

WHEN Post and Gatty broke all round-the-world flight records, they not only brought fame to themselves but also to the trim, white monoplane which carried them through. No sooner had they set their wheels on Roosevelt Field, than Captain Price, editor of MODEL AIRPLANE NEWS, always on the lookout for the best for his readers, wired the writer for the "best model of the Lockheed-Vega, round-the-world plane that can be made."

This model is the result of careful aerodynamic study and long labor. It was built by Pierce Au Werter, an expert model builder and an American Sky Cadet. When it was finally completed, it not only proved to be a splendid replica of Post and Gatty's plane, but also gave a remarkable flight performance. Its weight, with motor, is only seven drams (sixteen drams equal one ounce).

Build this ship, and assure yourself of winning the scale model event at your next meet!

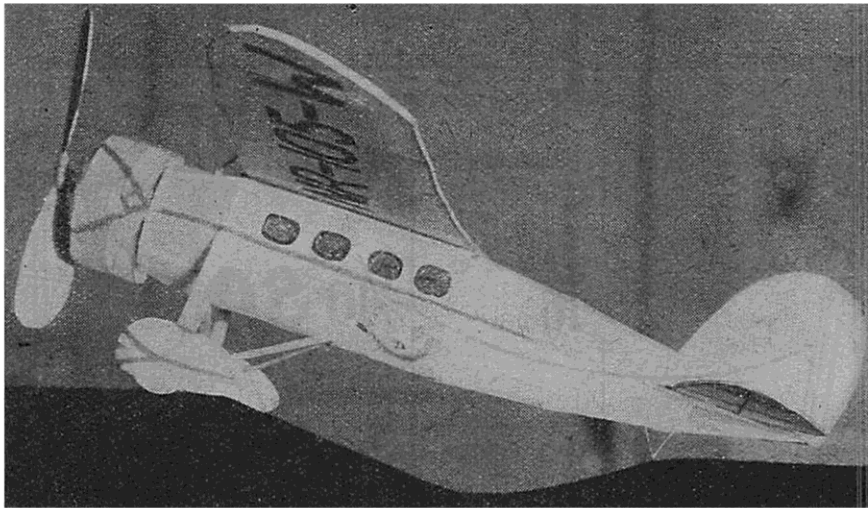
Fuselage

Six fuselage formers are cut, as shown in drawing 3, from 1/16" sheet balsa. Note that formers 3, 4 and 5 are exact duplicates. While they have eight 1/16" sq. notches cut in them to accommodate the longerons, the smallest former (No. 1) has only six notches, as the bottom side longerons extend only to this former. This is done so that the fingers can easily reach the rear hook, and this space is not covered with tissue. Cut and ambroid the longerons in place on the formers.

The cowling of the model consists of four cowling formers, as shown on drawing 2 of the plans. These are ambroided in place to former 6, as shown. Light music wire is used to form the circle. Four bands are required. Use No. 4 wire for these. A front motor stick clip is ambroided to the two side cowling formers and to the bottom cowling former. The rear clip is ambroided to fuselage former 1. Both clips are bent from No. 8 music wire.

Elevator

This is constructed in two parts, as shown in drawing 4. A 1/16" sq.



The finished model

balsa brace is cemented between the two side longerons in line with the main spar of the elevator, when it is in place on the fuselage. Cover with Japanese tissue on both sides.

Rudder

This is made of 1/16" sq. balsa, as shown on drawing 4. It is cemented in place on the top center longeron, as shown, and covered on both sides.

Landing Gear

This is constructed of six pieces of balsa, as shown in drawing 5. Carefully streamline each piece. These are cemented in place, as shown in drawing 6. The pants for the wheels are constructed of three pieces of sheet balsa. The center piece has a cutout as shown, and is made from 3/16" sheet balsa, while the two side pieces are exact duplicates, except that they have no cutout and are made of 1/16" sheet balsa. These are cemented on each side of the 3/16" piece and when hard, the entire block is sanded to a streamline form, as shown.

The wheels are cut from 1/8" sheet balsa, are 7/8" in diameter, and should be sanded round on their tread. These are inserted into the pants until they extend below the pants 3/16". They are held in place with a pin, which is thrust through their centers, ambroided in place, and cut off. This pin should go through the sides of the pants and into the landing gear struts.

Do not ambroid the pin to the wheel but only to the side pieces of the pants. Test to see that each wheel moves freely.

Wing

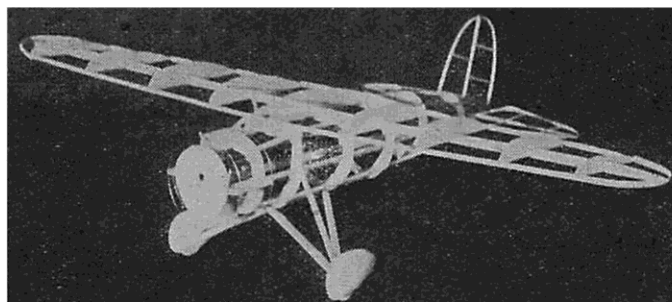
Five different ribs are necessary for this wing. In drawing 9 these are shown as V, W, X, Y, Z. Rib V is the center rib, so only one is required, while all others require two being made. The center rib V is cut from 1/16" sheet balsa, while all others are from 1/32" sheeting. The wing is built in one part, as shown on drawings 7 and 8. Balsa wood construction is used throughout. Note the 1/16" sq. balsa brace 1/2" behind the leading edge. Cover on both sides and apply a thin coat of dope. Note that the wing is given a 1/4" dihedral.

(Continued on page 40)

A "Winnie Mae" Flying Model

Half-Ounce Replica of Post and Gatty's Famous Plane

By Edwin T. Hamilton



The balsa skeleton

The "Winnie Mae"

(Continued from page 9)

Mount the wing on the fuselage with the leading edge at fuselage former 5, with rib V on the center top longeron. Cement in place. The eight $1/16$ " sq. cabin ribs are now cut and assembled on the top of the fuselage at the leading edge of the wing, as shown on page 10 of the plans. Cover the top with Japanese tissue and the sides with celluloid.

This is constructed of $1/32$ " strip bamboo and a pin. The pin is carefully thrust through the bottom center longeron at fuselage former 1, and cut off at the point of contact with the bamboo, which is bent as shown. A drop of ambroid at both ends holds the pin in place.

Motor Stick and Propeller

A $1/8 \times 3/16 \times 12$ " motor stick is used. It is fitted with the usual rear hook and propeller bearing, which can be bent from No. 8 music wire, as shown on page 10. The propeller is made in three pieces, a hub and two blades. Cut the blades from $1/32$ " sheet balsa. A $3/4$ " length of $1/4$ " dowel is cut, and a $1/4$ " deep groove cut in each end at right angles to each other.

The blades are inserted in these grooves and ambroid is applied to hold them in place. Insert and ambroid in place a propeller hook, which is made of No. 8 music wire, as shown in drawing 10.

A nose plate is now cut from $1/8$ " sheet balsa. At its center, a $3/16 \times 1/8$ " slot is cut with a $1/4$ " diameter hole at its top. This is now placed on the motor stick, so that the stick fits into the slot, and is then ambroided $3/8$ " from the stick's end. When the motor stick is in place in the fuselage, this plate fits just inside the first wire loop on the cowling.

Six strands of $1/16$ " sq. rubber, each about 11" long, are used for motive power.

Color

The body color of both fuselage and wing is white. On the upper side of the wing between the two ribs Z, and $1/4$ " back of the leading edge and $1/4$ " in front of the trailing edge, the wing is painted a solid blue. A blue stripe runs from the leading edge of the elevator along the center side longeron, where it branches into two stripes at the cowling, as shown in drawing 12. This strip is duplicated on both sides and should be $1/8$ " wide. It was found that the ordinary colored dope, which was used on the wing, could not be used for striping, as it "ran" on the tissue. This was corrected by cutting out strips of blue tissue paper and attaching them in place with clear dope.

The stripes on the pants were made in the same way, as the dope also "ran" on the balsa. The words "Winnie Mae" were printed with a hard lead pencil. These letters are about $5/16$ " high, and appear on both sides of the fuselage.

The rudder lettering was also applied with pencil, as was the Pathe News circle. Both these signs appear only on the left side of the plane. The letters "Lockheed" are $1/8$ " high. The circles of the Pathe News sign were made with a half dollar and a quarter. A rooster was drawn in the center, and the lettering around it reads "Pathe News—Winnie Mae—Round-the-World Flight."