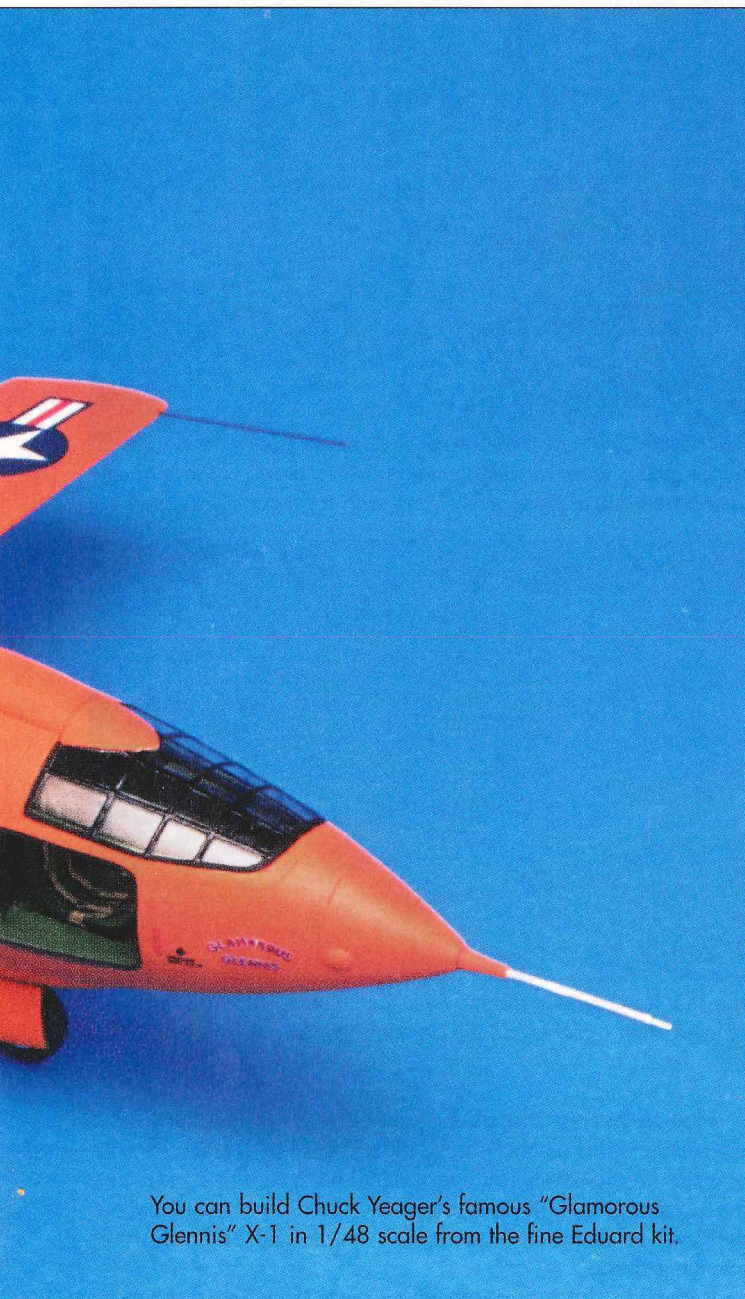




"Glamorous Glennis"

Yeager's X-1 can be your first multimedia aircraft kit

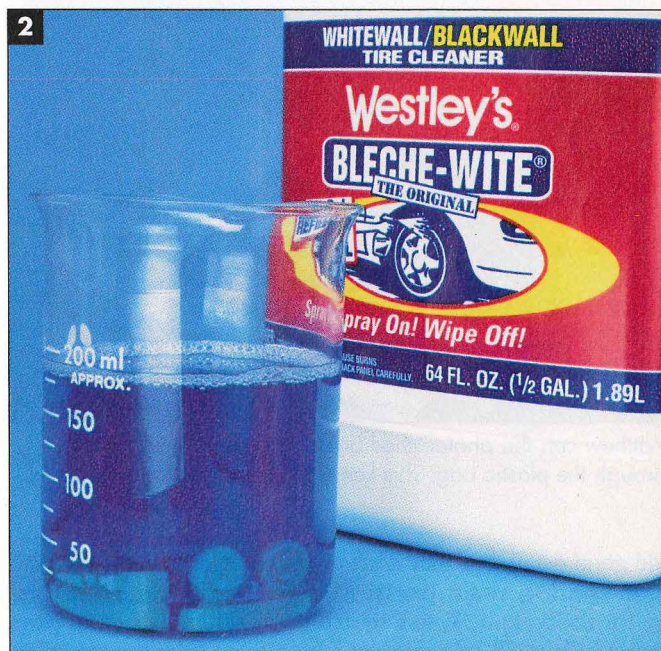
Story and photos by Matthew Usher



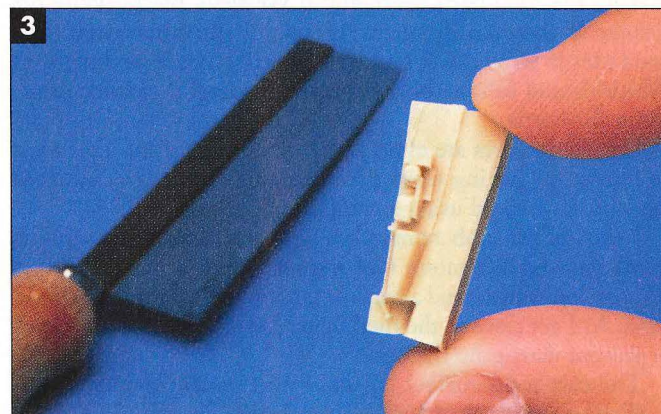
You can build Chuck Yeager's famous "Glamorous Glennis" X-1 in 1/48 scale from the fine Eduard kit.



Eduard's kit includes cast-resin cockpit parts and "weight-bulged" main-landing-gear wheels.



Soaking the cast-resin parts overnight in Westley's Bleche-Wite tire cleaner removes excess mold-release agent. Westley's is available at most auto-parts stores.



A razor saw is a good tool for removing most of the cast-resin pour stub.

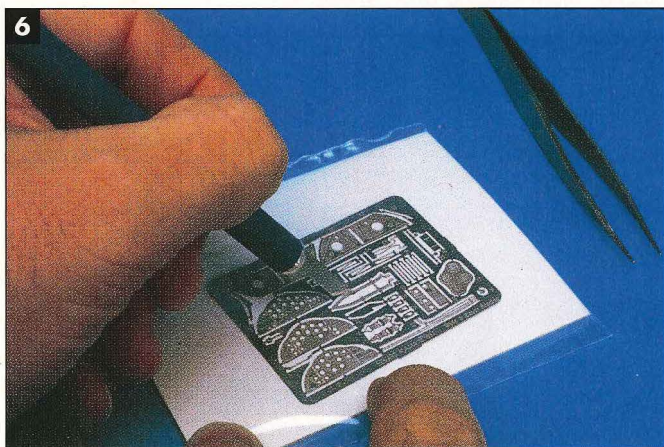
The Bell X-1 was the fastest aircraft in the world in 1947. It was the machine that rocketed Chuck Yeager through the sound barrier and into history.

Yeager's X-1 has taken its rightful place in the National Air and Space Museum's Milestones of Flight Gallery beside the Wright Flyer, The Spirit of St. Louis, Apollo 11's command module *Columbia*, and other history-making craft. Despite its renown, there have been only a handful of kits of "Glamorous Glennis" to choose from.

Eduard came to the rescue in the late 1990s by releasing two all-new X-1 kits in 1/48 scale. Kit No. 8026 is a standard, injection-molded model; the second, No. 8032, is a deluxe, "Profipack" edition that includes cast-resin and photoetched-metal detail parts. This edition of the kit is a good introduction to working with resin and photoetched-metal parts; the parts



4 A sanding drum chucked in a motor tool removes most of the remaining pour stub.



6 Matthew cuts the photoetched brass parts from their fret right through the plastic bag. This keeps the tiny parts from escaping.

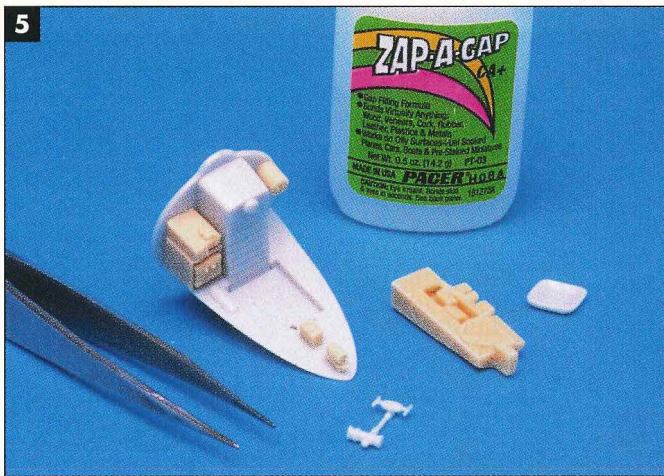
add good detail, but they don't overly complicate the assembly.

Preparing resin parts. Most of the kit's cast-resin parts are for the cockpit, **1**, so I started there. Often, cast-resin parts have a little mold-release agent left on them from the manufacturing process. Excess agent can cause problems during assembly and can keep paint and glue from adhering to the parts. Although soap and water usually do the trick, I prefer soaking the resin parts overnight in Westley's Bleche-Wite tire cleaner, **2**, then rinsing them thoroughly in warm water. It's a good idea to wear gloves and eye protection when working with Westley's, and follow the storage and disposal directions printed on the bottle.

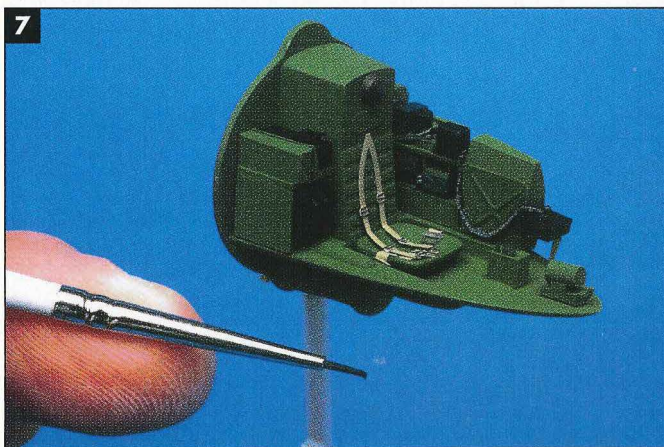
Cast-resin parts are often attached to "pour stubs" that must be removed. Cutting close to the parts, I removed as much of the stubs as I could using a razor saw, **3**.

I ground off stub remainders with a medium-grit sanding drum chucked in a motor tool and set at low speed, **4**. I always wear eye protection and a particle mask when sanding cast-resin parts. As I get close to the final shape, I switch to a sanding stick to prevent damaging the part.

The cast-resin cockpit details mount on the kit's injection-molded cockpit. Standard solvent-based model glues won't work with resin, so I assemble them with super glue (epoxy will work, too), **5**.



5 Super glue is ideal for gluing resin parts to plastic. Standard solvent-based model glues won't work with resin parts.



7 The seat harness was shaped over the kit seat, removed and painted, then replaced on the painted interior.

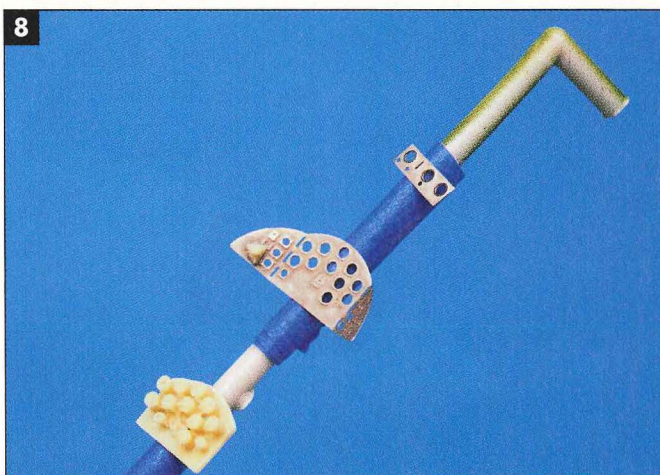
Not-so-heavy metal. Eduard offers a tremendous line of aftermarket photoetched-metal detail sets, so it's no surprise that this kit includes a full fret of detail parts for the cockpit and the landing gear. The parts are thin and extremely delicate, but the level of detail they provide is worth the extra effort of installing them.

Removing the tiny photoetched parts from the fret can be tricky. I took advantage of the parts' packaging; they came in a plastic bag reinforced by a piece of white cardboard. I used a sharp blade to cut the parts loose right through the plastic bag, then removed each part with tweezers, **6**. The plastic bag helped keep the parts from disappearing into the workshop carpet.

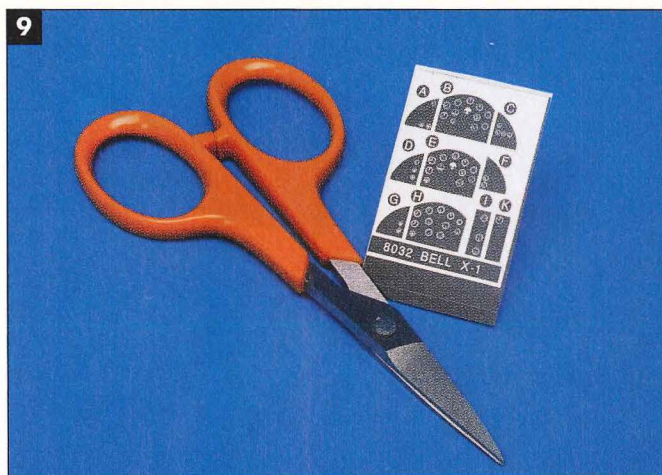
Many of the photoetched parts had to be folded or formed to shape before being installed on the model. To give the shoulder and lap belts a realistic "drape," I carefully bent them to shape using the cockpit seat as a form. Afterward, I painted them using Testor Model Master U.S. gulf armor sand enamel (No. 2136) and a detail brush.

I airbrushed the cockpit Testor Model Master interior green FS 34151 (No. 1715), then installed the belts, **7**. Touches of paint bring out the details, especially in the finely molded cast-resin parts.

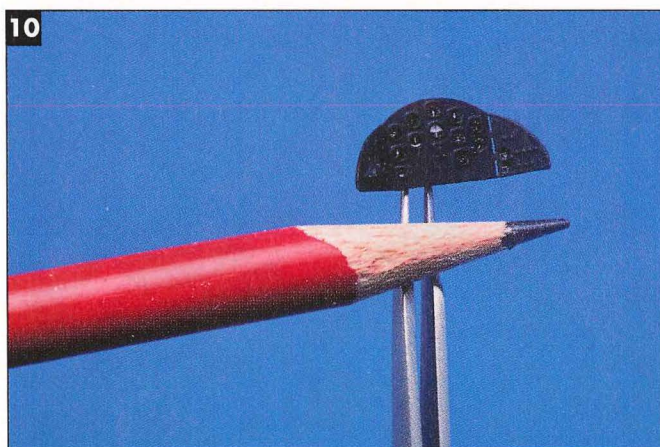
The instrument panel is a multipart assembly: a photoetched panel, photo-film instrument faces, and a resin part for the



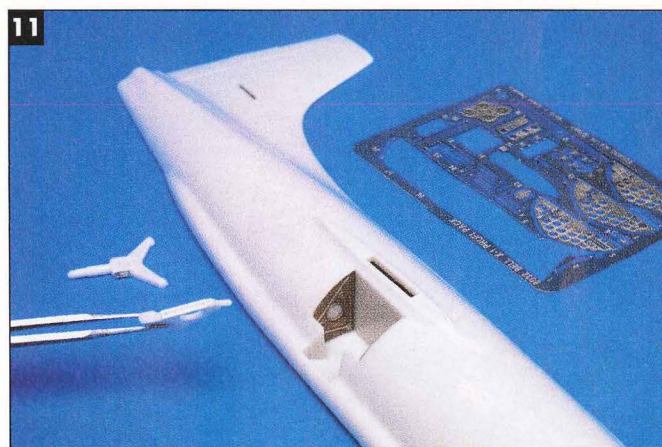
To hold the parts during painting, Matthew stuck the instrument-panel parts to a piece of sprue with doubled-over masking tape.



A small pair of sharp scissors separates the photo film instrument cluster from the sheet.



After painting the back of the film white, Matthew aligned it so the gauges could be seen through the holes in the panel.



Photoetched details are included for the main landing gear bays and struts. The extra detail really brings the model to life.

The Bell X-1

There were three X-1s in the "first generation" design of the rocket-powered, supersonic research aircraft. Originally designated XS-1 for experimental supersonic, the famous bullet-shaped aircraft were the first in a long and continuing line of "X-planes."

Of the three originals, serial No. 46-062 was the most famous. It was piloted by Chuck Yeager on the famous sound-barrier-busting flight of Oct. 14, 1947. This airframe went on to log 78 flights exploring transonic and supersonic flight. It was also the fastest, flown by Yeager at 957 mph (Mach 1.45) March 26, 1948. It now hangs in the National Air and Space Museum's Milestones of Flight gallery.

The second X-1 (46-063) flew 74 flights over California's high desert surrounding Muroc Army Air Field (later named Edwards Air Force Base). It was flown mostly by pilots with the National Advisory Committee for Aeronautics (NACA, the precursor of NASA). After a series of nose-wheel strut failures, it was rebuilt with a new wing and canopy as the X-1E. It is now mounted on a

pylon outside NASA's Dryden Flight Research Center at Edwards Air Force Base.

The third (46-064) flew only one glide flight. During ground operations Nov. 9, 1951, the aircraft exploded on the ground, injuring its pilot. It was destroyed along with its B-50 drop ship. Nearly all of the X-1s were launched by being dropped from B-29s or B-50s.

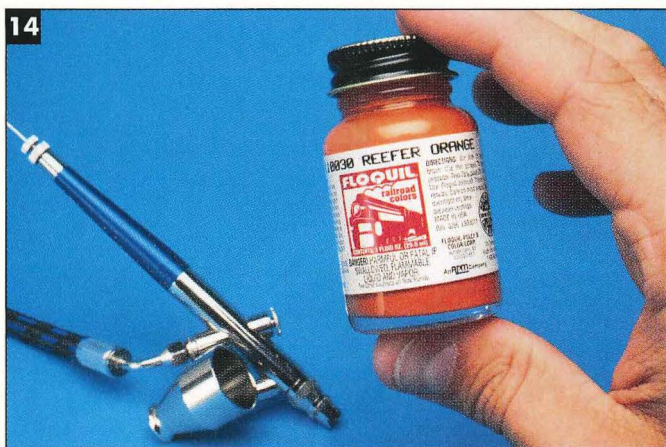
The second-generation X-1s followed and were dubbed X-1A, X-1B, and X-1D (the X-1C was cancelled). The craft were designed to test high-altitude flights at speeds beyond Mach 2, and were significantly enlarged to carry more fuel. Both the X-1A and X-1D were destroyed in explosions resulting from the incompatibility of liquid oxygen (the oxidizer of the rocket fuel) and leather gaskets used in the fuel tanks – also the cause of the explosion of the third X-1. (No crew members were injured in the X-1A or X-1D explosions.)

The fastest flight of the second-generation X-1B was 1,650 mph (Mach 2.44) Dec. 12, 1953. The pilot? Chuck Yeager!

– Paul Boyer



Any time you paint a model a bright color, prime with white or light gray. Matt used Testor camouflage gray.



Floquil railroad reefer orange is a good out-of-the-bottle match for the X-1's bright orange finish.

instrument cases. I used the kit's optional injection-molded panel as a guide to bend the photoetched panel to shape. Next, I stuck the panel and resin instrument cases on pieces of plastic sprue (the trees the parts come on) with masking tape, **8**, then airbrushed them Testor Model Master aircraft interior black FS 37031 (No. 2040).

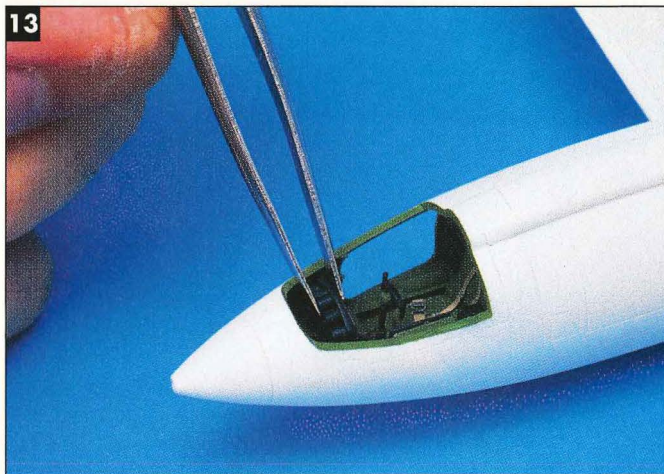
I trimmed the instrument film to shape using small, sharp scissors, **9**. I attached the film to the back of the photoetched panel with Microscale's Micro Krystal Klear applied with a fine paint brush, **10**.

Since the gauges are printed on clear film, I had to paint the back side flat white. The front faces of the dials can be seen in the holes in the photoetched panel. To complete the panel, the resin instrument housing was attached with Krystal Klear to the back of the film.

More photoetched detail parts went on the main landing-gear struts and inside the gear bays, **11**.

Closing time. The finished cockpit was installed in the starboard fuselage half, with the cockpit floor carefully aligned with the edge of the fuselage hatch. A pile of BBs held in place with 15-minute epoxy keep the X-1 on its nose gear.

The fuselage halves fit well, so there wasn't much filling and sanding on the seams. After adding the wings and horizontal tail surfaces, I masked the canopy and hatch openings, then primed the model with an airbrushed coat of Testor Model



The canopy opening is big enough for the rudder pedals and the instrument panel to be dropped in after priming the model.



An airbrushed coat of reefer orange looks good over the light gray primer. Don't forget to paint the hatch and canopy.

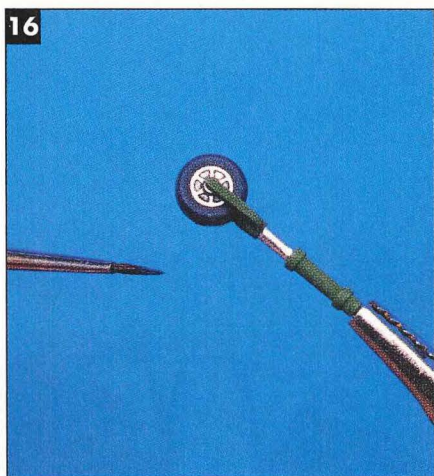
Master camouflage gray FS 36622 (No. 1733), **12**. It's a very light gray that provides a good base for the bright orange scheme. The triangular fairing at the top of the kit's canopy, landing-gear doors, and the main hatch also were primed.

Before attaching the canopy, I installed the rudder pedals and the completed instrument panel, **13**. The X-1's canopy opening is large enough to work through even after the fuselage halves are glued together.

Although all the first-generation X-1s were glossy orange (approximately FS 12243) when they left the Bell factory in New York, they faded quickly and lost their gloss in the desert sun during their testing near Muroc Dry Lake in California. Floquil Reefer Orange (No. 110030) is a good out-of-the-bottle match for the X-1's orange, **14**. Floquil paint is generally available in model-railroading shops. I thinned the paint for airbrushing with Floquil Dio-Sol and painted the model, **15**.

While the airframe was drying, I finished the kit's detail parts, including the landing gear. I airbrushed the wheel hubs with Testor Aluminum Non-Buffering Metalizer (No. 1418), then brush-painted the tires using Tamiya German gray acrylic paint (No. XF63), **16**. A black-acrylic wash darkened the recesses in the wheels.

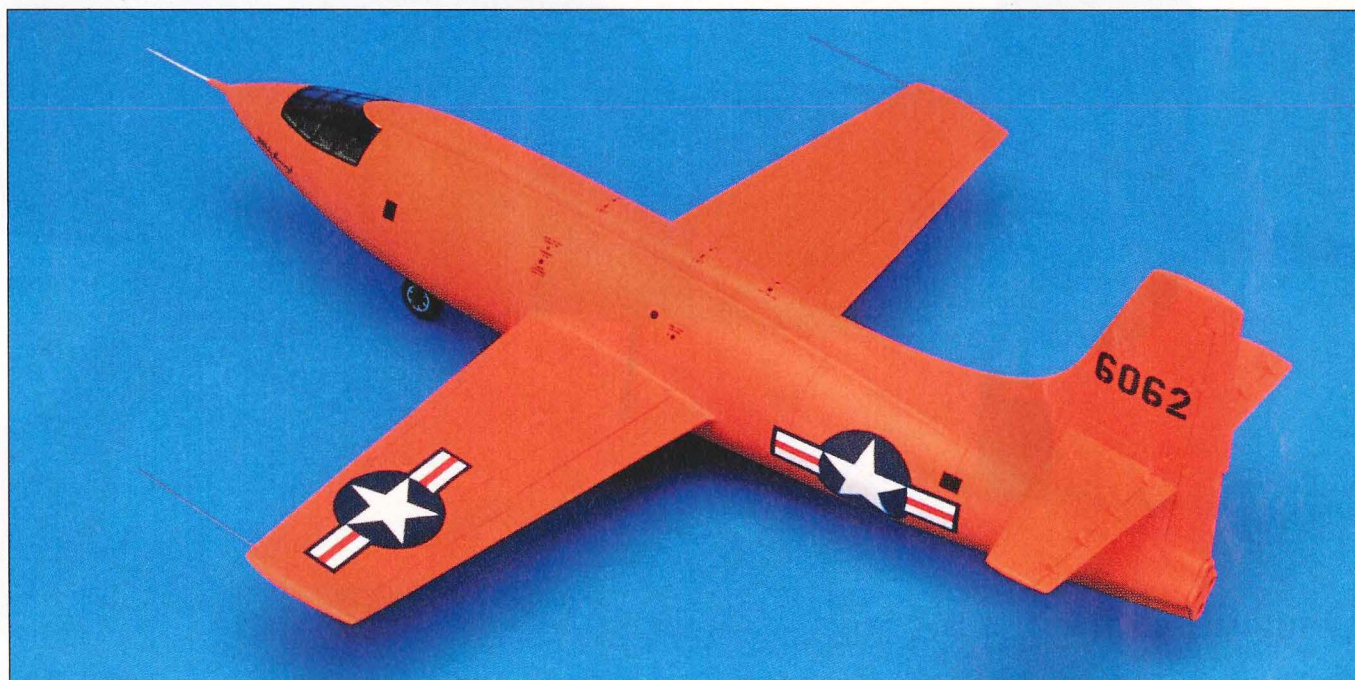
Decals are best applied to a smooth gloss surface, and since I painted the model with flat paint, I had to overcoat it with a clear gloss. I airbrushed several light coats of Future acrylic floor



16 Matt used Bare-Metal Foil to represent the landing gear's oleo struts.



17 Instead of painting the criss-cross canopy braces, Matt represented them with black decal strips, applied one at a time. A little setting solution helped them snuggle down.



Since .50-caliber bullets were known to travel at supersonic speeds, the X-1's design began with the shape of a bullet.

polish and let it cure for 48 hours.

The kit decals went on nicely, and no setting solution was needed. An airbrushed coat of Testor Model Master flat clear lacquer finish (No. 2015) sealed them in place when they were dry and restored the sun-faded flat sheen to the finish.

Final details. The X-1's canopy was crisscrossed with metal reinforcing straps. Instead of masking and painting them on my model, I cut thin strips from a sheet of solid-black decal film and applied them over the canopy's raised framework, 17. A little setting solution helped them snuggle down.

The last detail was replacing the kit's plastic wingtip pitot tubes with fine music wire, after drilling holes in the wings using a No. 78 (.0160") bit. They're finer and more durable than the kit-supplied parts.

I'm proud to place my X-1 model at the front of the line in my "space race" collection. The cast-resin and photoetched detail parts make the model worthy of a closer look. **FSM**

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- Micro Krystal Klear** Microscale Industries, Inc., 18435 Bandilier Circle, Fountain Valley, California, 92708