

# FOCUS ON Tools

by Keith Pruitt

## Badger 105 Patriot Airbrush

***This detail airbrush offers an excellent choice for any hobby project.***

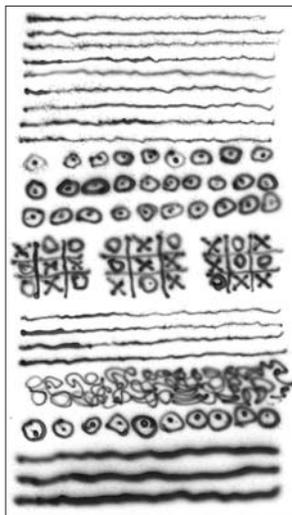
How does a company improve on state-of-the-art design? Badger Air-Brush Company has done just that with its new 105 Patriot detail airbrush. The Patriot is a gravity-fed, double-action airbrush with a unique, patented double-cutaway handle. This handle allows cleaning, normally a bit of a chore, to be quick and easy.

Badger has designed the new 105 Patriot to meet or exceed the high standards for which Badger products are known. Badger has produced the 105 Patriot with the patented "Easy Access" needle removal system, self-centering nozzle design, exacting control, comfortable balance and parts interchangeability with its 155, 200 and 360 airbrushes. With the gravity-fed design and fine tip and needle, the 105 Patriot is capable of fine detail work that both hobbyists and professionals require. It is constructed of solid brass with a nice chrome-plated finish, making this airbrush extremely reliable for many years of service. As with all Badger products, each 105 Patriot is tested before shipping.

Considering my fairly extensive experience with the



*Constructed of chrome-plated brass in a compact package, the 105 Patriot airbrush is designed to provide years of trouble-free service.*

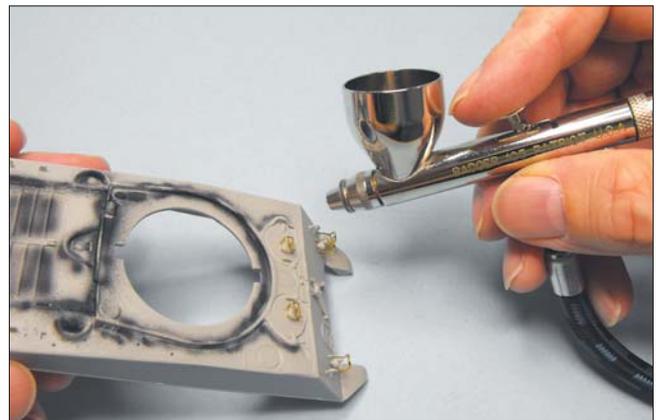


*The way to learn how to use an airbrush is to practice spraying paint.*



Badger 155 Anthem, I wanted to put the 105 Patriot through its paces in a real world test. Testing was done in sessions over several days. Airbrushing paint is a mixture of physics and tactile sensation. The physics involve such variables as air pressure, paint mixtures, pigment-to-solvent ratios and environmental conditions like temperature and humidity. All these variables affect the flow of paint. The tactile sensation is more subjective. Each airbrush has a different "feel," and a user must learn how to use the tool based on his individual sensation of spraying paint.

For the first session I thinned the paint, Model Master Flat Black Enamel, to a 50/50 ratio. I did my usual warm-up routine, spraying a few lines on a piece of sheet styrene to ensure that the paint flowed easily and that there were



*Although neatness does not count, using the Patriot to pre-shade panel lines was a simple and completely controllable task.*

no issues with the mechanics of the airbrush. I sprayed a series of lines first, moving from 1 inch apart to 1/8 inch, trying to get the lines as thin as possible. I moved on to small circles, spraying a dot in the center of each one. I finished by playing some one-handed Tic-Tac-Toe. I use this as an airbrush exercise because it requires more precise control. I finished by spraying more lines and a few more circles. By the end of this session, I had a fairly good feel for how the airbrush sprays paint. I also concluded that I had thinned the paint more than necessary. This was not surprising, as experimentation in finding the best paint to thinner ratio is fairly common with a new airbrush. I would correct the paint ratio for the next test session.

Cleaning the Patriot for the first time was fast and easy. Following instructions, the Patriot was disassembled with the cup, needle and orifices being washed with thinner until spotlessly clean. Before storing the airbrush, I added a tiny drop of Badger's Regdab Needle Juice, a lubricant, to the needle, reinserted it into the airbrush, and tightened the needle chuck nut. Badger produces the Patriot with exacting tolerances that allow the threaded attachments to be finger tightened, which means the airbrush can be disassembled and reassembled without tools. Along with that convenience, the airbrush has the added value of Badger's lifetime warranty on labor and PTFE seals.

In the second painting session, it was time to use the Patriot spray paint a model. I had recently started a 1:48 scale M4A3 Sherman tank, so this became the canvas. Since these tanks are overall olive drab in color, the monochromatic paint scheme can be somewhat dull and lifeless on a model. To add some tonal variation, I wanted to pre-shade the molded recesses, thereby darkening the shadow areas. Using the same Model Master flat black paint, I started spraying. While control is necessary in pre-shading, neatness is not. It is actually a better effect when there is variation in the shape and thickness of the lines. The base color will be applied over the pre-shading in very thin coats, allowing the darker color to show through slightly, giving the impression of deeper shadows on the painted surface. Done properly,



*Spraying highlights starts to add life to a vehicle that is generally presented in a flat olive drab monotone finish.*



*After spraying a final mist coat of flat olive drab, the tank hull shows the effects of war exposure. These are simple yet effective techniques that can be demonstrated to your customers.*

was also very pleased with the results.

Once the final mist coat of olive drab was applied, the final result could be evaluated. The tonal variation was there but extremely subtle. That was exactly what I wanted. Now, I could prep the model for decals and final assembly. The airbrush did everything quite well. The innovative design, outstanding performance, and incredible affordability make this detail airbrush an excellent choice for any hobby project. **HM**

the tonal variation is subtle but extremely effective. The Patriot has exceptional control, and the pre-shading came out well. After this dried, I went back to my faithful Badger 155 Anthem for painting the olive drab base color. I suppose old habits tend to die hard.

For the next painting session, I decided to try something new for me: post-shading. To create a slightly faded paint finish, post-shading involves lightening the base color and spraying it on selected panels that might be faded by direct sunlight on a full-sized tank. After thinning the paint, I sprayed this color into some of the larger, flat areas of the tank's upper hull and turret. With this process, just as with pre-shading, neatness is not an issue, as there will be one last heavily thinned mist coat of olive drab sprayed over the entire model to blend things together. The post-shading was easy to apply, and the airbrush performed flawlessly. With each session, I felt more comfortable using the Patriot. I

**Carstens**  
**1/12**

**HobbyTyme**  
**1/6 H**