

**DANGER! Important: Read These Warnings:**

Do not fly control line or towline models within 300 feet of electric power lines. Instant death from electrocution can result from coming near them. Direct contact is not necessary.

A model airplane motor gets very hot and can cause serious burns. Do not touch the motor during or after operation. Keep clear of the propeller. It can cut off a finger or put out an eye. Make sure the propeller is securely fastened in place and is not cracked. Model airplane fuel is flammable and poisonous. Take the same precautions while transporting and using it that you would with a can of gasoline or a bottle of poison.

Remember that it is possible to lose control of a model airplane. Do not fly in locations where the model may hit people or damage property if loss of control occurs. Check your model and equipment regularly to insure it is in safe operating condition.

**ABOUT Balsa Wood:**

We do our best to get a good grade of balsa in our kits as the supply situation permits. The worldwide shortage of balsa wood has led to a general increase in price and a decrease in quality to obtain as high an average quality as used to be the case.

Every piece of balsa supplied cannot be 100% perfect or of even wood but we do our best to provide the best material available. Small knots or small voids do not affect wood strength. Even with the very best grades of balsa, there is a natural tendency for some sticks or sheets to warp slightly from top to bottom, cut off from a perfectly square block because of built-in stresses. In most cases, these stresses will be relieved during assembly. If you find the edges of your balsa sheets by trimming, using a metal straightedge.

TOP FUSELAGE SHEET MAKE BY USING 2 SHEETS OF 1/8" x 3" x 36" AND ONE 1/8" x 1" x 36". GLUE INTO ONE SHEET.

\* WEBRA 61 GOLDBERG SPINNER 2"

3/8" x 3/4" x 6" MOTOR MOUNT STOCK NOTCH LEFT RAIL TO FIT F-1

IN SEVERAL PLACES TWO TYPES OF GEAR INSTALLATION ARE SHOWN AT THE SAME TIME TO SAVE SPACE. CALL TO YOUR ATTENTION ARE: THE SIG NOSE GEAR BLOCK, MAIN LANDING GEAR BLOCKS, GOLDBERG RETRACT UNITS.

5/32" WIRE NOSE GEAR CAN BE ADJUSTED FOR DESIRED HEIGHT. SAME WIRE IS USED IN THE GOLDBERG UNIT, SHORTENED AS REQUIRED.

**Bonanza**  
KIT RC-41

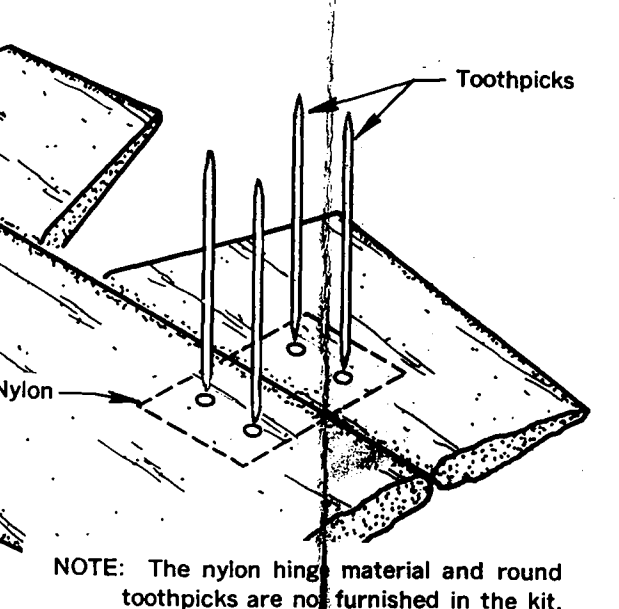
GLUE INTO ONE SHEET FOR FUSELAGE BOTTOM

\* BUILDING MATERIALS FOR THE GOLDBERG RETRACT INSTALLATION ARE NOT SUPPLIED IN THE KIT. (SERVO ACCESS HATCH, RETRACT MOUNTING ETC.) THE DETAIL DRAWINGS ARE SHOWN AS INSTALLED IN PROTO TYPE MODEL TO AID THE BUILDER IF A RETRACT MODEL IS BEING BUILT.

NOTE: THE PLAN PAPER CAN SHRINK OR EXPAND WITH HUMIDITY AND TEMPERATURE CHANGES, SOMETIMES AS MUCH AS 1/4". THE ORIGINAL DRAWINGS WERE DRAWN ON STABLE MYLAR FILM AND ALL THE PART PATTERNS WERE CHECKED AGAINST THEM. THEREFORE THE PARTS SHOULD ALL FIT TO EACH OTHER WITHOUT MUCH MISMATCH. ANY SMALL VARIATION OF THE PLAN DRAWING FROM THE PART THAT MAY BE NOTICED WILL NOT CAUSE SERIOUS DIFFICULTY DURING ASSEMBLY BECAUSE THE VARIATION WILL BE SMALL IN ANY ONE AREA OF THE PLAN.

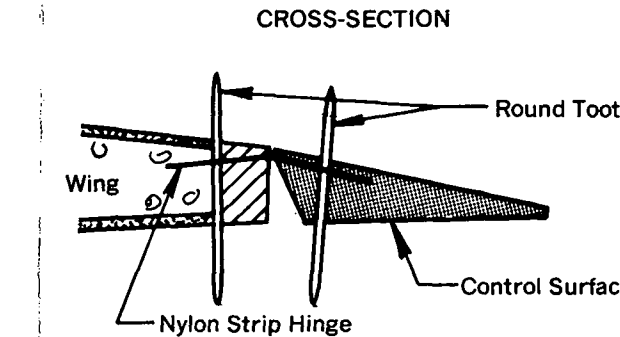
RIB AND FORMER PATTERNS ARE SHOWN ON THE PLAN AND IN THE BOOK FOR THE CONVENIENCE OF THE KIT BUILDER IF REPAIRS SHOULD BE NECESSARY.

CAUTION  
AN EXTRA QUANTITY OF TAIL WILL REQUIRE SEVERAL OUNCES IN THE NOSE. BE SURE AND CARVE THE TAIL DOWN TO THE INDICATED AIRFOIL SHAPES SO THERE WILL NOT BE EXCESS WOOD WEIGHT. GO EASY ON THE FILLER COAT AND PAINT ON THE TAIL SINCE THIS CAN ADD EXTRA WEIGHT.



REMOVE all shine with 220 Grit sandpaper on the inside of the cabin to prepare the surface for glue. The mating surface for an 1/8" to 3/16" around the edge of the clear windows should also be prepared by scuffing with 220. This light scuffing of both ABS and clear will aid in bonding these materials. The 1/8" to 3/16" fuselage (cabin) should also be sanded to aid bonding to balsa fuselage. Hot Stuff is recommended for bonding ABS to balsa. Hot Stuff, M.E.K., and Sig-Model Cement for bonding to balsa.

OIL PROOF YOUR MODEL!  
One of the most destructive things that can happen to a model is allowing engine oil to soak into bare, untreated balsa or plywood. It will cause glue joints to loosen and results in a steady increase in weight. An oil soaked model cannot be properly repaired or repainted after a crack-up, since glue and finish will not hold. Cover all wood parts of the model and put on enough coats of finish so that oil cannot soak in. Don't leave any exposed wood on the outside. Around the nose and engine compartment, apply extra effort at oil proofing. Coating the firewall and front joints with epoxy glue is best, but several extra coats of dope or paint will also do the job. Take special care during building to use plenty of epoxy glue to attach the firewall and coat the back of the firewall and the firewall braces with the glue. Fill any cracks with epoxy.



NOTE: The nylon hinge material and round toothpicks are not furnished in the kit.

LIMIT OF LIABILITY  
In use of our products, Sig Manufacturing Co.'s only obligation shall be to replace such quantity of the product proven to be defective. User shall determine the suitability of the product for his or her intended use and shall assume all risk and liability in connection therewith.

AN ASTERISK \* INDICATES AN ITEM NOT FURNISHED IN THE KIT. IF THE SUGGESTED BRAND NAME IS NOT AVAILABLE, AN EQUIVALENT PRODUCT MAY BE SUBSTITUTED.

PLAN SHEET 1 OF 2

**BEECHCRAFT** *Bonanza* **E33A**  
Designed By HANK POHLMANN

RC SPORT SCALE KIT RC-41 RC SPORT FLYING

WING SPAN: 64" ENGINE SIZE: 60 Cu. In.

WING AREA: APPROX. 653 Sq. In. LENGTH: 44"

WEIGHT: APPROX. 7-1/2 Lbs. APPROX. 8-1/2 Lbs. WITH RETRACTS

Drawn By HANK POHLMANN And DARRYL THOEM

Sig Manufacturing Co., Inc. . . . Montezuma, Iowa 50171 U.S.A.

**SIG**  
CRAFTSMAN'S KIT

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IN ANY CONFLICT BETWEEN THE PLAN AND THE BOOKLET, FOLLOW THE BOOKLET INSTRUCTIONS. THEY ARE REVISED MORE FREQUENTLY THAN THE PLAN.



**HINGING HINTS**

- 1) Use one strip of glue for hinge installation. The glue should be applied to the back of the hinge and to the surface of the fuselage. Have the same side down on all 3 hinges.
- 2) The hinges have a flat end and a curved end. The flat end should be towards the fuselage. The curved end should be towards the wing. The hinges should be spaced evenly along the fuselage.
- 3) The hinges should be spaced evenly along the fuselage. The hinges should be spaced evenly along the fuselage.
- 4) Use plenty of glue. The glue should be applied to the back of the hinge and to the surface of the fuselage. The glue should be applied to the back of the hinge and to the surface of the fuselage.
- 5) Let the glue set up for 15 minutes. During this time the glue will harden and the hinges will be firmly attached to the fuselage.

**MAKING A HINGE SLOT**

DRILL TWO 1/8" DIA. HOLES INTO THE WOOD

CUT BETWEEN THE HOLES WITH A HOOKING KNIFE

USE EPOXY GLUE TO FASTEN THE HINGE IN THE SLOT

NOTE: AN EPOXY RESIN CAN BE USED FOR CUTTING HINGE SLOTS

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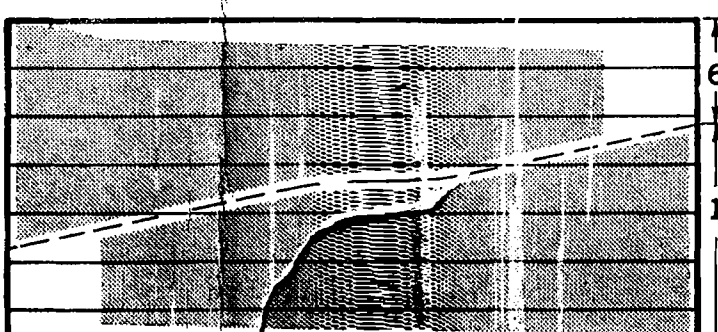
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**Bonanza**  
KIT RC-41  
WING SKIN LAYOUT  
NOTE: LOCAL SHADING AREAS



MAKE THE TWO LEADING EDGES BY CUTTING THE 1/2\"/>

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**SIG CRAFTSMAN'S KIT**

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**BONDING ABS**  
Remove all shine with 220 Grit sandpaper on the inside of the cabin to prepare the surface for glue. The mating surface for an 1/8\"/>

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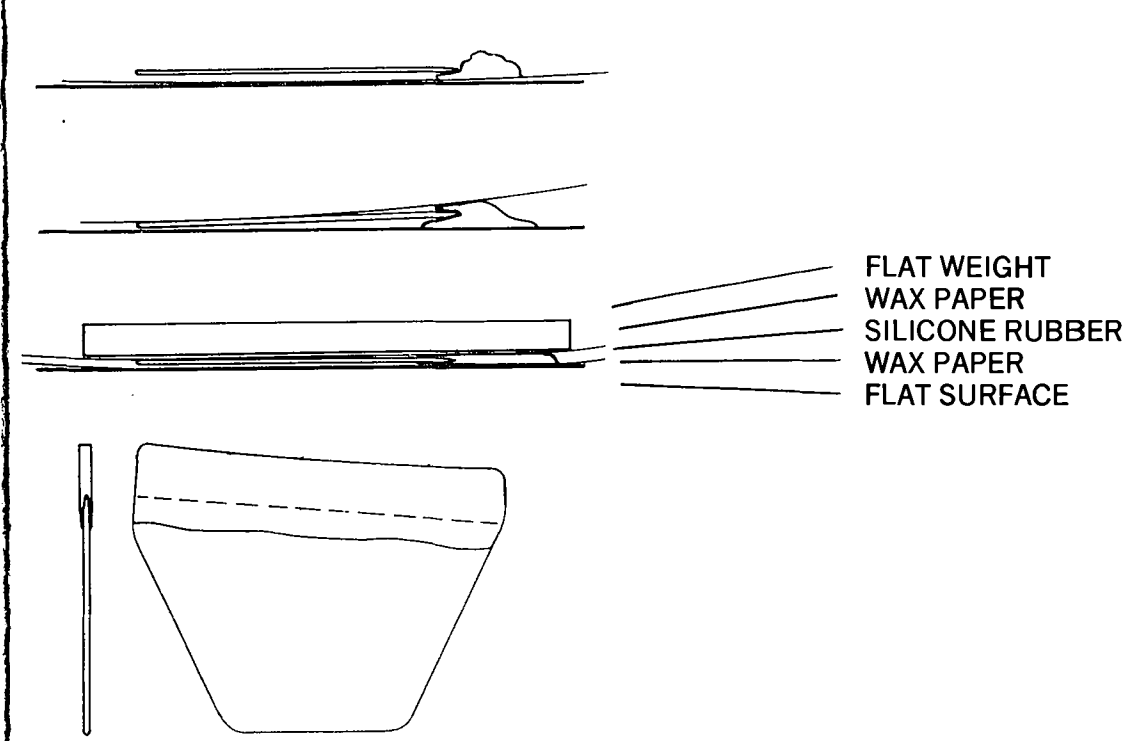
**NOTE: RADIO, SERVOS, RETRACTS, ENGINE, MANIFOLD, SPINNER, ETC. ARE SHOWN AS SET UP IN THE PROTO TYPE. LOCATIONS FOR OTHER TYPES OF EQUIPMENT CAN BE DETERMINED BY BUILDER. THE FULL SIZE BULKHEAD DRAWINGS ARE PROVIDED FOR THIS PURPOSE.**

**NOTE: THE PLAN PAPER CAN SHRINK OR EXPAND WITH HUMIDITY AND TEMPERATURE CHANGES, SOMETIMES AS MUCH AS 1/4\"/>**

**WARNING-DANGER!**

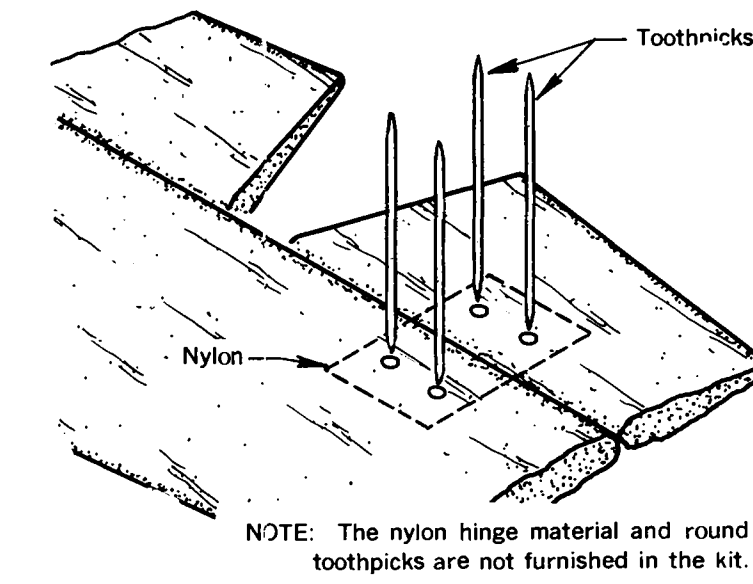
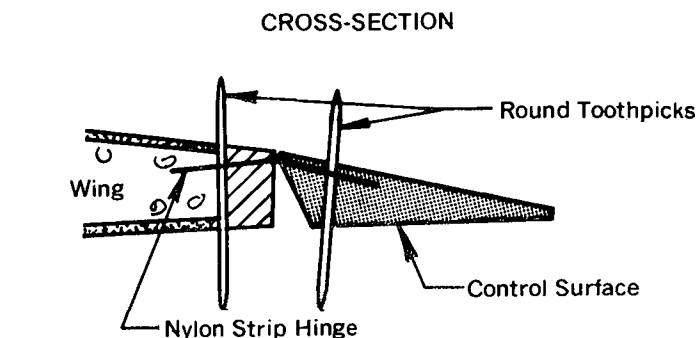
DO NOT FLY MODEL AIRPLANES NEAR ELECTRIC POWER LINES. INSTANT DEATH CAN RESULT FROM CONTACT WITH, OR FLYING TOO CLOSE TO, ELECTRIC POWER LINES.

**MAKING THE LANDING GEAR DOORS**

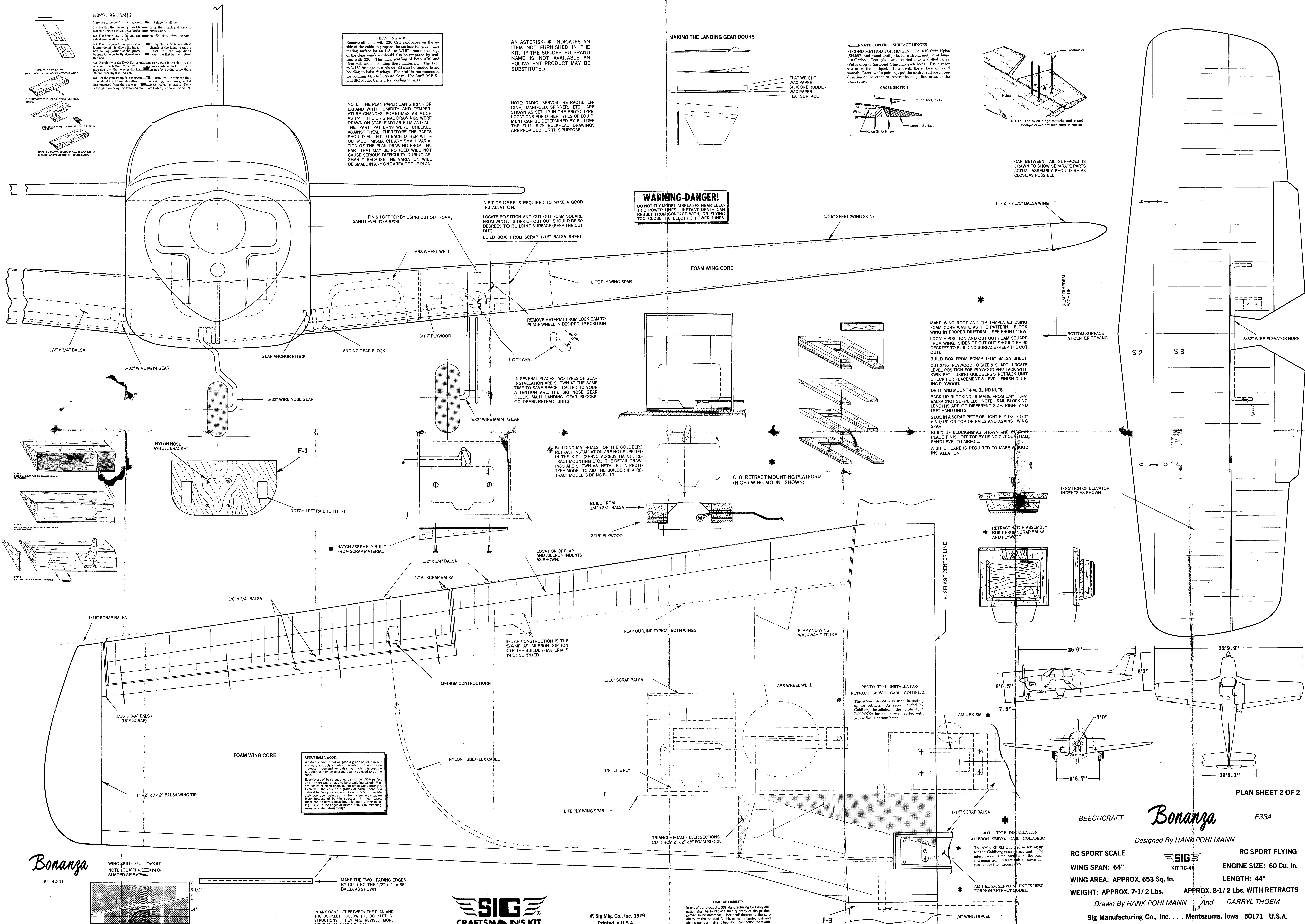


**ALTERNATE CONTROL SURFACE HINGES**

**SECOND METHOD FOR HINGES:** Use #10 Strip Nylon (#8257) and round toothpicks for a strong method of hinge installation. Toothpicks are inserted into 4 drilled holes. (Put a drop of Sig-Bond Glue into each hole). Use a razor saw to cut the toothpick off flush with the surface and sand smooth. Later, while painting, put the control surface in one direction or the other to expose the hinge line areas to the paint spray.



GAP BETWEEN TAIL SURFACES IS DRAWN TO SHOW SEPARATE PARTS. ACTUAL ASSEMBLY SHOULD BE AS CLOSE AS POSSIBLE.



MAKE WING ROOT AND TIP TEMPLATES USING FOAM CORE WASTE AS THE PATTERN. BLOCK WING IN PROPER DIHEDRAL. SEE FRONT VIEW. LOCATE POSITION AND CUT OUT FOAM SQUARE FROM WING. SIDES OF CUT OUT SHOULD BE 90 DEGREES TO BUILDING SURFACE (KEEP THE CUT OUT).

BUILD UP BLOCKING AS SHOWN AND PLACE FINISH TOP BY USING CUT OUT FOAM, SAND LEVEL TO AIRFOIL. A BIT OF CARE IS REQUIRED TO MAKE A GOOD INSTALLATION.

PROTO TYPE INSTALLATION RETRACT SERVO, CARL GOLDBERG  
The AM-4 EK-SM was used in setting up for retracts. As recommended by Goldberg installation, the proto type BONANZA has this servo inverted with access thru a bottom hatch.

PROTO TYPE INSTALLATION ALERON SERVO, CARL GOLDBERG  
The AM-3 EK-SM was used in setting up for the Goldberg nose retract unit. The aileron servo is mounted so the pushrod going from retract unit to servo can pass under the aileron servo.

AM-4 EK-SM SERVO MOUNT IS USED FOR NON-RETRACT MODEL.

**BEECHCRAFT Bonanza E33A**  
Designed By HANK POHLMANN  
RC SPORT SCALE  
WING SPAN: 64"  
WING AREA: APPROX. 653 Sq. In.  
WEIGHT: APPROX. 7-1/2 Lbs.  
RC SPORT FLYING  
ENGINE SIZE: 60 Cu. In.  
LENGTH: 44"  
APPROX. 8-1/2 Lbs. WITH RETRACTS  
Drawn By HANK POHLMANN And DARRYL THOEM  
Sig Manufacturing Co., Inc. . . . Montezuma, Iowa 50171 U.S.A.