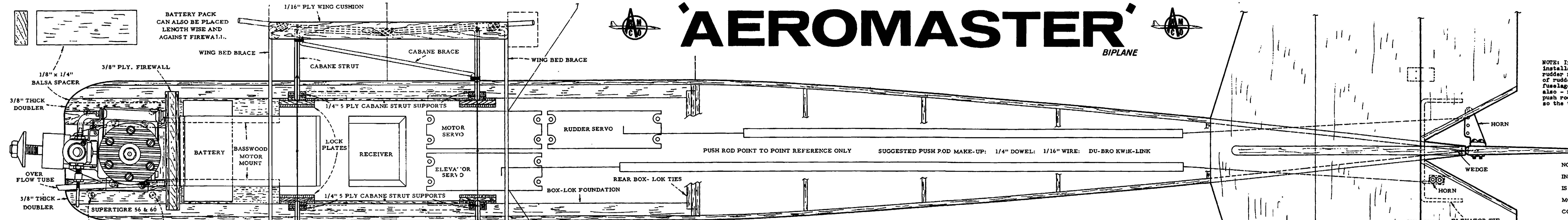


# AEROMASTER

BIPLANE

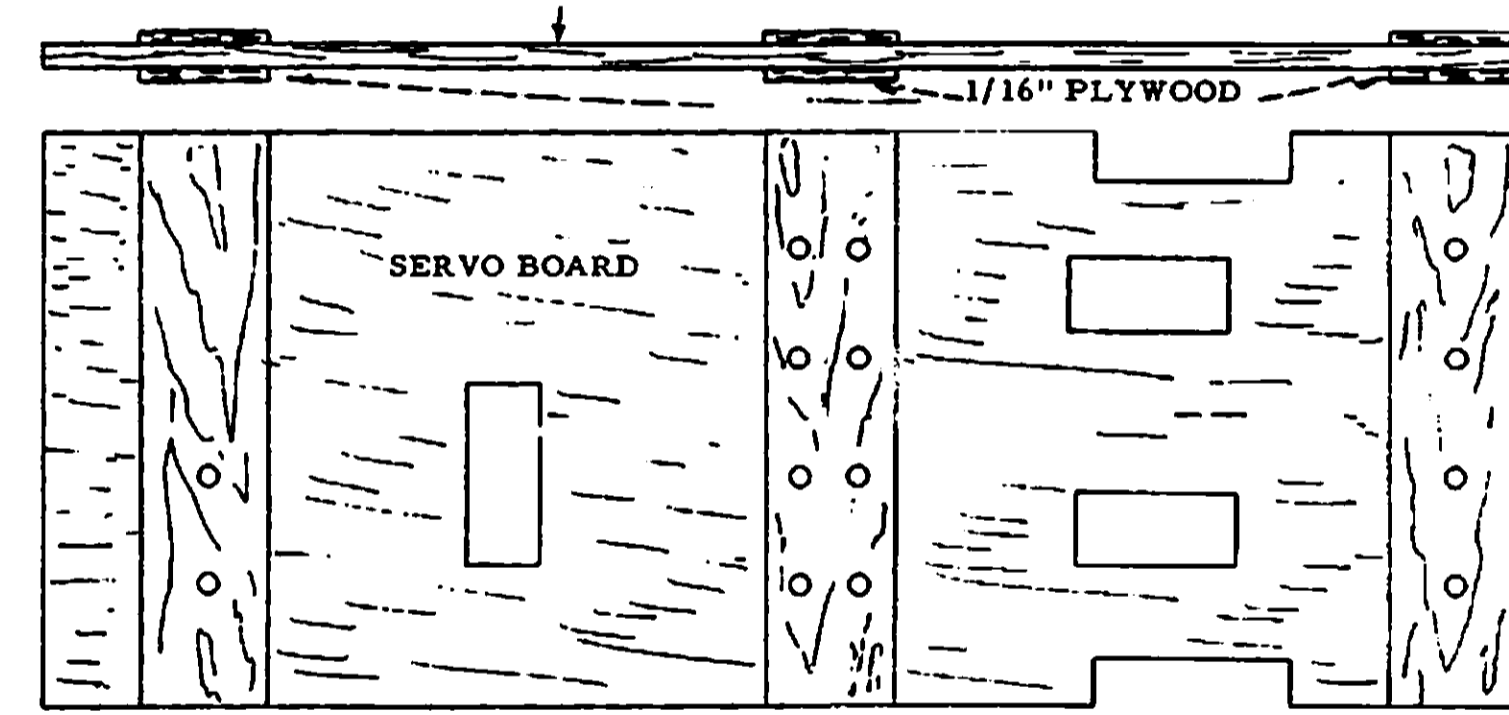


**NOTE:** If absolute straight line push rod installation is desired - cross rods so the rudder rod goes from the horn on the right of fuselage and the servo on the left of the fuselage and the same for the elevator - also - raise the exit point of the rudder push rod and raise the rudder horn location so the two rods do not touch.

**NO INFORMATION IS FURNISHED ON INSTALLATION OF WHEEL PANTS - THIS IS LEFT UP TO THE SKILLS OF THE MODELER - THERE ARE MANY COMMERCIAL WHEEL PANTS AVAILABLE**

### SUGGESTED SERVO BOARD:

This Servo Board is made from 1/8" Hard Balsa with 1/16" plywood cross braces and is very light and extremely strong. If a servo board is made we suggest you make it from light three ply plywood. The servo board is completely prepared with blind nuts installed and cemented to Box-Lok sides, against Former A and to former J & K. After board is cemented in place, glue small pieces of 1/16" sheet against Box-Lok sides and to servo board on both ends, in the middle and on both sides.

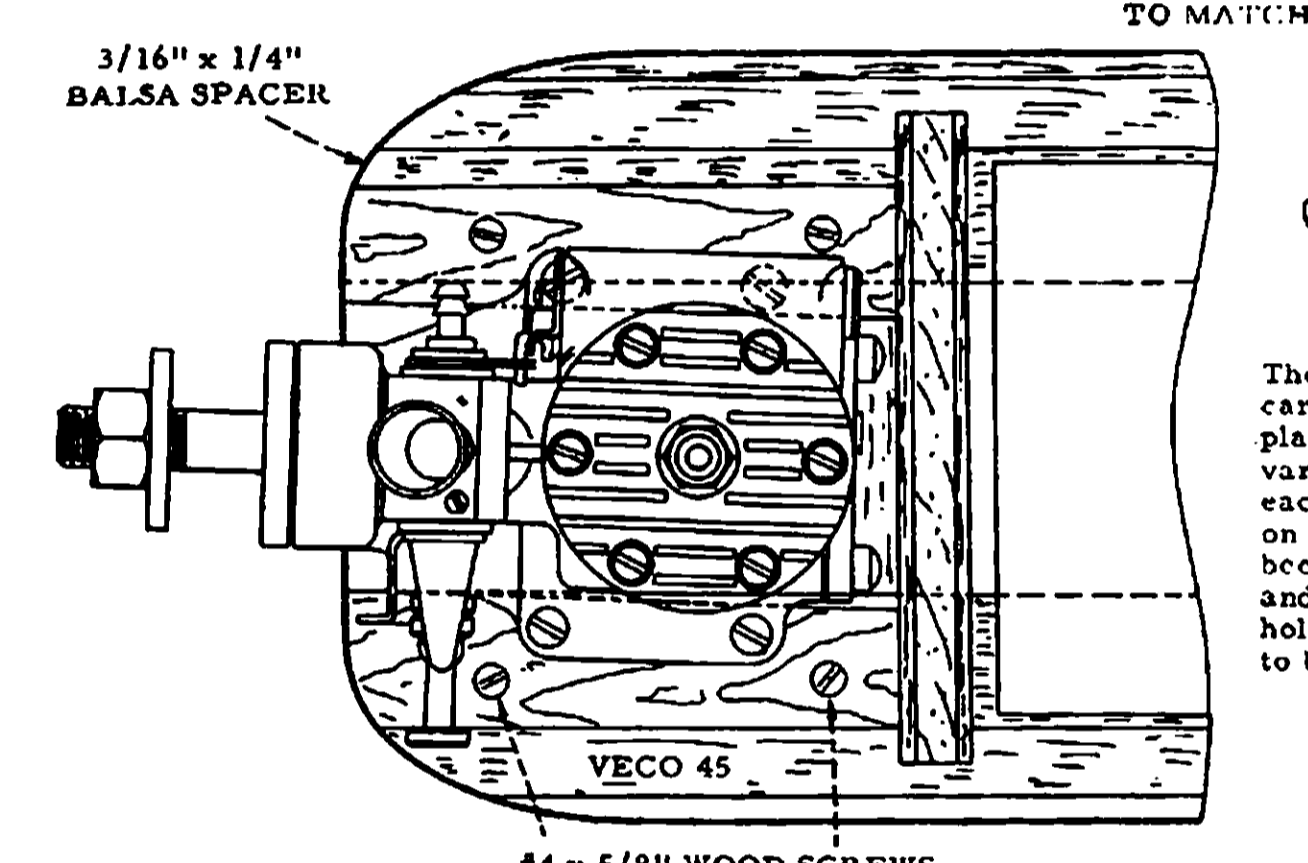


### Maneuvers for the full-scale aerobatic aircraft -

- Obligatory group**
1. Slow roll to the left in horizontal flight.
  2. Stalled turn to the right following a vertical climb.
  3. Half roll to the left off the top of a loop.
- 45 degree (or more) climb followed by a pull out recovery.
4. Roll to the right on a vertical climb followed by
  5. An outside loop ending after passing the top point of culmination.
  6. Three quarter loop starting at the lowest point and ending after having passed the top point of culmination.
  7. Stalled turn to the right after a vertical climb in the inverted position.
  8. Inverted sharp left-hand circle of 360 degrees.

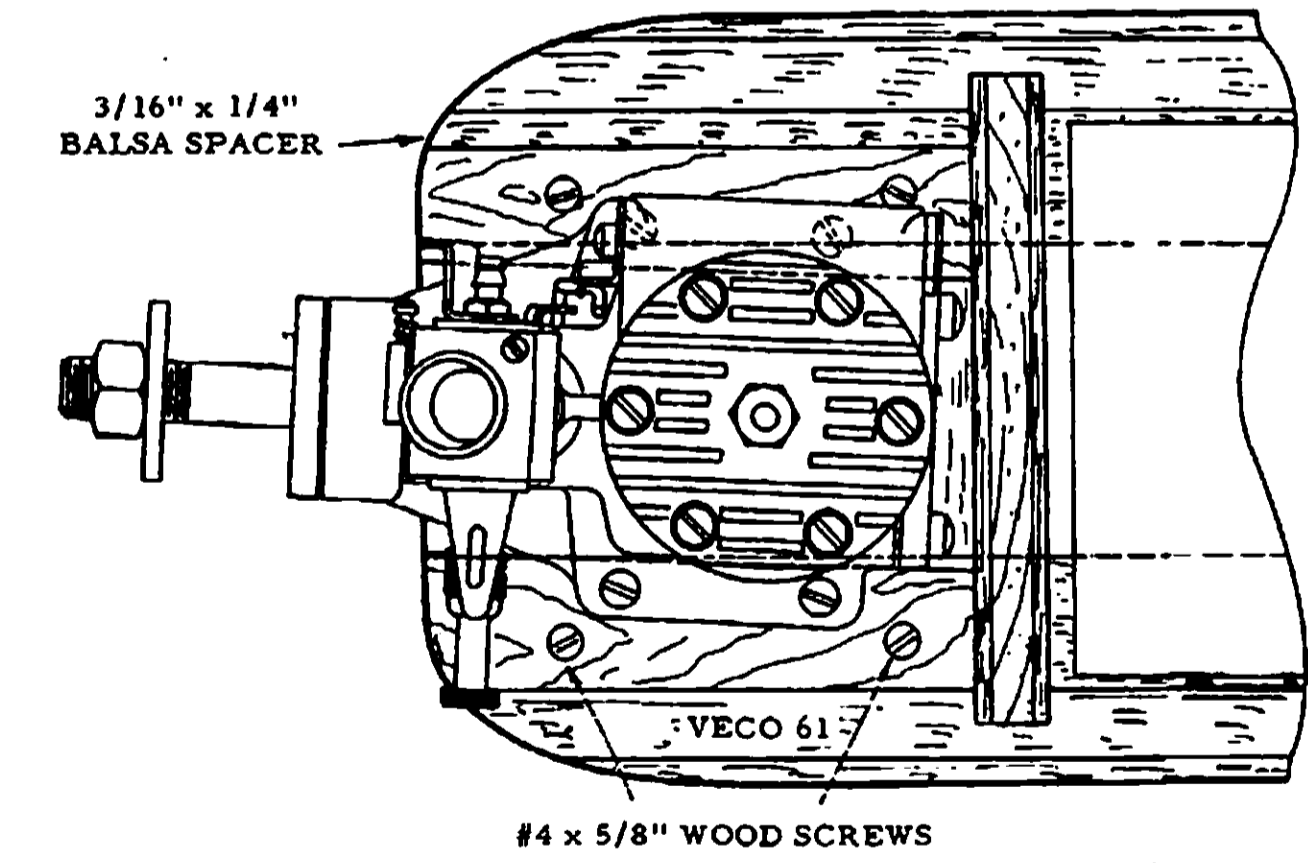
### Free Style Maneuvers

1. Inside loop from inverted position.
2. Square inside loop from inverted position.
3. Eight point loop (octagon).
4. Bottom loop.
5. Inside loop with slow roll on top.
6. Inside loop with snap roll on top.
7. Inside loop with double snap roll on top.
8. Outside square loop.
9. Rolling loop with one roll.
10. Square loop with half roll each quarter.
11. Vertical S ascending from inverted position.
12. Vertical Eight ascending from inverted position.
13. Barrel Roll.
14. Slow roll on take off.
15. Knife edge flight.
16. Knife edge, half slow roll, knife edge.
17. Soap roll.
18. One-and-a-half snap roll from normal to inverted.
19. Inverted spin with a minimum

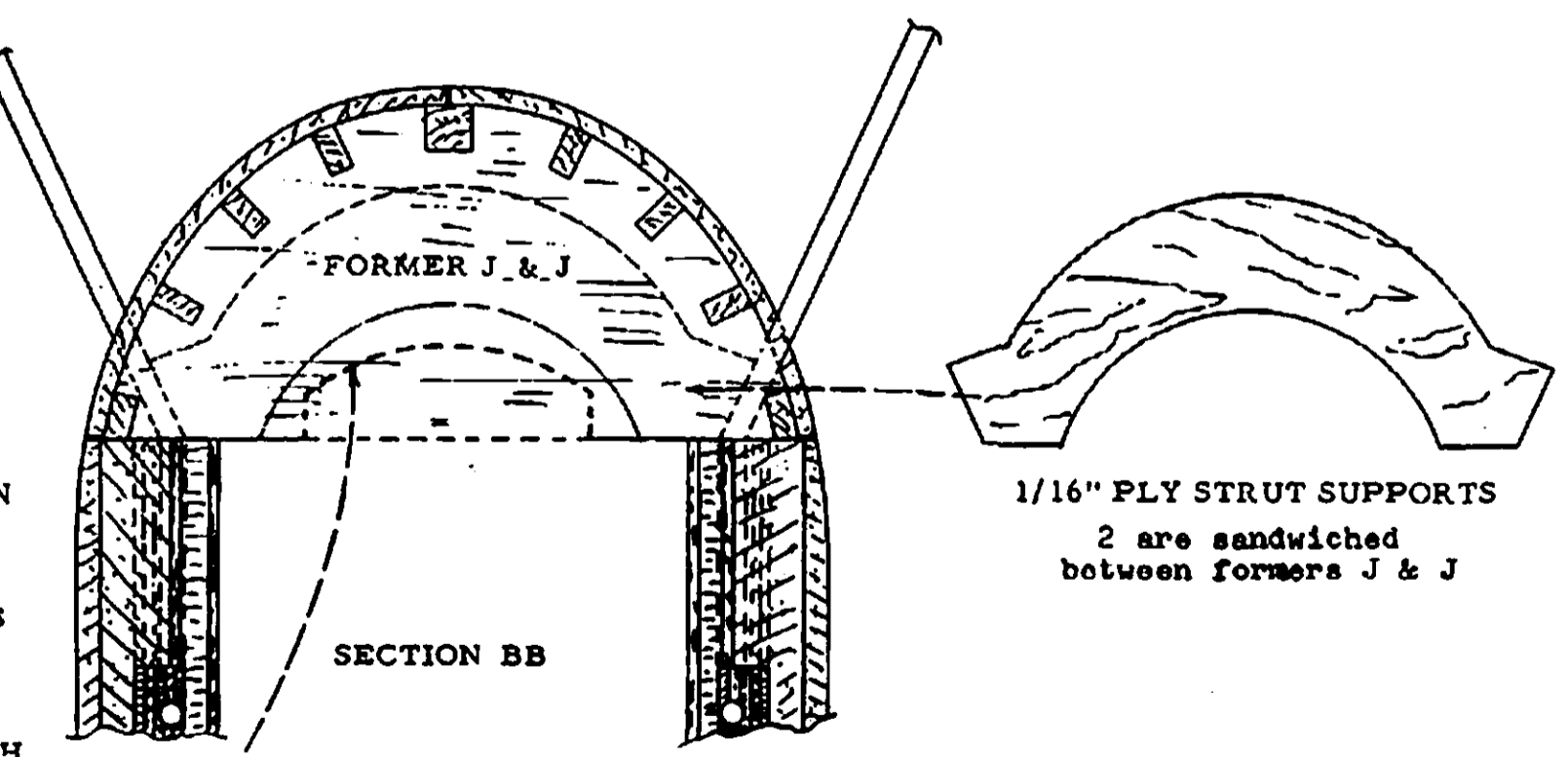


**MOUNTING ENGINES:**  
The 1/4" 5 ply motor plates are designed so that they can be used to mount any of the engines shown on the plan by simply varying the width with 1/4" wide and various thicknesses of spacers on the right plate to suit each motor. These are noted on each engine drawing on top view. To mount engine - after spacer has been determined, drill 1/16" holes through plates and about 1/8" deep into the basswood bearers. Open holes in ply plates with a 1/8" drill and screw plates to bearers with #4 x 5/8" round head wood screws -

do not cement plates at this time. Locate motor on plates, mark and drill holes for size of anchor nuts and press anchor nuts into bottom of plates. Remove any area on basswood bearers that the blind nuts require so plates will lay down flat. Now cement and woodscrew plates to bearers. Remove balsa where the wood screws touch the 3/8" balsa doublers and cement the doublers into position against the plates and to the Box-Lok sides and the FIREWALL.



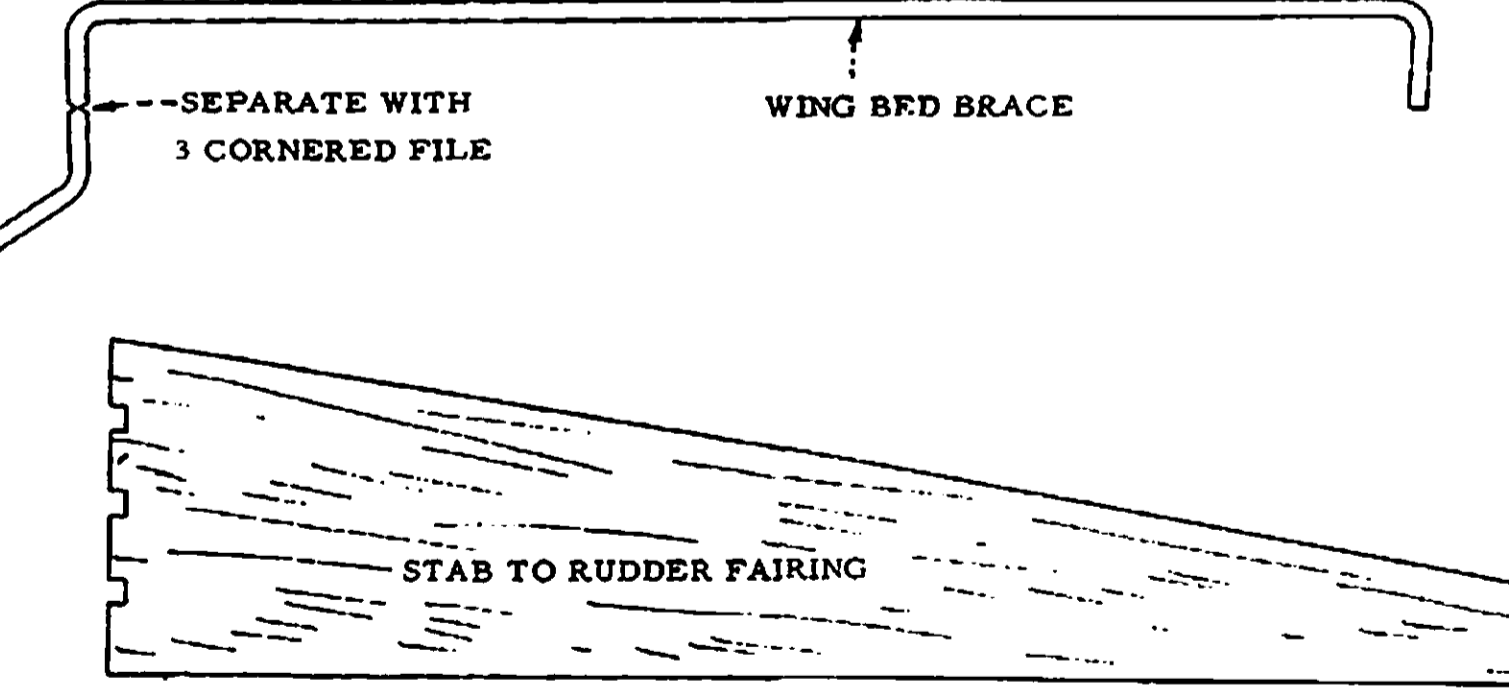
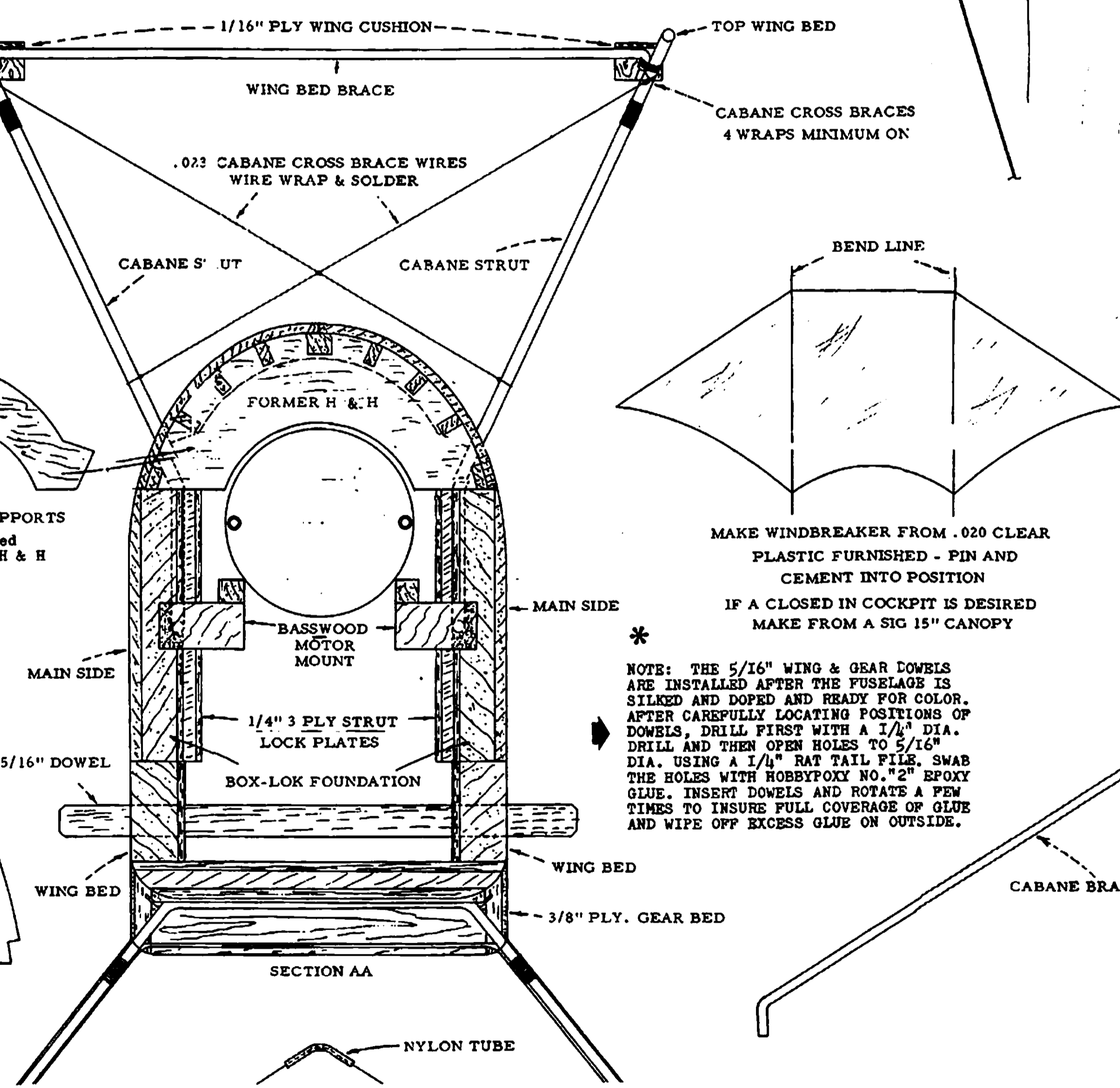
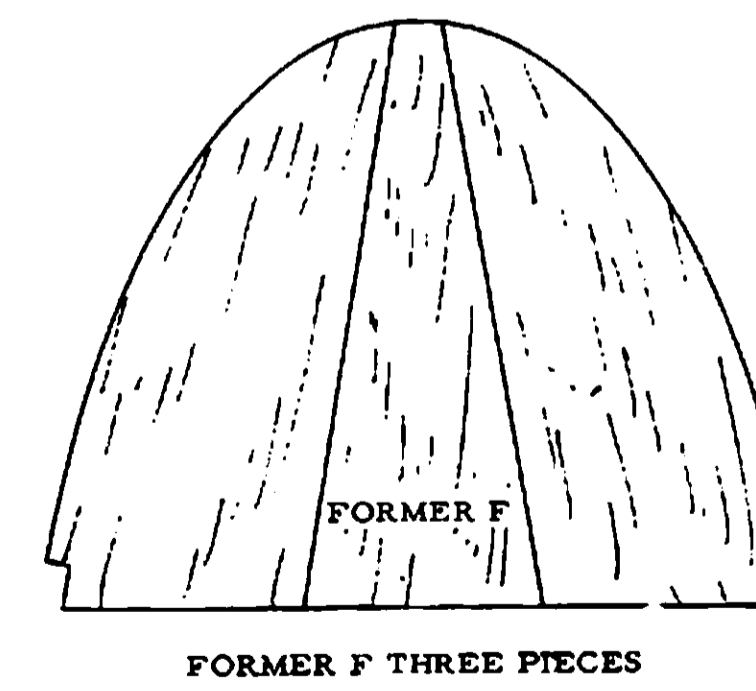
**PROPS:**  
THE BEST PERFORMANCE HAS BEEN OBTAINED USING 11-7 TO 11-8 WIDR BLADE PROPS WITH THE 60 MOTORS  
11-6 TO 11-7 WITH 49 MOTORS AND  
11-6 TO 11-7 NARROW BLADES WITH THE 45 MOTOR



**Note:** If the servos and servo installation shown on plan is used - remove balsa from Formers J&J as shown in dotted line before cementing servo board into place so servo wires can be passed through to receiver.

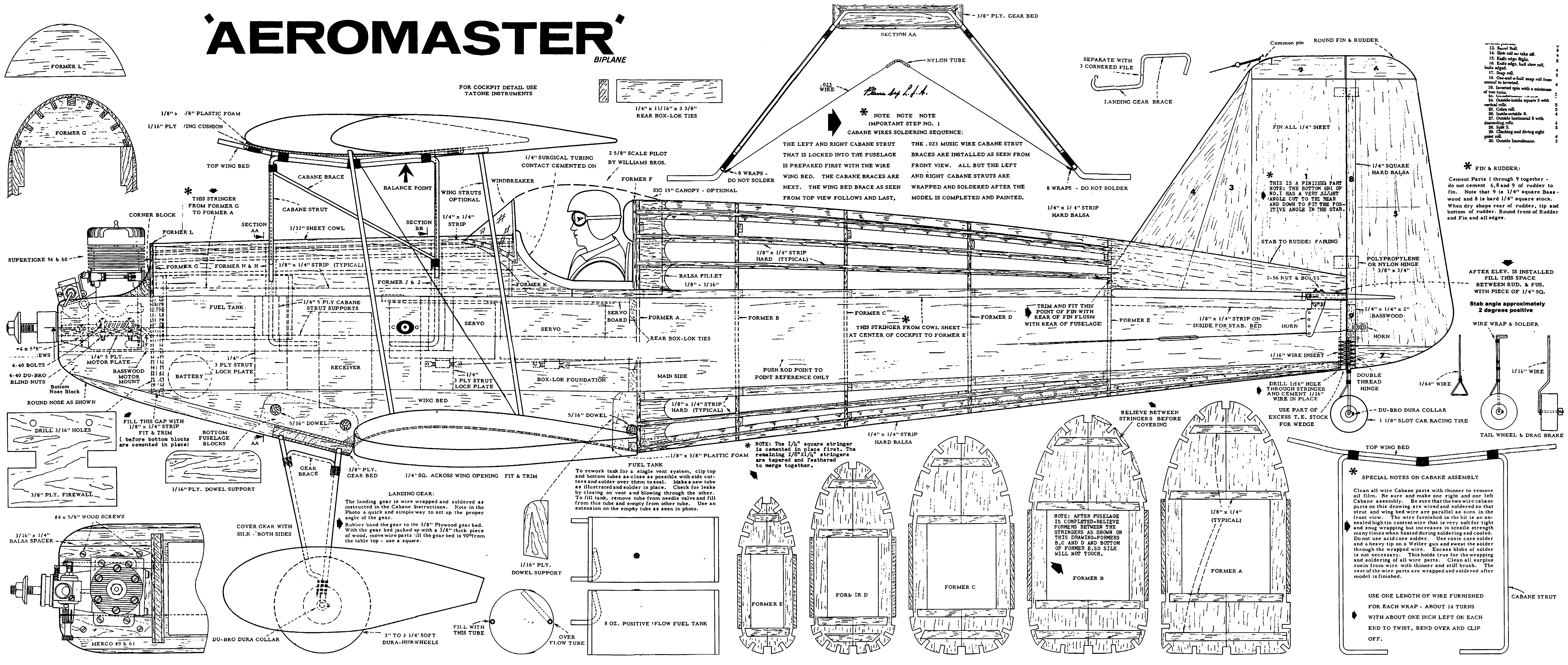
**\* THESE BRACES ALSO ARE USED TO LINE WING UP FORE AND AFT - WHEN SETTING UP FOR WIRE WRAPPING MEASURE BOTH SIDES FOR ACCURACY - THIS APPLYS TO ALL PARTS OF THE CABANE ALSO.**

**SPECIAL NOTES ON CABANE ASSEMBLY:**  
The Cabane Assembly is prepared very precise at the factory and it is important that the parts are assembled, wrapped and soldered accordingly to insure proper bed and accurate line up of top wing. Work carefully and slowly in this area. The cabane cross brace made from the special .023 Bright music wire is very important in absorbing twisting and shock loads of the whole cabane assembly. Carefully wrap these on and solder to cabane parts. Twist the wire after wrapping around cabane wires at least 4 times. The 1/16" plywood wing cushions are cemented on with epoxy and the wing immediately rubber banded on to insure they are seated.



# AEROMASTER

BIPLANE



FOR COCKPIT DETAIL USE TATONE INSTRUMENTS

1/8" x 11/16" x 3 3/8" REAR BOX-LOK TIES

*Plane by R.L.F.A.*

**\* NOTE NOTE NOTE IMPORTANT STEP NO. 1 CABANE WIRES SOLDERING SEQUENCE:**

THE LEFT AND RIGHT CABANE STRUT THAT IS LOCKED INTO THE FUSELAGE IS PREPARED FIRST WITH THE WIRE IS NEXT. THE WING BED BRACE AS SEEN FROM TOP VIEW FOLLOWS AND LAST,

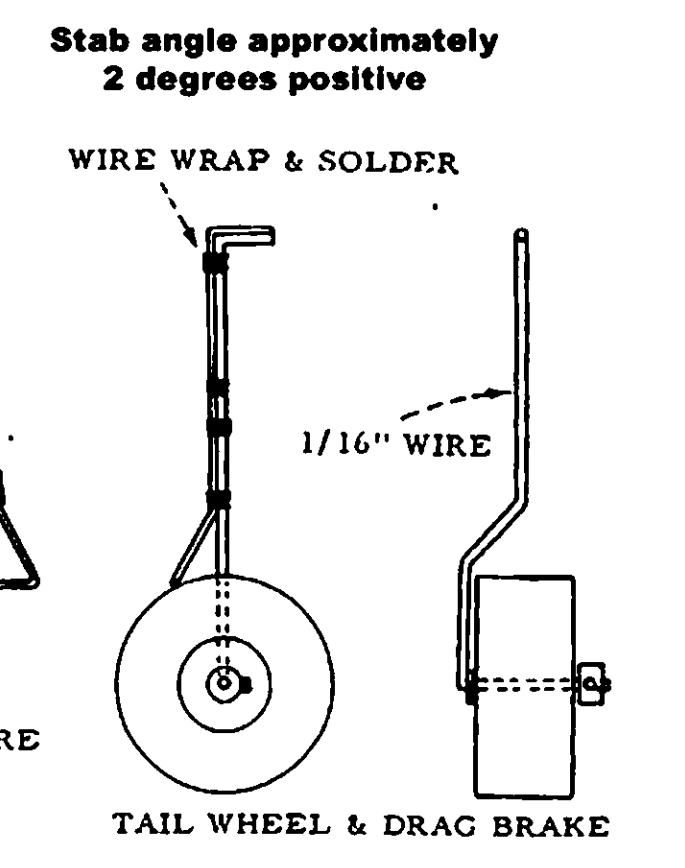
THE .023 MUSIC WIRE CABANE BRACES ARE INSTALLED AS SEEN FROM FRONT VIEW. ALL BUT THE LEFT AND RIGHT CABANE STRUTS ARE WRAPPED AND SOLDERED AFTER THE MODEL IS COMPLETED AND PAINTED.

- 13. Barrel Roll.
- 14. Slow roll as take off.
- 15. Knife edge flight.
- 16. Knife edge half slow roll, half edged.
- 17. Sharp roll.
- 18. One-and-a-half map roll from normal to inverted.
- 19. Inverted spin with a minimum of two turns.
- 20. Outside-inside square 5 with vertical rolls.
- 21. Cobra roll.
- 22. Inside-outside 8.
- 23. Outside horizontal 8 with descending rolls.
- 24. Spin 5.
- 25. Climbing and diving eight point roll.
- 26. Outside Immelmann.

**\* FIN & RUDDER:**

Cement Parts 1 through 9 together - do not cement 6, 8 and 9 of rudder to fin. Note that 9 is 1/4" square Balsa wood and 8 is hard 1/4" square stock. When dry shape rear of rudder, tip and bottom of rudder. Round front of Rudder and Fin and all edges.

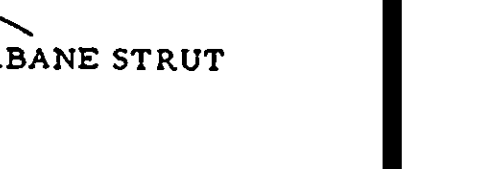
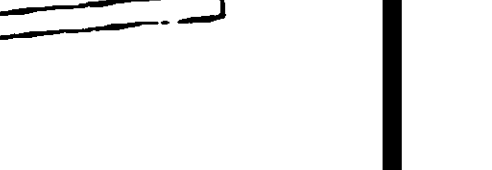
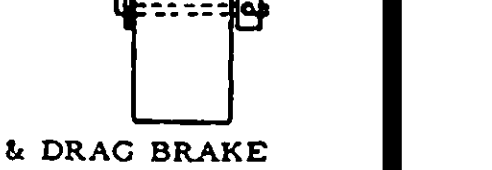
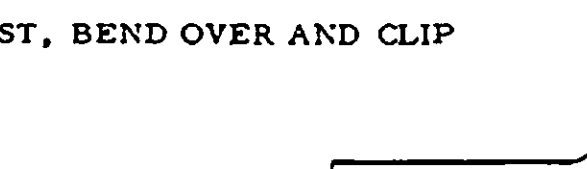
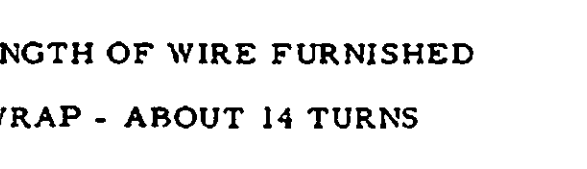
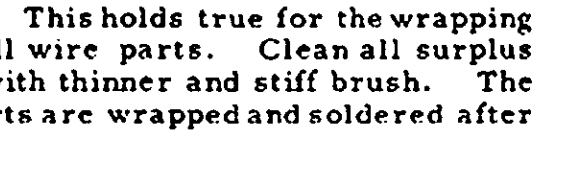
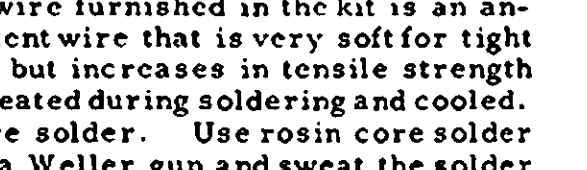
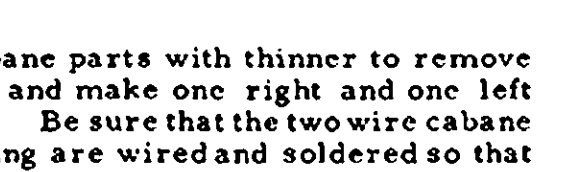
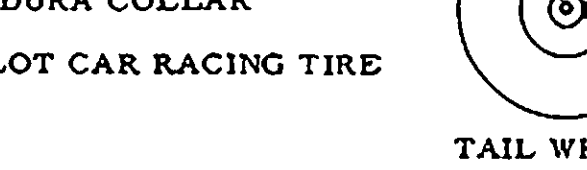
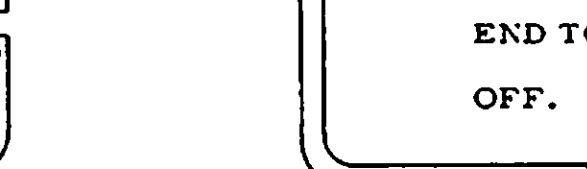
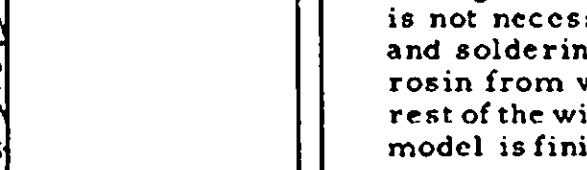
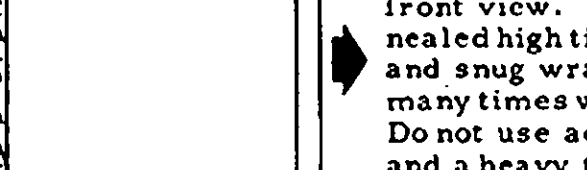
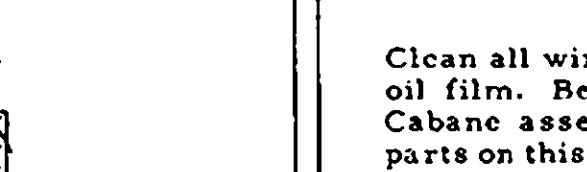
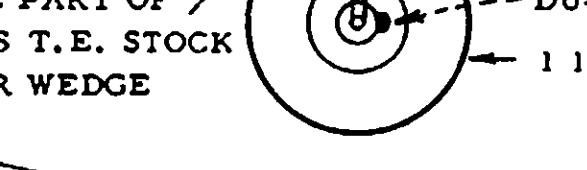
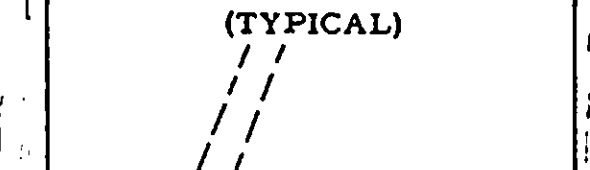
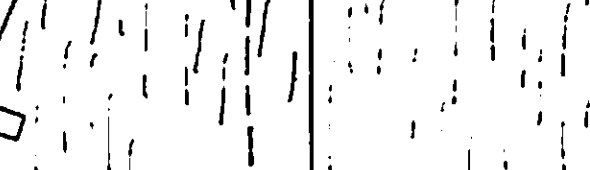
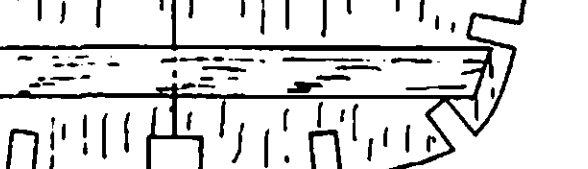
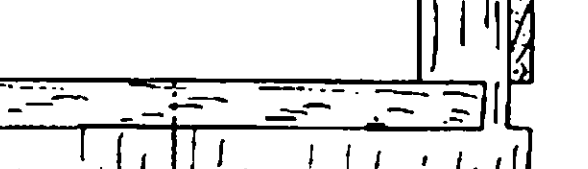
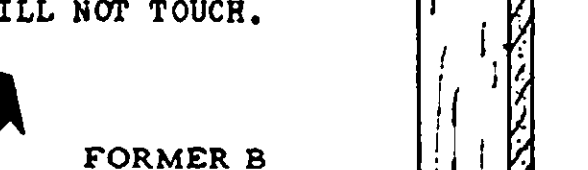
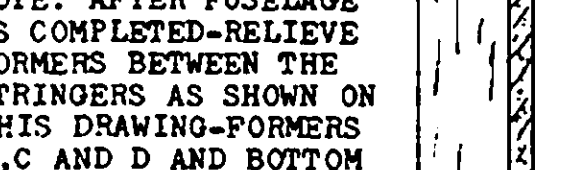
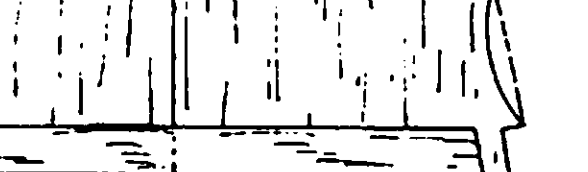
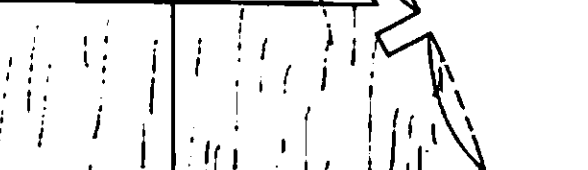
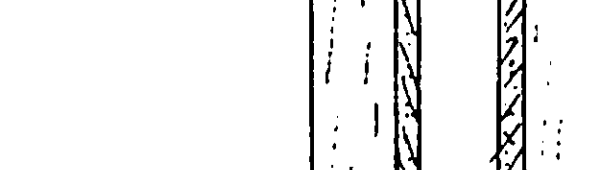
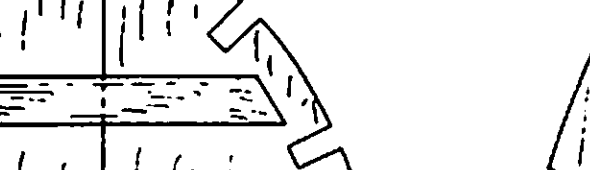
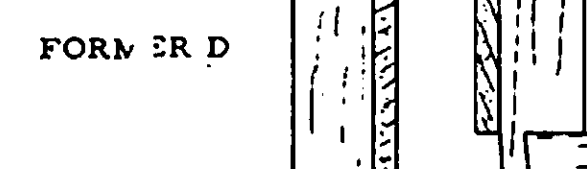
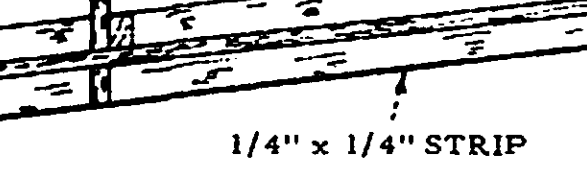
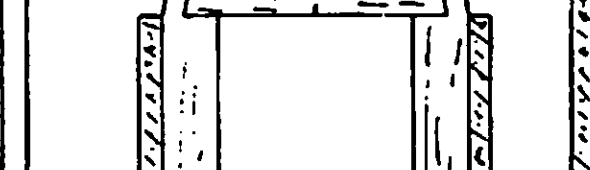
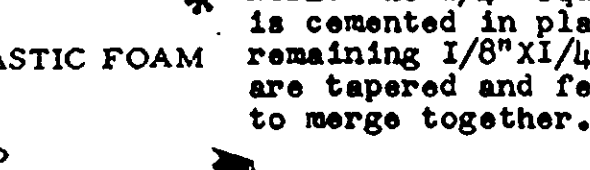
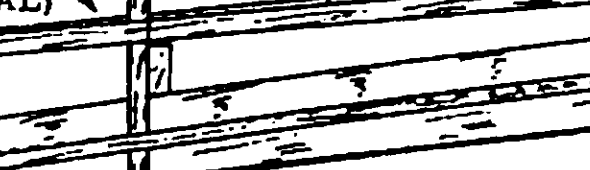
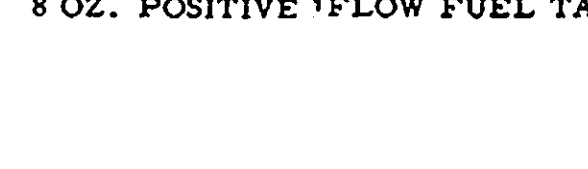
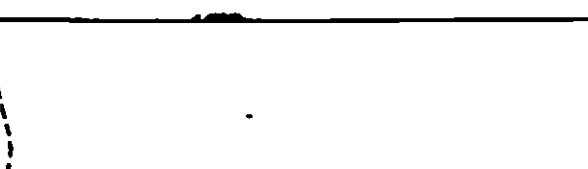
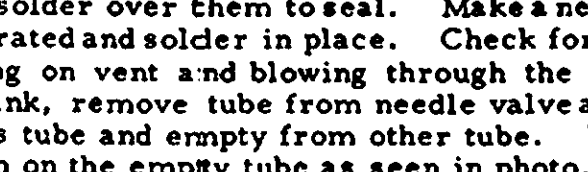
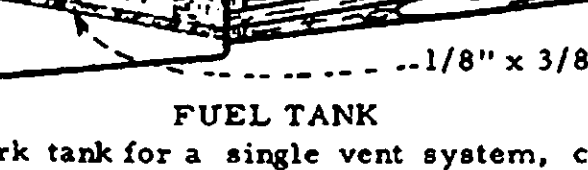
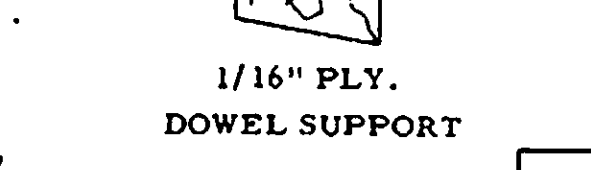
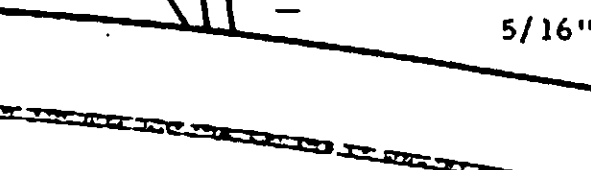
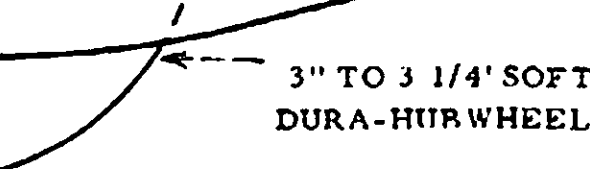
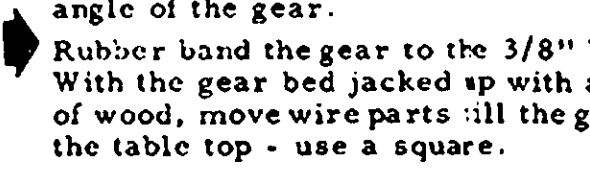
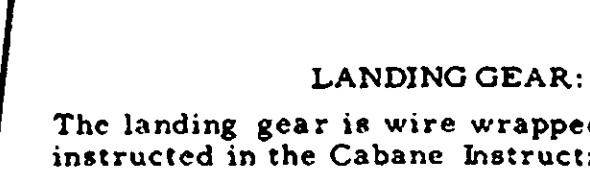
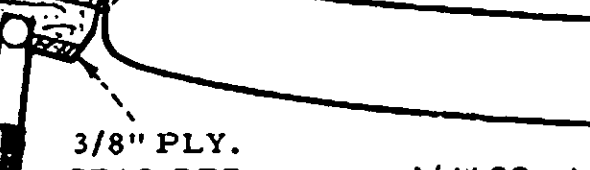
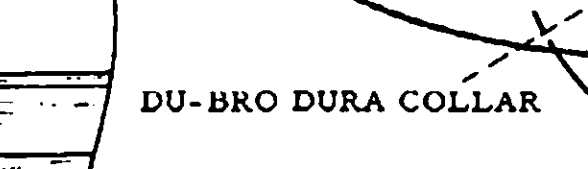
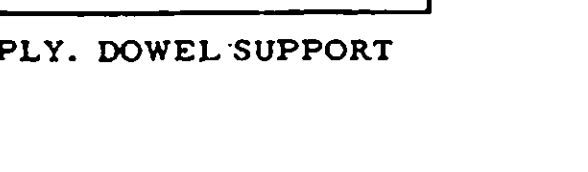
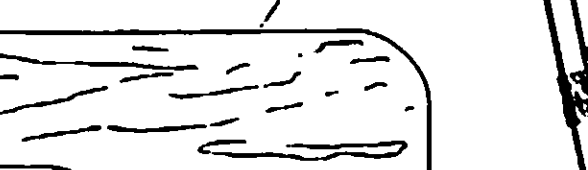
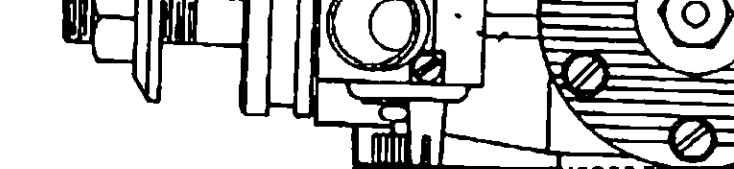
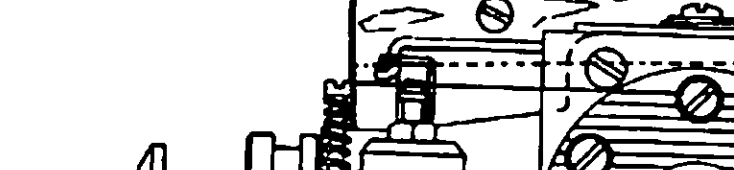
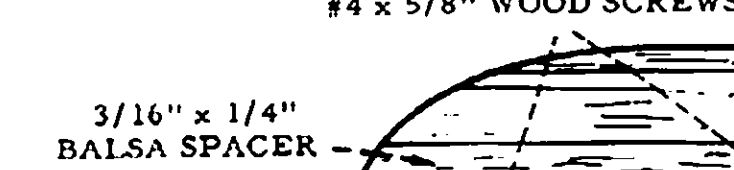
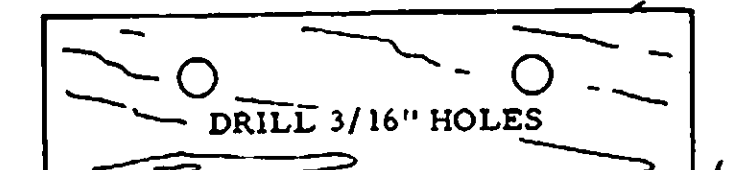
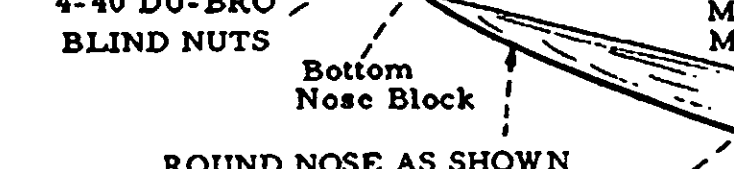
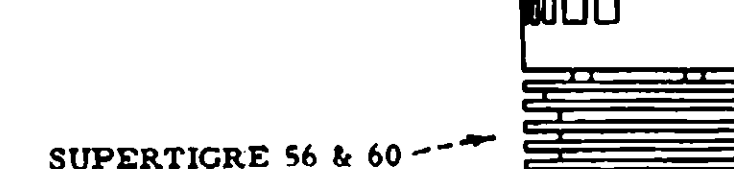
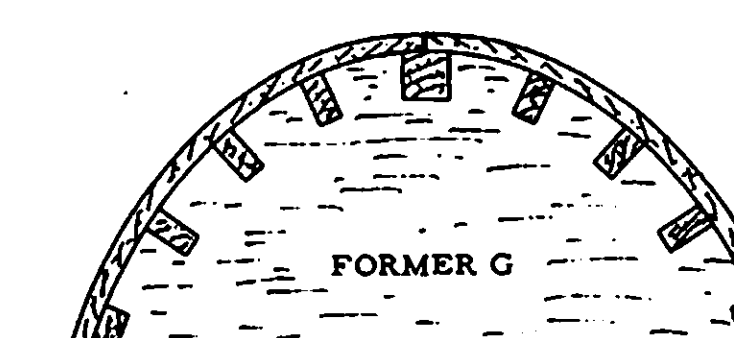
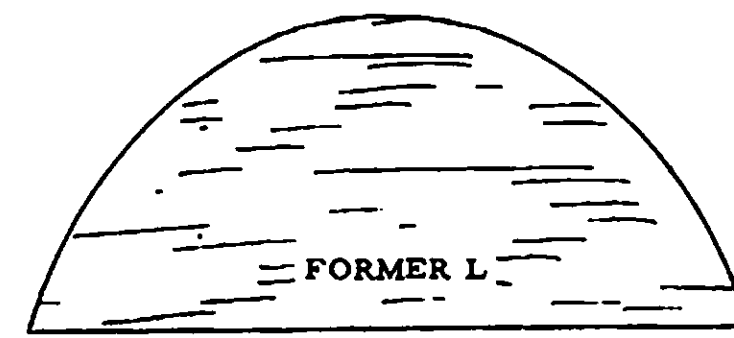
AFTER ELEV. IS INSTALLED FILL THIS SPACE WITH PIECE OF 1/4" SQ. STAB ANGLE APPROXIMATELY 2 DEGREES POSITIVE



**\* SPECIAL NOTES ON CABANE ASSEMBLY**

Clean all wire Cabane parts with thinner to remove oil film. Be sure and make one right and one left Cabane assembly. Be sure that the two wire cabane parts on this drawing are wired and soldered so that strut and wing bed wire are parallel as seen in the front view. The wire furnished in the kit is an annealed high tin content wire that is very soft for tight and snug wrapping but increases in tensile strength many times when heated during soldering and cooled. Do not use acid core solder. Use rosin core solder and a heavy tip on a Weller gun and sweat the solder through the wrapped wire. Excess blobs of solder is not necessary. This holds true for the wrapping and soldering of all wire parts. Clean all surplus rosin from wire with thinner and stiff brush. The rest of the wire parts are wrapped and soldered after model is finished.

USE ONE LENGTH OF WIRE FURNISHED FOR EACH WRAP - ABOUT 14 TURNS WITH ABOUT ONE INCH LEFT ON EACH END TO TWIST, BEND OVER AND CLIP OFF.



**FUEL TANK**

To rework tank for a single vent system, clip top and bottom tubes as close as possible with side cutters and solder over them to seal. Make a new tube as illustrated and solder in place. Check for leaks by closing on vent and blowing through the other. To fill tank, remove tube from needle valve and fill from this tube and empty from other tube. Use an extension on the empty tube as seen in photo.

**\* NOTE:** The 1/4" square stringer is cemented in place first. The remaining 1/8" x 1/4" stringers are tapered and feathered to merge together.

**\* NOTE:** AFTER FUSELAGE IS COMPLETED-RELIEVE FORMERS BETWEEN THE STRINGERS AS SHOWN ON THIS DRAWING-FORMERS B,C AND D AND BOTTOM OF FORMER E, SO SILK WILL NOT TOUCH.

**\* SPECIAL NOTES ON CABANE ASSEMBLY**

Clean all wire Cabane parts with thinner to remove oil film. Be sure and make one right and one left Cabane assembly. Be sure that the two wire cabane parts on this drawing are wired and soldered so that strut and wing bed wire are parallel as seen in the front view. The wire furnished in the kit is an annealed high tin content wire that is very soft for tight and snug wrapping but increases in tensile strength many times when heated during soldering and cooled. Do not use acid core solder. Use rosin core solder and a heavy tip on a Weller gun and sweat the solder through the wrapped wire. Excess blobs of solder is not necessary. This holds true for the wrapping and soldering of all wire parts. Clean all surplus rosin from wire with thinner and stiff brush. The rest of the wire parts are wrapped and soldered after model is finished.

USE ONE LENGTH OF WIRE FURNISHED FOR EACH WRAP - ABOUT 14 TURNS WITH ABOUT ONE INCH LEFT ON EACH END TO TWIST, BEND OVER AND CLIP OFF.

CABANE STRUT

# AEROMASTER

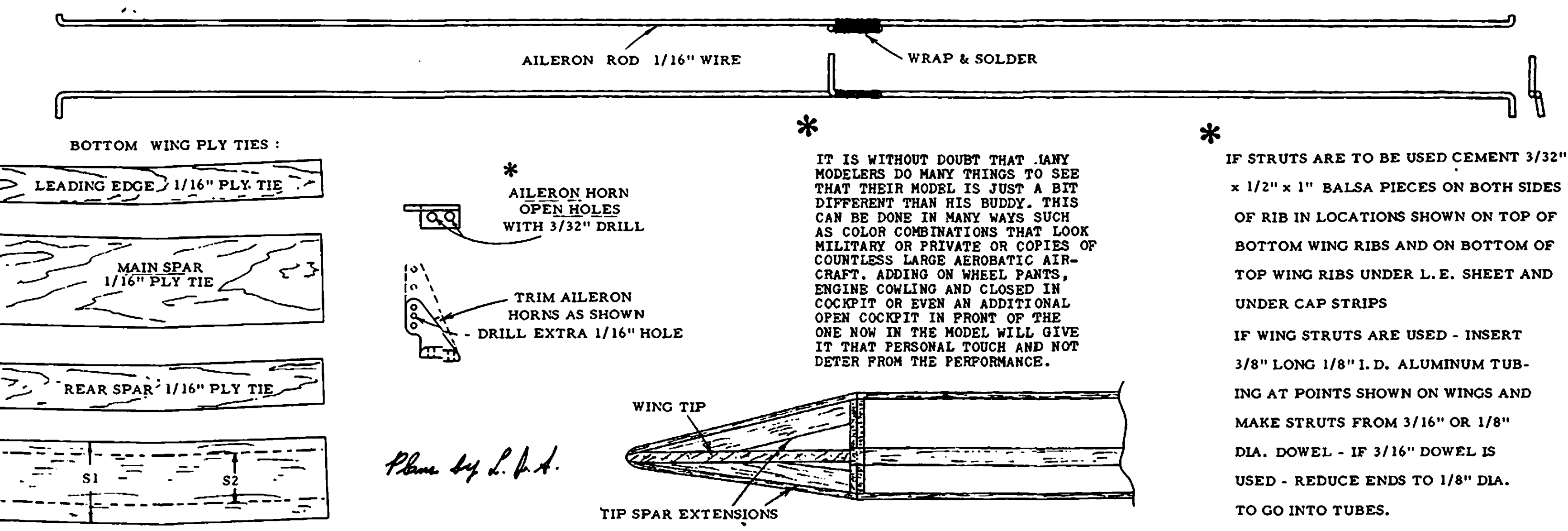
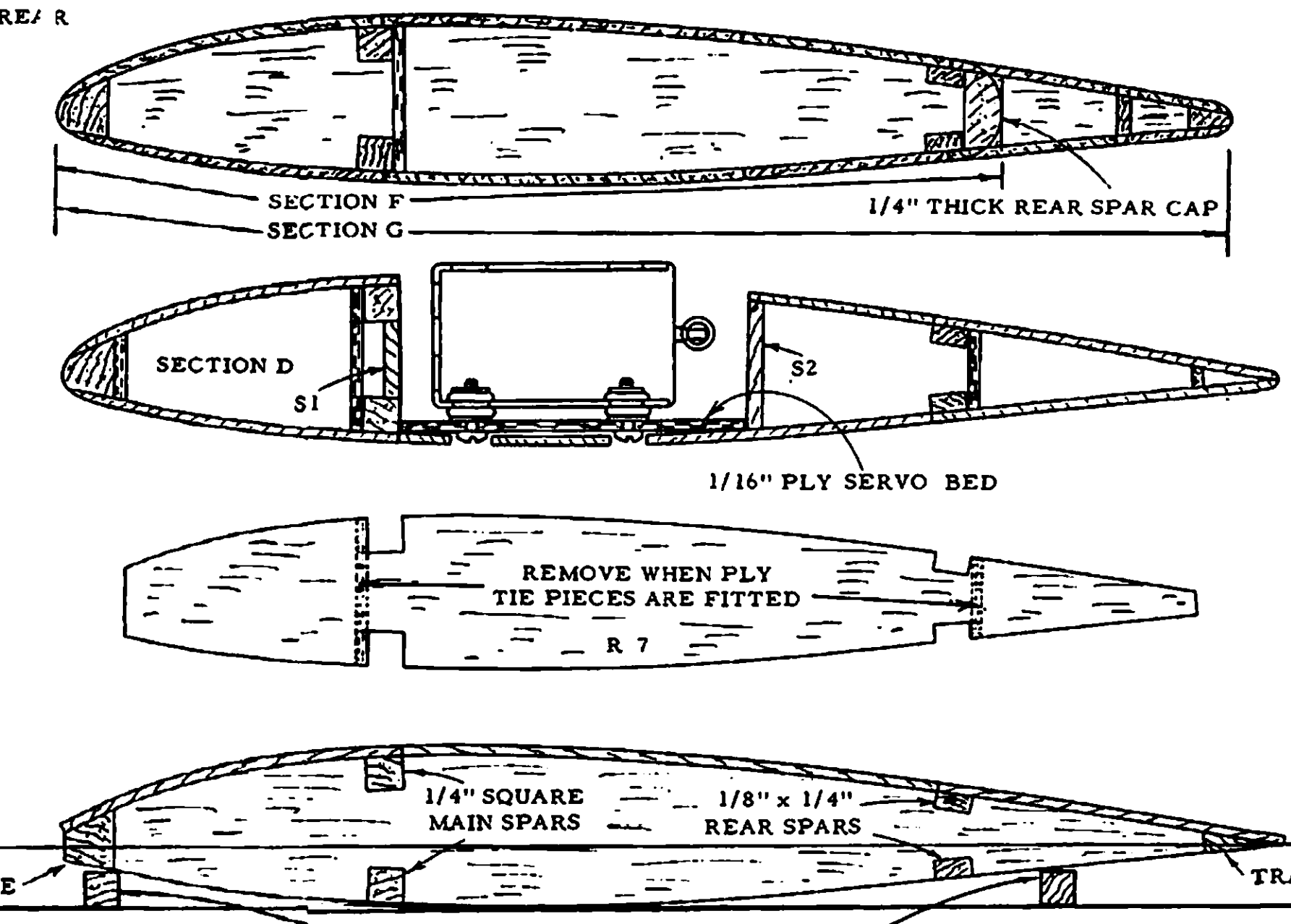
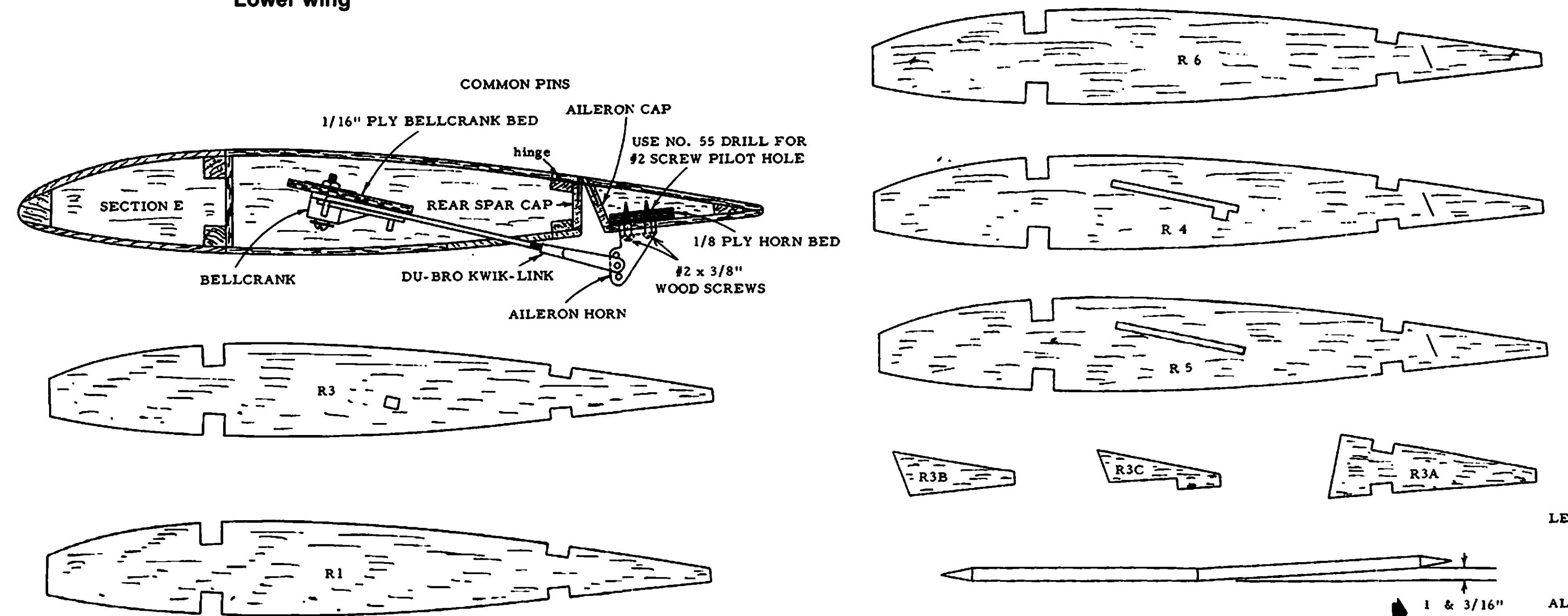
BIPLANE

Lower wing

NOTE THAT 1/16" TRAILING EDGE SHEET IS 1/16" BACK OF TRAILING EDGE SO SHEET CAN COME TOGETHER AT REAR

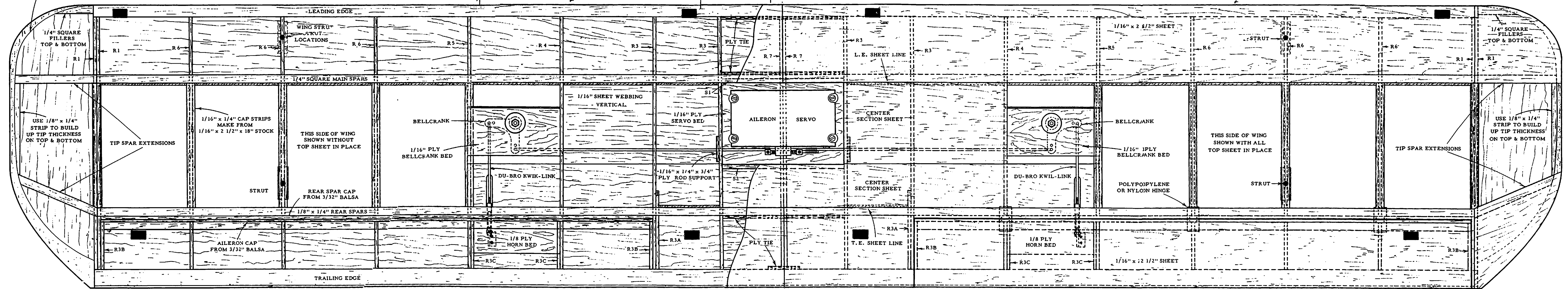
\* BE SURE WHEN PREPARING LEADING AND TRAILING EDGES THAT YOU HAVE THEM IN PLACE WITH THE CORRECT ANGLES ON THESE PARTS AS SEEN FROM END VIEW-REFER TO CROSS SECTION DRAWINGS OF RIB SECTIONS:

\* NOTE: THE SOLID 1/4" WIDE BLACK LINES ARE THE LOCATIONS OF THE 1/4" SQUARE STRIPS USED TO KEEP WING TRUE DURING THE CONSTRUCTION STAGES AND WEBBING.



APPROXIMATE SHAPE OF TIP AFTER SANDING & BEFORE SHEETING  
\* CENTER SECTION SHEET FROM 1/16" x 2 1/2" x 42" STOCK  
\* STRIP THE 1/16" x 2 1/2" x 18" Balsa SHEET INTO 1/4" WIDE PIECES FOR CAP STRIPS  
\* WINDIHDRAAL SCHEME: 1 & 3/16" total dihedral

\* ALL CENTER SECTION SHEET IS ONE PIECE FROM R4 TO R4 ON TOP AND R4 TO R4 IN FRONT AND R5 TO R5 FOR ROD CUT-OUT ON BOTTOM OF WING  
\* METHOD OF KEEPING WING TRUE WHILE BUILDING IS SHOWN USING 1/4" SQ. STRIPS UNDER RIBS AT LOCATIONS INKED IN SOLID LINES ON WING PLAN.  
\* ALL CENTER SECTION SHEET IS ONE PIECE FROM R4 TO R4 ON TOP AND R4 TO R4 IN FRONT AND R5 TO R5 FOR ROD CUT-OUT ON BOTTOM OF WING



FUSELAGE ASSEMBLY PROCEDURE:

IMPORTANT POINTS - WORK INSTRUCTIONS:

Remove all die-cut parts from sheets and orient them with the plan. Do not force a die-cut part from the sheet as in some instances some parts might not be die-cut completely through. In such a case, simply cut through with a razor blade or Exacto knife first. Some times when balsa is being sawed into strips, the balsa might be under tension and then become bowed or warped. If a leading or trailing edge is bowed, straighten them by exposing to steam from a small kettle spot by the opposite direction of bow over steam and held this way till dry. Select the best 1/4" squares for top stringers. Select the hardest 1/8" x 1/4" stringer for the rear top and bottom stringers. Cement is used and wood, pre-cement these joints as they do not come apart very easily once made. I highly recommend Wildcat's epoxy cement. It has a nice consistency, dries nearly colorless in a wood. Where epoxy cements are used, I recommend "Hobbyepoxy" glue required.

The first important step in the Fuselage Assembly is to prepare the Cabane Struts as noted on the Cabane Strut Drawing. Cement the Main Fuselage Sides to the Box-Lok Foundation. Be sure to line up both parts especially if contact cement is used. Cement the Wing Bed to the bottom of the main Sides line up the Wing Bed with the rear of Box-Lok Foundation. Lay one side on plan and mark the location of Rear Formers on inside of fuselage side and mark location of former #K on top of side in front of cockpit. Transfer these marks to other fuselage side. Cement the Cabane Struts as they are shown in position in Slots prepared for them. Cement Cabane Struts into Slots in Strut Supports and then cement the Strut Lock Plates into position. Check that the Cabane Struts are cemented to Front Bottom of Position. I would suggest that at this point the assembly be laid flat over the end of a table and weighted down till cement sets. The next step while this assembly is setting is to prepare all of the rear formers by cementing each two halves together and cementing on the 1/8" x 1/4" cross strips. Next, cement the 3/8" Ply Firewall rear Box-Lok Ties, Motor Mounts and Bottom nose Block in respective places and hold together with rubber bands till dry. Cement two 1/16" ply strut supports together for each front and rear strut and cement across top of fuselage and between wire struts. If a Servo Positive Flow Fuel Tank is to be used, cement 1/4" square pieces to top of motor mounts and cement tank into place. Next, draw fuselage sides together at rear and cement in a cut down piece of wing T.E. stock and hold together with pins or rubber bands till dry. At this point check for absolute alignment by sighting down fuselage and by laying on top of drawing. If one side has more tension than the other wet that side with water for about one inch where

fuselage side leaves Box-Lok foundation and this will relieve tension. Cement all rear formers into position. Line up carefully vertically and horizontally - hold all formers tight with rubber bands around fuselage and close to each former. Cement front Top Former in place - note that all these formers are centered across fuselage as seen from top because each former is a little narrower than the next one so fuselage cowl can taper as it goes forward. Note also that the double formers at cabane struts are also cemented to the plywood strut supports. Now cement the 3/8" ply Main Gear Bed to bottom of fuselage directly in front of Bottom Wing Cut Out. Be sure that the widest of the 5/32" slot is to the Rear. Next, cement the two 3/8" thick Bottom Fuselage Blocks together and cement to Front Bottom of Fuselage and against Gear Bed. Cement all Fuselage Stringers into place starting with the 1/4" squares. Note that the 1/8" x 1/4" Stringer on top of Main Fuselage side in front goes from Former 6 and binds to Rear Fuselage Former A. The 1/8" x 1/4" stringer at Rear Top of Fuselage Side binds the Cowl at center of Cockpit. Give the inside of the left and right Cowl Sheet a heavy coat of Cement and when dry, wet outside of Cowl Sheet with Water so sheet will roll and fit and cement and pin to formers and stringers. Cap Cowl with former Land Cap former A with Former F. Cement Fillers between Stringers at rear of Cockpit on top and bottom. Now Prepare Stabilizer and Elevator and Fin and Rudder. When finished and sanded, cement Stabilizer to top of fuselage and against former E. Cement Fin to top of Elevator and against former E. and to 1/4" square top stringer. Prepare Rear 3/32" fairing sheets like the Cowl sheets and cement and pin in place. Drill a 1/16" hole through bottom 1/4" square stringer at rear and cement in a piece of 1/16" wire for heavy

thread to hold on to when sewing bottom of rudder to fuselage. Cement 1/16" Plywood Supports to inside of fuselage. Prepare 1/4" x 5" ply motor plates and cement in place. Cement 3/8" thick doublers to inside of motor area against Box-Lok and to Motor plate and against Firewall. Clear these doublers for heads of motor area against Box-Lok and to Motor plate and against Firewall. Finally, cement corner Fairing blocks in place. The fuselage can now be shaped at the nose completely sanded and all formers at rear between stringers undercut.

TOP WING ASSEMBLY PROCEDURE:

The Top Wing has No Dihedral and is built flat on the workbench using 1/4" square strips located as shown on plan under all ribs to insure the wing is built not only flat but with no wash in or wash out. With an Exacto No. 35 saw or Zona Saw prepare all angle cuts on Leading Edges, Trailing Edges and Front and Rear Spars. If you saw in the Angle cuts precisely you can cement the Leading edges and spars together before assembly or cement them together as you proceed. Lay all Ribs into place and cement in Top Spars, Leading Edges and Trailing edges to Ribs. All double ribs should be cemented together first. Cement 1/4" thick rear spar Cap in place and fit 1/4" thick center section T.E. stock to spar cap and end of T.E. Cement in place and cement R2A and R2B pieces in place. When dry taper 1/4" T.E. Stock from Cap to T.E. and cement 1/16" x 1/4" Ply ties to front of all Spars. Turn wing over and cement Bottom Front and Rear Spars in place and 1/16" Ply ties also. Fit and cement all Top and Bottom Leading and Trailing Edge Sheet in place. Note that the sheet butts in the center and stops at the inside rib of the two tip ribs. Also note that the Trailing Edge is 1/16" in from the rear of the sheet. Cement all Cap Strips to top and Bottom of Ribs - make cap strips from sheet (unfinished). Cement Wing Tips in place - center tips from L.E. to T.E. as seen on end view. Fit and cement 1/4" square and 1/8" x 1/4" tip spar extensions. Cement Fillers in place on tips. Sand wing tips on top and bottom and fit and cement tip sheet in place. Now cement the Center Section Sheet to Bottom of Wing. With wing in Up position and laying flat on 1/4" strips to insure that it is Flat, fit and cement all 1/16" vertical Grain Webbing into place and fit and cement top Center Section Sheet on. When dry the complete wing can be sanded, leading edges rounded, tips rounded and the sheet removed from the Two Cut-outs at rear of center section. Round the front of the cutouts and break the edges on the rear of these cutouts.

BOTTOM WING ASSEMBLY PROCEDURE:

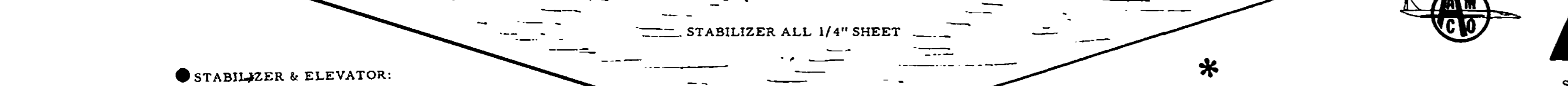
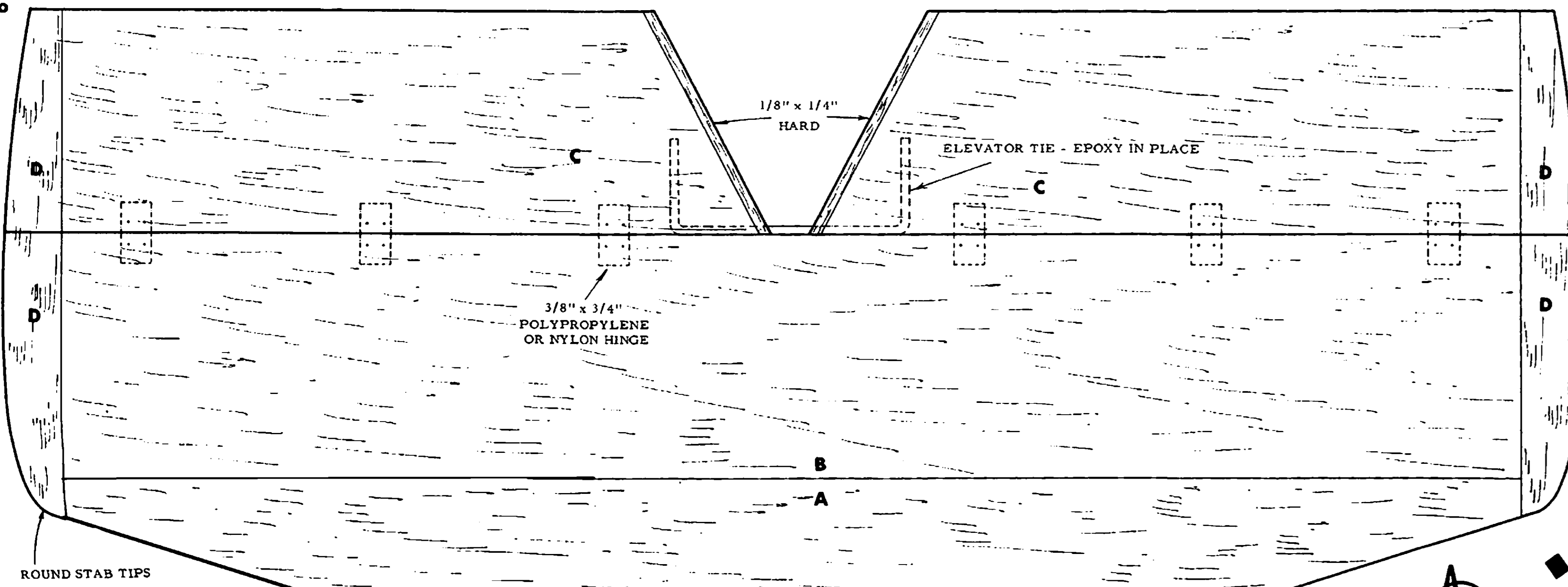
Because of the three degree dihedral in the bottom wing it is built as a left and right panel and joined before sheeting. Use the 1/4" square strips under ribs to keep wing level during construction. Fit all Ribs in place. Cement Leading Edge, Trailing Edge and all the Spars into place. Raise one wing panel at tip rib and join wing at center with 1/16" Plywood Spars ties. Cement Leading and Trailing Edge sheet to Top of Wing only. Turn Wing over and remove rib material for Aileron Cut-Out on Die-Cut lines on ribs R4, R5, and 3 R6 ribs on both left and right wing. From 3/32" material cut, fit and angle cut Rear Spar Cap and Aileron Cap and cement in place. Cement short ribs R3A, R3B and R3C in place. Cement 1/8" plywood Aileron Bed to R3C short ribs. Cement Bellcrank 1/16" ply Bed to slots in Ribs R4 and R5. Cement Leading and Trailing Edge sheet to Bottom of Wing. Fit and cement all 1/16" Vertical Grain Webbing in place. Note: When cementing Webbing in place, do each wing panel separately with wing panel raised on 1/4" strips to keep wing level. Do the Wing tips the same as described on Top Wing instructions. Cement Center Section sheet to top and bottom of wing. Note: all center section sheet is one piece from R4 to R4 in front and R5 to R5 in rear bottom only. Cement all Cap Strips in place. Finish wing as described in Top Wing Instructions. Remove Center section sheet for Servo Bay, cut and remove that portion of RT ribs. Cement 1/16" Ply served in place. Fit and cement S1 and S2 Balsa caps into servo bay. Remove ailerons with Saw and Knife as shown in Photograph. Make cutout for Aileron Push Rod. Remove 1/16" sheet for base of Aileron horn after wing is covered and doped. Prepare and install Aileron and Servo push rods and Bellcrank before covering. Servo is installed after wing is completely done.

FINAL ASSEMBLY NOTES:

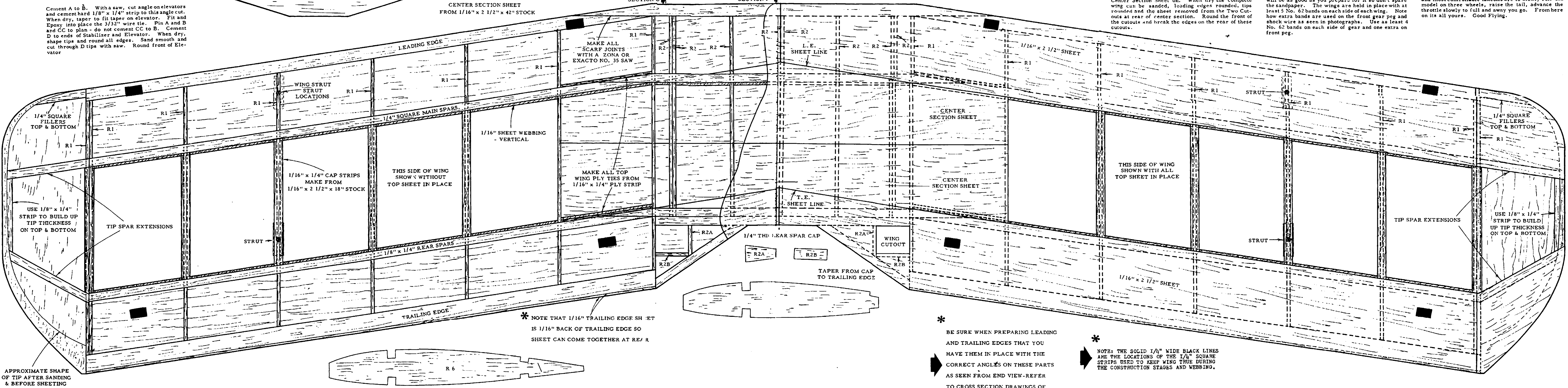
All hinging is done after model is structurally completed or after it is doped. Use method shown on plan. Mount all equipment in model and remove to dope and paint model. The fin and rudder and elevator and stabilizer should be covered with light tissue and the rest of the model with silk. The finish will be as good as you prepare for it so don't spare the sandpaper. The wings are held in place with at least 5 No. 62 bands on each side of each wing. Note how extra bands are used on the front gear peg and shock wire as seen in photographs. Use at least 4 No. 62 bands on each side of gear and one extra on front peg.

FLYING THE 'AEROMASTER' BIPLANE:

Assuming that the model is correctly balanced, wavy free and all servos and surfaces in neutral and everything checked out, read on. The Aeromaster has exceptionally fine ground handling characteristics and does not easily ground loop. The Aeromaster is a very docile and easy to fly model that can also be tossed around and made to perform almost violently if desired. It has a very clean and semi-fast rate of flight speed and the speed is rather constant during maneuvers. The Aeromaster also has a fantastically high glide ratio both in a dead stick approach or low motor approach and has to be slowed down by inducing angle of attack in a three point landing approach. The Aeromaster can be brought up much higher on angle of attack than just mentioned without stalling out if desired. Two wheel landings can be had after first slowing model down with angle of attack and then raising the tail just before touch down. If you have enough room such as at big contests, long low angle of attack approaches can be made with either two or three point landings. The model is extremely stable during landing maneuvers and also very responsive to all control surfaces except rudder. The rudder is most effective during maneuvers such as wing overs, spins, knife edge flight, etc. but a little slower on most other maneuvers and actually you don't ever use rudder except for these maneuvers or to steer the model on the ground if the tail wheel is attached to the rudder. Ailerons are used more than anything for most maneuvers combined with elevator and motor control. If coupled ailerons and rudder are used, allow only about 1/8" movement left or right at end of rudder with full movement of ailerons. If no rudder is used, lock rudder into neutral and steer tail wheel via cable from aileron servo if you wish. On the Aeromaster, the rudder will only yaw the model and not bank it. The amount of movement for good flying is set up by connections of rods to horns as shown on plan. Note that an additional hole is drilled on the aileron horns. Because the Aeromaster is proportioned like the large biplanes, torque from the motor has to be considered especially during takeoffs and landings. If you gun the motor from a standstill or when coming in very slowly the airplane will tend to bank to the left. It is therefore very important to slowly advance the motor speed on takeoff and during landing. The best and most controllable takeoffs are to slowly roll the model on three wheels, raise the tail, advance the throttle slowly to full and away you go. From here on it's all yours. Good Flying.



# 'AEROMASTER' BIPLANE



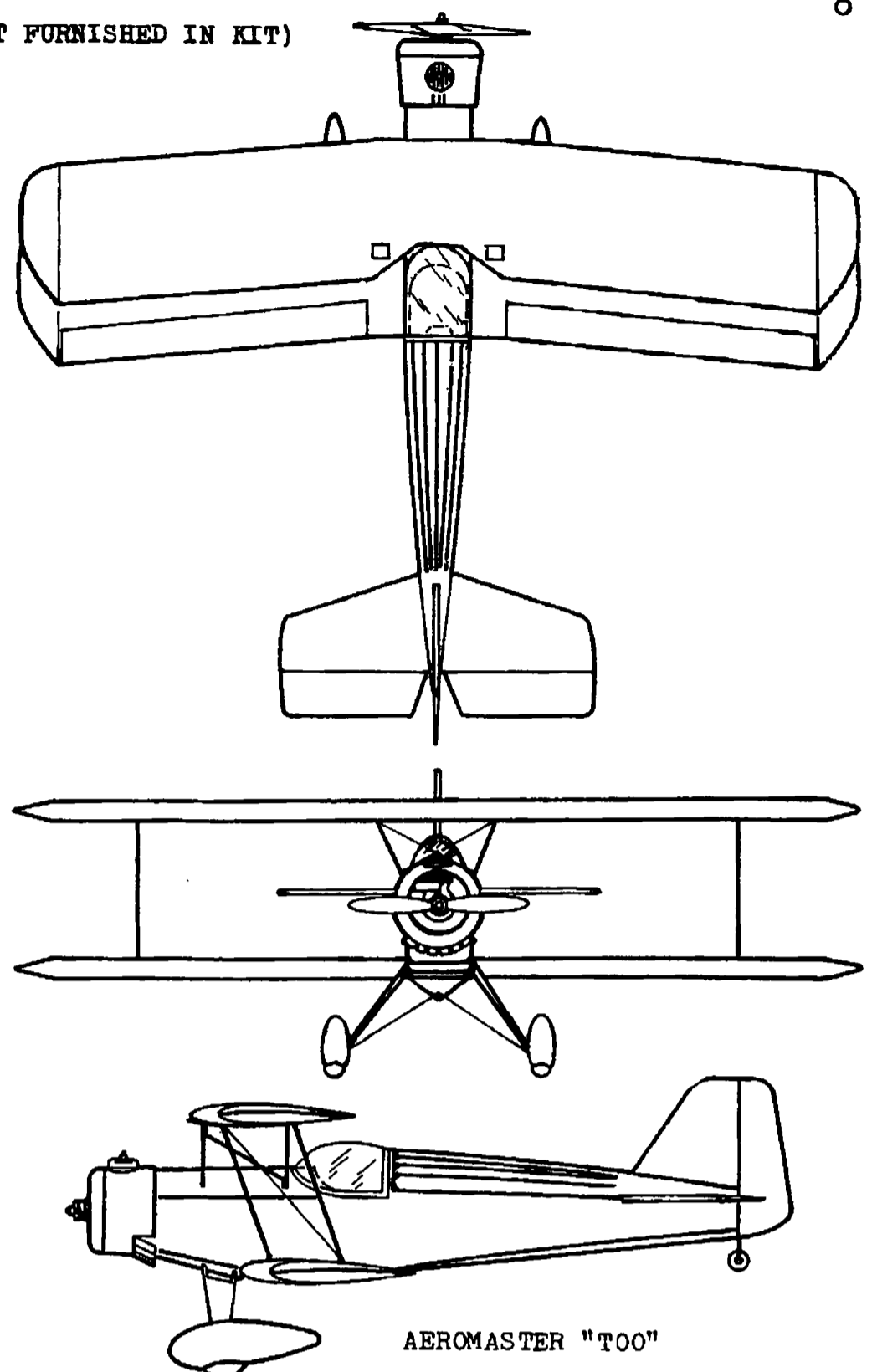
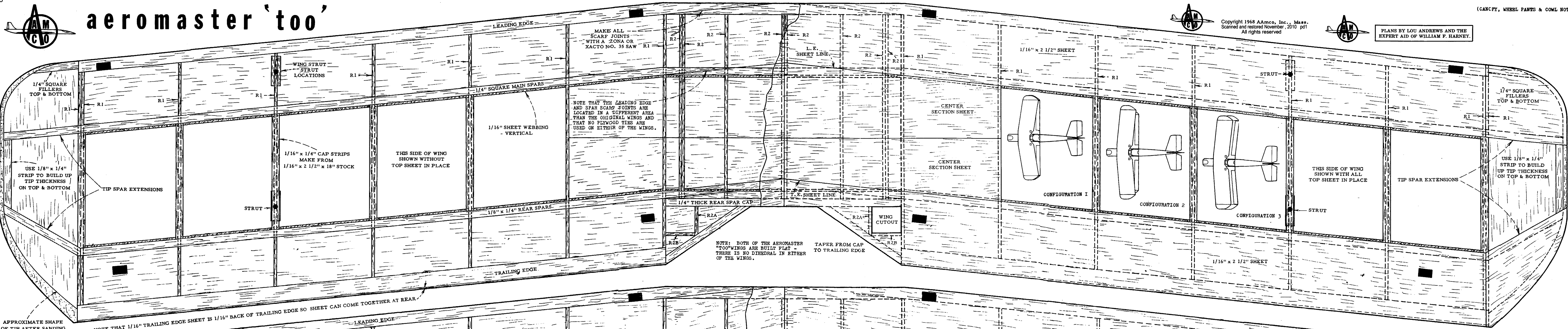
**STABILIZER & ELEVATOR:**  
Cement A to B. With a saw, cut angle on elevators and cement hard 1/8" x 1/4" strip to this angle cut. When dry, taper to fit taper on elevator. Fit and Epoxy into place the 3/32" wire tie. Pin A and B and CC to plan. Do not cement CC to B. Cement D to ends of Stabilizer and Elevator. When dry, shape tips and round all edges. Sand smooth and cut through D tips with saw. Round front of Elevator

APPROXIMATE SHAPE OF TIP AFTER SANDING & BEFORE SHEETING

\* NOTE THAT 1/16" TRAILING EDGE SHEET IS 1/16" BACK OF TRAILING EDGE SO SHEET CAN COME TOGETHER AT REAR

\* BE SURE WHEN PREPARING LEADING AND TRAILING EDGES THAT YOU HAVE THEM IN PLACE WITH THE CORRECT ANGLES ON THESE PARTS AS SEEN FROM END VIEW-REFER TO CROSS SECTION DRAWINGS OF RIB SECTIONS:

\* NOTE: THE SOLID 1/4" WIDE BLACK LINES ARE THE LOCATIONS OF THE 1/4" SQUARE STRIPS USED TO KEEP WING TRUTH DURING THE CONSTRUCTION STAGES AND WEBBING.



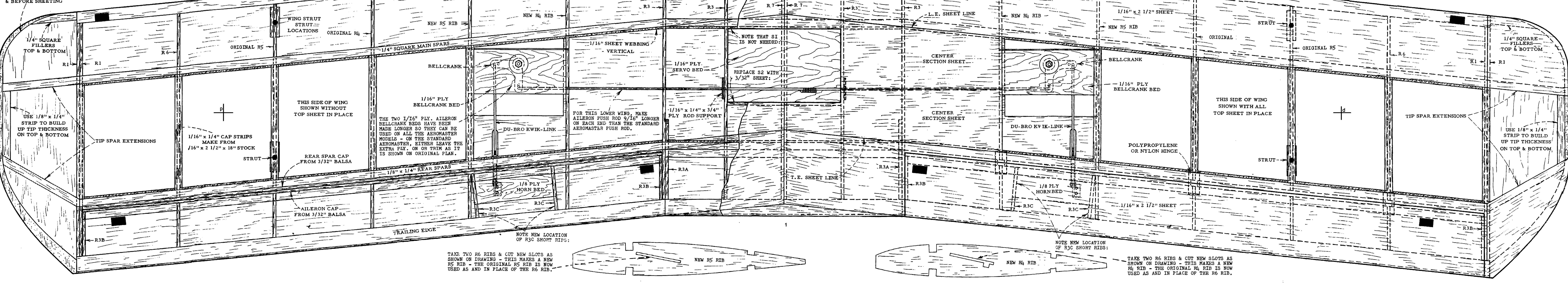
LISTEN TO THIS: THE MOST POPULAR BIPE IN THE HISTORY OF R/C MODELING HAS BEEN UP-DATED.

FIRST: THESE FEW CHANGES AND ADDITIONS ARE BY POPULAR REQUEST FROM MODELERS TO MAKE THE "AEROMASTER" MORE VERSATILE.

SECOND: THESE FEW CHANGES AND ADDITIONS DO NOT AFFECT THE KIT AS IT IS NOW.

THIRD: THE "AEROMASTER" CAN NOW BE BUILT IN THREE CONFIGURATIONS FROM THE SAME KIT AND ALL THE NECESSARY EXTRA MATERIAL, ADDITIONAL WING PLANS AND INSTRUCTIONS ARE INCLUDED IN THE KIT.

FOURTH: THE "AEROMASTER" CAN BE BUILT AS IT IS NOW KNOWN - IT CAN BE BUILT WITH THE TOP WING SPAN INCREASED TO 52" AND AN INCREASE IN AREA OF FROM 814sq. AS IT IS NOW TO 844sq. - AND HERE IS THE SURPRISE - IT CAN NOW ALSO BE BUILT WITH BOTH WINGS SWEPT BACK WITH 52" SPAN ON BOTH WINGS AND TOTAL AREA OF 910sq., AN INCREASE OF OVER 90sq.!"



INSTRUCTIONS FOR THE AEROMASTER "TOO" SWEPT WINGS:

ACTUALLY, ACCEPT FOR THE FACT THAT BOTH WINGS ARE SWEPT BACK, THE CONSTRUCTION OF THESE NEW WINGS IS IDENTICAL TO THE STANDARD "AEROMASTER" WINGS WITH A FEW SIMPLE CHANGES AND ADDITIONS AS FOLLOWS:

SO AS TO KEEP A STRAIGHT LINE AILERON PUSH ROD, YOU HAVE TO SLOT 2 NEW R4 & R5 RIBS THAT ARE MADE FROM R6 RIBS AND AS NOTED ON PLAN, THESE NEW R4 & R5 RIBS REPLACE THE ORIGINAL R4 & R5 RIBS AND THESE SAME REGULAR R4 & R5 RIBS REPLACE THE R6 RIBS USED TO MAKE THE NEW R4 & R5 RIBS.

THE SCARF JOINTS ON THE L.E. AND SPARS ARE IN A DIFFERENT LOCATION AS NOTED ON THE PLAN.

THERE IS NO DIHEDRAL IN EITHER WING - FLAT OUT.

THE SPAR TIES HAVE BEEN ELIMINATED AND THE 1/16" WEBBING ELIMINATES PART S1 IN THE SERVO BAY AND THE S2 PART IN THE SERVO BAY WITH THE DIHEDRAL ANGLE CUT INTO IT IS DISCARDED AND REPLACED WITH A NEW ONE LESS THE DIHEDRAL ANGLE.

THE 2 R7 CENTER RIBS ON THE LOWER WING ARE SHORT TO ALLOW FOR THE PLY. TIES AND WITH THE RIBS LEFT OUT; THE GAPS IN THESE CENTER RIBS HAVE TO BE FILLED WITH SMALL PIECES OF 1/16" Balsa TO FILL THE GAPS.

WHEN USED IN THE NEW SWEPT LOWER WING, THE R3C SHORT RIBS ARE SET INTO A NEW LOCATION AT AN ANGLE TO RECEIVE THE 1/8" PLY. AILERON HORN BED.

THE C.G. ON CONFIGURATION 1 (STANDARD AEROMASTER) REMAINS THE SAME. THE C.G. ON CONFIGURATION 2 (SWEPT TOP 52" WING & 48" STRAIGHT BOTTOM WING) IS 1/8" IN FRONT OF THE REAR CABANE STRUT. THE C.G. FOR CONFIGURATION 3 (DOUBLE SWEPT 52" WINGS - 1/8" IN FRONT OF THE REAR CABANE STRUT.