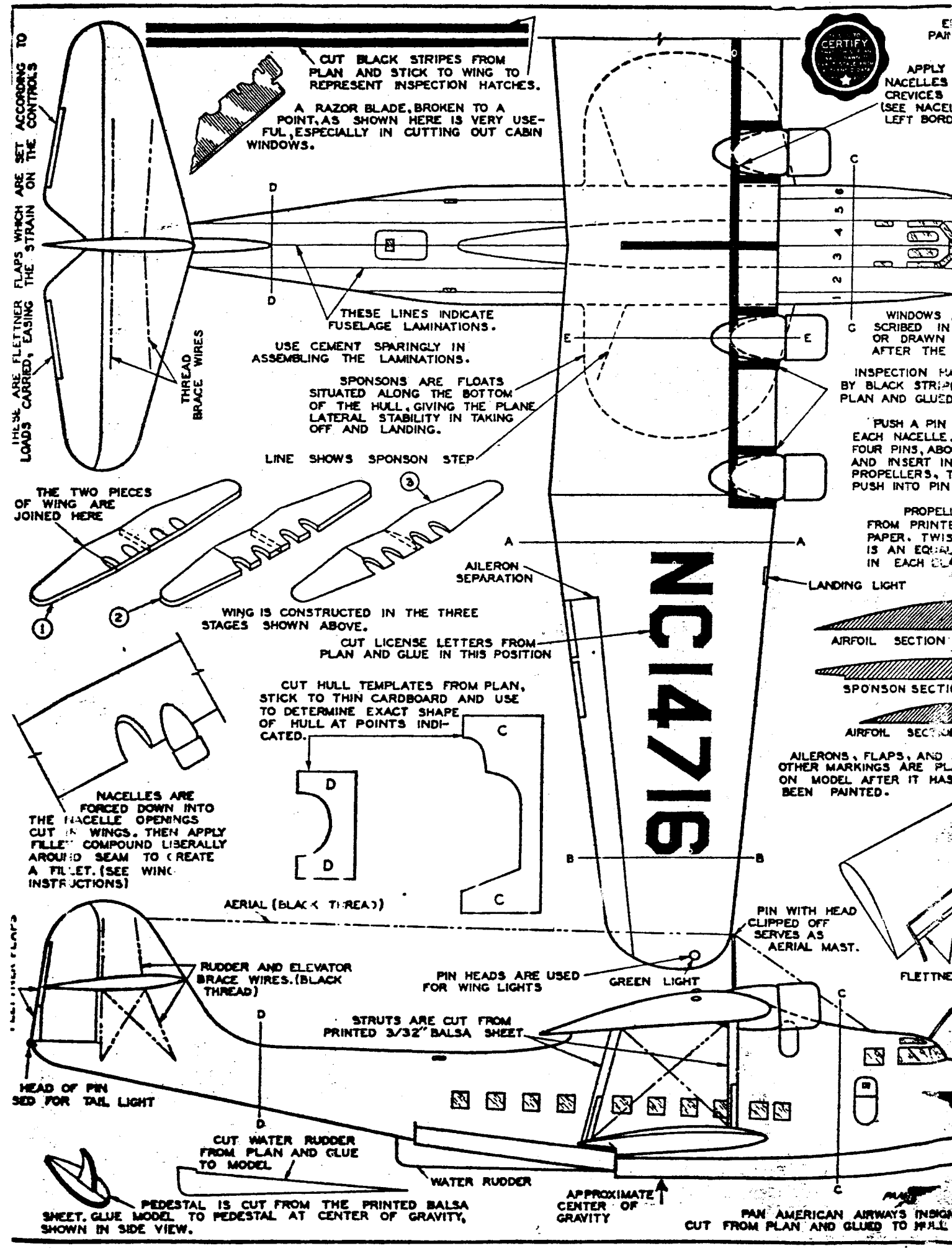

CUT BLACK STRIPES FROM PLAN AND STICK TO WING TO REPRESENT INSPECTION HATCHES.
A RAZOR BLADE, BROKEN TO A POINT, AS SHOWN HERE IS VERY USEFUL, ESPECIALLY IN CUTTING OUT CABIN WINDOWS.
THESE LINES INDICATE FUSELAGE LAMINATIONS.
USE CEMENT SPARINGLY IN ASSEMBLING THE LAMINATIONS.
SPONSONS ARE FLOATS SITUATED ALONG THE BOTTOM OF THE HULL, GIVING THE PLANE LATERAL STABILITY IN TAKING OFF AND LANDING.
LINE SHOWS SPONSON STEP
THREAD BRACE WIRES
THE TWO PIECES OF WING ARE JOINED HERE
WING IS CONSTRUCTED IN THE THREE STAGES SHOWN ABOVE.
AILERON SEPARATION
LANDING LIGHT
CUT LICENSE LETTERS FROM PLAN AND GLUE IN THIS POSITION
NC14716
CUT HULL TEMPLATES FROM PLAN, STICK TO THIN CARDBOARD AND USE TO DETERMINE EXACT SHAPE OF HULL AT POINTS INDICATED.
NACELLES ARE FORCED DOWN INTO THE NACELLE OPENINGS CUT IN WINGS. THEN APPLY FILLET COMPOUND LIBERALLY AROUND SEAM TO CREATE A FILLET. (SEE WING INSTRUCTIONS)
AERIAL (BLACK THREAD)
PIN WITH HEAD CLIPPED OFF SERVES AS AERIAL MAST.
RUDDER AND ELEVATOR BRACE WIRES. (BLACK THREAD)
PIN HEADS ARE USED FOR WING LIGHTS
GREEN LIGHT
STRUTS ARE CUT FROM PRINTED 3/32" BALSA SHEET
HEAD OF PIN BED FOR TAIL LIGHT
CUT WATER RUDDER FROM PLAN AND GLUE TO MODEL
WATER RUDDER
PEDESTAL IS CUT FROM THE PRINTED BALSA SHEET. GLUE MODEL TO PEDESTAL AT CENTER OF GRAVITY, SHOWN IN SIDE VIEW.
APPROXIMATE CENTER OF GRAVITY
AIRFOIL SECTION
SPONSON SECTION
AILERONS, FLAPS, AND OTHER MARKINGS ARE PLACED ON MODEL AFTER IT HAS BEEN PAINTED.
WINDOWS SCRIBED IN OR DRAWN AFTER THE
INSPECTION HA BY BLACK STRIP PLAN AND GLUED
PUSH A PIN EACH NACELLE FOUR PINS, ABO AND INSERT IN PROPELLERS, T PUSH INTO PIN
PROPELL FROM PRINTE PAPER. TWIS IS AN EQU IN EACH
APPLY NACELLES CREVICES (SEE NACEL LEFT BORD
PAN AMERICAN AIRWAYS INSIG CUT FROM PLAN AND GLUED TO HULL
IHESE ARE FLETTNER FLAPS WHICH ARE SET ACCORDING TO LOADS CARRIED, EASING THE STRAIN ON THE CONTROLS

ENTIRE MODEL IS PAINTED ALUMINUM.

APPLY CEMENT AROUND ELLES SO AS TO FILL IN VICES UP TO DASH LINES. NACELLES DETAIL NEAR BORDER OF PLAN)

DOWS AND HATCHES ARE ED IN WITH A SOFT PENCIL, RAWN ON WITH BLACK INK THE MODEL IS PAINTED.

ON HATCHES ARE REPRESENTED STRIPES WHICH ARE CUT FROM GLUED IN POSITION SHOWN.

A PIN INTO CENTER OF CELLE. NOW CUT OFF IS, ABOUT 3/16" LONG ERT INTO CENTER OF ERS, THEN CUT TO PIN HOLES.

PROPELLERS ARE CUT PRINTED ALUMINUM TWIST BLADES SO THERE EQUAL AMOUNT OF PITCH CH BLADE.

SECTION EE IS A TYPICAL SPONSON SECTION AT LOCATION SHOWN IN TOP VIEW.

CUT STEP IN BOTTOM OF THE SPONSON BEFORE SHAPING. NOTICE IN TOP VIEW THAT IT GRADUALLY DECREASES TOWARD TIP.

SECTION AA

SECTION EE

SECTION BB

AND ALL RE PLACED T HAS

BORDERLINE

AILERON

ILLUSTRATION SHOWS HOW BORDERLINE OF PLAN IS USED TO SHOW UP AILERON SEPARATION.

LETTNER FLAPS

PITOT TUBE IS MADE BY BENDING A PIN TO SHAPE SHOWN. THE PITOT TUBE IS CONNECTED TO THE AIR-SPEED INDICATOR.

ANCHOR COMPARTMENT

INSIGNIA ARE SMALL SIZES AS SHOWN.

THREAD BRACE WIRES

SPONSON

STRUTS ARE CUT FROM THE PRINTED 3/32" BALSA SHEET AND STREAMLINED AS SHOWN ABOVE WITH SANDPAPER.

CUT PAPER LANDING LIGHTS FROM PLAN AND PLACE IN CORRECT POSITION ON LEADING EDGE OF WING.

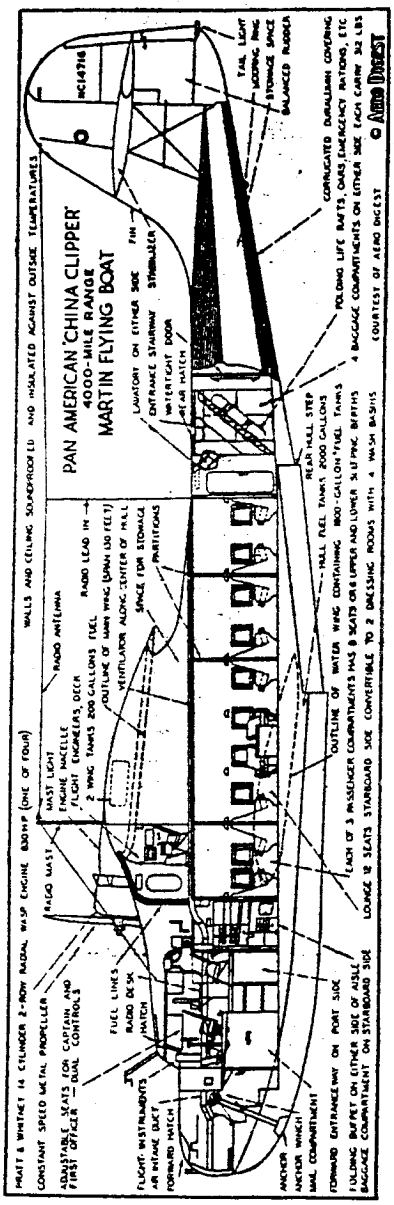
DIHEDRAL ANGLE IS SHAPED INTO THE WING BEFORE THE AIR-FOIL SECTION IS CUT IN.

GREEN LIGHT

WINDOWS ARE CUT OUT BY MEANS OF A RAZOR BLADE BROKEN AS SHOWN IN SKETCH.

WING LIGHT ON OPPOSITE TIP IS RED

THE SKETCH ABOVE SHOWS HOW HULL LAMINATIONS ARE JOINED TOGETHER.



ASSEMBLY DIRECTIONS

The China Clipper is PAN AMERICAN AIRWAYS' long transport airplane, designed by the Glenn L. Martin Co. the Pan American Airways. It is capable of carrying passengers having a wingspan of 130 feet and an over length of 89 feet 8 inches. This is the first mail plane span the Pacific ocean. At the left is shown the inter arrangement of the ship.

Before beginning construction of the model, read the directions over carefully and acquaint yourself with t construction procedure. This kit employs a new constru tion, featuring a laminated fuselage which is easier to sha and giving a hollow cabin interior.

HULL (Fuselage)

Cut parts 1, 2, 3, 4, 5, and 6 from the printed balsa she These are the six laminations comprising the hull. Noti that laminations 2, 3, 4, and 5 are composed of two portio which are glued together. Cut these pieces very carefu using a sharp jacknife or razor blade. It may be necessa to make two or three strokes before cutting through th wood. Push a pin in end of tube of cement and it is rea for use. Cement the laminations together aligning ea piece over dash lines on preceding one. Allow to dry tho oughly before going further. Figure one (See illustratio directly below these directions) shows how your hull appea before shaping.

Now begin to carve hull to shape. Using a sharp jacknif cut the corners of laminations off until hull assumes shap shown in Fig. 2 below. Proceed cautiously now, cuttin slowly. Finish off hull using sandpaper. Test hull with tem plates C. and D. Figure 3 shows finished hull. Now la hull aside and follow next step.

TAIL ASSEMBLY (EMPENNAGE)

Cut the rudder and elevator from the printed balsa woo and pierce dots with a needle or pin. This will permanentl locate brace wire locations. Sandpaper to a streamline shape. See top and side views showing rudder and elevato sections. Glue rudder and elevator together aligning the in notches of each other. Now cement unit to hull. Brac wires are passed through their locations using a needle. Sid view shows where they pass through hull.

WING

Cut the wing and sponsons out next. Don't try to cu through wood right away, but instead use successive strokes Cut out openings along leading edge of wing. These are t receive the nacelles. Shape wing carefully as shown b sketch on plan. Sponsons are shaped in same manner a wing. Cement sponsons to fuselage. Glue the four nacelle to wing. Rub some scrap balsa on sandpaper and mix th balsa dust with cement. Pack this in around nacelles to ob tain a smooth job. Now cement wing to hull. Cut the wing struts from printed balsa sheet. Guide your razor blade with a metal edged rule to obtain perfectly straight struts. Sand the struts to a streamline section and cement in place.

DOPING THE MODEL

The term doping is generally employed instead of "paint ing" as the material used is known as "dope." Shake up th small bottle of aluminum dope. Coat the entire model with it using an ordinary water color brush. When dry add a details such as door openings, cabin windows, etc. Cut th license letters from plan and glue them to wing.

Cut the propellers out with the point of the razor blade Attach them to nacelles as directed on plan. Attach aerial and brace wires. Use fine silk thread for all brace wires.

The pedestal is made up of three pieces which are glue together as shown on plan at lower left hand corner. Dop it aluminum and glue model to it.

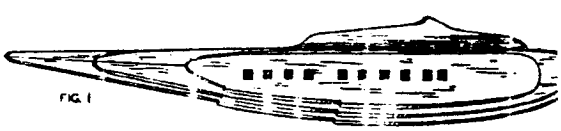


FIG. 1

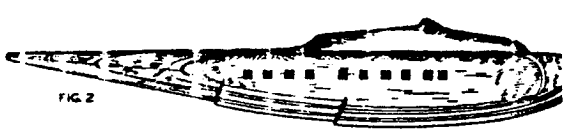


FIG. 2

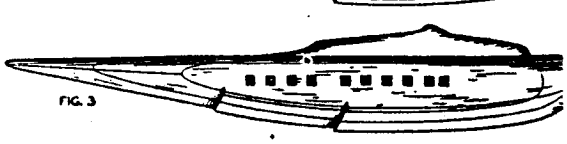


FIG. 3

NC14716

CUT LICENSE LETTERS FROM PLAN AND STICK TO BOTTOM OF LEFT WING, READING FROM THE FRONT.

CHINA CLIPPER

WINGSPAN - 12"	LENGTH - 8-3
KIT NO. A-169	SERIES - ONE STAR
DRAWN BY J. Northrop R. Palen	LETTERED BY (illegible)