

PL-1 NEWSLETTER No. 5

1. Incorporate changes shown in Engineering Change Notice #5 (see attached sheets). Most of the changes will simplify construction or increase the safety of your airplane. Many are just plain old mistakes discovered while designing the PL-2 and going over the PL-1 drawings with a fine comb. Also I am grateful to the PL-1 builders who called to my attention several mistakes.
2. For the last three years, I have been working on the PL-2 design which is an improved version of the PL-1. Many PL-2 drawings can be used on the PL-1 with minor adjustments. Following is an updated list. Also I am including some PL-1 drawings which are not part of the basic set you bought, but which can be of some help.

Dwg. No.	Used On	Title	Sq. Ft.	Price	Dwg. No.	Used On	Title	Sq. Ft.	Price
1-30-011	PL-1	Fuselage Tail Cone Frames-Loft Lines	6.6	\$3.00	2-40-007	PL-2	Exhaust System	13.5	\$4.00
1-40-009	PL-1	Engine Mount for Lycoming 0-290-G	11.6	4.00	2-40-008	PL-2	Cowl Installation	14.0	4.00
1-40-010	PL-1	Firewall for Lycoming 0-290-G	9.6	4.00	2-40-005	PL-2	Engine Installation	13.0	4.00
2-70-001	PL-2	Electrical System Schematic	4.2	3.00	2-40-009	PL-2	Nose Cowl (fiberglass)	18.7	6.00
2-40-006	PL-2	Power Plant Details	12.2	4.00	2-70-002	PL-2	Brake System Installation	10.0	3.00

- Drawing 1-30-011 - Is a full size drawing very helpful to layout the templates for the tail cone frames.
- Drawing 1-40-009 - Is a new design for the alternate Lyc 0-290-G or any of the Lycoming 4 cylinder engines
- Drawing 1-40-010 - Is also a new design, incorporating some strengthening due to the heavier weight of the Lycoming engines.
- Drawing 2-70-001 - Is a must for any PL-1 builder. Will give you the wiring diagram, wire sizes, connectors, circuit breakers, relays, etc. This drawing could be used on any light airplane.
- Drawing 2-40-006 - Power Plant Details show: Spinner (fiberglass), spinner plates, carburetor heat box assembly, propeller spacers.
- Drawing 2-40-007 - Shows the cross-over exhaust for the Lycoming 0-290-G with mufflers and heaters in every detail. The cross-over exhaust will increase the performance of the engine by approximately 4%.
- Drawing 2-40-008 - Shows the cowl for the Lycoming, including cowl flap.
- Drawing 2-40-005 - Shows the major components and most of the hardware required for the assembly.
- Drawing 2-40-009 - Full size loft lines for the fiberglass nose cowl.

Every part of these drawings has a dash number, and each drawing has a parts list which indicates materials, heat treatments, raw sizes, specs, suppliers, etc.

3. For those who are using the Lycoming engine, I prepared a weight and balance (2 sheets) which could be ordered for \$1.00.
4. If you are building your PL-1, please send a card to Sport Aviation telling about your progress. PL-1 builder's names can be seen more and more in the monthly list of "Airplane Under Construction", or reported in "Chatting with the Chapters". I talked with many of you at the Rockford Fly-In, also viewed a few PL-1's under construction, and was extremely satisfied with what I have seen. There will be more PL-1's flying very soon!
5. I would appreciate some photos of your ship, or at least a few words about your progress. When you write to me, please mention your PL-1 number at the top of the page and state your name. I have received letters without even a signature. Considering that I have sold 240 sets, it requires a tremendous amount of time to answer your letters, which I am pleased to do. However, if I have to spend additional time searching for your names or addresses, I will be unable to answer. Also, if you expect an answer, please send me a stamped, self-addressed envelope.
6. I will be glad to send you an updated list of PL-1 builders if you will send me a stamped, self-addressed envelope.
7. Mr. J. D. Waller (#194) - 605 Howard Drive, Brunswick, Georgia is publishing a PL-1 Mutual Aid Club Newsletter - 4 issues have been distributed already. This is great and I will support him. This could be a tremendous help for all PL-1 builders. In the Newsletter you will find names and addresses of people who are building PL-1 parts for sale or trade.
8. If you did not receive Sheet #1 of ECN #4, please send me a self addressed envelope. This sheet shows an alternate Aileron Push-Pull which eliminates the machining of the Bearing Retainer.

Have fun!

L. Pazmany

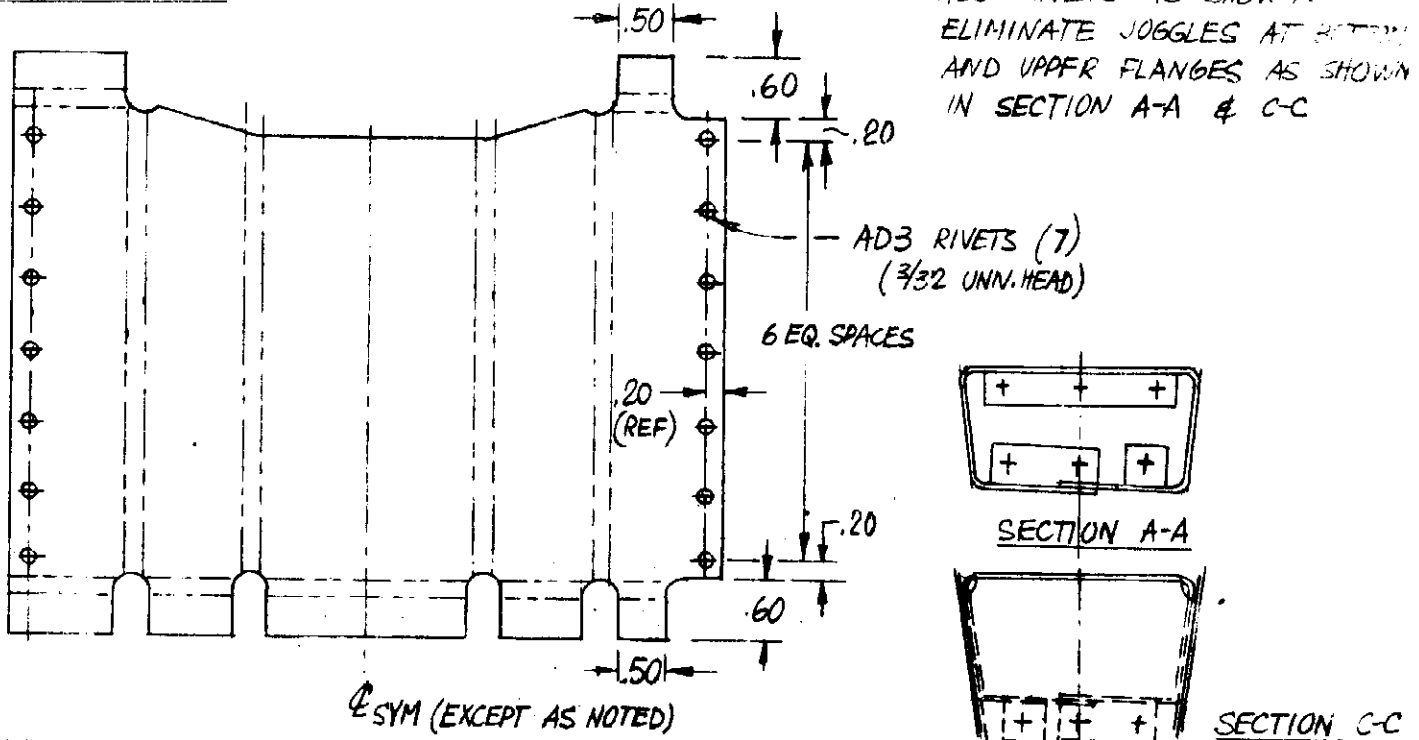


ENGINEERING CHANGE NOTICE # 5

SHEET # 2
JAN. 1967

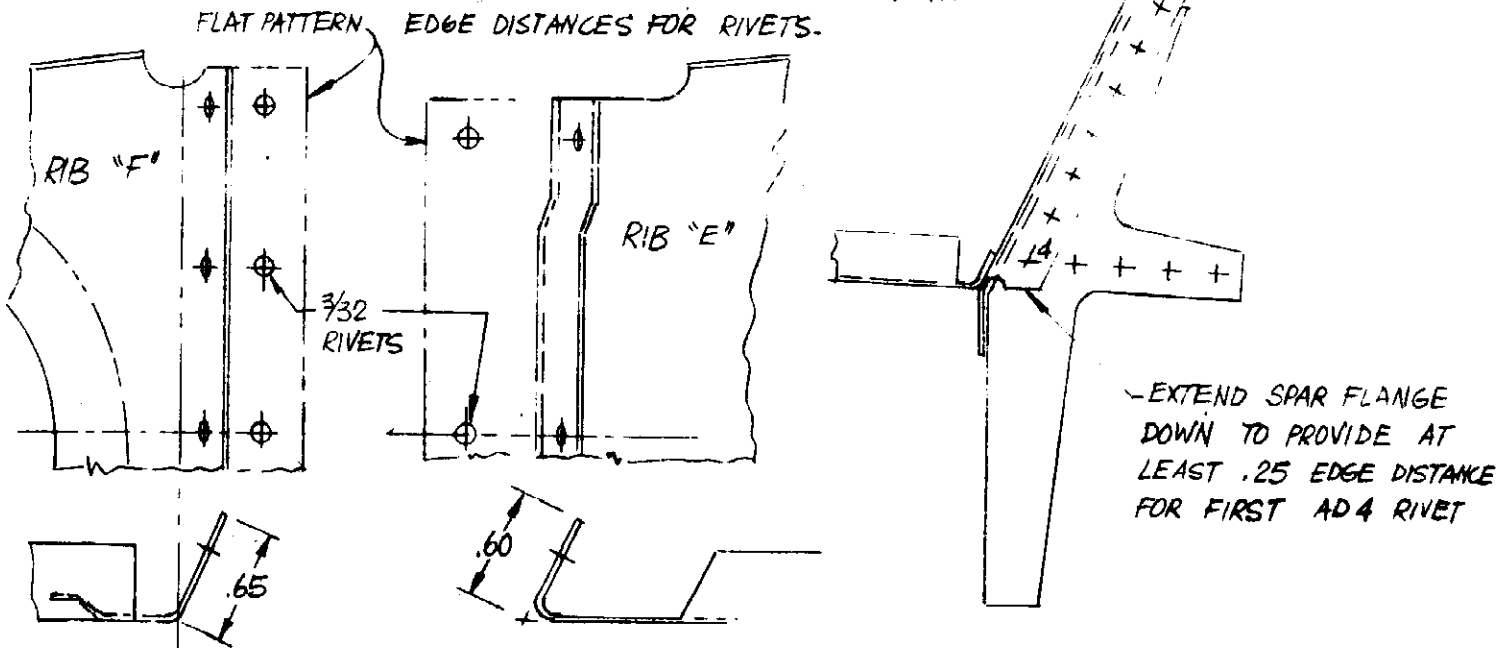
DWG 1-20.002

ADD RIVETS AS SHOWN.
ELIMINATE JOGGLES AT BOTTOM
AND UPPER FLANGES AS SHOWN
IN SECTION A-A & C-C

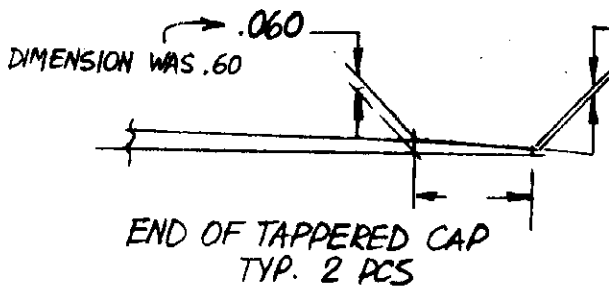


DWG 1-20.001

MODIFY RIB "F" & "E" FRONT SPAR ATTACHMENT
FLANGES AS SHOWN TO PROVIDE ADEQUATE
EDGE DISTANCES FOR RIVETS.



DWG 1-10.002



DWG 1-60-002 & LIST OF MATERIALS PAGE 23 & 24

BOLT FOR NOSE GEAR AXLE SHOULD BE AN 5-64
INSTEAD OF AN 5-6

DWG 1-40-004

BOLT AND NUT FOR CONTROL PULLEY SHOULD BE:
AN 5-11 BOLT
AN 364-524 NUT

ENGINEERING CHANGE NOTICE # 5

SHEET # 3
JAN 1967

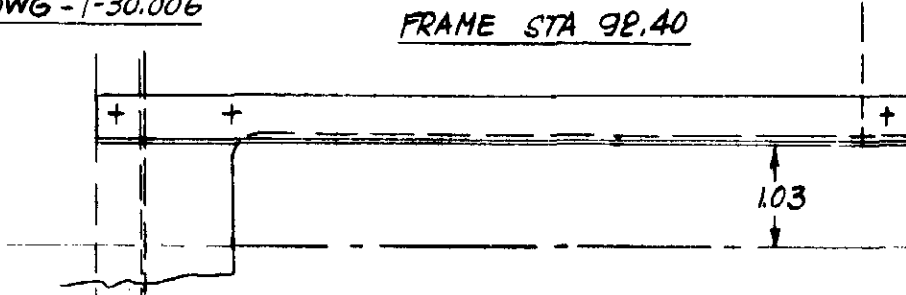
DWG 1-50-008 , DWG-1-30.009 AND LIST OF MATERIALS. PAGES 22 & 25

TOTAL REQD

AN 160-32S TERMINAL - CHANGE TO : AN 161-32LS TERMINAL	2
AN 669-SA TERMINAL - CHANGE TO : AN 669-S4RH TERMINAL	2
AN 664- TERMINAL - CHANGE TO : AN 664-CA TERMINAL	6
RA 2482-4 TERMINAL - CHANGE TO : RA 2500-4 TERMINAL	6
SA-161-SB# TERMINAL - CHANGE TO : SA-162-SC4 TERMINAL	6
SAFETY WIRE FOR TURNBUCKLE CHANGE TO .032 MONEL (MS20995-NC32	AS REQD.

DWG -1-30.006

FRAME STA 92.40

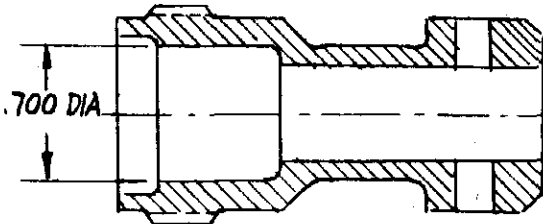


CHANGE LOCATION OF ANGLE FOR ATTACHMENT OF FLAP BOX AS SHOWN. (DIMENSION WAS 1.00).

DWG 1-50.006

TRIM INDICATOR WORM (STEEL) AND TRIM INDICATOR (NYLON). THREAD PITCH SHOWN IS .400. CHANGE TO .166 (6 THREADS/INCH).

AD DIMENSION TO "HOUSING"



11. HARDWARE TO INSTALL AN 220-1 PULLEYS, DELETE THE WORD "ALUMINUM" FROM AN 5-11 BOLT AN 364-524 NUT

DWG 1-10.001

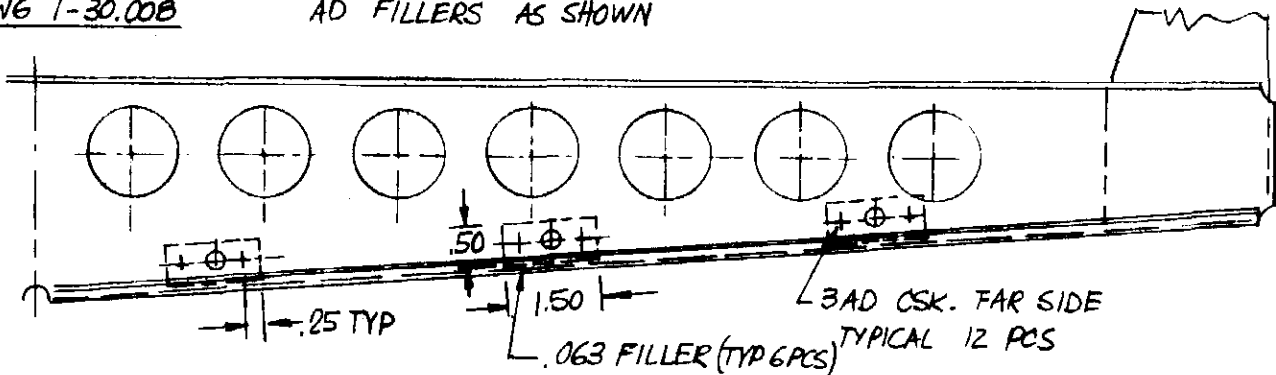
ANCHOR NUT INSTALLATION DETAIL (SCALE 2:1) - CALL OUT OF RIB THICKNESS SHOULD BE .020 INSTEAD OF .025

LIST OF MATERIALS

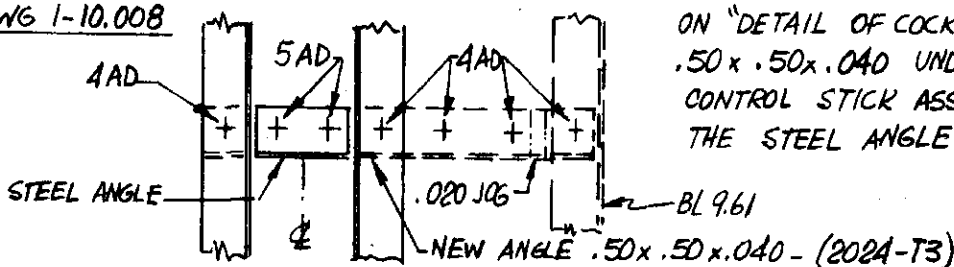
FROM PAGE 11, FIRST .025 SHEET, DELETE TWO PIECES (20x24) FOR SEAT PAN ON PAGE 11a. AD TWO PIECES (20x24) FOR SEAT PAN TO THE .032 SHEET

DWG 1-30.008

AD FILLERS AS SHOWN



DWG 1-10.008

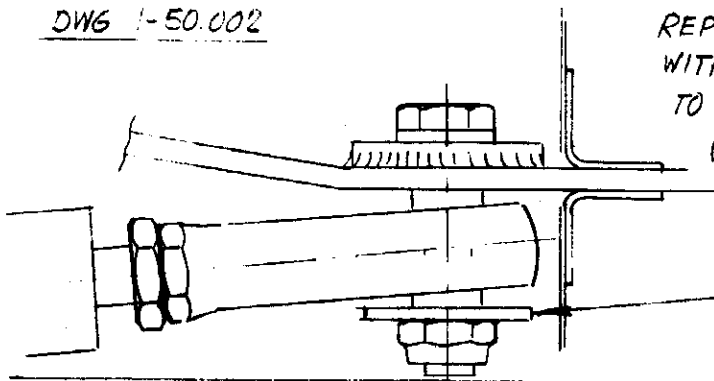


ON "DETAIL OF COCKPIT FLOOR" - SCALE 1/2 AD AN ANGLE .50x.50x.040 UNDERNEAT THE STEEL ANGLE PART OF CONTROL STICK ASSY. USE 5/32 RIVETS TO ATTACH THE STEEL ANGLE

ENGINEERING CHANGE NOTICE #5

SHEET # 4
JAN 1967

DWG 1-50.002



REPLACE THE AN 960-C416 WASHER UNDER THE NUT WITH A AN 970-4 WASHER. THIS IS A SAFETY MEASURE TO AVOID LOOSING CONTROL IF ROD END BEARING FAILS (SEE DESIGNEE BULLETIN #10-EAA-SPORTA/AT-21 SEP 30-1966).

AN 970-3 WASHER. INCREASE HOLE DIA TO .250

DWG 2-60.001 AND 2-60.002

AD THE FOLLOWING NOTE: HYDRAULIC PRESSURE TEST SHOCK ABSORBER TO 1,785 P.S.I.

DWG 1-10.004

SHEET THICKNESS FOR THE SMALL CLIP WHICH ATTACHES THE RIB TO THE REAR S CHANNEL SHOULD BE $\pm .020$.

AD NOTE: HEAT TREAT RIBS AFTER FORMING TO T42 (T42 IS THE HEAT TREATMENT MADE BY THE USER AND IT IS EQUIVALENT TO T4 WHICH IS THE HEAT TREATMENT MADE BY PRODUCER)

LIST OF MATERIALS - PAGE 3 - DWG 1-20.003 - SHOULD READ AS FOLLOW:

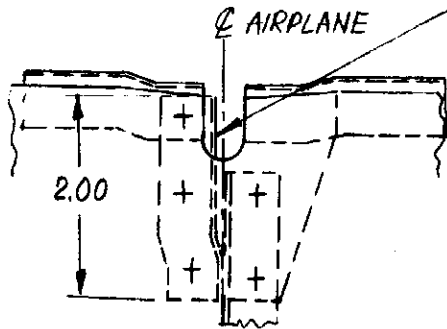
RIBS (NOSE)	2024-0- BARE	.016 SHEET - 3.5x 7.5	10
RIBS (AFT)	" "	.016 " - 3.5x 20.0	4
RIBS (AFT)	" "	.020 " - 3.5x 20.0	6

DWG 1-50.007 - DETAIL OF BEARING HOUSING TUBE - DIAMETER FOR KPA BEARING SHOULD BE .9009 INSTEAD OF .9014

DWG 1-10.008

ON "DETAIL OF COCKPIT FLOOR" - SCALE 1/2:

EXTENDED .60x .60x .032 ANGLE AS SHOWN IN DWG 1-10.006

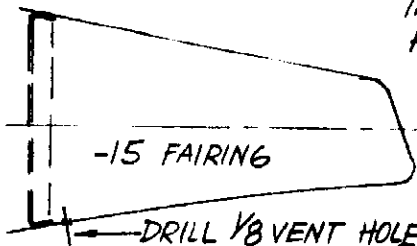


DWG 1-10.006 -

REPLACE THE HI-LOCK FASTENERS WITH NAS 1104 AND NAS 1204 BOLTS AND AN 364-428 NUTS AS SPECIFIED IN NEWS LETTER #2 - FEB 1965 -

(THIS IS JUST A PICTURE CHANGE, THE FASTENERS WERE CORRECTLY CALLED OUT IN THE SPAR DRAWINGS)

1-40.002



DRILL 1/8 VENT HOLES IN FUEL TANK AFT FAIRING. THIS IS REQUIRED TO AVOID DEFORMATION DUE TO CHANGE IN TEMPERATURE OR ALTITUDE

PAGE 19 OF CONSTRUCTION SPECIFICATIONS:

AD THE FOLLOWING NOTE:

DRILL