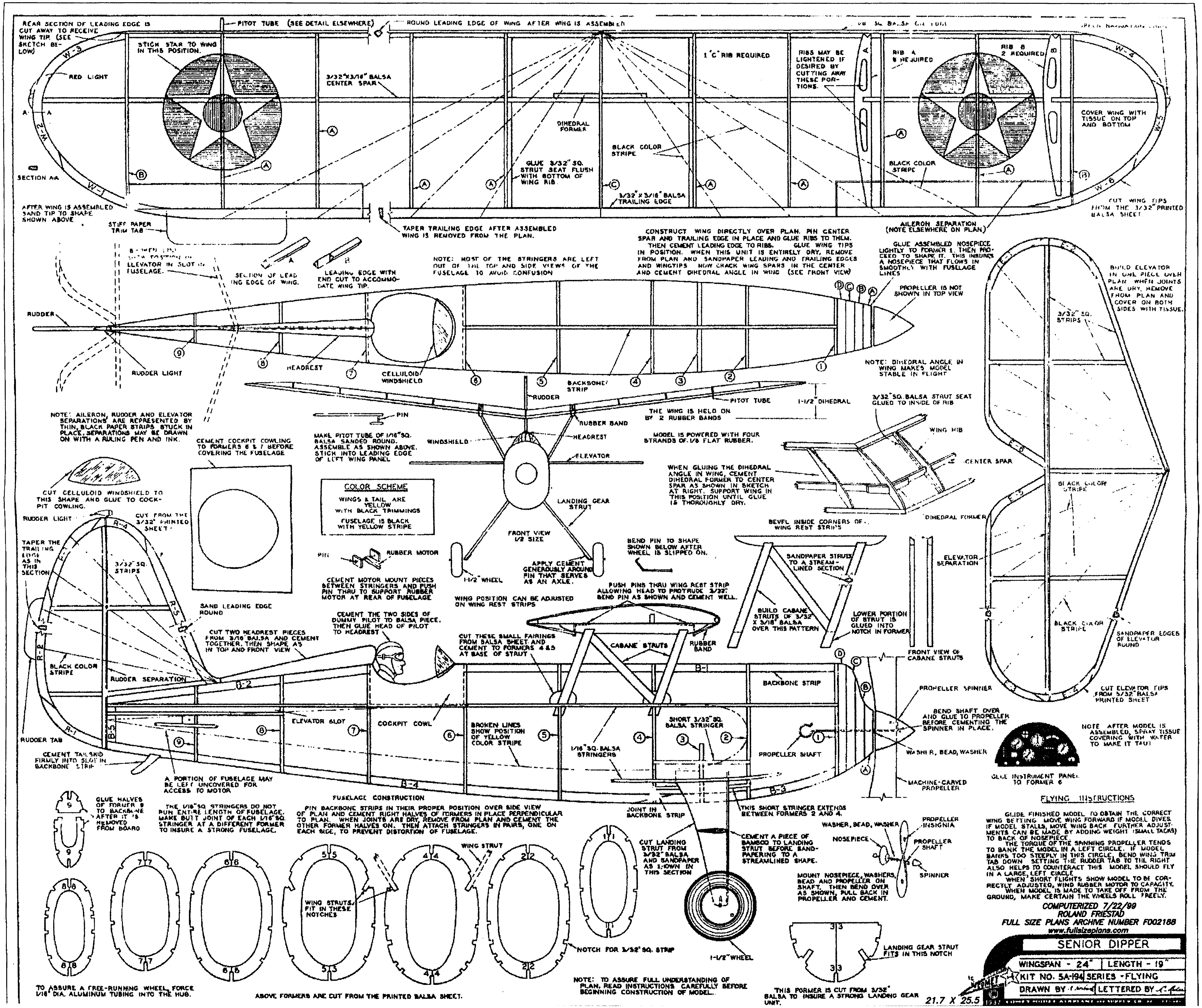
PITOT TUBE (SEE DETAIL ELSEWHERE)
ROUND LEADING EDGE OF WING AFTER WING IS ASSEMBLED
1/8" SQ. BALSA LEADING EDGE
GREEN NAVIGATION LIGHT
STICK STAR TO WING IN THIS POSITION.
RED LIGHT
W-1
W-2
W-3
W-4
W-5
W-6
A
A
SECTION A-A
3/32"X3/16" BALSA CENTER SPAR
DIHEDRAL FORMER
GLUE 3/32" SQ. STRUT SEAT FLUSH WITH BOTTOM OF WING RIB.
BLACK COLOR STRIPE
3/32" X 3/16" BALSA TRAILING EDGE
1 "C" RIB REQUIRED
RIBS MAY BE LIGHTENED IF DESIRED BY CUTTING AWAY THESE PORTIONS.
RIB A 8 REQUIRED
RIB B 2 REQUIRED
COVER WING WITH TISSUE ON TOP AND BOTTOM
CUT WING TIPS FROM THE 3/32" PRINTED BALSA SHEET.
AILERON SEPARATION (NOTE ELSEWHERE ON PLAN)
STIFF PAPER TRIM TAB
TAPER TRAILING EDGE AFTER ASSEMBLED WING IS REMOVED FROM THE PLAN.
BROKEN LINE SHOWS POSITION OF ELEVATOR IN SLOT IN FUSELAGE.
SECTION OF LEADING EDGE OF WING.
LEADING EDGE WITH END CUT TO ACCOMMODATE WING TIP.
RUDDER
RUDDER LIGHT
HEADREST
CELLULOID WINDSHIELD
BACKBONE STRIP
PROPELLER IS NOT SHOWN IN TOP VIEW
PITOT TUBE
1-1/2" DIHEDRAL
THE WING IS HELD ON BY 2 RUBBER BANDS
RUBBER BAND
WINDSHIELD
ELEVATOR
LANDING GEAR STRUT
FRONT VIEW 1/2 SIZE
1-1/2" WHEEL
APPLY CEMENT GENEROUSLY AROUND PIN THAT SERVES AS AN AXLE.
PIN
RUBBER MOTOR
3/32" SQ. BALSA STRUT SEAT GLUED TO INSIDE OF RIB
WING RIB
CENTER SPAR
DIHEDRAL FORMER
3/32" SQ. STRIPS
ELEVATOR SEPARATION
BLACK COLOR STRIPE
SANDPAPER EDGES OF ELEVATOR ROUND
CUT ELEVATOR TIPS FROM 3/32" BALSA PRINTED SHEET
E-1
E-2
E-5
E-6
RUDDER LIGHT
CUT FROM THE 3/32" PRINTED SHEET
TAPER THE TRAILING EDGE AS IN THIS SECTION
3/32" SQ. STRIPS
SAND LEADING EDGE ROUND
R-1
R-2
R-4
R-5
BLACK COLOR STRIPE
RUDDER SEPARATION
RUDDER TAB
B-1
B-2
B-3
B-4
B-5
ELEVATOR SLOT
COCKPIT COWL
CABANE STRUTS
RUBBER BAND
BROKEN LINES SHOW POSITION OF YELLOW COLOR STRIPE
1/16" SQ. BALSA STRINGERS
SHORT 3/32" SQ. BALSA STRINGER
PROPELLER SHAFT
PROPELLER SPINNER
WASHER, BEAD, WASHER
MACHINE-CARVED PROPELLER
SANDPAPER STRUTS TO A STREAMLINED SECTION
LOWER PORTION OF STRUT IS GLUED INTO NOTCH IN FORMER
FRONT VIEW OF CABANE STRUTS
JOINT IN BACKBONE STRIP
THIS SHORT STRINGER EXTENDS BETWEEN FORMERS 2 AND 4.
WING STRUT
WING STRUTS FIT IN THESE NOTCHES
NOTCH FOR 3/32" SQ. STRIP
1-1/2" WHEEL
LANDING GEAR STRUT FITS IN THIS NOTCH
WASHER, BEAD, WASHER
NOSEPIECE
PROPELLER INSIGNIA
PROPELLER SHAFT
SPINNER
GLUE INSTRUMENT PANEL TO FORMER 6
1
2
3
4
5
6
7
8
9
A
B
C
D

REAR SECTION OF LEADING EDGE IS CUT AWAY TO RECEIVE WING TIP. (SEE SKETCH BELOW)

AFTER WING IS ASSEMBLED SAND TIP TO SHAPE SHOWN ABOVE.

CONSTRUCT WING DIRECTLY OVER PLAN. PIN CENTER SPAR AND TRAILING EDGE IN PLACE AND GLUE RIBS TO THEM. THEN CEMENT LEADING EDGE TO RIBS. GLUE WING TIPS IN POSITION. WHEN THIS UNIT IS ENTIRELY DRY, REMOVE FROM PLAN AND SANDPAPER LEADING AND TRAILING EDGES AND WINGTIPS. NOW CRACK WING SPARS IN THE CENTER AND CEMENT DIHEDRAL ANGLE IN WING (SEE FRONT VIEW)

NOTE: MOST OF THE STRINGERS ARE LEFT OUT OF THE TOP AND SIDE VIEWS OF THE FUSELAGE TO AVOID CONFUSION

GLUE ASSEMBLED NOSEPIECE LIGHTLY TO FORMER 1. THEN PROCEED TO SHAPE IT. THIS INSURES A NOSEPIECE THAT FLOWS IN SMOOTHLY WITH FUSELAGE LINES

BUILD ELEVATOR IN ONE PIECE OVER PLAN. WHEN JOINTS ARE DRY, REMOVE FROM PLAN AND COVER ON BOTH SIDES WITH TISSUE.

NOTE: DIHEDRAL ANGLE IN WING MAKES MODEL STABLE IN FLIGHT

NOTE: AILERON, RUDDER AND ELEVATOR SEPARATIONS ARE REPRESENTED BY THIN, BLACK PAPER STRIPS STUCK IN PLACE. SEPARATIONS MAY BE DRAWN ON WITH A RULING PEN AND INK.

MAKE PITOT TUBE OF 1/16" SQ. BALSA SANDED ROUND. ASSEMBLE AS SHOWN ABOVE. STICK INTO LEADING EDGE OF LEFT WING PANEL

MODEL IS POWERED WITH FOUR STRANDS OF 1/8 FLAT RUBBER.

CEMENT COCKPIT COWLING TO FORMERS 6 & 7 BEFORE COVERING THE FUSELAGE

WHEN GLUING THE DIHEDRAL ANGLE IN WING, CEMENT DIHEDRAL FORMER TO CENTER SPAR AS SHOWN IN SKETCH AT RIGHT. SUPPORT WING IN THIS POSITION UNTIL GLUE IS THOROUGHLY DRY.

CUT CELLULOID WINDSHIELD TO THIS SHAPE AND GLUE TO COCKPIT COWLING.

COLOR SCHEME

WINGS & TAIL ARE YELLOW WITH BLACK TRIMMINGS

FUSELAGE IS BLACK WITH YELLOW STRIPE

BEVEL INSIDE CORNERS OF WING REST STRIPS

BEND PIN TO SHAPE SHOWN BELOW AFTER WHEEL IS SLIPPED ON.

CEMENT MOTOR MOUNT PIECES BETWEEN STRINGERS AND PUSH PIN THRU TO SUPPORT RUBBER MOTOR AT REAR OF FUSELAGE

WING POSITION CAN BE ADJUSTED ON WING REST STRIPS

PUSH PINS THRU WING REST STRIP ALLOWING HEAD TO PROTRUDE 3/32". BEND PIN AS SHOWN AND CEMENT WELL.

BUILD CABANE STRUTS OF 3/32" X 3/16" BALSA OVER THIS PATTERN

CEMENT THE TWO SIDES OF DUMMY PILOT TO BALSA PIECE. THEN GLUE HEAD OF PILOT TO HEADREST

CUT TWO HEADREST PIECES FROM 3/16 BALSA AND CEMENT TOGETHER. THEN SHAPE AS IN TOP AND FRONT VIEW

CUT THESE SMALL FAIRINGS FROM BALSA SHEET AND CEMENT TO FORMERS 4 & 5 AT BASE OF STRUT

BEND SHAFT OVER AND GLUE TO PROPELLER BEFORE CEMENTING THE SPINNER IN PLACE.

NOTE: AFTER MODEL IS ASSEMBLED, SPRAY TISSUE COVERING WITH WATER TO MAKE IT TAUT

CEMENT TAILSKID FIRMLY INTO SLOT IN BACKBONE STRIP

A PORTION OF FUSELAGE MAY BE LEFT UNCOVERED FOR ACCESS TO MOTOR

FUSELAGE CONSTRUCTION

PIN BACKBONE STRIPS IN THEIR PROPER POSITION OVER SIDE VIEW OF PLAN AND CEMENT RIGHT HALVES OF FORMERS IN PLACE PERPENDICULAR TO PLAN. WHEN JOINTS ARE DRY, REMOVE FROM PLAN AND CEMENT THE OTHER FORMER HALVES ON. THEN ATTACH STRINGERS IN PAIRS, ONE ON EACH SIDE, TO PREVENT DISTORTION OF FUSELAGE.

GLUE HALVES OF FORMER 9 TO BACKBONE AFTER IT IS REMOVED FROM BOARD

THE 1/16" SQ. STRINGERS DO NOT RUN ENTIRE LENGTH OF FUSELAGE. MAKE BUTT JOINT OF EACH 1/16" SQ. STRINGER AT A DIFFERENT FORMER TO INSURE A STRONG FUSELAGE.

CUT LANDING STRUT FROM 3/32" BALSA AND SANDPAPER AS SHOWN IN THIS SECTION

CEMENT A PIECE OF BAMBOO TO LANDING STRUT BEFORE SANDPAPERING TO A STREAMLINED SHAPE.

MOUNT NOSEPIECE, WASHERS, BEAD AND PROPELLER ON SHAFT. THEN BEND OVER AS SHOWN, PULL BACK IN PROPELLER AND CEMENT.

TO ASSURE A FREE-RUNNING WHEEL, FORCE 1/16" DIA. ALUMINUM TUBING INTO THE HUB.

ABOVE FORMERS ARE CUT FROM THE PRINTED BALSA SHEET.

NOTE: TO ASSURE FULL UNDERSTANDING OF PLAN, READ INSTRUCTIONS CAREFULLY BEFORE BEGINNING CONSTRUCTION OF MODEL.

THIS FORMER IS CUT FROM 3/32" BALSA TO INSURE A STRONG LANDING GEAR UNIT.

FLYING INSTRUCTIONS

GLIDE FINISHED MODEL. TO OBTAIN THE CORRECT WING SETTING, MOVE WING FORWARD IF MODEL DIVES. IF MODEL STALLS, MOVE WING BACK. FURTHER ADJUSTMENTS CAN BE MADE BY ADDING WEIGHT (SMALL TACKS) TO BACK OF NOSEPIECE.

THE TORQUE OF THE SPINNING PROPELLER TENDS TO BANK THE MODEL IN A LEFT CIRCLE. IF MODEL BANKS TOO STEEPLY IN THIS CIRCLE, BEND WING TRIM TAB DOWN. SETTING THE RUDDER TAB TO THE RIGHT ALSO HELPS TO COUNTERACT THIS. MODEL SHOULD FLY IN A LARGE, LEFT CIRCLE.

WHEN SHORT FLIGHTS SHOW MODEL TO BE CORRECTLY ADJUSTED, WIND RUBBER MOTOR TO CAPACITY.

WHEN MODEL IS MADE TO TAKE OFF FROM THE GROUND, MAKE CERTAIN THE WHEELS ROLL FREELY.

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SENIOR DIPPER

WINGSPAN - 24"	LENGTH - 19"
KIT NO. 5A-194	SERIES - FLYING
DRAWN BY	LETTERED BY

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21.7 X 25.5

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