Complex canopies and multicolored schemes can be intimidating, scaring modelers away from kits like the He 111. But new products and old stand-bys can produce eye-catching results.

Masking canopies & camo

Old and new techniques combine to produce
a sharper looking He 111

by Aaron Skinner

Zorro's mask helped hide his identity. In modeling, the opposite holds true; masks help the builder achieve something closer to a subject's real identity. Complex color schemes and clear parts can be masked in several ways, and effective masking can greatly enhance the model.

Hasegawa's 1/72 scale Heinkel He 111H-6 (No. E21) is a nice kit and a perfect candidate for masking. The twin-engine bomber's "greenhouse" nose features dozens of individual panes of glass, **1**, which benefit from being neatly finished to look like part of the airplane's structure. Also, World War II Luftwaffe bombers wore a splinter camouflage scheme with hard edges and sharp angles.

Something to look at

With all the glass up front, it's nice to have something to look at when you peer inside. This kit included nicely molded seats for the pilot and bombardier, as well as instrument panels, a control stick, details molded on the walls, and a small fret of photoetched-metal parts from DragonUSA including seat belts. I took my time painting and constructing the cockpit, **2**. Because black and RLM 66 schwarzgrau dominate the interior decor, I washed and dry-brushed so the detail would pop when viewed through the glass. I wanted the glass to be as clear as possible, so I dipped the clear parts in Future floor polish, **3**.

Using Eduard's masks

Several companies produce flexible, vinyl masks designed to fit a specific kit. I chose Eduard's set for the Hasegawa kit, **4**.

After the Future was dry, I set out the clear parts and began applying the masks. I did this with the parts loose, figuring they would be easier to work with off the model. First, I peeled away the extra vinyl around the pieces to make it easier to remove the masks. Then, using a No. 11 blade in a hobby knife, I peeled up the corner of a mask, **5**. Once it was started, I held the mask between the knife blade and my thumb and slowly pulled it from the backing. The masks are flexible and stretchy, so I was careful not to pull too hard while handling them.

With the mask ready, I lined it up against the corresponding frame on the canopy, **6**, using a toothpick to steady it while I maneuvered it into position. After it was in place, I ran a burnishing tool around the edges of the mask to seal it against the plastic, **7**. The vinyl is strong enough to be pushed around a little if the mask is not quite right the first time, but I minimized adjustments to avoid misshaping the material.

It took about an hour and a half to finish masking all the glass. Eduard includes masks for every window on the He 111, but different versions of the plane had some windows painted over (or none there at all), so it's a good idea to check references. There are a couple places, in particular the canopy over the dorsal gun position, where liquid mask is needed to fill gaps between the masks. Eduard designed them this way, and the instructions specify where liquid mask is needed.
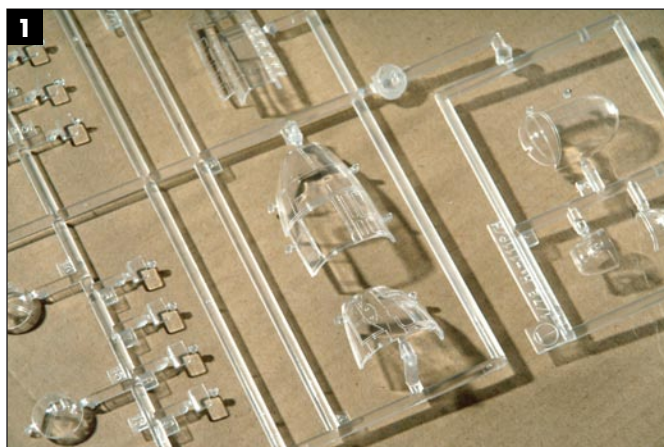
Hasegawa's He 111 features a large sprue of well-molded clear parts requiring careful masking to look right.
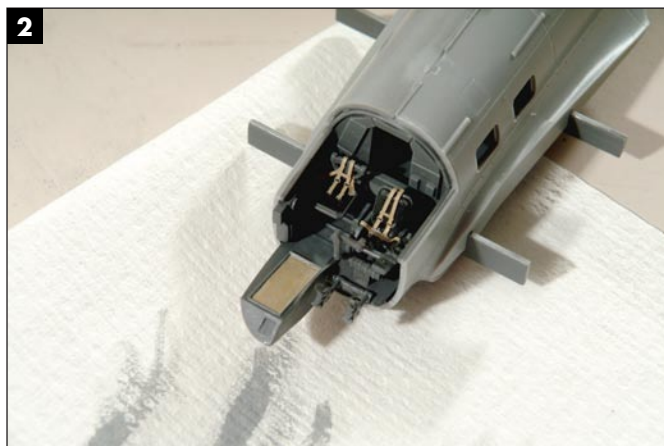

Aaron's washes and dry-brushing help bring out the detail included in the cockpit; a lot of it will be visible on the completed model.

Aaron dipped clear parts in Future floor polish, dragging each across a paper towel to wick away excess liquid before setting it aside to dry.

I used super glue to attach the front canopy and the ventral gondola. (The Future floor polish coating prevents super glue fumes from clouding the clear parts.) Getting the three-piece front end together took some work. Additionally, a separate hemispherical shape for the nose gun blister gets glued to the
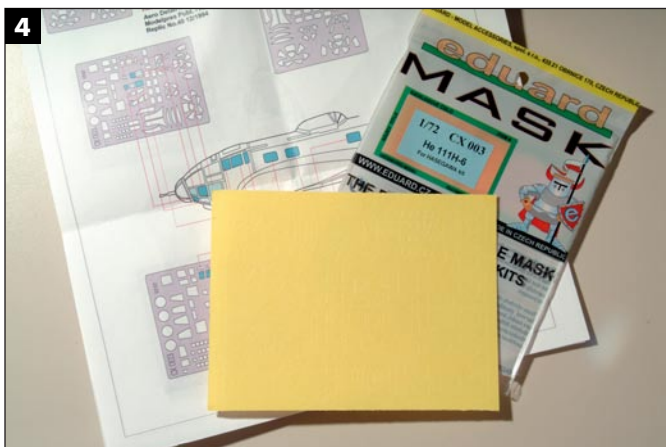
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The Eduard mask set (No. CX003) is a 3½" x 5½" sheet with precut vinyl masks for all the kit's windows as well as the wheels. Aaron checked references carefully to be sure he used only the necessary masks.

5

Aaron uses a sharp hobby knife to begin peeling the corner of a mask from the backing sheet. Once started, he held the mask between his thumb and the blade to pull it away entirely and transfer it to the model.
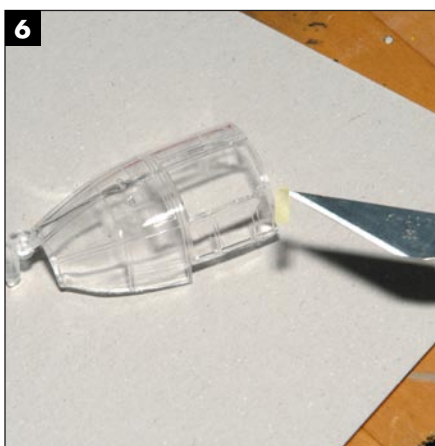
6

Using a knife, Aaron transfers a mask to the Heinkel's upper canopy. Getting the masks lined up the first time prevents stretching the vinyl.
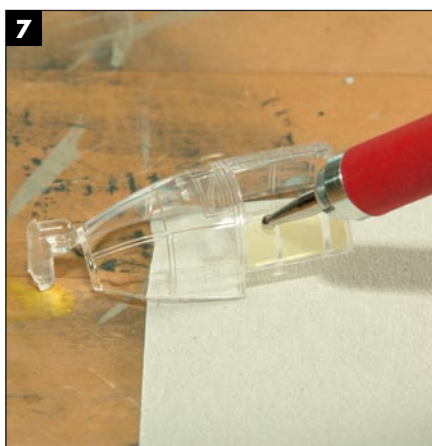
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Running a burnishing tool around the edges of the mask ensures a good seal with the plastic and prevents paint from bleeding onto the window.
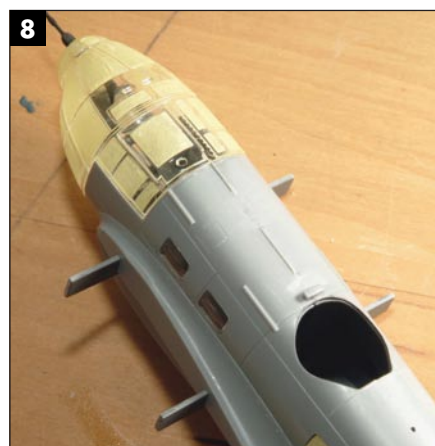
8

After completing the masking, Aaron super glued the cockpit windows into position and used more super glue to blend them into the fuselage.

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front of that structure. I could have used a couple of extra hands here, but I eventually got the cockpit glass together. I faired the framework into the fuselage with super glue, **8**. I painted the nose and gondola machine guns and installed them before attaching the glass for those positions because they wouldn't be accessible after being glued into position. The break down of the parts meant I could have left them off until after painting, but I wanted nice clean joins painted with the rest of the airframe, so I chose to do it this way and repaint the gun barrels after the model was painted.

I left the carapace for the dorsal gun position off, applying masking tape to the underside of it to protect it from spray when it was painted. I also left the rear-most cabin windows off. There were machine guns mounted through them making it hard to mask, but they were easy to place after painting was finished. The kit comes with an extra pair of windows, apparently for a version of the He 111 which did not have guns mounted there. I pressed the extras into position to protect the interior of the plane, in particular the nearby windows, during painting.

From the inside out

I sprayed RLM 66 schwarzgrau over the nose and ventral gondola, **9**. This layer becomes the interior color, so the inside of any

painted part of the canopy frame matches the interior components already installed.

Next, I primed the entire model with a lighter gray. The primer evened out the colors of the airframe, covering the dark gray of the canopies and providing a uniform surface for the camouflage to follow.

Luftwaffe aircraft on the Eastern Front carried bright-yellow theater markings under the wingtips and in a band around the rear fuselage. Hasegawa supplies decals for the fuselage stripes, but I painted this band to be sure it matched the wingtips. Because yellow doesn't always cover darker colors well, I painted the theater markings first. I sprayed the wingtips and fuselage band white, then RLM 4 yellow, **10**.

After the paint dried, I masked off the wingtips and the fuselage band. There are many types of masking tape available, including some made specifically for modeling. I've used several over the years, with mixed results. For this project, I chose ScotchMark Paper Tape from 3M. Used by graphic designers and the publishing industry, it sticks well without being too tacky. On the finished He 111, the paint only pulled up in a couple of spots. However, I suspect that had more to do with the quality of my paint job than the tape.

Referring to the kit's marking diagrams, I placed the edge of

9

Aaron painted unmasked portions of the clear parts with schwarzgrau, the 111's interior color. When the cockpit is viewed from outside, the inside of the canopy frame matches the interior walls and details.
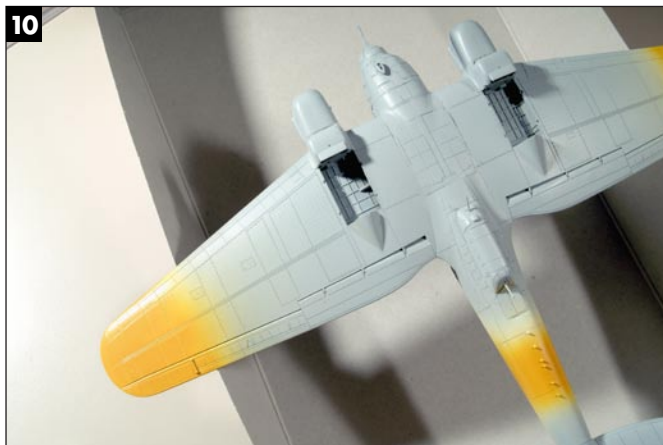
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Aaron started the yellow theater marking on the wingtips and fuselage by airbrushing white, then overcoating with RLM 04 yellow. The white under-coat makes the yellow brighter.
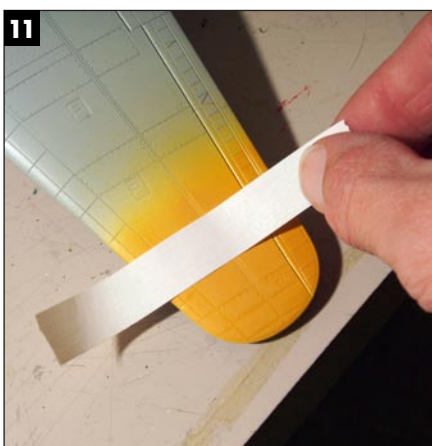
11

Aaron adds a strip of tape along the line to begin masking the yellow for the theater markings. Additional tape will cover the rest.

12

Aaron removes a mask, folding the tape back on itself and working slowly to avoid damaging the paint underneath.
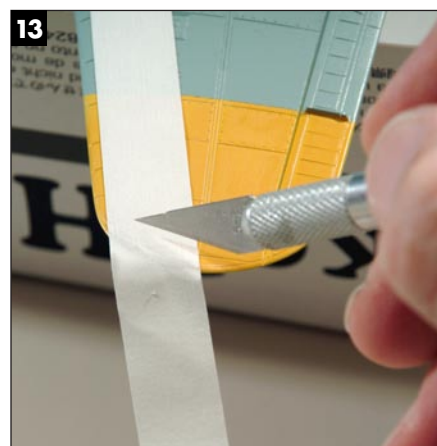
13

Using a hobby knife, Aaron trims paper tape for the wingtips where the upper surface camouflage overlaps the leading edge.

a piece of tape where I wanted the demarcation line between yellow and blue under the wings, **11**. Using my fingernail, I burnished the tape along the edge to prevent the blue from bleeding under the mask. I covered the remainder of the wingtip with additional tape.

To produce the fuselage band, I laid the kit decal for the stripe over a piece of tape, then cut around it with a hobby knife. I used a light touch, preferring to make several passes rather than risk roughing up the edge of the tape. Then, I stuck the tape in position over the yellow paint on the fuselage and burnished it down.

From the bottom up
I airbrushed the undersides of the Heinkel with Testors Model Master Acryl RLM 65 hellblau, the lightest of the three camouflage colors, making sure to cover all areas of the plane that would be blue on the final model – the undersides of the wings and horizontal stabilizers and the full length of the fuselage.

Once the paint was dry to the touch, I removed the masks from the wingtips. The upper camouflage wraps around the wings' leading edges, so I wanted to remask the entire wing, including the tips. When removing masking tape, I work slowly, pulling the tape almost back on itself as I go, **12**. I left the mask for the fuselage band in place.

After letting the paint cure overnight, I used the paper tape to mask off areas that would remain blue, **13**. I worked slowly, ensuring the tape was burnished well and there were no gaps paint could sneak into, **14**. I paid particular attention to areas where the tape had gone across the vinyl canopy masks, making sure it covered properly. Where the color demarcation line curved around the tail planes and wing roots, I cut thin strips of tape for the front edge of the mask and backfilled with larger pieces of tape, **15**. Under the rear fuselage and tail planes, I filled gaps between the masks with more tape. For large areas, like the wings, I cut paper to fit and taped it into position, **16**.

Go easy when painting over masks, especially around the tape lines. Too much paint not only increases the chance of bleeding but can form a ridge along the edge of the tape, requiring careful sanding to remove.

After airbrushing RLM 71 dunkelgrun, the lighter of the two greens, and letting it dry for 24 hours, I masked the splinter camouflage, **17**. Where the scheme requires sharp points, such as the top of the fuselage, I precut the angles with scissors, then placed the masks on the model, **18**.

Now that my Heinkel looked as if it had just come from the emergency room after a skiing accident, it was back to the spray booth for the last color – RLM 70 schwarzgrun.
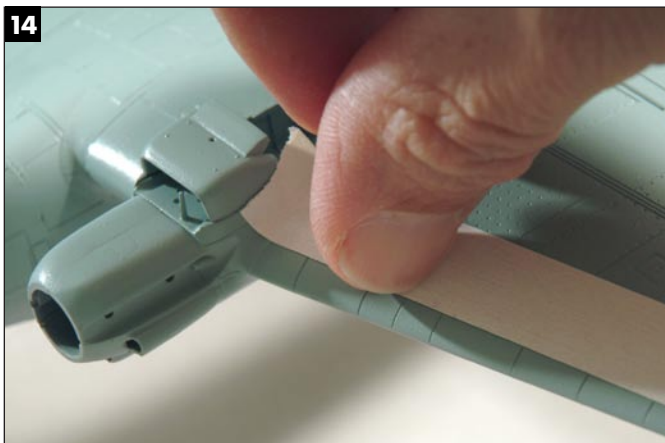
14

Aaron uses his thumbnail to burnish the tape along the leading edge, tightly sealing the mask to reduce the amount of touch-up necessary after painting.

15

A thin strip of tape forms the curve for a mask. Aaron filled the area behind the edge with larger pieces of tape.
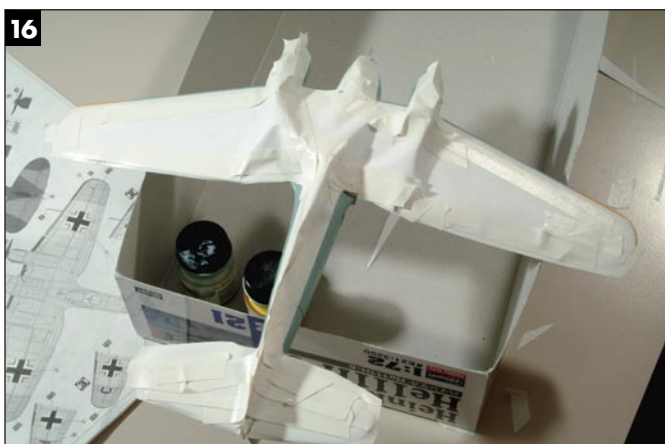
16

More tape cut to shape, as well as whole sections of paper for larger areas, fill gaps between the edges of the masking.

17

Aaron enlarged the kit's marking diagrams to 1/72 scale on a photocopier to reference while masking the splinter scheme on the upper surfaces.

18

Using scissors, Aaron cut the sharp points and odd angles necessary for the Luftwaffe splinter-scheme camouflage.

19

Paint lifted off the model around the wing fuselage root when the masks were removed.

The big reveal

After an hour, the black-green was dry to the touch, and the moment of truth had arrived. I began removing the masking tape, starting with the top layers and gradually revealing more of the paint job. Resisting the urge to rush through the unwrapping like a young child on a birthday, I went slowly, taking care to not damage the paint.

When the tape and paper was all off, I had a properly dressed He 111. Only a couple of problem areas existed – one or two spots where the painted lifted with the tape, **19**, and one line with a little bleeding from the top coat, **20**. I touched these up with a small brush and sanded down a couple of ridges left by the tape.
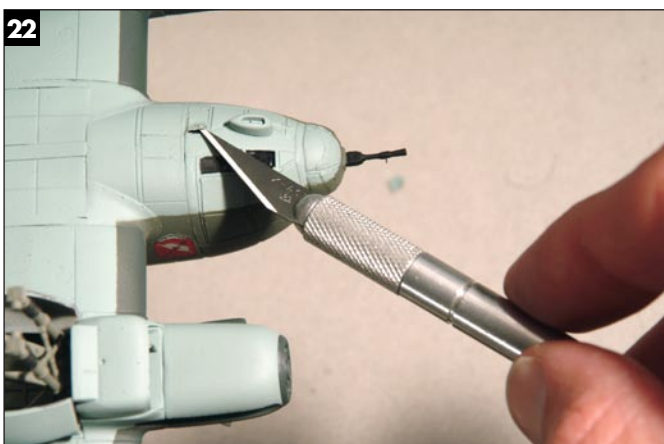
Keeping the masks in place on the clear parts, I sprayed the

20

Aaron didn't get one piece of tape burnished down quite right, so he had to touch up an area where paint bled under the mask.

21

The point of a new No. 11 blade run around the edge of a vinyl mask helps break the surface of the paint, minimizing damage to the surrounding color.

22

Using the point of the knife, Aaron pries up the corner of a mask, taking care not to scratch the plastic underneath.

23

The mask is carefully and slowly pulled away from the window. The slight ridge of paint around the window is easily cleaned up with a knife.

aircraft with Future floor polish to prepare for decals. After the markings were applied, I airbrushed clear flat to give the airframe a more realistic sheen and even out all the coats.

I can see clearly now

Before removing the vinyl masks, I ran the point of a sharp hobby knife around the edges, **21**. Doing this scores the paint, making the mask easier to remove and limiting damage to the surrounding paint. I lifted the corner of each mask with the point of a knife, taking care not to scratch the clear plastic underneath, **22**. Then, using tweezers, I slowly pulled back the mask, **23**. Most of the ones on the complex greenhouse peeled away cleanly. I touched up small mistakes with a brush.

Cleanup and the addition of the last parts and the dorsal gun position completed my Heinkel. The time invested in masking really paid off. **FSM**

SOURCES

Canopy masks, CX003, Eduard, 420-47-611-8259, www.eduard.cz
Paper tape, 3M ScotchMark 256, 3M, www. 3m.com, available at office supply stores

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