1/32" SHEET (TOP ONLY)

1/32" SHEET (COVER CENTER SECTION TOP AND BOTTOM)

1/16" HARDWOOD DOWELS (2 REQ). INSTALL THRU LEADING EDGE AND CEMENT SECURELY.

3/16" SQ. HARD BALSA LEADING EDGE (SAND TO ROUNDED SHAPE)

7/16 X 9/16 IN. SOFT BALSA TIPS (SAND TO SHAPE AFTER INSTAL.)

MAKE BELLCRANK FROM STANDARD NYLON BELLCRANK

BELLCRANK INSTAL. (TYPICAL BOTH SIDES)

1/8 X 1/4" BALSA SPAR

1/16" AILERON ROD EXITS (2 REQ)

1/32" WIRE PUSHRODS

1/32 X 1/8" CAP STRIP (2 REQ)

AILERON SERVO CE-9(REV.)

1/32" SHEET B'TTOM ONLY

CONNECT PUSH RODS WITH SOLDER OR "HOT STUFF", THREAD AND BAKING SODA

SPARS 1/8 X 7/32" HARD BALSA OR SPRUCE

DOWEL PIVOT

1/8" HARD BALSA BELLCRANK PLATE

BALANCE POINT (3° NOSE DOWN)

MOUNT SERVO WITH SERVO TAPE

1/32" SHEET TOP AND BOTTOM

BIND WITH THREAD (4 PLACES). CEMENT WITH HOT STUFF & BAKING SODA

1/16" GUSSETS (32 REQUIRED)

(LAMINATE)

(LAMINATE)

BLOCK BOTH TRAILING EDGES UP 5/32" AT RIB G TO OBTAIN WASH-OUT (VERY IMPORTANT)

AILERONS 7/32 X 21/32" TAPERED TRAILING EDGE STOCK

GOLDBERG 1/2A AILERON HORNS

5/32 X 1/2" HARD BALSA TAPERED TRAILING EDGE

USE CHARLIE'S AIR-FLO HINGES ON AILERONS ALSO

CUT BOTH SIDES AT BULKHEAD A AFTER BUILDING WING FLAT ON PLANS. ADD DIHEDRAL BRACES, BLOCK BOTH TIPS UP 3/4". ADD GUSSETS. CEMENT CENTER SECTION JOINTS THOROUGHLY WITH SODA & HOT STUFF.

ALL RIBS 1/16" MED. BALSA

(MAKE 2) HALF-RIB AA — FULL RIB A (MAKE 2)

RIB B (MAKE 6)

RIB C (MAKE 2)

RIB D (MAKE 2)

RIB E (MAKE 2)

RIB F (MAKE 2)

RIB G (MAKE 2)

(1/16" BALSA) BULKHEAD (1/32" BALSA) R S MAKE 4 MAKE 3

ENGINE BLOCK EB (3/16" HARD BALSA)

HOLES FOR NO. 2 SCREWS

FIREWALL H (1/16" PLY) MAKE 1

DRILL HOLES FOR NO. 2 SCREWS

MAKE 1 BULKHEAD J (1/16" PLY)

BULKHEAD K (1/16" PLY) MAKE 1

BULKHEAD L (1/16" PLY) MAKE 1

BULKHEAD M (1/16" BALSA) MAKE 1

BULKH'D N (1/16" BALSA) MAKE 1

BULKHEAD P (1/16" BALSA) MAKE 1

BULKHEAD Q (1/16" BALSA) MAKE 1

USE HARD BALSA FOR BULKHEADS M THRU Q

FORWARD (TOP VIEW)

OUTBOARD →

MATERIAL: 1/16" MUSIC WIRE (REAR VIEW)

VERTICAL STABILIZER, RUDDER, HORIZONTAL STAB. AND ELEVATORS 1/16" HARD BALSA

STABILIZER FILLET

STABILIZER FILLET

MAKE HORIZONTAL STABILIZER IN ONE PIECE

FORWARD

RIGHT LANDING GEAR SHOWN. BEND LEFT GEAR OPPOSITE.

DOUBLERS

HARDWOOD HATCH BLOCK

EB-TAPER FOR 3° RIGHT THRUST, NO DOWN THRUST

TRIANGULAR CORNER BRACES(7 PLACES)

HATCH TOP - 1/32" HARD SHEET BALSA CURVED TO FIT

DOUBLERS EXTEND TO BULKHEAD L

TRIANGULAR CORNER BRACES (7 PLACES)

RUDDER-NOSE GEAR PUSHRODS

CEMENT SAME AS FOR AILERONS

TO RUDDER

TO NOSE GEAR

1/32" MUSIC WIRE

THREAD, BAKING SODA & HOT STUFF ON ALL PUSH ROD JOINTS

ELEV. PUSH ROD 1/16" HARD-WOOD DOWEL, 9-1/2" LG.

RUDDER PUSH ROD 1/16" DOWEL, 7-7/8" LG.

AILERON PUSHRODS

TO LEFT AILERON

TO RIGHT AILERON

BIND WITH THREAD. CEMENT WITH HOT STUFF AND BAKING SODA

3/32" HARDWOOD DOWEL FLAT ONE SIDE (2 REQ) CEMENT TO UNDERSIDE OF BOTH STABS

1/16" HARDWOOD DOWEL (ONE PIECE; CEMENT TO BOTH ELEVATORS BEFORE HINGING)

CE-9 (STD.)

FOAM

100 MAH BATTERY

FOAM

4 CH. SUPER-MICRO RX.

CE-9 (STD.)

CE-9 (REV.)

ENGINE COWL - MAKE FROM 3 PIECES OF 1/4" SOFT BALSA SHEET. SAND TO SHAPE

DIHEDRAL BRACE 1/16" PLY (MAKE 2)

WING DIHEDRAL 3/4"

THROTTLE ROD 1/32" WIRE

HATCH SPAR 3/32 X 3/16"

NYLON HOLD-DOWN SCREW

MODIFIED SIG CS-007 7" CANOPY

HARDWOOD BLOCK

MOTOR SERVO CE-9(STD)

FOAM

4 CH. SUPER-MICRO RX.

HARDWOOD WING HOLD-DOWN BLOCK. DRILL AND TAP FOR NYLON WING SCREW

DU-BRO 1/2A STEERABLE NOSE GEAR

AILERON TRAY (3 REQ) CEMENT TO FUSELAGE

1-1/16" HARDWOOD DOWELS. CEMENT FIRMLY INTO WING LEADING EDGE

NYLON WING SCREW

ANTENNA WIRE (ALLOW END TO TRAIL)

INSERT STIFFENERS (1/16" BALSA)

CHARLIE'S 1" AIR-FLO HINGES ON RUDDER AND ELEVATORS (TRIM TO SIZE NEEDED)

G-MARK .03 R/C ENGINE

1 INCH SPINNER

TIE KNOT IN ANTENNA WIRE

VERTICAL STABILIZER OUTLINE

STABILIZER HAS 1/16" NEGATIVE INCIDENCE

TAILCONE (SOFT BALSA)

ON-OFF SWITCH

DOUBLERS EXTEND FROM REAR OF FIREWALL H TO FRONT OF BULK-HEAD L

CUT FUSELAGE SIDES TO THESE LINES

1/32" MED. BALSA (CROSSGRAIN) (WING SEAT)

HORIZONTAL STAB. PLATFORM

GOLDBERG 1/2A CONTROL HORNS USED THROUGHOUT

FUSELAGE BOTTOM 1/16" MED. BALSA (CROSSGRAIN)

TRIANGULAR CORNER BRACES (7 PLACES)

TURTLEBACK SIDES 1/16" SOFT BALSA (MAKE 2)

4-1/2 X 2" PROPELLER

FIREWALL H

WING FAIRING - MAKE FROM 3 PIECES OF 1/32" SHEET OR BLOCK OF SOFT BALSA. CEMENT TO UNDERSIDE OF WING

.091" WIRE

.062" WIRE

SECURE WHEELS WITH COLLARS OR SPRING RETAINERS

1-1/4" LIGHTWEIGHT WHEELS (FOX OR BANNER)

TURTLEBACK TOP 1/16" SOFT BALSA (MAKE 1)

STAB. FILLET 1/16" SOFT BALSA

MAKE 1 WITH HOLE, 1 WITHOUT

RUDDER SLOTS

HORIZONTAL STAB. PLATFORM 1/16" MED. BALSA (MAKE 1)

COPYRIGHT 1 APRIL 1982

GENERAL ASSEMBLY NOTES

1. Keep airframe as light as possible. 2. Read instructions and plans carefully before starting. 3. Select materials carefully; minimal weight means maximum performance. 4. Use Hot Stuff & Baking Soda for highest strength & lightest weight.

AIRFRAME ASSEMBLY

1. Make light cardboard patterns for all parts needed. 2. Cut parts from materials indicated. Fuselage sides extend entire length; doublers extend rear of firewall to front of bulkhead L, cut to fit each side of bulkhead K. Cut slots in horiz. stab platform and horiz. stab. to match tabs on vertical stab. 3. Cement doublers to inside of L&R fuselage sides. 4. Cement fuselage sides to firewall H and bulkhead L. Check for square. Install remaining bulkheads, fuse bottom, wing seat, corner braces, stab platform & tail cone. Keep everything true. 5. Cement elevators to 1/16" hardwood dowel. Add hinges, cement vertical & horizontal stab to stab platform; vertical stab & rudder provide alignment. 6. Install servos in fuselage , add pushrods, controls, to rudder & elev., close rear of fuselage with turtleback & fillets. 7. Attach nose gear & engine with No. 2 screws, lock washers & nuts. Add control pushrods, engine cowl, etc. After shaping cowl, hollow out interior to reduce weight. 8. Assemble hatch bulkheads R&S to 3/32 x 3/16" hatch spar. Soak 1/32" balsa hatch top in 10% ammonia water for a few minutes, dry, bend over hatch frame until fully dry. Cement in place, trim to fit. 9. Place wing components in place. Block up rib G trailing edge 5/32" for wash out. Do not install ribs AA or gussets on outer side of ribs A until after dihedral is installed. Cement parts in place. 10. Cut leading edge, spars and trailing edge outside of ribs A, bevel parts to fit, block both tips up 3/4" after installing dihedral braces. Cement parts in place, add ribs AA and gussets. 11. After dry, cover center section with 1/32" sheet. Fabricate 1/16" landing gear, attach & cement to wing. Add 1/32" leading edge sheet. 12. Install control servo, pushrods, horns, etc. 13. Cover wing with silkspan or covering of your choice. 14. Finish Model as you desire. Make certain model balances at point shown. IMPORTANT! 15. If built true, weight 12.5 oz. or less, plane should fly beautifully as designed!

WING AREA 120 SQUARE INCHES

WING SPAN 28 INCHES

WEIGHT 11.5 OUNCES

MODEL BUILDER magazine
621 West 19th St., Costa Mesa, CA 92627
Plan No: 12821