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Lancair 235/320/360
Ready-To-Install Interior Manual



Technical Assistance (404) 228-3901 ext. 139

The Alexander Aeroplane Company Interior Department, specializes in top quality drop-in kits for homebuilt aircraft. Each of these kits represent hundreds of hours of development time and are the finest quality you can obtain anywhere at a reasonable price.

All fabric inserts are quilted and sewn to 1/2" foam.

The side panels are mounted on lightweight waterproof boards with 1/2" foam under the upholstered surface. Map pockets are provided as needed. You should notice immediately the noise level reduction.

All carpets used are top quality wool.

Technical assistance is available should you encounter a major problem. Our technical experts can be reached at (706) 228-3901 ext. 139.

### LANCAIR 235-320-360 Specification Sheet

# THE INTERIOR SET WILL BE SHIPPED IN THREE BOXES. PLAEASE INSPECT THE CONTENTS.

2	Seating units with headrest
2	Nose gear panels (bereath natural poulto rose boall of plan)
1	Fwd. center console panel (fabric only) -
1	Center console armrest ( top of center console)
2	Forward side panels (extending into the footwell area) side of f
1	Backrest bulkhead fwd. panel (fabric only)
1	Backrest bulkhead aft panel (fabric only)
2	Lower aft side panels Front South Lover
2	Upper aft side window panels
2	Rear window trim panels
1	Overhead ctr. panel
1	Flaphouse (little box behand pilot sat sat []
1	Aft lower bulkhead panel with hat shelf
1	Upper rear bulkhead panel
1	Rear elevator push-rod panel, fabric sewn with velcro for
	securing - led on tornel behaloeds the states
1	Carpet set, pilot and co-pilot fwd. and baggage
	carpet (4 pcs.)
2	Step in mats
2	Stick boots
	* Booster cushion set (optional) includes 1 backrest
	and seat cushion

### **INSTALLATION KIT**

2	Cans spray adhesive		
1	Can brush on adhesive		
2	1" brushes		
6yds.8"	2" velcro PSA hook:		
·	2" X 45"apply to backrest ledge		
	2" X 29"apply two pcs. to side of wire tunnel		
	2" X 9"apply four pcs. to seat pans		
	2" X 15"apply two pcs. to pilot and co-pilot sides		
	on the aft side of the backrest bulkhead		
	in order to secure booster seat with velcro		
	flap. (4 pcs.)		
	2" X 18"apply one pc. to console lid attaching		
	armrest		
1yd. 25"	1" Velcro PSA hook:		
	1" X 11"apply four pcs. to seat pan for securing		
	stick boot sides.		
	1" X 4-1/2"apply two pcs. to seat pan at the stick boot		
	fwd. edge between the 1" side pcs.		
	1" X 3-3/4"apply two pcs. to seat pan at the aft edge of		
0.1	the stick boot between the 1" side pcs.		
3'	1/4" sound insulation to be used as specified or as builder		
414 :	needs		
1/4 yd.	glareshield material		

### LANCAIR 235-320-360 DROP-IN INTERIOR KIT COLOR AND DESIGN SCHEME

1.

### A. Base Color

Lower side panels (fwd and baggage side panels)
Upper rear side panel
Backrest bulkhead
Nose gear panels-pilot and co-pilot
Flap house motor cover
Seat center insert
Headrest flap
Backrest flap
Side panels (upper section)
Seat side insert
2 console pockets
2 forward side panel pockets
2 rear panel pockets
Window trim
Headrest Boxing

### **B.** Trim Color

Stripe on all lower side panels
Center overhead rear panel
Welt seat
Hat shelf at rear upper bulkhead
Rear tunnel cover
Upper baggage bulkhead
Headrest welt
Seat boxings

### C. Color Vinyl

Stick boots
Stick wrap around (Fwd. section of seat cushion)
Glareshield Console \*\*see diagram\*\*
Headrest bottom and top inserts
Center Console headrest insert. (top and bottom)
Armrest for Center Console

- D. Carpet
  Fwd. carpet pilot and co-pilot
  Baggage carpet right and left
- 2. Booster cushions: 2" backrest with velcro attaching flap and 3" seat cushion. (see diagram-Base Color) Additional cost: \$125.00 per unit.
- 3. Seat backs and bottoms are constructed of vinyl or canvas.

  \*\*manufacturer choice\*\*
- **4.** Any variation, requiring a design change will be accommodated at an hourly billing rate.
- 5. Optional logo's are available for an additional cost of \$50.00.

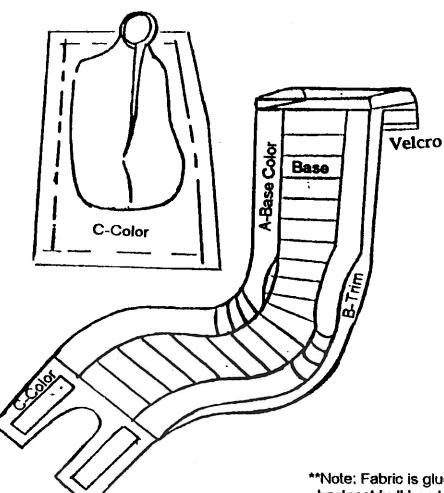
\*\*THIS MANUAL WILL ADDRESS INTERIOR UPHOLSTERY INSTALLATIONS. SINCE ONE STEP OF THE INSTALLATION WILL USUALLY HAVE SOME AFFECT ON THE NEXT, IT IS RECOMMENDED THAT YOU READ THE ENTIRE MANUAL PRIOR TO PERFORM ING THESE INSTALLATIONS.

THANK YOU
DIANE DAVIDSON
INTERIOR DEPT.

### LANCAIR SEATING DIAGRAM

Side-by-side seating consists of 2 one-piece units sitting shoulder to shoulder. The seating is two-inch high-density foam with a built-in lower lumbar support. The seat unit has detachable headrest with velcro flap fasteners securing cushion to backrest bulkhead. Seating has cut out for stick. Velcro is sewn to the back of seating for securing the seat cushion to the seat pan.

Do you have a forward-hinged canopy? Ves \_ No



Customer needs to measure backrest height. if the builder has installed a forward-hinged canopy, the backrest bulkhead may be two inches taller.

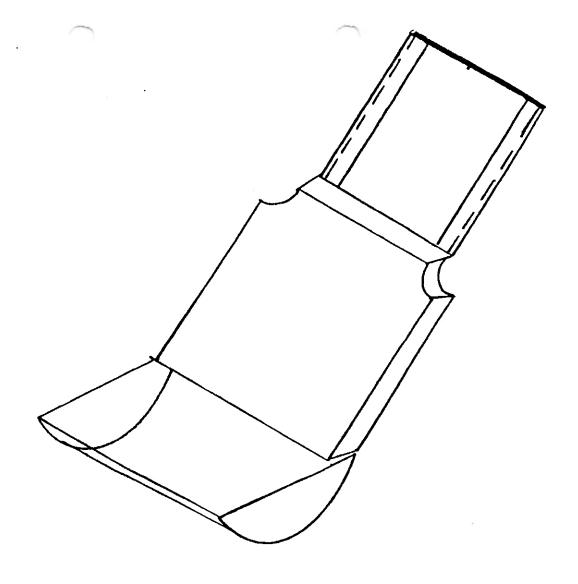
A-Base Color blue B-Trim Color blee C-Trim Color \_\_ area

Stick boots are made to fasten securely to the seat pan (with veloro). The boot has a velcro opening for builder accessibility. Boots are usually made from the trim color to coordinate with the interior.

The seating lies against A-Base Color backrest bulkhead. We recommend A-Base color for seat inserts and B-trim color as accent. for seat boxing and welting.

\*\*Note: Fabric is glued to the backrest bulkhead.

1. Ergonomic foam (1") is available at an additional \$100 per seating unit. Note: the highdensity 2" foam will under normal circumstances condense to a 1" thickness. The cushion cover has been designed to accommodate both foams.



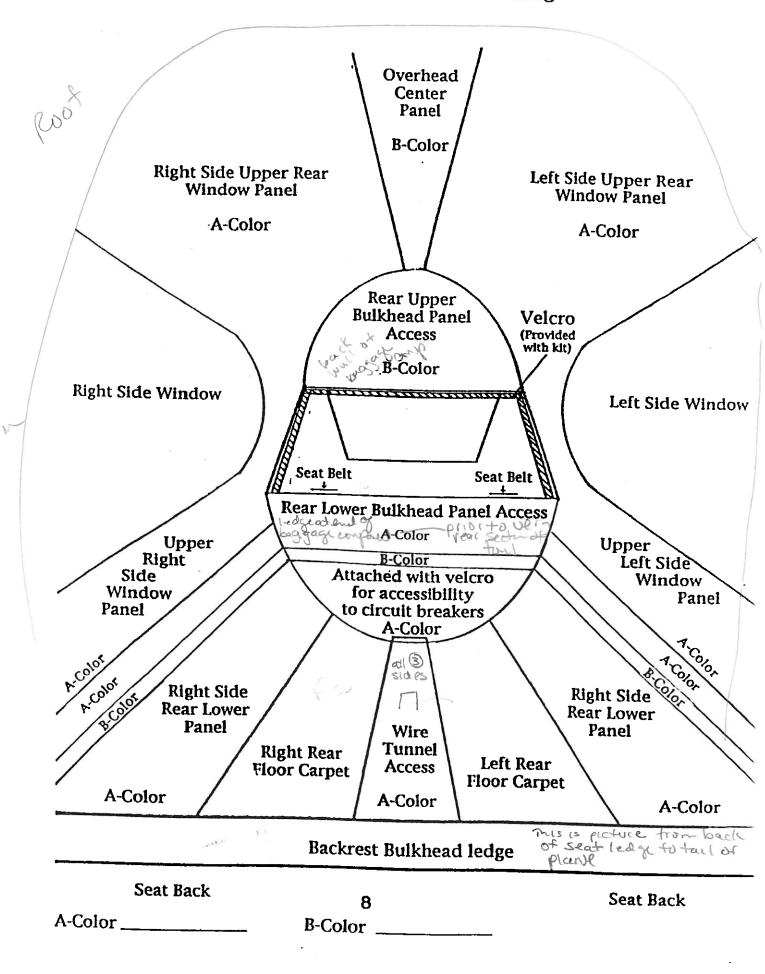
### **LANCAIR BOOSTER CUSHIONS**

The booster cushions, consists of a 2" backrest with a velcro flap extending up and over the cushions. They attach to the back of the back rest bulkhead with the velcro and are interchangeable from pilot to co-pilot.

The seat cushions are 3" thick. Builders choice of fabric. Mfg. recommendation, fabric only no vinyl.

LANCAIR SIDE PANELS

## Lancair 320 — View Looking Aft



### **INSTALLATION PROCEDURES**

- 1. Detail the plane: paint the canopy openings, all vents, brackets (any area where it would be necessary to cut an opening in an upholstery panel.(or any area where the side side panels joined together.)
- 2. Guide Line
- 3. Lower aft. side panels
- 4. Protect panels with overspray paper
- 5. Upper rear side window panels
- 6. Window trim moulding
- 7. Rear overhead panel
- 8. Hat shelf panel
- 9. Lower rear bulkhead panel
- 10. Upper rear bulkhead panel
- 11. Seat back bulkhead (aft side)
- 12. Seat back bulkhead (fwd side)
- 13. Velcro to seat pan (for securing stick boots)
- 14. Center console
- 15. Armrest (if applicable)
- 16. Nose gear panels
- 18. Forward side panels
- 19. Carpet and wire tunnel
- 20. Canopy brackets and seat belt brackets (cut and glue fabric)
- 21. Glare shield (builders choice)

### **GUIDE LINES**

A.

X

Lay a straight edge along the lower edge of the canopy opening. (pilot side) Draw a line fwd. to the panel, then aft. 2" past the upper bulkhead panel, and extend across the lower rear bulkhead panel.

B.

Repeat step A. for the co-pilot side.

C.

Draw another line 3" below the *lower canopy line*. This line will be referred to as the *lower panel guide line*, ( the line that separates the upper part of a side panel from the trim line on the same side panel.)

D.

Repeat step C. for the other side of the aircraft.

\*\*note \*\*

The forward panel runs parallel with the *lower canopy line*. the aft lower baggage panel should have a notch cut out at the upper fwd. edge to accommodate the seat back bulkhead ledge. See diagram fig 330. The upper edge of the aft. lower baggage panel should be 2 1/4" above the *lower canopy line*.

X

The finished lower edge of the window panel, should overlap the lower panel by an estimated 1" to 1 1/4". (or stop at the top edge of the backrest ledge.

### E.

Draw a center line down the top of the fuselage from the windshield aft to the baggage compartment upper bulkhead panel. Draw this line two inches past the bulkhead.

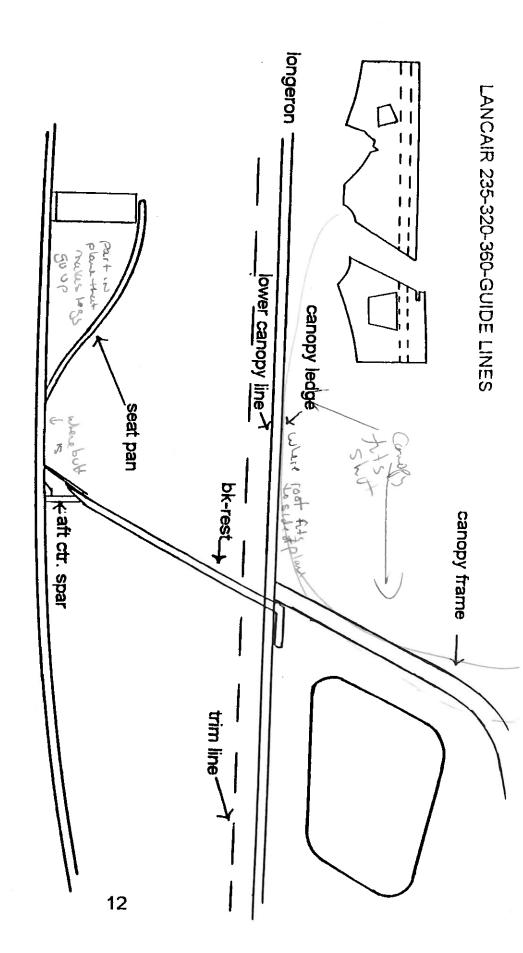
### **LOWER AFT SIDE PANELS WITH MAP POCKETS**

The Lancair calls for one static port line to be installed aft of the seat back bulkhead. The line generally protrudes to the inside of the fuselage about 3/4" or more. The line is usually positioned at FS-80. Per fig. 356 in the Lancair builders manual.

We recommend building up the wall around the line by cutting strips of 1/4" insulation (provided in the kit) and positioning in place around the line and valves. While laying up the first two layers, do not cover the line or valve.

As you layer the foam by gluing in place, try to build a smooth surface to camouflage the static port line. The smoother the surface, the neater the interior will look.

\*\*note\*\* If you installed your static port line elsewhere, disregard the above instructions.



stripe on all of the lower side panels. below the guide line. This line will indicate placement of the trim upper panels from the lower panels. Draw a 2nd line three inches across the lower rear bulkhead panel. The guide line separates the two inches past the upper bulkhead panel, and extend the line lower edge of the longeron. Draw a line fwd. to the panel, then aft Use the longeron line as a guide line. Lay a straight edge along the

### **RIGHT & LEFT LOWER AFT PANELS**

Fabric panels and pockets are stay-stitched to the panel stiffener. The outboard edges are left unfinished to accommodate any trimming of panels that you may deem necessary. Aft lower side panels should fit neatly just aft of the seat back bulkhead.

You may need to notch a cut out panel at the forward edge to accommodate the seat back bulkhead ledge.

### A.

Position the panel against the aft side wall. You may need to spot glue the panel to the side wall to hold it in place. This method will allow you to measure and trim with scissors to fit.

### B.

You may need to trim the panel forward and/or aft. Upper and lower edges should be accommodating.

### C.

While the panel is in place, fit and trim the lower aft side panel, pilot and co-pilot, with the rear lower bulkhead panel. Allow 1/16" on each panel to wrap fabric around and glue to the back of each panel. This can get tricky, so be careful. If you trim away too much of the panel, you will have a crack between the panels (rear lower panel may need to have cut out at wire tunnel). If you do not trim away enough, the panel may bow to the outside or have dimples. If you position all three lower panels at the same time, you will get a better visual picture. \*\*note: Outline the panels on the wall with a pencil.

D.
Glue fabric to the back of each panel. Cut away any bulky fabric on the back of the panels. BE CAREFUL-- do not cut the fabric too deep into the panel area. Cut the fabric at curves.

(If you cut to deep the panels will have frayed edges)

### E.

Install the two side panels first. Using the brush provided in the kit, brush glue to the back side of the panel.

### PROTECT AGAINST OVERSPRAY

CUT PAPER TO COVER LOWER SIDE PANELS, PROTECT FROM GLUE SPILLS ETC.

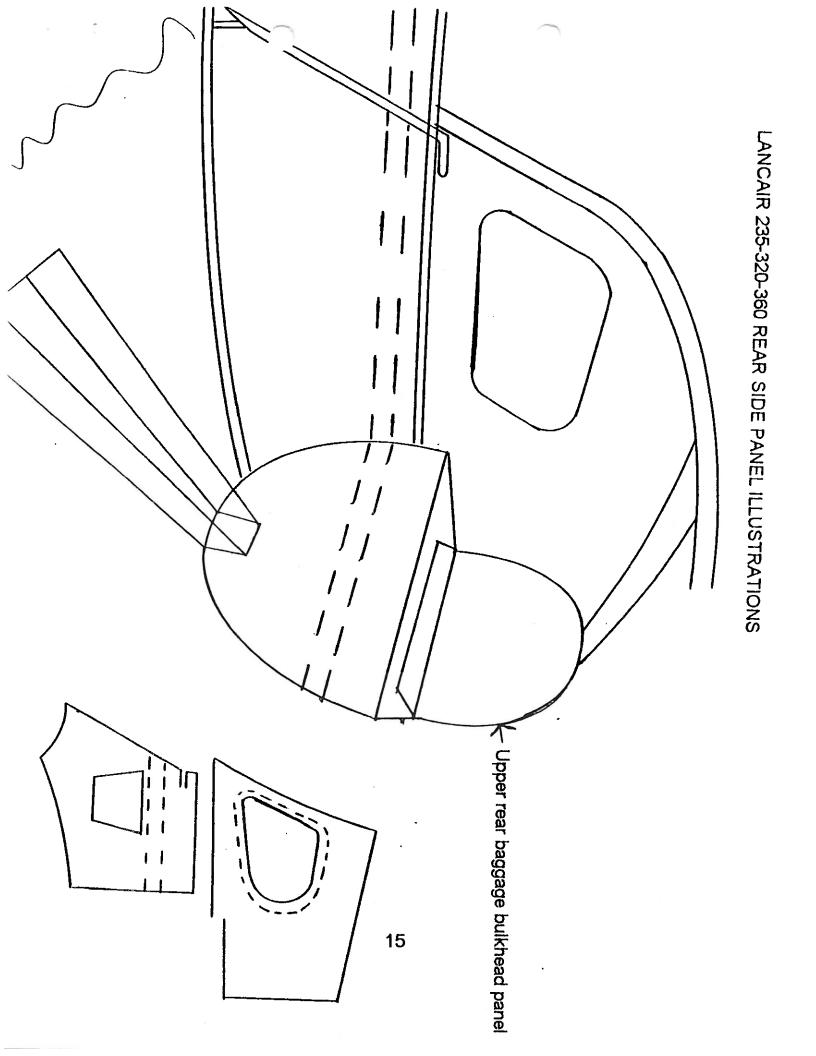
### **UPPER AFT SIDE WINDOW PANELS**

# PROTECT AGAINST OVERSPRAY Cut paper to fit inside the window frame and tape in place

Fabric panel will be stay-stitched to stiffener panel with all outboard edges unfinished, allowing you to make any necessary adjustments.

### A.

Position panel to the upper aft side wall. You may need to spot glue panel, to secure panel in place, in order to measure and trim stiffener panel to fit. Trim with scissors.



### B.

Make necessary adjustment trims on the forward edge first. You may have to allow the panel to roll up inside the fuselage at the hat shelf area.

### C.

Make the necessary cut for the hat self ensuring that the panel is pushed forward. It is important to have a good forward fit before making the cut for the hat shelf.

### D.

Cut the window area out leaving 2" access fabric to the inside of the window frame.

### E.

Outline the panel position with marker on the wall of the aircraft. Work the opposite side same as above or use the first panel as a cutting guide.

### F.

Take the panel down and finish forward, upper and lower edges. Allow the excess fabric at the aft end to extend 2" aft of the upper rear bulkhead panel and glue to the side wall. <u>DO NOT GLUE</u> THE WINDOW CUT OUT TO THE BACK SIDE OF THE PANEL!

### G.

Secure the panel to rest just above the backrest ledge overlaping the upper edge of the lower aft baggage panel by 1' to 1-1/4". Brush glue on the back of the panel and on the side wall. Be careful not to brush the glue too heavily on the fabric extending into the window. Do brush glue adequately in the window mold area of fuselage.

H.

Using outlines as a guide, position panel and press into place. Install both panels. Glue the length of the panel upwards in increments of approx. 6" at a time.

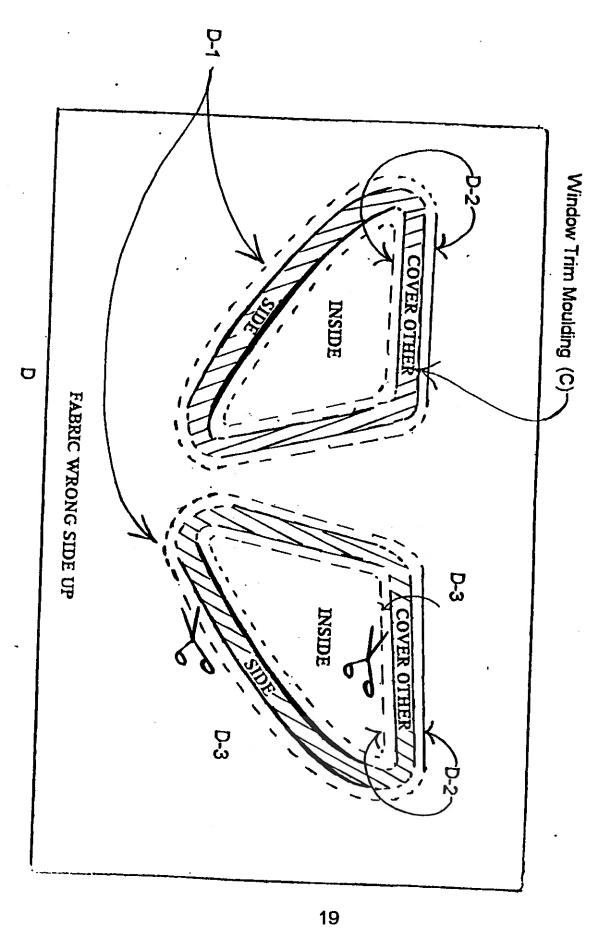
I.

Trim out excess window fabric. Be careful, do not scratch your windows. Trim 1/4" inboard molding area so that the material can not be seen from the outside.

### WINDOW TRIM MOULDING

The kit includes panel materials and the fabric to cover the panel with.

- A. Remove the overspray paper from the windows.
- B. Lay the panel material up to the window from the inside of the fuselage.
  - 1. Use the outline on the panel material as a guide. Measure and draw the outline of the window opening. See diagram B-1.
  - 2. Cut the inside of the panel away. See diagram B-2.
  - 3. a. Measure the width of the moulding. (I recommend 1-1/4")
    - b. Mark the outside edge.
    - c. Cut as marked.
    - d. Use this as a pattern to cut the opposite side.
- C. Mark the wrong side of each template, and cover the other side.



- D. Layout the cloth provided, wrong side up. Position window trims on cloth
  - 1. Position windows trim on cloth, with the label in view. (cover the other side). See diagram D-1
  - 2. Allow 3/4" to all outside edges of trim, inside and out. See diagram D-2.
  - 3. Cut on dotted lines and clip fabric at curved areas.
  - 4. Spray adhesive on the finished side of the trim panels and the unfinished side of the fabric. Glue the outside edges to the panel back, join the panels and fabric together and allow to dry.
  - Apply a thin coat of glue to the back of trim panels and to the window moulding edge. Press trim panels in place.
     BE\_ CAREFUL WITH THE GLUE!!

### **REAR OVERHEAD PANEL**

Panel should be finished lengthwise on both sides and at fwd edge. Panel should extend aft 1" beyond upper rear bulkhead.

Line the panel up with the center line starting 1" beyond the upper rear bulkhead line. Glue in place with the liquid adhesive. (brush the glue on both surfaces)

### **HAT SHELF**

The hat shelf panel has velcro sewn on each side and at the aft edge. (see diagram) Allowing access to the upper rear bulkhead panel by pulling the velcro flap back.

- A. Remove the shoulder harness
- B. Fit the panel with the velcro edge flush against the aft upper baggage bulkhead panel. Allow the excess fabric at the wide edge (without velcro) to make a 90 degree turn on to the face of the lower bulkhead panel.
- C. Glue excess fabric or vinyl to forward face edge of the lower bulkhead panel.
- D. Mark an outline of the hat shelf panel.
- E. Install the PSA hook velcro provided in the kit. Use the outline as a guide. (make sure the surface is clean)
- F. Velcro the hat shelf fabric panel in place.
- G. Install the shoulder harness on top of the hat shelf panel.

### LOWER REAR BULKHEAD BAGGAGE PANEL

- A. Line up panel with the guide lines.
- B. Cut the upper edge flush with the hat shelf (trim the sides as needed)
- C. Cut the cut-out for the wire tunnel.
- D. Clip the fabric, glue to the back of the panels.
- E. Glue or velcro (PSA hook velcro) panel in place.

### **UPPER REAR BULKHEAD PANEL**

- A. Use aircraft panel as an outline guide.
- B. Cut stiffener panel (provided with the kit) to fit the guide.
- C. Center the fabric panel and position to your liking. Using the spray adhesive, glue the material to the panel. Spray adhesive lightly to the material, crosswise first, then up and down. Spray panel--glue material to panel. Turn the unit over and clip the outboard edges, allowing the material to fold to the backside neatly without excess bulk.
- D. Using a brush, glue and secure upper rear bulkhead panel to aircraft panel.

### **SEAT BACK BULKHEAD**

Forward side fabric provided to glue directly to structure.

- A. Position the fabric against the bulkhead allowing the fabric to extend up and wrap over the upper ledge. Extend fabric to the under section of the ledge 1".
- B. Be sure to allow at least 1" of excess fabric along the bottom edge of the backrest and glue underneath. Spot tack the panel with glue to hold in place.

- C. Cut out for the center console. Starting at the bottom, either side, lift the fabric and spray adhesive to the backside of the fabric and to the structure. Hold 2-3 seconds and press the fabric into place.
- D. Use the same procedure on the remainder of the bulkhead being sure to press tightly in place. \*\*note: Keep some type of paper (newspaper, etc.) to use for overspray protection.

### AFT SIDE OF SEAT BACK BULKHEAD

When installing fabric, use the same method as for the seat back bulkhead. 2" hook velcro should be installed vertically to the rear seat back bulkhead for securing the booster cushions. We recommend you secure the hook velcro solidly to the seat back, using additional devices such rivets, screws, etc. (builder's choice)

### **FLAP HOUSE MOTOR COVER**

Material is provided to match back rest bulkhead. Cut and glue into place.

### **STICK BOOTS**

- A. Position in place on seat pan. Outline with marker.
- B. Install velcro (provided) hook using pre-marked outline as a guide. Install velcro to the inside line. Allow to cure. You may want to use additional methods of securing velcro in place. (rivets, screws, etc.)

### **CENTER CONSOLE COVER**

The console cover is a one-piece unit with a small pocket on each side. The unit is to be glued directly to the structure. There will be a drawing of the cutting instructions on the inside of the panel. Use as a guide. Make your own measurements before cutting; do not cut the guide.

The sides should extend forward into the nose gear area four or five inches, allowing the fabric to cover any electrical wiring, tubing, etc. Now, you may install the nose gear panels, and you will have a neat professional finish.

Due to builder variation, you will need to provide measurements: length, height, and width for the center console and width forward at the nose and width aft at the back rest bulkhead. (See diagram)

### **ARMREST**

The armrest fastens with velcro to the storage compartment lid. It is made up of one-inch thick foam. The builder needs to supply a measurement of the lid. The armrest has one-inch flaps sewn in on each side to cover hinge pins used in installation on the lid. (See diagram) If builder does not have console completed, we will send materials to be used for the armrest..

### Center Console Cover Diagram

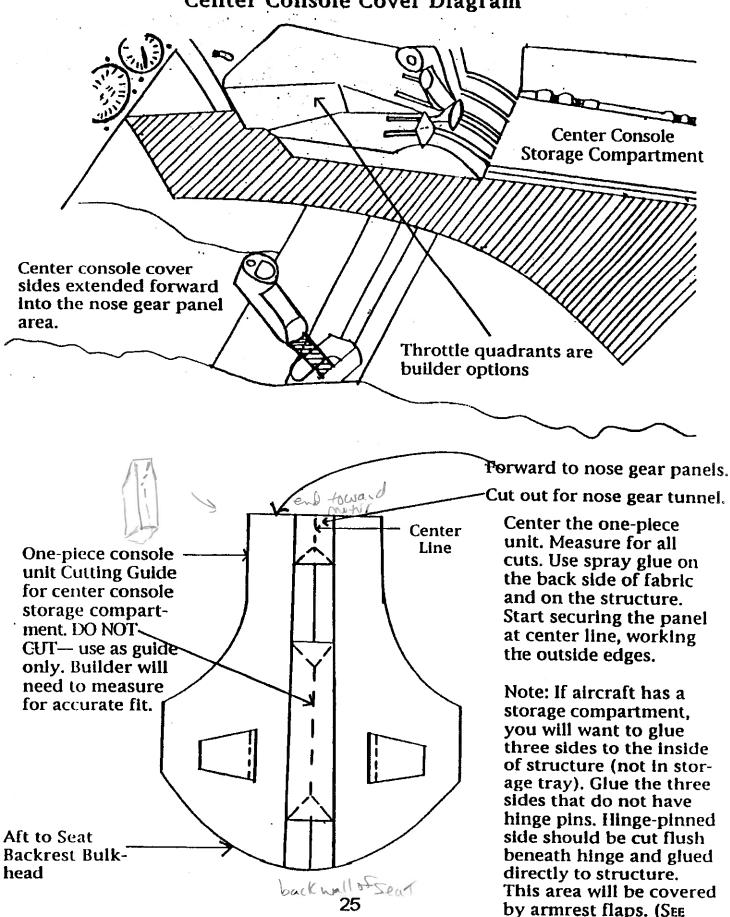


DIAGRAM)

### **NOSE GEAR PANEL**

The pilot and co-pilot panels are finished on the forward edges, allowing free movement of the rudder pedals. The aft edges are unfinished allowing the customer to cut around the throttle quadrant area. Due to builder variation in this area, you may need to cut the panel to fit. After cutting the panel and the foam, glue the fabric to the back of the panel.

Quarter-inch foam insulation is provided to glue directly to side wall, cutting around wires, tubes, etc. On the pilots side, there should be an emergency landing gear release valve. You will need to make the necessary cut outs. Fitting these panels before installing the forward center console cover allows you to see the areas into which the center console panel extends.

### **FORWARD SIDE PANELS**

Side panels protrude into the footwell as a one-piece unit. The panel has a pocket forward of the seating area at hand level. Panels are left unfinished on the upper top edge due to builder variables in the placement of the canopy hinges and/or latches. If the aircraft has a forward-hinged canopy, this would allow us to finish the upper top edge. The customer would still have to cut out for the placement of the air vents.

Trim pcs: The builder would also cut openings for rudder pedal lines. Some builders will glass the rudder cable to the side wall, all the way forward to the rudder pedal, making a cut opening in the side panel unnecessary. For those of you who need to cut an opening, we have included trim panels, to go around the line openings. Secure the trim pcs. with 1/2" screws and finishing washers provided in the kit.

The panel should be secured to the upper portion of the side wall, leaving the bottom of the side wall accessible. Wiring may or may not be installed along the side wall.

\*\*Note: This method will allow the outboard edges fo the floor carpet to extend under the side panels, ensuring a neat appearance.

Step 1 Cutting the air vent openings in the panels.

A. Measure the air vent. Draw the size, shape and position of the vent on the backside of the panel. Check for fit.

- B . Draw an X inside the air vent. Draw on the back of the panel.
- C. Cut the X (stiffener panel only, not the fabric).
- D. Cut the outside air vent drawing (stiffener panel only)
- E. Check to ensure that the opening accommodates the air vent.

Step 2 Cutting the air vent opening in the fabric panel.

- A. Using a sharp razor blade, very carefully cut away the 1/2 foam using the panel cut-out as a guide. Do not cut through the fabric.
- B. Draw an X inside the opening onto the fabric panel on the backside of the fabric.
- C. Cut the X, being careful not to cut too far into the corner. You do not want the cut to show from the finished side.
- D. Pull the cut fabric pieces to the inside of the panel and glue to the back of the panel.

### CARPET

Lay in place. You may want to spot glue it in (your choice)

Our carpets are serged, with the exception of the edges where the builder may need to cut to fit.

### **REAR ELEVATOR PUSH-ROD COVER**

- A. Lay cover on cover and mark an outline with a marker.
- B. Position the hook velcro inside the guideline and allow to cure.
- C. Secure the cover in place with velcro.

### **EXTRA FABRIC**

Cut and glue extra fabric that is provided over canopy brackets, seat belt hinges, etc.

(Builders may have painted these items.)

### **GLARE SHIELD**

Cut vinyl as needed and glue in place.

\*\*To insure an adequate fit. We ask for the builder to take measurements. Refer to pages 30-33. Please return these pages to Alexander Aeroplane.\*\*

For laster servi	ice, please return the measurement pages to
Alexander Aero Attn. Interior Do PO Box 909 Griffin, GA 302	ept.
Good luck with Diane Davidso	your project and thanks for your order. n
Interior Dept. N	lanager
Your Name: Address:	
Phone#:	

### LANCAIR 235, 320, & 360 PANEL MEASURMENTS

The front face of the seat back positions at approximately FA-61. The forward side panel is made to accommodate the seat back at FS-61. If the builder has moved the seat back aft, we need to know how far.

The seat back MUST attach to the top of the aft center spar cap. From that base point, it can be leaned back to an angle that suits you. We strongly recommend the position that places this bulkhead topo position at a point that is approximately 1" aft of the aft deck roll over fwd face (as measured at the top longeron position). See fig. 330

# SEAT BACK BULKHEAD SIDE VIEW Fig. 330 SEAT BACK STIFFENER FSLG / CANOPY FRAME JOGGLE SEAT BACK BULKHEAD LONGERON Front face of seat back positions at approx. FS-\$1 Seat back rests on top of the aft spar cap

\*\*\*FOR MEASUREMENTS 2-7, REFER TO LANCAIR 235, 320, & 360 SIDE PANE VEW ON PAGE 31.\*\*\*

Give measurement from floor to the hatch opening.

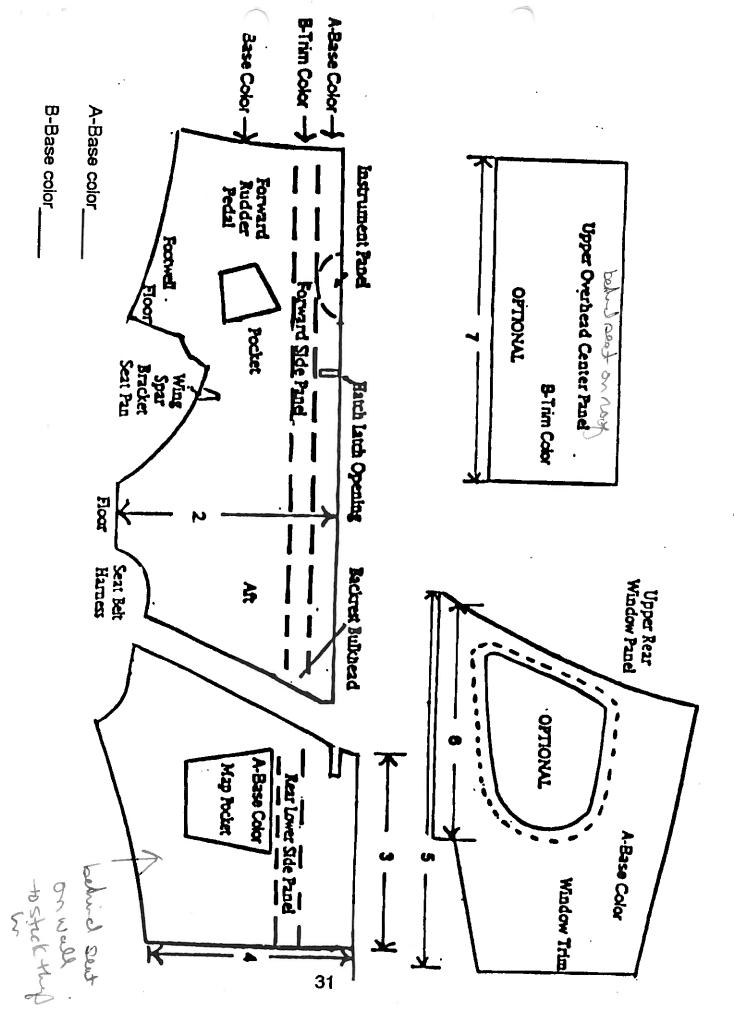
Give measurement from the aft edge of the backrest to the back baggage bulkhead.

Height of the panel at the aft edge.

Length of the panel to the upper rear baggage bulkhead.

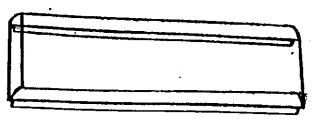
Length of the panel to the hat shelf.

Length of the forward center overhead panel.



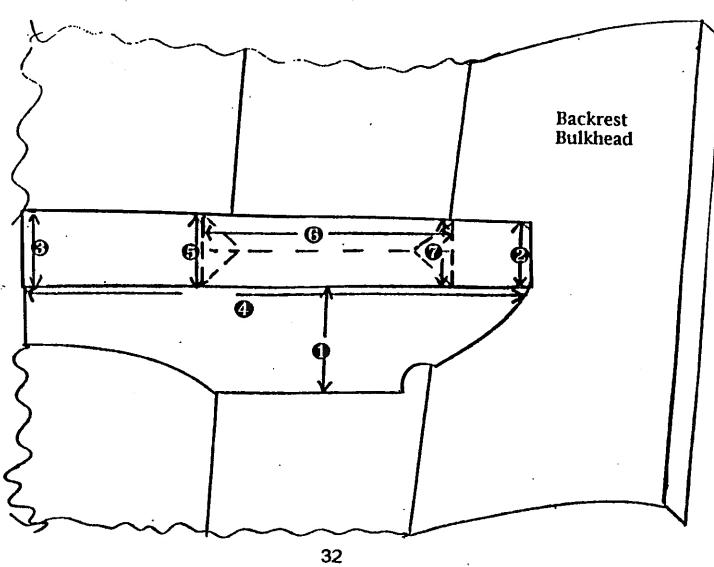
# Center Console Compartment and Armrest Measuremen

0011001 (101)	isole Compartment and Armrest Measurements
Measure: 5/0	The state of the s
1. $\frac{1}{3}$	Height of center console structure
2. 5 1/8"	Width of aft section backrest hulkhoad
3. 411	width at forward nose gear
4. 25 9/47	Length of center console unit
5	Width at forward edge of storage lid armrost with and to
6/2'/	mp on each side
7 37/81	Length of storage compartment lid
8. 4/2"	Width at rear of storage compartment lid
	Length from backrest bulkhead to storage compartment lid



Armrest one-inch thick

One-inch flap covers hinge pin area — either side



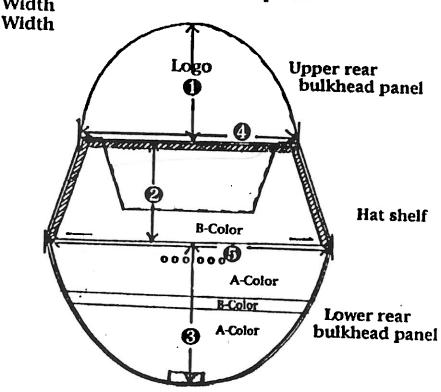
### Upper Rear Bulkhea...

The upper rear bulkhead is a one-piece unit with logo. The hat shelf and lower rear bulkhead panel is a one-piece unit. You will need to remove seat belt to permit installation of the panel unit. The lower half of the lower rear bulkhead can be glued in place and the upper half and the hat shelf can be fastened in place with velcro, permitting access to aft section of aircraft.

1. 1/3/4 Height of upper rear bulkhead Depth of hat shelf

3. Height of rear lower bulkhead panel

4. 21/2" Width 5. 27/8" Width



Rear wire tunnel should wrap around wire tunnel and fasten to structure with velcro (sewn to the inside of the cover).

33

	,	
1. 2. 3. 4. 5.	10 1/2" 37 1/2" 31/2" 6"	Height of forward edge of wire tunnel Width at forward edge of wire tunnel Length of wire tunnel Width at aft edge of wire tunnel Height at aft edge of wire tunnel

Two pieces hook velcro glued to sides of wiring tunnel provided in kit. Plus, hook velcro glued to hat shelf supplied

