEMBER THAT YOU DON'T HAVE TO SPEND TIME RUNNING DOWN SUPPLIES. YOU DON'T HAVE ANY WASTED MATERIAL OR MISMADE PARTS. PAZ SAYS THAT THESE FORMED PARTS ARE EXCELLENTLY MADE. THE PARTS ARE READY TO ASSEMBLE AND THE SUB-KIT HAS EVEN THE RIVETS NEEDED WITH SOME EXTRA FOR REPLACING THOSE THAT DROP AND GET

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GOBBLED UP BY THAT INVISIBLE GREMLIN THAT INHABITS EVERYONE'S SHOP. IF THIS ROUTE INTERESTS YOU, DROP LEE CONLAN A LINE AT HOMEBUILDERS AIRCRAFT ASSOCIATES, 7858 ARNETT STREET, DOWNEY, CA. 90241. OR BETTER YET SEND HIM A CHECK FOR \$95.00 FOR KIT NO. 402-3R. (CALIFORNIA BUYERS ADD 6% SALES TAX.) THIS PRICE INCLUDES THE PACKING CHARGE. THE RUDDER KIT HAS 27 PARTS INCLUDING THE PREFORMED SKIN. YOU LOCATE AND DRILL THE RIVET HOLES. THEN YOU RIVET IT. YOU CAN ALSO FURNISH ALL YOUR OWN RIVETS. THEN SEND A CHECK FOR \$80.00. YOU WILL NEED ABOUT 450-500 RIVETS.

SEE TEMP, P. O. BOX 576, MENOMONEE FALLS, WI. 53051. THIS COMPANY HAS A VERY FINE PLASTIC TEMPLATE MATERIAL WHICH CAN BE DRAWN ON, AND CUT OUT EASILY WITH AN EXACTO KNIFE. THE MATERIAL IS 0.015" THICK (NOT 0.0015 AS REPORTED IN A PREVIOUS PL-4 NEWSLETTER). IT CAN BE USED TO MAKE VERY GOOD STENCILS. THE SHEET IS 21" X 50". CONTACT SEE TEMP FOR PRICE.

TAIL WHEEL SOURCE: AVIATION PRODUCTS, INC., 114 BRYANT, OJAI, CA. 93023 HAS A VERY FINE TAIL WHEEL FOR THE PL-4A. IT HAS A RUGGED ATTACHMENT FOR 1¼" OR 1½" SPRING. THE 4" X 1½" TAIL WHEEL WEIGHS 2 ¾ LB. PRICE \$27.95 POSTPAID.

SOURCE PAYSON CASTER WHEEL (ML-5BY) - SPECIFY ½" BORE AND 1 ¾" HUB. PRICE \$7.08 PLUS SHIPPING CHARGES (FEBRUARY 1975)

GEAR LEGS: RALPH BORDEN IS HAVING TROUBLE FILLING THE ORDERS HE HAS FOR GEAR LEGS. THE STEEL IS SCARCE AND EXPENSIVE. IT IS HARD TO WORK. RALPH IS ASKING FOR SOMEONE ELSE TO HELP HIM FILL THE ORDERS OR BETTER YET, TAKE OVER GEAR LEG MANUFACTURE.

PL-4A PROJECT FOR SALE - A VERY SAD LETTER CAME THE OTHER DAY. IT IS FROM LYLE F. SANDELL, BOX 69, FORRESTON, IL. 61030, PHONE 815/938-3475. IT READS IN PART:" I HAVE BEEN WORKING ON MY PL-4 FOR ABOUT 2½ YEARS NOW. . . . I HAVE DECIDED TO SELL MY PROJECT. . . . I HAVE MOST OF THE MATERIAL NEEDED, AND MOST OF THE PARTS MADE, ALODINED, AND CHROMATED. THE AILERONS, RUDDER, FIN, AND STABILATOR ARE DRILLED AND READY TO RIVET. THE SPARS ARE ASSEMBLED; AS ARE THE FUSELAGE FRAMES. I HAVE THE RIVET KIT, MOST OF THE HARDWARE, THE FAIRINGS, CANOPY, GAS TANK. I ALSO HAVE AN A-75, "O" SMOH THAT COULD GO WITH THE PROJECT. THE PROJECT WILL COST \$2,800.00 AND THE ENGINE \$1,395.00; OR BOTH FOR \$4,000.00."

SEE PL-4 NEWSLETTER, VOLUME 2, ISSUE 3, NOVEMBER 1974, PAGE 6 FOR PICTURES OF LYLE'S PROJECT. THE CRAFTMANSHIP IS EXCELLENT. IF YOU ARE INTERESTED IN A VERY GOOD HEADSTART ON A PL-4, CONTACT LYLE.

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THE FOLLOWING NAMES & ADDRESSES ARE OF SUBSCRIBERS TO THE PL-4 NEWSLETTER WHO DO NOT HOLD PLANS

The names preceded by an * have confirmed that they do not hold a PL-4 plans set. Would the rest of you please drop me a line and let me know the status of you PL-4 plans set. It is perfectly acceptable to subscribe without holding a PL-4 plans set. All we would like to know is that there is no error in our records. So please drop that line now before you forget.

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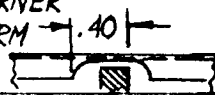
* Victor Jiricek
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Arkville, NY 12406

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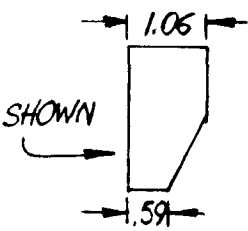
PREPARED	NAME L. Pazmany	Mar. 1975	PAZMANY AIRCRAFT CORPORATION — SAN DIEGO — CALIFORNIA —	MODEL NO.	PL-4A
CHECKED			ENGINEERING CHANGE NOTICE # 5	REPORT NO.	
APPROVED				PAGE NO.	

DWG 10-004 - AILERON - LEFT HAND - BOTTOM CORNER
DETAIL OF -7 SPAR, CUT OUT FOR MASS BALANCE ARM
CHANGE DIMENSION .45 TO .40



DETAIL -15

CHANGE TWO DIMENSIONS AS SHOWN

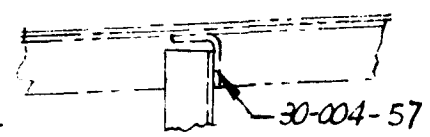


DWG 10-005 - SPAR ASSY. WING OUTBD PANEL :
NOTE INDICATING RIVETS ATTACHING RIBS TO WEB. CHANGE
MD 419 TO 424 - JUST ABOVE THIS NOTE IS SHOWN "MD 424 TYP".

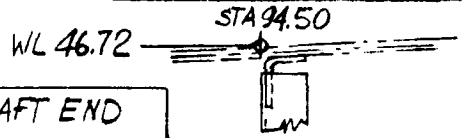
DWG 10-007 - REAR SPAR - WING - DETAIL -39 - CHANGE LENGTH TO 2.38 AND DIMENSION
1.15 TO 1.19. (TUBE FITS INSIDE .69 DIA. HOLES IN -33 AND -35) CHANGE STOCK TO 2.4".

DWG 30-002 - FIREWALL : IN B/M. 212-12N RECEPTACLE - CHANGE REQ. TO 6 -
HAS 697-A08K NUTPLATE - CHANGE REQ. TO: 19 FOR -3 AND 20 FOR -1

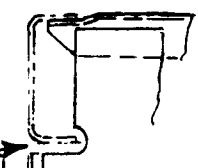
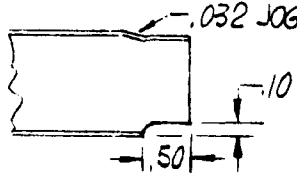
DWG 30-003 - LANDING GEAR BEAM ASSY - JUST UNDER
SECTION B-B. CLIP ATTACHING -27 CHANNEL TO COCKPIT
LONGERON IS SHOWN WITH FLANGE FACING AFT. SHOULD BE
FACING FORWARD AS SHOWN IN DWG 30-004



DWG 30-004 - COCKPIT LONGERON - FRAME STA 94.50 ASSY
ADD: WL 46.72 AT INTERSECTION WITH LONGERON

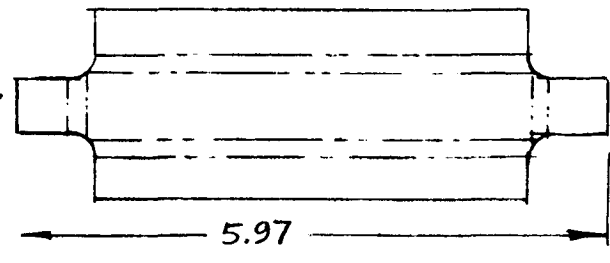
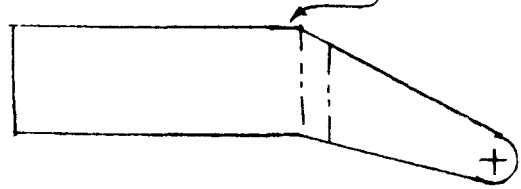


DWG 30-006 - BAGGAGE COMPART. FLOOR. ADD DETAIL OF AFT END
OF -43 AS SHOWN IN SKETCH.
ON -3 FLOOR ASSY. THE RIGHT SIDE EDGE
MEMBER IS SHOWN AS -7, SHOULD BE -61
AT LEFT SIDE EDGE - (STA 85.79). CUT OUT
FOR CHANNEL 30-005-17 SHOULD BE AS SHOWN



DWG 30-007 - TAIL CONE FRAMES. IN B/M. -53/-54 : STOCK SIZE SHOULD BE: 8.5 x 1.5 x .032
IN B/M -45/-46 CLIP, REQ. SHOULD BE 2/2

DWG 50-004 - RUDDER CONTROL.
THE BLANK FOR -11 AS SHOWN IS TOO SHORT.
INCREASE LENGTH AS SHOWN IN SKETCH
ELIMINATE THE UPPER FLANGE OF -21



DWG 50-002 - ELEVATOR TRIM CONTROL
IN B/M -25 STOCK SIZE SHOULD BE L=1.4

CONSTRUCTION MANUAL. PAGE 51. 3 LINES FROM BOTTOM: SHOULD READ: GUSSET -27

SHEET UTILIZATION DIAGRAM. PAGE 10. DELETE 30-001-17 FROM 2024-T3 -.020 SHEET
AD TO 2024-T3 -.032 SHEET IN PAGE 13

DWG 20-001 - STABILATOR. IN B/M. -63 ANGLE. STOCK SIZE SHOULD BE 1.2 x 3.1

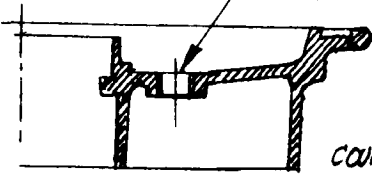
SUMMARY OF RAW MATLS. PAGE 3. ITEM 78. TUBE - NYLON. 3/16" O.D. x .039. LENGTH SHOULD BE 10 FT.

EXPLODED VIEWS. DWG 20-003
RUDDER



DWG. 60-001 - WHEEL REWORK

DRILL AND TAP 6 HOLES - 1/4" - 20



ALSO. IN "REWORK OF BRAKE
DISC ADAPTER", NOTE SHOULD BE:
COUNTERSUNK TO MATCH AN 505-416 (82)

PAZ'S TRIP TO CANADA -- Paz has just gotten back from a trip to Ottawa, Canada. He went there to deliver a paper on light plane design. While there he visited the Warkworth Institute and the first PL-4A under construction there. He has promised to send some photos of that PL-4A under construction to be published in the next newsletter.

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OSHKOSH 1975 -- That time is drawing near very fast. Those of you who haven't given it any thought lately should be right now. The dates are Tuesday 29 July through Monday 4 August. We will have a PL-4 Builders dinner as in the previous years. The exact time will be handed out at the display. So check at the PL-4A on display. Paz does not think that he will have a booth this year.

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PICTURE SECTION -- This issue will not have pictures. There were only two pictures. That is too few to make up a photo page. There will be a lot of pictures from Oshkosh. This is also a plea to all of you to send in glossy black and white prints - 3½" x 5" or larger. Color can be used if the prints are glossy. The process used for reproduction of the photo pages does much better with glossy prints. The trouble with color prints is the nature of "seeing" colors with the reproduction film. That film is colorblind to red. So all reds come out too black for a really good monochromatic balance.

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ANOTHER VW ENGINE CONVERSION -- The mail has just brought the plans for the only approved conversion in England. The English aircraft engines, even for amateur built experimental aircraft, must have dual ignition. These plans go into detail on the installation of a second spark plug. The plans are of high quality and should be obtained for those of you who want dual ignition. The packet contains four 27" x 40" blue-line prints, A Volkswagen Aero Engine Conversion for the Homebuilder booklet of 15 pages, a V. W. Engine Conversion Overhaul and Inspection Report of 3 pages, three V. W. Aircraft Engine Technical Bulletins, and a Materials Supplement. Order VOLKSWAGEN AIRCRAFT ENGINE PLANS for Amateur Constructors from DONALD G. PEACOCK, Meadow Cottage, The Heath, Ardleigh, Essex, England. The price is 6.00 Pounds Sterling airmail anywhere in the world. At the moment that amounts to about \$13.80 US.

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Here's a list of U. S. Companies that sell conversion parts, do-it-yourself plans and complete Volkswagen engines for aircraft use. Since engineering background and reliability vary, it's best to check any supplier thoroughly before buying.

DIRECT DRIVE
 Monnett Experiment Aircraft
 and Components
 410 Adams
 Elgin, IL 60120
 312/741-2223

Barker Volkswagen
 Palomar Airport
 Carlsbad, CA 92008
 714/729-9468

Revemaster Aviation
 Chino Airport
 Chino, CA 91710
 714/597-3213

SPEED REDUCTION
 Noel J. Becar (belt drive)
 316 Del Rosa Way
 San Mateo, CA 94403
 415/345-7775
 Stewart Aircraft Corp. (belt drive)
 11420 Route 165
 Salem, OR 44460
 216/332-0865

Gyrodynamic Systems (gear drive parts
 and plans)
 P O Box 55
 Redlands, CA 92373

9/10

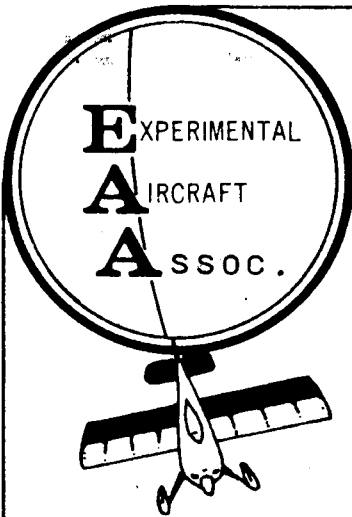
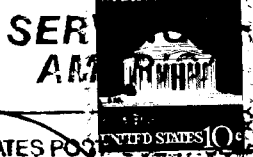
page 10



C. A. Ackerman (plans only)
1351 Cottontail Lane
La Jolla, CA 92037
714/454-4518

BAC (plans booklet only)
78 E. Stewart
Lansdowne, PA 19050

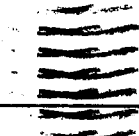
R. C. Huggins (plans only - very good \$3.00 postpaid)
4915 South Detroit
Tulsa, OK 74150



DEVOTED TO HOMEBUILT AIRCRAFT AND SPORT AVIATION
ACTIVITIES WITH SAFE AND SANE OPERATION FOREMOST!

PAZMANY PL-4 NEWSLETTER
P O Box 20422
Dallas, TX 75220

FIRST-CLASS MAIL



10/10