

# MODEL KIT REPORT

Keith Pruitt

## **Hobby Tools** *Every job requires the right tool.*

**Acrylicos Vallejo Paints & Weathering Products**, or simply Vallejo to tens of thousands of scale modelers, has been producing water-based acrylic paints for many years. Used by figure painters as well as armor and aircraft modelers, many modelers have come to demand the brand for the best possible, most realistic, contest-winning miniatures. Vallejo has recently introduced two new lines, Weathering Effects and Metal Color.



*Vallejo has recently introduced two new lines of water-based acrylic paints including Metal Colors. Designed specifically for airbrushing, the line consists of 19 colors with such shades as Pale Burnt Metal, White Aluminum, Magnesium and Exhaust Manifold.*

For this article, the Metal Color line will be used, while the Weathering Effects line reviewed in greater depth in an upcoming issue. The Weathering Effects line includes different color Mud effects like Thick Mud and Splash Mud. It also includes Environmental Effects like Grime, Moss & Lichen, Snow, and Mud & Grass. There is the Engine Effects line containing Oil Stains, Diesel Stains, Brown Engine Soot, and Petrol Spills. Additionally, paint sets like the Rust, Stain, and Streaking Set provide more ways to add interesting and realistic effects to scale military or civilian vehicles. Even more depth and contrast can be attained by adding one or more layers from the Vallejo Model Wash line which includes Desert Dust, Dark Grey, Rust, and Dark Brown to name but a few.

Getting back to the Metal Color line, it includes a long list of water-based metallic paints designed specifically for airbrushing. Available in 32ml bottles with a dropper dispensing flip top, the line consists of 19 colors including those used in this review which are Pale Burnt Metal, White Aluminum, Exhaust Manifold, Chrome, Silver, Magnesium and Jet Exhaust. Also in the line are the Gloss Black Primer for base coating and Gloss Metal Varnish for sealing the finish. The paints do not require thinning for airbrush application;

just open and fill the airbrush color cup as needed. For those who do wish to thin the paint, Vallejo Airbrush Thinner is recommended to be certain that the flow and coverage characteristics of the paint are not affected.

An unfinished plastic model kit was used as a mule to test the paint. One half of the model was sprayed with the Gloss Black Primer, leaving the other side in bare plastic. Select colors were sprayed over sections of the model. Recommended for use at 10-15psi, the paint seems to work best at 12psi. Even with no Flow Enhancer, the paint flows and sprays nicely, providing excellent coverage, drying fairly quickly. Coverage is better when applying the paint in one wet coat rather than applying multiple light coats. The colors are quite excellent in density, hue, and sheen. It is recommended to use less paint in the



*Known by thousands simply as Vallejo, the paints are available in many colors and shades, and are used by figure painters, armor modelers and other hobby disciplines. Many modelers have come to demand Acrylicos Vallejo Paint and Weathering Products for the best possible, most realistic contest-winning finish for their miniatures.*

airbrush than would be anticipated, as a small amount does cover a fairly large area. Also, it would be a good idea to have the large-size bottle of Airbrush Cleaner on hand (A small bottle was purchased for testing, and with cleaning the airbrush between each color the entire bottle was used during the one session).

Most metallic paints, as well as most acrylic paints, tend to have adherence issues when masking for color demarcations. Some just cannot be masked without lifting the paint when the tape is removed. The Gloss Varnish Metal Color is recommended to seal and protect the finish, but it was not used for this evaluation. Testing according to recommendations from the Vallejo instructions, strips of tape were first stuck to the back of my hand and removed a few times to reduce the tackiness, then they were applied over the painted areas, burnished down, and slowly removed. The primed areas had no lifting whatsoever, but the unprimed areas did show a few flecks of paint when the

tape was lifted from the bare plastic. Another test was done without reducing the tack of the tape, just sticking it straight on the model and burnishing it. Those results were not as good, as the paint and primer were both pulled away revealing the bare plastic, so following the instructions is always the best choice [*Instructions are printed for a reason.* – Ed].

The Metal Colors from Acrylicos Vallejo do live up to a well deserved reputation, and most scale modelers, especially those that prefer acrylic hobby paints, will be glad to have these paint sets on their workbench.

**ComposiMold Products** offers an extensive line of re-usable mold making materials. Experienced modelers often scratchbuild parts or assemblies, then cast them for duplicates or for use in more than one project. With the more common silicon and latex materials, once a mold is prepared it cannot be changed or reused, and the slightest flaw in the mold will produce malformed parts. This can get expensive since bad molds are thrown away and new materials must be used for each mold. ComposiMold products are designed to be used multiple times, simply by melting the damaged or no longer needed mold and going through the mold-making process again. There is absolutely no waste at all, as only the amount needed is used.

Products include ComposiMold-Original for resin or plastic, ComposiMold-Flex for softer casting materials, ImPRESSive Putty for



*Experienced modelers want to cast parts and accessories for use in projects and ComposiMold Products offers an extensive line of re-usable mold making materials. Designed to be used multiple times, the no longer needed mold can be melted and the material used again, resulting in minimal waste.*



quick and easy use, Bubble Buster for reducing bubble formation in the molds and Mold Release, which is vegetable oil based for ensuring smooth removal of castings. This month the ImPRESSive Putty will be evaluated, while the other products will be reviewed in greater depth in a later issue.

ImPRESSive Putty requires no measuring or weighing. It is easy to use and can be remelted and used over and over again. To make a mold from the putty, add a few drops of the Activator liquid to the putty in the included microwaveable bag (this is only necessary for the larger amount packages), heat in a microwave oven for the sug-

gested time, allow to cool enough to handle, knead for a few minutes to mix the Activator well, place the putty over the part or place the part into the putty, then finally put the mold into the freezer and wait for it to solidify. Once the mold has cured, the original part can be removed and the mold is ready for casting all the parts wanted.

Clear Casting Plastic can be used to create finished castings. This is a two-part epoxy resin that is mixed in a 1:1 ratio and poured into the mold. As a precaution, it should be mixed slowly to avoid air bubbles. Apply a very light coat of Mold Release to the inside of the mold, and then slowly pour the Casting Plastic into the mold. Once the part has cured for 24 hours, it can be removed and admired. Although not mentioned in the instructions, washing with dish soap or other degreasers will remove the mold release from the cast parts.

With ComposiMold ImPRESSive Putty, gone are the days of messy mixing and struggling to get a good mold and an accurate duplicate. It really is just that simple and easy.

**Flex-I-File** offers an extensive line of tools and building supplies that modelers can use in almost all phases of building. The Touch-N-Flow Work Base (#721) provides a station that will hold a bottle of Plast-I-Weld, a Filler/Cleaner Bottle, and the Touch-N-Flow liquid cement applicator so that it is always available for use. Molded of solid resin, the base is white with the Flex-I-File logo on the front. It contains openings that are sized for the company's glue and filler bottles, and three horizontal grooves to hold multiple applicators, which use capillary action to apply the liquid cement to the kit joints. Storing the bottles in a vertical position prevents any glue from dripping out of the loaded applicator and also keeps it from unintentionally contacting anything that could be damaged by the cement, as well as preventing it from rolling across or off the workbench.

Flex-I-File Super Cutting Compass (#6116) is a small adjustable plastic compass with a steel point on one arm and a cutting blade

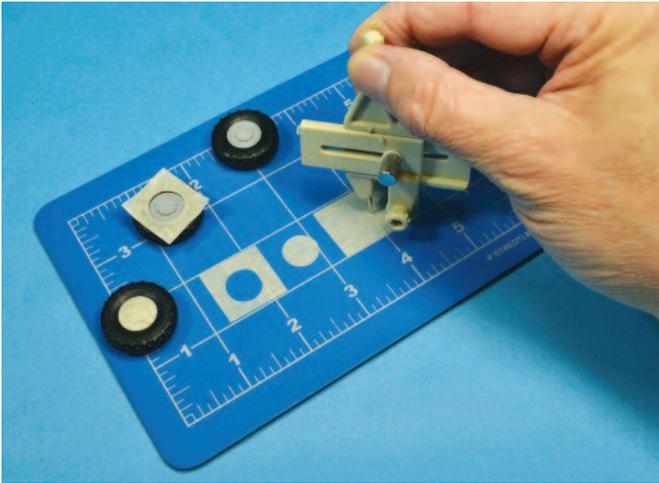


*Molded from solid resin, Flex-I-File's Work Base is a station that holds a bottle of Plast-I-Weld and a Touch-N-Flow cement applicator so they are always ready.*



*The Flex-I-File Super Cutting Compass is a small adjustable compass with a steel point on one arm and a cutting blade on the other. It is designed to cut masking materials in perfect circles for applications such as Roundel's.*

on the other. It is designed to cut masking materials in perfect circles for covering surface areas. The cutting blade is made of titanium for durability and exceptional cutting performance. The compass can be set for sizes as small as 1/16 inch (1.5mm) up to as large as 2 inches (50mm). The masks can be used for masking circular areas with the cut portion as in a Roundel for a model aircraft wing or fuselage, or around an area where an object, such as a wheel inside a tire, needs to be painted. If using the cut circle portion for masking, there will be a tiny hole at the center point where the steel point punctured the mask, but a small piece of tape can easily be placed over the hole.



*Cutting a circle from as small as 1/16 inch to as large as 2 inches, Flex-i-File's Circle Cutter not only cuts perfect circles for Roundels, but it can also be used to mask wheels and tires. When used in this application there will be a tiny hole in the center where the steel point punctured the material, but this is easily covered with a piece of tape.*

## The Hobbico Multi-Angle Hobby Vise (#HCAR0680)

is an extremely versatile tool. Manufactured from heavy cast aluminum, the vise has an enamel-coated body and chrome plated steel screws for durability and secure attachment to a work surface. The jaws of the vise open as wide as two inches, and have removable rubber covers which can protect delicate parts or materials from damage. The base has a C-clamp attachment that opens up to two inches to secure it to workbench tops of varying thicknesses. The specially-designed type of adjustable ball attachment allows the vise to rotate a full 360 degrees and also tilt in multiple directions, all while securely and safely holding a variety of objects.

Acting as a dependable and reliable third hand, the Hobbico



*At just over five inches in length, Hobbico's 2-in-1 Wire Cutter/Stripper fits nicely in the hand and features a traditional diagonal made from hardened stainless steel for increased strength and durability. The spring-loaded universal wire stripper is located between the cutter's grips. Place the wire in the jaws and squeeze to cut through the insulation.*

Multi-Angle Hobby Vise has a place on the bench of any modeler, craftsperson, or hobbyist.

One might wonder why a scale modeler or dioramist would have a need for a wire cutter or stripper like the Hobbico 2-in-1 Wire Cutter-Stripper (#HCAR0635). Of course, the cutter could be used to remove plastic parts from the sprue, but on many occasions, wire can be used when plastic or resin parts and assemblies benefit from a more secure



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attachment. This could be a factor where there is only a

small surface area for gluing parts, or, in the case of large scale resin kits, the weight of the solid resin part being attached. Copper wire can be cut into small sections so that it can be inserted into holes drilled in those parts, actually "pinning" the joints. While common electrical tools could be used, they are often cumbersome and the pre-drilled wire strippers do not always fit smaller gauge wires.

At just over five inches in length, the Hobbico Wire Cutter-Stripper fits nicely in the hand and features a traditional diagonal cutter head made from stainless induction-hardened steel for increased strength and durability. The Cutter also features a spring-loaded universal wire stripper in the handles. Position the wire between the two sets of jaws of the self-adjusting stripper and squeeze the handles to hold it in place, squeeze a bit tighter to cut through the insulation, then pull to remove the insulation leaving the bare wire.

Simple, yet precise and incredibly effective, the Hobbico 2-in-1 Wire Cutter-Stripper is an excellent combination tool for a somewhat mundane, but absolutely necessary, task.

## Trumpeter's Model Chisel

is an excellent tool for modelers to remove unwanted flash, molded details, or to clean up seams where parts are glued together. Based on the size of the tool, it is easy to maneuver it into tighter spots where needed. The cutting point is circular with a round notch in the center of the point. This will easily allow for the removal of molded sidewall detail inside an aircraft fuselage, since the round point would follow the rounded interior and not gouge grooves into the plastic. It would also work well to remove unwanted molded details from a flat surface, like hinges or handles on a tank or other types of armored fighting vehicles, by positioning the point with the cut angle against the flat surface and using the chisel to cut off unwanted raised details so they are level with the surface.

Besides the described round tip, the chisels are also available with square tips in 1mm, 2mm and 3mm, round tips in 2mm and 3mm, and a diamond-shaped tip of 2.8mm. While each individual chisel might be used for a variety of tasks,



*Model Chisel is an excellent tool for removing unwanted flash, molded details, or to clean up a seam. The chisels are available in a number of tip shapes for a variety of modelling applications.*

some are likely best suited to specific cutting tasks based on the shape of the surface where removal of material is required.

The Trumpeter Medium Photoetched Parts Bender (#09932) allows modelers to easily and accurately bend these detail parts to create another level of realism on models of various scales. These



*The Trumpeter Medium Photoetched Parts Bender allows modelers to make quick and accurate bends in the photoetched detail parts that are included with today's highly accurate model kits. The bender is easy to use, resulting in perfectly formed parts.*

parts are typically produced together on a flat metal fret of brass or other alloy. This means that three dimensional objects like radios or toolboxes must be created by folding the parts along a designed crease and gluing the joints. While the bending process can be done with hand tools, it usually results in inaccurate folds which will lead to deformed parts.

Measuring 79mm x 59mm at the base, the overall size of this bender makes it appropriate for bending parts in most scales. Both the

bottom and top plates are machined from a heavyweight metal. The hard plastic knurled adjustment knob is spring-loaded and has metal threads. The top plate can be rotated so that any of the four different sides can be used, and features holes that match a metal peg protruding from the base to ensure that the plates are perfectly aligned and cannot slip while tightening. The upper plate has a straight edge for bending long lines as well as a variety of fingerlike fixtures to fold parts of different shapes and sizes. The protrusions are also precision-milled and angled so that multiple bends and unique angles are easily accomplished. Also included are plastic wedges, numbered as 1, 3, and 4. With these wedges being made of hard plastic, they are less likely to scratch the metal parts or damage prepainted finishes.

The Trumpeter Medium Photoetched Parts Bender is an invaluable tool for the serious modeler. It is designed to be compact, versatile and precise, while still being rugged and dependable.



*Trumpeter's parts bender is packaged in a clear clamshell, making it easy for the potential purchaser to examine the tool.*

**The Xuron Modelers Tool Kit** is an excellent choice for a new modeler, a modeler who is experienced but needs to replace some worn tools, or someone returning to the hobby after a few years. It consists of three basic, but invaluable, tools that will help anyone to be able to work faster, easier, and produce higher quality builds, including the Original Sprue Cutter, the Original Photo-Etch Scissors and the TweezerNose Pliers. The kit comes complete with a sturdy, attractive canvas storage case with Velcro closures.

The Xuron Original Sprue Cutter (#410T) is designed to cut plastic parts off the sprue, the plastic frame used in the molding process. The shorter handles are particularly suited to comfortably fit smaller hands, especially younger modelers, or for individuals with certain limitations, like arthritis often suffered in older modelers.

The Micro-Shear design allows the blade edges to bypass, creating a perfect flush cut rather than the crimp style cut of common household shears.

The Tweezer Nose Pliers (#450) have jaws that taper into a fine blunt point, with a nice fit along the edges. The gripping surface of the jaws is smooth to reduce potential damage to softer or smaller plastic parts (available separately is the 450S model, which features serrated jaws which allow a stronger grip on harder mediums that would not be damaged easily by pliers).

With the unique combination of precision and gripping power, the Tweezer Nose makes it easy to form and bend soft wire, bend or hold photoetched metal detail parts, or even gently hold and place delicate parts for gluing.

The Original Photo-Etch Scissors #440 are a very specialized tool for cutting a wide variety of materials. Designed specifically for cutting photoetched metal detail parts, the Scissors will also cut through any soft thin metal, as well as softer items like thread, cloth, or tape. Model shipbuilders will love the tool for the speed and ease of cutting multiple rigging lines at one time.

Modelers all over the world know whether old or new, Xuron tools are tried and true. **HM**



*The Xuron Modelers Tool Kit contains three of the most important tools needed in plastic kit assembly. The Original Sprue Cutter, Original Photoetch Scissors and the Tweezer Nose Pliers. Each of these tools serves a purpose when it comes to the building of a show winning model.*

