

"ALBATROS D-5A"

24 INCH WING SPAN FLYING SCALE

FULL SIZE DRAWING

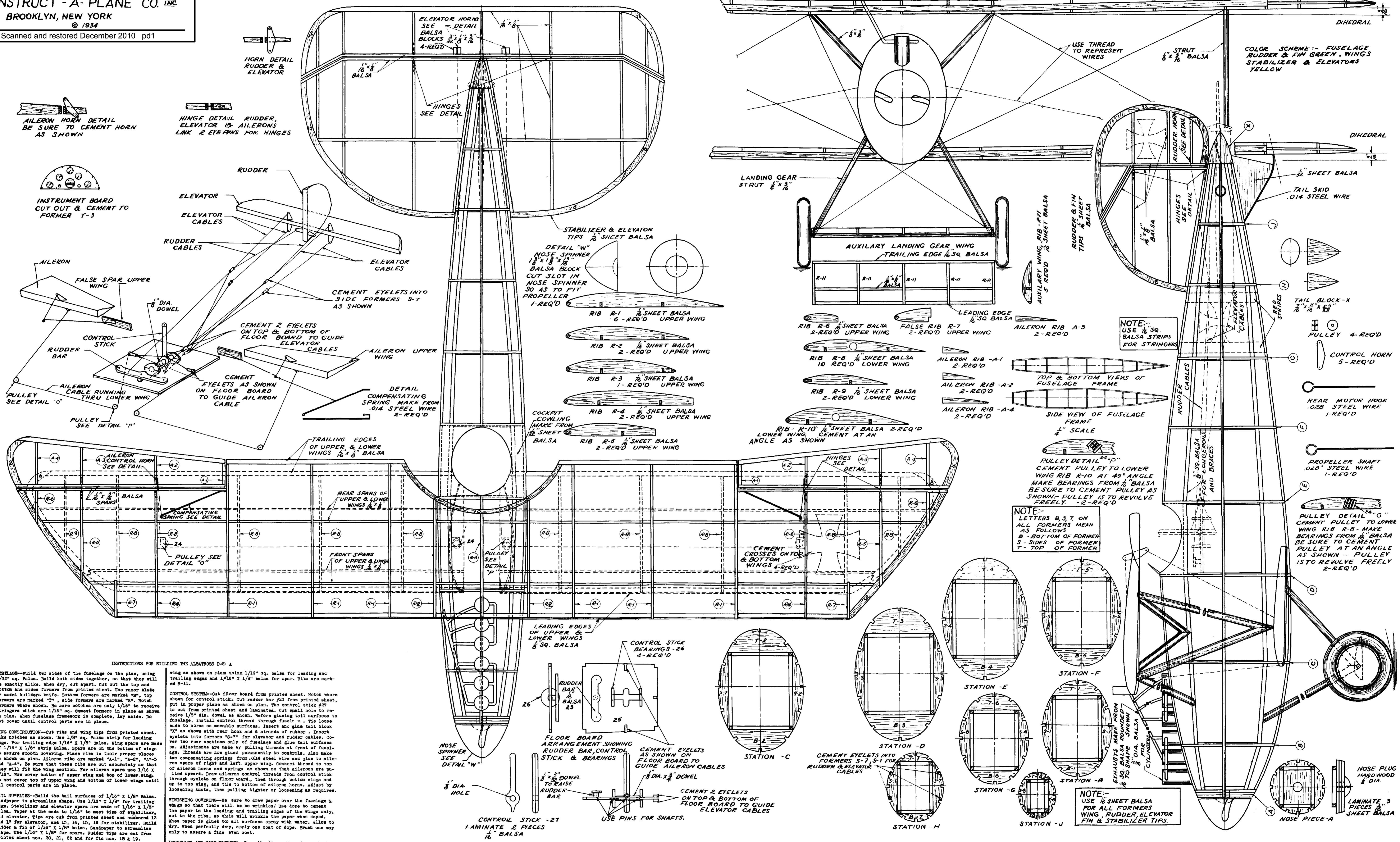
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CONSTRUCT - A - PLANE CO. INC.

BROOKLYN, NEW YORK

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FUSELAGE—Build two sides of the fuselage on the plan, using 3/32" sq. balsa. Build both sides together, so that they will be exactly alike. When dry, cut apart. Cut out the top and bottom and sides formers from printed sheet. Use razor blade or model builders knife. Bottom formers are marked "m", top formers are marked "m", side formers are marked "s". Both formers where shown. Be sure notches are only 1/16" to receive stringers which are 1/16" sq. Cement formers in place as shown on plan. When fuselage framework is complete, lay aside. Do not cover until control parts are in place.

WING CONSTRUCTION—Cut ribs and wing tips from printed sheet. Make notches as shown. Use 1/8" sq. balsa strip for leading edge. For trailing edge use 1/16" x 1/8" balsa. Wing spars are made of 1/16" x 1/8" strip balsa. Spars are on the bottom of wings to assure smooth covering. Place ribs in their proper places as shown on plan. Aileron ribs are marked "A-1", "A-2", "A-3" and "A-4". Be sure that these ribs are cut accurately so that they will fit the wing section. For aileron spars use 1/16" x 3/16". Now cover bottom of upper wing and top of lower wing. Do not cover top of upper wing and bottom of lower wing until all control parts are in place.

TAIL SURFACES—Build the tail surfaces of 1/16" x 1/8" balsa. Sandpaper to streamline shape. Use 1/16" x 1/8" for trailing edge. Stabilizer and elevator spars are made of 1/16" x 1/8" balsa. Tape at the ends to 1/16" to meet tips of stabilizer, and elevator. Tips are cut from printed sheet and numbered 12 and 17 for elevator, and 14, 15, 16 for stabilizer. Build rudder & fin of 1/16" x 1/8" balsa. Sandpaper to streamline shape. Use 1/16" x 1/8" for spars. Rudder tips are cut from printed sheet nos. 20, 21, 22 and for fin nos. 18 & 19.

WING AND LANDING GEAR STRUTS—Sandpaper piece of balsa 1/8" x 5/16" to a streamline shape for wing struts. Make landing gear struts of 1/8" x 3/16" balsa. Lay out auxiliary landing gear

INSTRUCTIONS FOR BUILDING THE ALBATROS D-5 A

wing as shown on plan using 1/16" sq. balsa for leading and trailing edges and 1/16" x 1/8" balsa for spar. Ribs are marked R-1.

CONTROL SYSTEM—Cut floor board from printed sheet. Notch where shown for control sticks. Cut rubber bar #23 from printed sheet, put in proper place as shown on plan. The control stick #27 is cut from printed sheet and laminated. Cut small hole to receive 1/8" dia. dowel as shown. Before gluing tail surfaces to fuselage, install control thread through fuselage. Tie loose ends to horns on movable surfaces. Insert an glue tail block "x" as shown with rear hook and 6 strands of rubber. Insert eyelets into formers "s-7" for elevator and rudder cables. Cover two rear sections only of fuselage and glue tail surfaces on. Adjustments are made by pulling threads at front of fuselage. Threads are now glued permanently to controls. Also make two compensating springs from .014 steel wire and glue to aileron spars of right and left upper wing. Connect thread to top of aileron horns and springs as shown so that ailerons are pulled upward. Draw aileron control threads from control stick through eyelets on floor board, then through bottom wings and up to top wing, and tie to bottom of aileron horns. Adjust by loosening knots, then pulling tighter or loosening as required.

FINISHING COVERING—Be sure to draw paper over the fuselage & wings so that there will be no wrinkles. Use dope to cement the paper to the leading and trailing edges of the wings only, not to the ribs, as this will wrinkle the paper when doped. When paper is glued to all surfaces spray with water. Allow to dry. When perfectly dry, apply one coat of dope. Brush one way only to assure a fine even coat.

PROPELLER AND NOSE SPINNER—Propeller is ready made in the kit. All you need to do is sand blades to airfoil finish. Make nose spinner from 1 3/8" x 1 3/8" x 1 1/16" balsa block. Cut slot in one a spinner so as to fit propeller hub.

DETAIL "W"
NOSE SPINNER
1 3/8" x 1 3/8" x 1 1/16" Balsa block
CUT SLOT IN NOSE SPINNER SO AS TO FIT PROPELLER
1-REQ'D

DETAIL "X"
TAIL BLOCK-X
3/16" x 1/8" x 3/32" Balsa
PULLEY 4-REQ'D

DETAIL "Y"
CONTROL HORN
5-REQ'D

DETAIL "Z"
REAR MOTOR HOOK
.028" STEEL WIRE
1-REQ'D

DETAIL "A"
PULLEY DETAIL "A"
CEMENT PULLEY TO LOWER WING RIB R-10 AT 45° ANGLE
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "B"
PULLEY DETAIL "B"
CEMENT PULLEY TO LOWER WING RIB R-8
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "C"
PULLEY DETAIL "C"
CEMENT PULLEY TO LOWER WING RIB R-6
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "D"
PULLEY DETAIL "D"
CEMENT PULLEY TO LOWER WING RIB R-4
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "E"
PULLEY DETAIL "E"
CEMENT PULLEY TO LOWER WING RIB R-2
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "F"
PULLEY DETAIL "F"
CEMENT PULLEY TO LOWER WING RIB R-1
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "G"
PULLEY DETAIL "G"
CEMENT PULLEY TO LOWER WING RIB R-10 AT 45° ANGLE
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "H"
PULLEY DETAIL "H"
CEMENT PULLEY TO LOWER WING RIB R-8
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "I"
PULLEY DETAIL "I"
CEMENT PULLEY TO LOWER WING RIB R-6
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "J"
PULLEY DETAIL "J"
CEMENT PULLEY TO LOWER WING RIB R-4
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "K"
PULLEY DETAIL "K"
CEMENT PULLEY TO LOWER WING RIB R-2
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "L"
PULLEY DETAIL "L"
CEMENT PULLEY TO LOWER WING RIB R-1
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "M"
PULLEY DETAIL "M"
CEMENT PULLEY TO LOWER WING RIB R-10 AT 45° ANGLE
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "N"
PULLEY DETAIL "N"
CEMENT PULLEY TO LOWER WING RIB R-8
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "O"
PULLEY DETAIL "O"
CEMENT PULLEY TO LOWER WING RIB R-6
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "P"
PULLEY DETAIL "P"
CEMENT PULLEY TO LOWER WING RIB R-4
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "Q"
PULLEY DETAIL "Q"
CEMENT PULLEY TO LOWER WING RIB R-2
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "R"
PULLEY DETAIL "R"
CEMENT PULLEY TO LOWER WING RIB R-1
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "S"
PULLEY DETAIL "S"
CEMENT PULLEY TO LOWER WING RIB R-10 AT 45° ANGLE
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "T"
PULLEY DETAIL "T"
CEMENT PULLEY TO LOWER WING RIB R-8
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "U"
PULLEY DETAIL "U"
CEMENT PULLEY TO LOWER WING RIB R-6
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "V"
PULLEY DETAIL "V"
CEMENT PULLEY TO LOWER WING RIB R-4
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "W"
PULLEY DETAIL "W"
CEMENT PULLEY TO LOWER WING RIB R-2
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D

DETAIL "X"
PULLEY DETAIL "X"
CEMENT PULLEY TO LOWER WING RIB R-1
MAKE BEARINGS FROM 1/8" Balsa
BE SURE TO CEMENT PULLEY AS SHOWN - PULLEY IS TO REVOLVE FREELY
2-REQ'D