# THE "B/G SPECIAL"

WINNER 1940 WEST COAST CHAMPIONSHIP
CLASS C RUBBER POWER CABIN

DESIGNED BY STUART G. BENNETT
DRAWN BY " " "

4 FOR BLUE AND GOLD, CALIF. STATE COLORS.

NOTE: S.A.M. APPROVED FOR OUTDOOR CABIN COMPETITION 7-30-87

UNDER 1939 RULES CROSS SECTION IS 10.23 SQ. IN.
" " " WEIGHT MUST BE 4.4 OZ.
WING AREA IS 147 SQ IN.

PLAN COURTESY OF OAKLAND CLOUD DUSTERS
ALL RIGHTS RESERVED

½ SCALE

CROSS SECTION AT [A]

FOR FOLDING VERSION, ELIMINATE GARLMI STOP. BEND SHEET TO FIT INTO STOP HOLE DRILLED INTO TIN CAN METAL FRONT PLATE

[B]

COMMERCIAL BUSHING OR 3/32" BRASS TUBING SOLDERED TO A 5/16" STEEL WASHER.

BIRD WITH COPPER WIRE AND SOLDER SOLDER

.0625

SOLDER

TIN CAN METAL BACKPLATE WITH STOP PIN

JASCO BALL BEARING

GARAMI STOP

.028 WIRE FRONT HOOK

LANDING GEAR MOUNTING AS AT [C]

DRILL TWO 3/16" HOLES ON EACH SIDE OF LONGERON FOR REAR WING MOUNT. LOOP RUBBER BAND THROUGH AND FORWARD TO FRONT HOOK.

1/8 IN SQ. LONGERONS

DRESS SNAPS FOR MOUNTING WING FAIRING PIECE.

OUTLINE OF WING MOUNT PLATFORM CUT FROM 3/32" BALSA

GRAIN

.028 WIRE REAR MOUNT REINFORCEMENT

1/16 x 1/8 CROSS BRACES EXCEPT WHERE NOTED

3/32 BALSA GUSSETS

1/32 BALSA SHEET FILL

1/16 x 1/8 BAMBOO PEG (ORIGINAL) 1/16 SHEET

TISSUE FILLET BETWEEN RUDDER AND STABILIZER, INBOARD RIBS.

1/8" THICK

1/8" SQ.

3/32" THICK

3/32 IN. SHEET BALSA SANDED SYMMETRICAL AIRFOIL

GRAIN

2 @ 1/16 x 1/8" LAMINATED

1/32 BALSA SHEET FILL

1/16 x 1/4

.0625 WIRE

SOLDER

3/16 BRASS TUBING

.0325 PIANO WIRE HOOKS

FOLDER ON 1940 REVISED VERSION. 1939 ORIGINAL HAD 15" FREE WHEELING PROP. WITH TENSIONER STOP.

(SEE DIAGRAM [B])

ALL FOLDING PROP. PARTS CUT FROM TIN CAN METAL

PANEL #2

2 PIECES 1/16 x 1/16 LAMINATED

1/8 SQ.

1/8 BALSA LANDING GEAR MOUNT

1/16" MUSIC WIRE (.0625)

PANEL #12

PANEL #13

PANEL #14

1/8 SQ.

MATCH CURVE OF PLATFORM

FRONT WING FAIRING PIECE: CUT FROM BALSA SCRAP.

CHANNEL FOR WING-HOLDING RUBBER BANDS. FITS OVER FRONT HOOK.

COLOR SCHEME: ORIGINAL MODEL WAS ALL YELLOW JAPANESE TISSUE WITH WING, STAB. AND FUSELAGE STRIPED IN DARK BLUE. ALL SUBSEQUENT MODELS HAVE HAD DARK BLUE FUSELAGE COVERING TO IMPROVE VISIBILITY AND REDUCE VISIBLE LUBE SPLATTER, WITH YELLOW BALDING AT PANELS #2 AND #12, 13, 14.

ALUM. WIRE SKID

3½"

2¼"

¾"

ON ONE SIDE ONLY, CUT ½ WAY THROUGH LONGERON AT ARROWS AND BUILD STRAIGHT (SEE DOTTED LINES). USE THIS LONGERON FOR FUSELAGE TOP, WHERE WING MOUNT IS GIVEN.

TRIM: ADJUST WING AND STAB. INCIDENCE AND WARP RUDDER FOR A FLAT LEFT GLIDE. ADD RIGHT AND DOWNTHRUST AS NEEDED FOR A STEEP RIGHT SPIRAL CLIMB. GLIDE IS FAST BUT FLAT AND MODEL IS QUITE STABLE AND THERMAL SENSITIVE.

MOTOR: MODEL CAN BE FLOWN ON LESS BUT FOR FULL CLIMB USE 12 STRANDS OF 3/16" x .042 RUBBER, 24" LONG.

1/16" PLYWOOD WITH 1/16 PLY HUBS.

WING CONSTRUCTION: PIN DOWN LEADING EDGE, LOWER TRAILING EDGE AND TIPS. GLUE IN BOTTOM CAP STRIPS. PIN IN PLACE AND GLUE PRE-ASSEMBLED BOX SPAR, GLUE RIBS IN PLACE THEN GLUE TRAILING EDGE TOP IN PLACE AND ADD TOP CAP STRIPS. GLUE IN TIP DIAGONALS, GUSSETS AND CENTER SHEETING. LET SET, REMOVE AND SAND LEAD.

NO CAP STRIPS ON TOP

¼" SHEET 3/32 COVER TOP

BUILD UP BOX SPAR ON BOTTOM 1/32 IN 1ST BAY

REL TO SUPPORT WING ON PLATFORM

⅛" GUSSETS

LEADING EDGE 1/8 x 3/16

TYPICAL RIB-SPAR JOINT

TYPICAL TRAILING EDGE 1/32 x 5/8

SEE AT [D]

TYPICAL BOX SPAR CROSS SEC.

1/8 x 1/16 SIDES
1/32 x 1/2 TOP & BASE

TYPICAL RIB CROSS SECTION

1/32 RIB
1/8 x 1/32 CAP STRIP TOP AND BOTTOM

⅛" GUSSETS

3/32

1/16"D

ELEVATE TIP 1/32" TO MAKE FLUSH JOINT WITH BOX SPAR.

CUT TIP R.S. SHORT AT T.E. AND SAND TO SHAPE AFTER GLUING.

CUT TONGUE AT RUDDER TIP AND INSERT INTO T.E.

STABILIZER RIBSECTION, CUT TEN:

3/32 x 1/2

BOX SPAR 1/16 x 1/8 SIDES 1/32 x 3/16 TOP & BASE

1/32 RIBS

CUT TIP RIBS SHORT AT T.E. AND SAND TO SHAPE AFTER GLUING

3/32

1/16"D

WING SECTION: USE INSIDE LINE FOR TEMPLATE. CUT 24 @ 1/32" " 30 @ 1/16" FOR JOINTS

[D]