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is that, once cut to meet our modeling purposes, it must be treated gently as the twigs and foliage become delicate. It's easy for its fine leaves to be damaged or fall off just by handling it. To help avoid this, I spray freshly cut asparagus with a matte varnish and various shades of green paint. This helps delay the twigs from shedding their foliage.

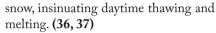
Once they were stabilized I placed the trees around the diorama, attaching



them with white glue and Das white putty. (34, 35)

For the background I used smaller scale artificial pine trees from one of the various hobby brands. This simulated the depth of field I needed. Then I used an airbrush to apply a first coat of Yellow Ochre (No. 70.913) to the path and ground cover.

Finally I coated the ground with a wash of Burnt Umber (No. 70.941) to create a muddy texture for under the



Next, I covered the trees with snow. To simulate snow accumulation on the pines' crowns I turned to Aguaplast powder (Ratioplast brand). I like using the powder, which is mixed with water to create the consistency you desire, because it's easy to adjust. Then brush the fake snow into the canopy of pine trees you've created. Be gentle so as not to break the twigs that are acting as branches. (38, 39)

Before attaching the vehicle permanently I applied a generous coat of artificial Thick Mud—European Mud (No. 26.807). This makes the sloppy path more believable. (40, 41) I then glued the vehicle in place before adding mud to its wheels with a small stick so it looks to be moving through the muck.

Once the mud dried, I reinforced its fresh nature by adding small amounts of artificial Water Texture Still Waters (No. 26.230). (42)

Finished! (43)





# George Washington crossing the Delaware River

### SKILLS

Work from scratch with figures to achieve poses similar to those in the painting.

Create an icy river and winter atmosphere.

Place three scales in position to re-create a realistic background.

### **SCALES**

Washington's boat: 1:32 Second boat: 1:56 Third boat: 1:72





Emanuel Gottlieb Leutze. Washington Crossing the Delaware. 1851. Metropolitan Museum of Art. Wikimedia Commons.



This diorama was undoubtedly the most complex due to the number of figures included (30) and the difficulty of adapting the positions of the combatants to reflect those in the famous Emanuel Leutze painting, *Washington Crossing the Delaware* (1851). The idea was suggested to me in 2015 by a friend and colleague José María López Lago, born in Chicago, whom I thank for his conviction to creating this dramatic historical diorama.

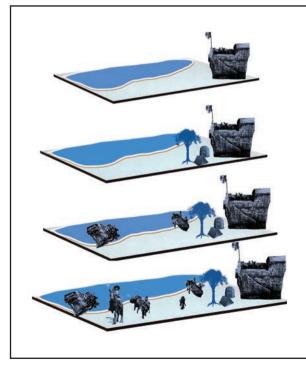
Gen. George Washington's crossing of the Delaware River during the American Revolutionary War was a historic military turning point. It famously took place on Christmas night and the morning of Dec. 26, 1776, and was the first move in a surprise attack Washington had planned against the Hessian soldiers, commanded by Johann Rall at Trenton, N.J.

The diorama was difficult for several reasons. First, to achieve a realistic representation of Leutze's painting I had to work from scratch, or semi-scratch, to re-create the painting's main figures. That entailed assembling and painting some of the figures two or three times, working with various heads, torsos, arms, and legs, all from various manufacturers. Those included Andrea Miniatures, Latorre Models, LOD Enterprises, Hornet, TMP, Revell, Preiser, Historex, BUM, Art Girona, Perry Miniatures, and Airfix.

But this combination meant some figures were made of parts from up to five sources. However, that meant they each had their own unique personality. It also meant I had to work with different putties, tinfoil, and other materials to complete their uniforms and accessorize the scene.



Here we see the scale differentiation looking back from zone 2 to 1 with the 1/35 scale soldier pulling his donkey, and the 1/32 scale officer on horseback in back. Overall there are three zones, as seen in Image 4 (previous page), the final being 1/72 scale with the castle, boat, tree, two tents, and two horses. There also are the figures in the castle. Overall there are 11 figures in the scene.



## 4 steps to placing elements in the diorama:

**Step 1:** First prepare the riverbed, painting the land with earthy and ochre tones, then place the already finished fortification.

**Step 2:** Place the tents and tree while finishing the ground.

**Step 3:** Add the water and elements in contact with the river, then place the boat and burned wagon.

**Step 4:** Finally place the figures to create the illusion of depth of field.

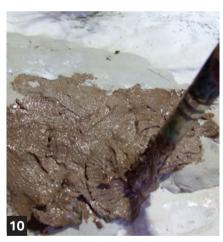














### Starting the build

Now that you have the background and some perspective on how the diorama will be arranged to feature the three scales, I'll describe the build in five phases, starting with the base and wrapping up with the final stage, broken into three parts, dealing with the figures.

### Phase 1: The base

Start with a light plywood board for a base, or use a bulletin board, one with a frame and smooth cork on one side. (5) Eager to learn a new skill I experimented with sheets of tinfoil, due to its ductility, to increase the land's surface area. I then added pieces of white foam insulation and added one plastic container that would be used in the next step. (6-8) I fixed the foil to the base with adhesive tape and found it was easy to add texture to the surface.

Once the land's varying slopes were glued in place I was careful to keep the formations in scale with the varying figures I would be adding so as not to overpower any of them, especially the smaller scale figures. For example I marked a river bank to be narrower by the area adjoining the 1/72 scale figures.

Next, I mixed Aguaplast powder with water and patiently covered the entire diorama's surface with the mix, avoiding excessive bubbles and clumps.

On the earthy area I applied a generous layer of Vallejo Gray Sand gel (No. 26.215) mixed with Earth Texture Brown Earth (No. 26.219) gel. (9, 10) This creates an excellent finish, and its hardness is especially forgiving when mixed with other acrylics. (11)