

HISTORY

The Howard "Ike", was first introduced to the Thompson Trophy Race in 1932. Spanning 20 ft., 6 inches with a fuselage length of 17 feet plus, the all-white Ike finished seventh with an average speed of 191.073 mph. At its controls was William Ong.

1933 found Roy Minor at the controls with the little white airplane placing third behind two Wedell-Williams' racers. This time the Ike had an average speed of 199.870 mph, an increase of over eight miles per hour above the previous year's speed.

With Harold Neumann at the controls of Ike during the 1934 race, the little airplane, with racing number 39, finished fourth with an average speed of 207.064 mph, again-

an increase of eight miles per hour over the previous year.

The Ike was built by Ben Howard in Chicago at a site about two blocks south of the airport now called Chicago Midway. The airframe was basically steel tubing with fabric covering. Mounted beneath its metal engine cowl was a Menasco B-6 inline engine of 489 cubic inch displacement.

The Ike and other race planes of the Thirties are a breed apart from military airplanes. The men who built and flew them are also in a class by themselves, and although that brilliant era in aviation history is gone, we still can enjoy some of its glow through modeling the famous airplanes of the air races.

INTRODUCTION: READ BEFORE STARTING!

1. Study illustrations and instructions before starting.
2. Decide how much detail you wish to put into this kit.
3. Be sure to refer to the side of this package for the list of items required to complete this model.
4. Lay out all parts on a clean surface. Check fit by pre-assembling parts without cement.
5. Paint all parts before assembly and allow paint to dry thoroughly before handling.
6. For masking off painted parts it is recommended that a "magic" type of clear tape be used. For holding glued parts, use a masking tape.
7. To remove tape from parts easily, we highly recommend pressing your fingers on sticky side of the tape to make it less sticky before applying tape to part.
8. Remember, when painting or spraying, be sure your work area is well-ventilated.

1 PREPARATION OF PARTS

1. Wash all parts (do not detach parts) in warm water with liquid dishwashing detergent to remove the oily residue often left on during the molding process.
2. Let parts air dry and avoid excessive handling.
3. Use a Testor Hobby Knife to cut parts from plastic runner (parts tree). **DO NOT BREAK OFF.**
4. If you desire you may fill in seams, imperfections, etc., with Testor Contour Putty for Plastic Models which is available at good hobby shops.

2 SPRAY PAINTING**SPRAY PAINTING IS RECOMMENDED**

1. Remember, use a well-ventilated area (see #8 in the Introduction above).
2. Lay out the Fuselage halves 1 and 2, Wing 3, Stabilizers 4 and 5, Wheel Pant halves 8, 9, 10, and 11, Gear Strut 14, and Spreader Bar 13 on a piece of old cardboard.
3. Prepare a can of Testor No. 1245 White enamel spray paint by placing it in a pan of warm water.

WARNING: Do not heat over stove, use only warm tap water!

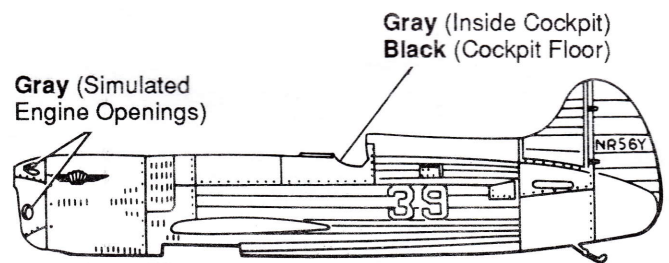
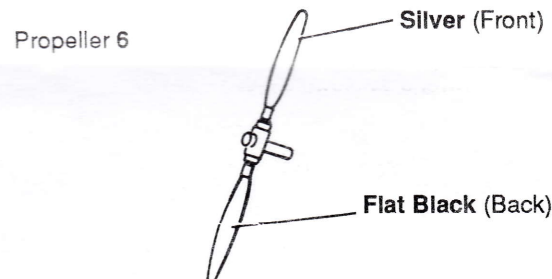
We only want to warm the spray can so the gas used to propel the paint is better able to atomize the paint and produce a good finish.

4. Shake can well until you hear marble inside can moving around freely.
5. Spray a **light** even coat of white paint on each part. (Distance recommended for spraying is 2 feet.)
6. Let dry (2 - 3 minutes).
7. Shake can again and spray from a closer distance being sure to use just enough spray to cover parts. (The **less** paint you use, the **better** the finish.)
8. Let dry thoroughly (24 hours).

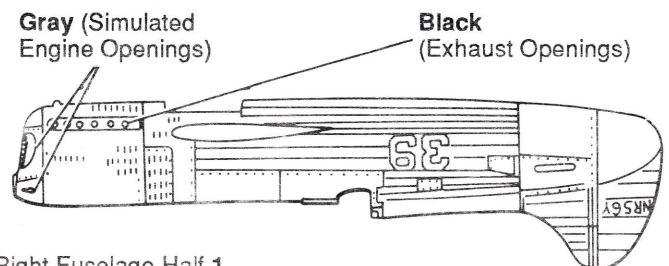
3 BRUSH PAINTING

1. Paint needed for brush painting:
 - a. No. 1146 Silver
 - b. No. 1138 Gray
 - c. No. 1149 Flat Black
 - d. No. 1171 Flat Beret Green
 - e. No. 1145 Gloss White
2. Paint the following:
 - a. No. 1146 Silver
 1. Propeller 6 (hub and front of blades)
 - b. No. 1138 Gray
 1. Inside Fuselage 1 and 2 (cockpit area)
 2. Simulated engine in front cowl (see drawing at right)
 - c. No. 1149 Flat Black
 1. Floor area of cockpit
 2. Propeller 6 (backs of blades only)
 3. Tires 12
 4. Exhaust openings on cowl lower right side
 - d. No. 1171 Flat Beret Green
 1. Pylon Base 17 (simulates grass field)
 - e. No. 1145 Gloss White
 1. Pylon Sides 16

TIP: Thinner, with just a little black and a little gray, can be flowed carefully into the engraved lines representing the aileron, elevator and rudder hinges. This will highlight these areas. We have done this on the model shown on the package.



Left Fuselage Half 2



Right Fuselage Half 1

Wheels 12



Black (Tires)

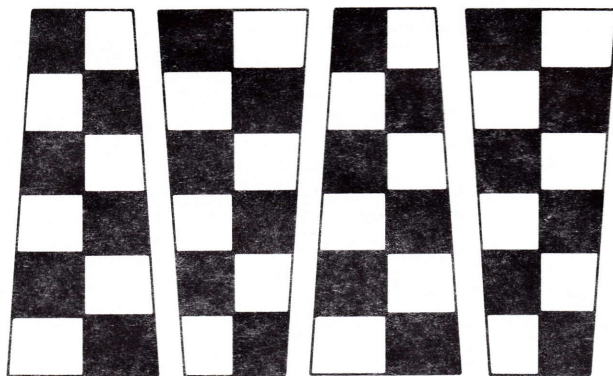
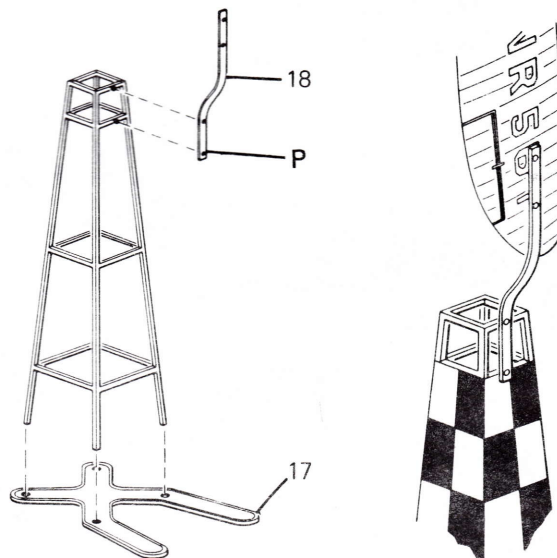
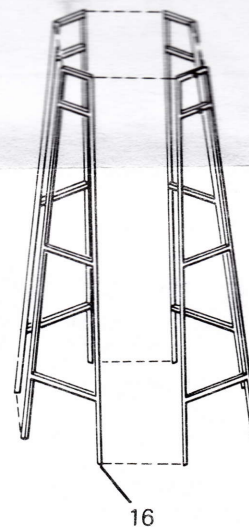
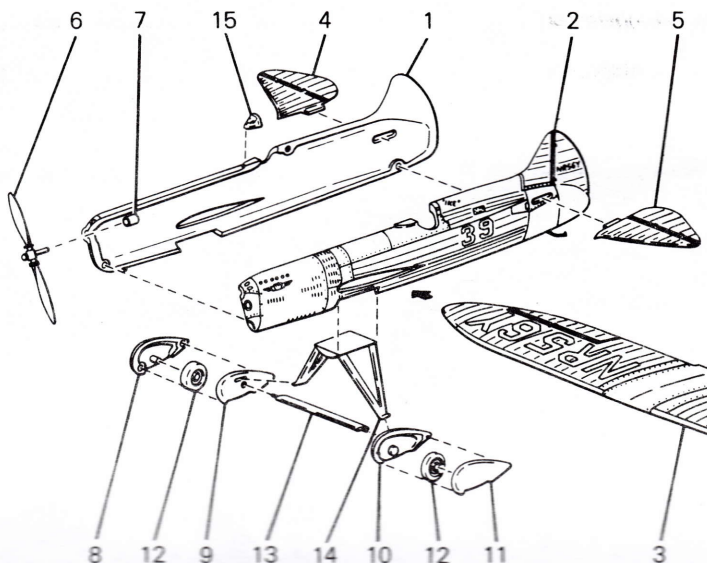
4 ASSEMBLY

NOTE: We suggest using Testor Liquid Cement (bottle with brush in cap) for most joints.

Be sure to scrape any paint from all joints to be cemented. Hold the parts to be joined together and touch the joint with the cement brush. The cement will flow into the joint and will not show.

For joints requiring strength, use Testor Cement for Plastic Models (tube). Use this cement on the Howard "Ike" for the landing gear joints 14 and the stabilizer-to-fuselage joints 1, 2, 4 and 5.

1. Place a drop of cement in the hole in the propeller retainer 7 and join to the propeller shaft 6.
2. Place the propeller unit into the slot in the nose of the right fuselage half 1. **DO NOT CEMENT.** Now carefully cement the left fuselage half 2 to the right half.
3. Slide the wing 3 through the fuselage from the left side and cement in place. Glue the stabilizers 4 and 5 into position as shown. Now cement the wind-screen 15 into place.
4. Place the wheels 12 on the axle pins and cement the matching wheel pant halves 8 to 9 and 10 to 11. Note that each unit has one slotted pant half, one unslotted pant half and one wheel. **DO NOT CEMENT WHEELS.** This will allow wheels to rotate freely.
5. Cement the spreader bar 13 into the hole in each pant unit.
6. Glue the strut unit 14 to the fuselage as shown. Note that the two angled strut unit legs face toward the rear of the airplane.
7. Cement the pant assembly to the struts as shown.
8. Glue the four pylon sides 16 together on the beveled edges. You may find it handy to use regular masking tape to hold these parts together while they dry.
9. Assemble the base 17 to the pylon.
10. Cut pylon checkered markers from this plan and glue them to pylon as shown.
11. Cement the short end (marked "P") of the curved support 18 to the two tabs on one pylon side.
12. When the Howard "Ike" is completed, it can be snapped on the pylon supports, as shown, and removed whenever desired. Note the two tabs on the bottom of the left wing for this purpose.



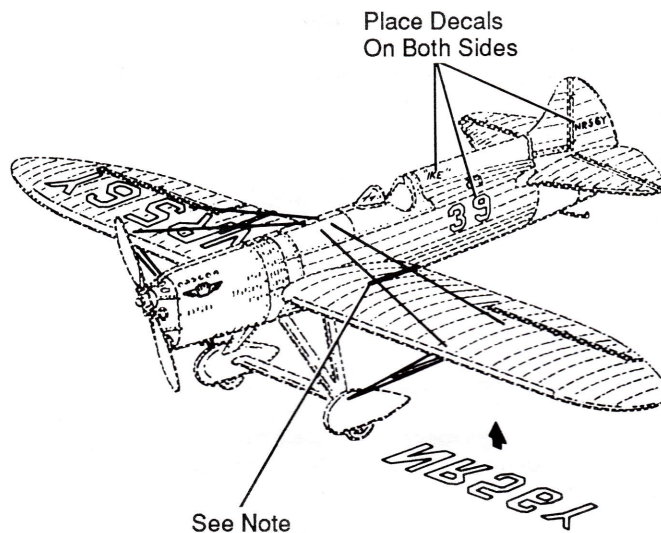
5 DECALS

Note: Decals stick best to a smooth, glossy painted surface. For best results, mask off the canopy and spray the entire model with a coat of Testor No. 1261 Glosscote, and allow to dry before applying decals.

Refer to the photo on the box for these steps.

1. Cut out each decal separately.
2. Place decal in lukewarm water for 10 seconds.
3. Remove from water and allow to sit for an additional 60 seconds to allow glue to soften.
4. Slide decal into proper position and blot off excess water with a tissue. Now plane should be sprayed again with **Glosscote**. Remove tape from canopy.

NOTE: Construct rigging braces from stretched sprue (see method 1 in 6 below). Make thick enough to make two holes in each with a **pin drill** for insertion of rigging.



6 RIGGING (OPTIONAL) (SEE STEP 5 AND BOX)

If you want to really finish the model we suggest you rig the flying wires as we have shown on the box. We will explain three methods of rigging: Please choose the one that suits your talents. We suggest you experiment with all three methods.

METHOD 1. - Stretched Sprue (see Fig. A)

- a. Take a piece of plastic that the parts were attached to (sprue).
- b. Hold over candle (approximately 4 inches) and **carefully** roll and stretch between your fingers.
- c. Be sure to apply enough heat to soften sprue before stretching.
- d. Make your own decision on the thickness.
- e. Cut to proper length and glue into position.
- f. Paint **Silver** (Testor No. 1146).

METHOD 2. - Wire

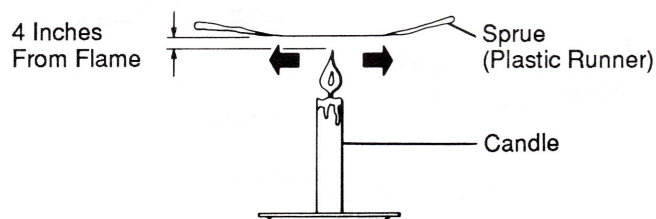
NOTE: This is the easiest of the 3 methods, but getting the wire tight, is difficult.

- a. Purchase from a hobby shop, .008 inch thick music wire.
- b. Cut to proper size and glue.

METHOD 3. - Thread

NOTE: A **Pin Drill** is needed. This can be purchased at better hobby shops.

- a. Use monofilament fishing line or nylon thread.
- b. This method requires drilling.
- c. After holes are drilled rig thread in one continuous run, if possible.
- d. Glue line at start and when threading is complete pull thread tight and glue. This method actually adds strength to the finished model.



Stretched Sprue
Figure A