



Well, this has been a rather quite month for the club.

Having said that, though, several of us placed orders with and received our newly embroidered shirts from Matt Pellett and "Troop Logos." Matt did right by us, and we owe Keith a well-earned pat on the back for arranging things on our behalf with Matt. The quality of the shirts and the craftsmanship on the embroidery was top notch, and ordering process was fast and trouble-free. "Troop Logos" offers some very nice garments in addition to the polo shirts we all ordered, and I know that I'm very seriously considering one of their fleece jackets. (Tim was very happy with his.)

Some disappointing news on the contest front for this month – the Fayetteville AMPS All-American club has had to cancel their participation with the IPMS Layfayette Scale Modelers show in November. I know I was looking forward to the AMPS side of the show, but hopefully, Kerry and the other AMPS All-Americans can generate another event for 2014. In the meantime, the IPMS LSM show will go on as planned, and that's still an event worth attending – and not just for the hobby shopping in Fayetteville. Still, give the AMPS All-American guys credit for making the hard call in a timely fashion. I'm sure it was a tough decision, but it's better to regroup and come back stronger than ever than to drop the ball.

Our August meeting was very well attended – literally standing-room only! It was great to see some members who haven't been able to make some of the more recent meetings, but we also missed some of our regulars, like Tony and Rebecca who were attending the IPMS Nationals. We also had a new member join us, Michael Child. Welcome Michael, and here's hoping to see everyone again at the September meeting!

#### **Last Meeting's Minutes:**

Our last meeting was held at 6:00 pm, August 14, 2013. We had 16 members in attendance, and those members brought in 12 models to show and tell. We had one new member join us – Michael Child. Welcome, Michael! Tom Wingate won the raffle prize, a Bronco German Staff Car.

During the meeting: We conducted a brief discussion of the failure of our plans for participation in the "Toy Soldier Show" at the SC State Museum; Members want to try to participate again next year; We discussed and reviewed tentative name tags and new club shirt orders; Tim displayed a sample name tag created by a vendor in Sumter; Members decided to table a decision on procuring these until other options and sources could be examined; Keith displayed the sample shirts with embroidered logos sent by "Troop Logos;" Members agreed that these shirts should be made the "official" shirts and information for ordering, on an individual basis, was sent out by email to all club members; We discussed the up-coming show calendar; Tim Darrah brought several boxes of donated kits and parts that members looked through; All of the kits and parts were received by

various members present; Keith Frappe presented a discussion, with examples, on resin kit building. His presentation generated lots of good Q&A!

### **Next Meeting's Agenda:**

Our next meeting will be at 6:00 pm, Wednesday, 11 September, 2013 at the HobbyTown USA store on Two Notch Road, Columbia.

6:00 pm (1800): Meeting starts / Admin Business – This month's business: Brief show and tell of the new embroidered logo polo shirts; Discuss and vote to sponsor a trophy / award for the IPMS Piedmont Scale Modelers show in Duncan, SC, Saturday, 21 September; Floor will open to members wishing to arrange for travel to the Piedmont Scale Modelers show; Brief discussion to determine desire to for us to host an AMPS show in 2014 (it's not too early to start lining things up).

REMINDER: The HobbyTown USA store will close at 7:00 pm (1900). This means that all purchases at the store must be made before then so that the cash registers can be closed.

6:15 pm (1810): Demo / Discussion – Modeler's Safety Considerations by Ralph Nardone

6:50 pm (1850): Break: Shopping & Social Mixer. Cash registers close at 7:00 pm.

7:10 pm (1910): Reconvene: Continue demo / discussion followed by Show & Tell: Builds and WIPs

8:00 pm (2000): Meeting ends (officially – but we'll carry-on as long as the store will stay open)

*Regular meetings are held on 2<sup>nd</sup> Wednesdays of each month at 6:00 pm (1800) at the HobbyTown USA store, 10120 Two Notch Road, Suite 5, Columbia, SC 29223, (803) 736-0959.*

### **Up-coming Events of Interest:**

**Sep 11, 2013, 6:00 pm (1800):** AMPS meeting at HobbyTown USA store on Two Notch Road.

**Sep 21, 2013:** Piedmont Scale Modelers show at Byrnes HS, 150 E. Main Street, Duncan SC.

**Oct 09, 2013, 6:00 pm (1800):** AMPS meeting at HobbyTown USA store on Two Notch Road.

**Oct 26, 2013:** Spartanburg Scale Modelers "Plan 9 from Spartanburg" show, Parkway Freewill Baptist Church, 3615 Parris Bridge Road, Spartanburg, SC.

**Nov 09, 2013:** IPMS Lafayette Scale Modelers show in Fayetteville, NC.

**Nov 13, 2013, 6:00 pm (1800):** AMPS meeting at HobbyTown USA store on Two Notch Road.

**Dec 11, 2013, 6:00 pm (1800):** AMPS Christmas Party anyone?

**Apr 3-5, 2014:** AMPS International Convention, Fredericksburg Hospitality House (Convention Center), Fredericksburg, VA. Convention theme: "Hollywood Tanks."

## Finishing and Weathering: Orthodoxy versus Artistry – Part 2 "The Tools of the Trade"

Mike Roof  
AMPS #1632

In the first part of this series, I explained my personal views about why it's not possible to create some formulaic list of finish and weathering steps that can be followed to create any desired final result or look for your work. Each model should be approached as a discreet subject with a particular desired final appearance, and the finish and weathering techniques to be used should be tailored specifically towards that desired end result.

This next part will list, define and describe the many and varied finishing and weathering techniques that are available for us to use. Think of this as opening up the lid on your box of finishing and weathering tools and taking each one out and turning it over in your hands. What we want to do this month is to become familiar with what's in our toolbox. Later, we'll discuss in detail how to use each of these tools, but for now, let's just take a look inside the "finishing and weathering toolbox." What we want to walk away with today is an understanding of what **the usual purposes are for each technique**. We'll concern ourselves later with how we actually execute different techniques.

The following list enumerates and defines these techniques, but keep in mind that this list is not necessarily sequential. The sequence that these techniques can be used in can and should always be altered to achieve specific desired results. Many of the techniques listed here are called by different names by different modelers, so if you're familiar with a technique but you call it something different, just roll with it: "A rose by any other name..." and all that. Also, this list is not the "be all, end all" of available or possible techniques. While it does represent what I think are the most familiar techniques, these things evolve constantly, and innovative and creative guys, just like you, are developing new ones every day. Finally, another thing to keep in mind, as you read the definitions and descriptions of the techniques, is that many (if not all) can be used for different intended purposes at the same time.

Just like your X-acto knife can be used to cut, it can also be used to scrape, drill and scribe, so, many of these finishing and weathering techniques can be used to create shadows or highlights to overcome scale lighting and also, at the same time, to replicated some particular weathering effect, and / or also at the same time, to achieve some detail painting goal, and so on. And just like you might combine your X-acto knife with sand paper and files to clean up parts and later use it with a pin vise to drill holes, and still later use it with a straight edge to scribe a panel line or hatch opening, you can combine many of these finishing techniques to achieve different results. Different finishing and weathering techniques can be combined, just like your X-acto knife can be used with different tools, for multiple purposes.

**"Your Finishing and Weathering Tool Box" (and NOT a sequential, step-by-step list):**

**1) Priming or under-coating.** Priming is used to create a uniform color on the model so that later colors will also be uniform or show "true." Priming can be used to highlight or emphasize construction errors so that they might be corrected. It is also used to enhance the adherence of later color coats to various materials, such as brass or aluminum. Finally, in contrast to the first purpose, priming can also be used for pre-shading – creating shadows and highlights in the later color coats. In this case, priming begins to cross the line into actual base coating.

**2) Using reverse (or "negative") masking for markings, camouflage, or weathering.** The final desired color is applied and then masked. Later colors are then applied over the mask. When the

mask is removed, the final color shows through the later colors. This technique can be used to create markings, camouflage patterns, or weathering effects ("chipping" or worn or faded paint). The edges of the mask can be "tight" creating "hard-edged" color demarcations or "lifted" to create "soft-edged" color demarcations. Masking mediums can be liquid latex materials, roll and sheet tapes or frisket films, PE "stencil" masks (often used to cut other mediums like tape, frisket film, or dried latex), or "random" materials – hairspray, salt granules, toothpaste, or proprietary "chipping mediums." Many layers of masking can be used, one on top of the other, to expose many different earlier colors as the final top coats of the finish.

**3) Base coating.** These are the general color coats that will replicate the model's overall colors. Base coating usually includes (but not always!) any camouflage colors. These colors are generally applied using an airbrush, but they can be hand-painted. Note that the effects of scale lighting generally cause even perfect prototype color matches to appear too dark on the scale model.

**4) Pre-shading.** Applying the base coats in a graduated manner using darker tones followed by lighter tones to create artificial shadows and highlights (to overcome the effects of scale lighting) and / or to create the effects of weathering (sun-fading). Sometimes pre-shading can be used in much the same way and for the same purposes as color modulation (see below); the difference being that pre-shading uses opaque layers of paint to change the colors while color modulation uses semi-transparent layers as filters.

**5) Post-shading.** Applying the base coats in a graduated manner starting with lighter tones followed by darker tones for the same purposes and effects as pre-shading.

See "The Wildcat" V2-N4,

[http://www.ampscentralouthcarolina.org/uploads/V4\\_N2\\_Jan\\_2013.pdf](http://www.ampscentralouthcarolina.org/uploads/V4_N2_Jan_2013.pdf) ,for a discussion and explanation of scale lighting in "What is 'Pre-shading?'" Note that pre-shading and post-shading are really the same technique, and the difference in names simply indicates whether the darker colors are applied first (pre-shading) or second (post-shading). The final results are, for all intents and purposes, the same: The technique could just as easily be called "pre-highlighting" or "post-highlighting." Also note in the V4-N2 article the controversy between the two model finishing schools: "color purists" and "artists."

**6) Color modulation.** Color modulation varies or "modulates" the tones of the underlying colors (usually the base coats, to include camouflage colors, but the technique can also be used selectively on detail painted areas) to break-up large monotone areas and provide visual interest, replicate some weathering effects, and / or create shadows and highlights. Note that all three of these purposes can be achieved at the same time. Because this has the same effect as viewing the underlying colors through a colored lens or filter, this technique is also called "filtering" by some modelers. Other modelers look at the varied color tones as if they create a map of different tones and colors, and so these modelers call the technique "color mapping." Color modulation, color filters, and color mapping are three terms which describe the same technique. Color modulation is achieved using either one or both of the following techniques:

**a. Oil-dot technique.** Small "dots" of artist oil paint are applied to the model. These dots are then spread and thinned into semi-transparent layers over the underlying color thus altering its tone or color.

**b. Filter-wash technique.** A pre-mixed wash of color is applied over the underlying color creating a semi-transparent layer that alters the underlying tone or color.

Color modulation can be used in a manner that is closely related to pre- or post-shading by carefully selecting the "filter" colors and their placement. In this way, subtle shading effects can also be accomplished in addition to varying the tones of the underlying base colors.

**7) General wash.** Paint is thinned to form a semi-transparent (usually more opaque than the "filter" wash) mixture that is applied to large areas of the model. This mixture then pools in cracks, seams, and around raised details to create either darker or lighter areas in and around these details. General washes are used to overcome the effects of scale lighting and / or to replicate some weathering effects. Note that this technique is different from filter-washes in that the filter is intended to alter the underlying base color on the flat planes, and the general wash is intended to create a different color only (or mostly) around raised or recessed details. While the material used is similar (thinned, semi-transparent paint), the intended effects are different. Note also that dry artist pigments can be mixed with various thinners and used like general washes.

A very similar effect can be achieved using proprietary "antiquing glazes" sold for furniture finishing. However, the process of wiping these heavier solutions off of the model's surface runs the risks of causing damage to small details, and it has fallen out of favor with most armor modelers. Another similar technique called "sludge washes" is used by some aircraft modelers to emphasize panel lines and other surface details, but the generally unobstructed surfaces of model aircraft allow this technique to be used with less risk of damage.

**8) Pin-wash.** Similar to a general wash, the semi-transparent paint mixture is applied only around raised or into recessed details. The intended effect is to create a concentrated contrast between the detail and its surroundings to overcome the effects of scale lighting and / or to replicate some weathering effects. The pin-wash is more controlled than the general wash and contrast created between the details and their surroundings are usually greater.

However, in some situations, a series of pin washes can be used, more or less, uniformly around the entire model creating results similar to that of general washes. The intended final result is the same, but the application of the washes is done in a more controlled manner. This is often done when the use of a general wash would have unintended consequences similar to a filter wash but altering the base colors in undesired ways.

**9) Streaking.** Semi-transparent paint is applied in vertical lines to replicate the weathering effects of rain, dew, melting snow, etc. on dusty / dirty surfaces and / or rust or spills (fuel, oil, or other fluids). This is primarily a weathering effect although depending on the amount of streaking done, it can also have the same effect as color modulation. In this way, streaking can be closely related to color modulation, in particular the oil-dot method, if the modulation effects are generally made vertical so as to both modulate the underlying color tones and create the effects of older, less stark rain streaking. (Pre-shading, when applied vertically, can also be used to replicate a similar effect of older, less stark streaking.)

**10) Chipping.** Small, irregular-shaped areas of a paint color that contrast with the underlying colors are used to replicate the effects of damage to the underlying paint or spots of the original base color showing through layers of other weathering effects. These small areas can be applied with a fine brush and / or a piece of open-cell foam (called appropriately – "sponging"). This same technique can be used to replicate dusty areas that have been "scuffed" through various mechanical actions (crew walking, tree branches, etc) in much the same way as "streaking" can be used to replicate the effect on dusty surfaces through the action of water. In this use, chipping usually adds spots of the darker base colors over the dusty or dirty base colors whereas streaking adds dusty or dirty colors over the base colors. Chipping can also be used in much the same way as dry-brushing to highlight

and emphasize details (that would logically be subject to use or wear and tear) and as a part of detail painting.

**11) Dry-brushing.** A lighter or darker shade or tone of the underlying color use applied using a brush that has had the majority of the second color removed by first wiping the brush on another surface (paper towel, etc). By whisking and lightly dragging the brush over the model's surface the second color is deposited on raised details, edges, and corners creating a color contrast between these raised areas and their surroundings. This contrast is intended to overcome the effects of scale lighting and / or to replicate some weathering effects. Dry-brushing, when applied vertically and with a heavier hand, can also be used to replicate streaking effects.

**12) Dust glazes.** A semi-transparent (or occasionally a fully transparent flat or matt) mixture of paint is applied by airbrush to replicate the, more or less, uniform effects of dust and dirt. Glazes can be built up in layers to intensify or concentrate the dusty effect in some spots, while in other spots the effect might be almost invisible. Glazes are also used to "dull down" the brightness or contrast of intense colors and / or to "tie" various colors together to achieve continuity and consistency in the weathering. Finally, dust glazes can prepare an area for later scuffing effects by providing the underlying contrast between the later scuffs and the original (shaded or modulated) base colors. Occasionally, a transparent matt or flat paint is used to "frost" clear parts of a model (windshields, light lenses, etc.) to replicated the effects of dust settling on these normally reflective surfaces.

**13) 3-dimensional textures.** Various polyester putties and / or textured acrylic gel mediums can be applied at anytime during construction or finishing to create the appearance of thick mud or dirt on the surfaces of the model. Different materials such as sand or static grass can be added to the putty or gel to create variety and a natural candidness to the textures. These areas can be finished and weathered later using any of the other techniques listed here. These texture materials have an advantage over using pigments as textures in that these polyester putties and acrylic gels are very durable and hold up to handling allowing. These properties allow them to be applied early in construction to areas that will be inaccessible or hard to reach later.

**14) Pigment dusting.** Artist dry pigments, ground chalk pastels and / or proprietary "weathering" pigments or powders can be applied dry using brushes or a brush moistened with water or other thinners. The effects achieved can replicate even dust and dirt or streaks similar to glazes or paint streaks. Dry pigments are very fragile and should usually be "fixed" with a wash or overspray of a clear coating (either flat or gloss) or other adhesive. Note that over-spraying with a clear coat usually lessens the intensity of the dry pigments. Pigments can also be mixed with various thinners or adhesives and applied like general and pin washes. The nature of the thinner or adhesive used determines how fragile the pigments are when dried. Often these pigments, applied wet with ordinary water or mineral spirits, can be manipulated once dry using various stubs and dry or wet brushes.

Keep in mind that artist dry pigments (to include proprietary "weathering" pigments) are the exact same materials that are used to create colored paints and chalk pastels. In using dry pigments, the modeler is simply applying the same color mediums – the pigment - in a different manner than when he uses them formulated in paint (in a solution with a binder and carrier) or in chalk pastels (formed into sticks with gum Arabic as a binder). In fact, many "fine" artists create their own paint colors or chalk pastels using dry pigments, and this is what most art supply vendors sell dry pigments for.

**15) Pigment textures.** Pigments can be mixed with plaster of Paris and / or acrylic gels, adhesives or other liquid mediums to form a paste or slurry that can be built up on the model by troweling or brushing on to replicate thick layers or earth or mud. As with other 3-dimensional textures, other materials can be mixed with the pigment paste or slurry to add variety and a natural candidness to the

textures created. Pigment textures have the advantage over other 3-dimensional textures in that the pigment textures have inherent color and don't need to be painted later.

**16) Pigment "splashes."** Pigments can be mixed with water, thinners, adhesives, or acrylic mediums creating a "soupy" slurry that can be "splashed" onto the model's surface by loading a stiff bristled brush and "flicking" the bristles or by shooting air from a compressed source (airbrush). The resulting "splashes" replicate mud or earth thrown up on to the model. Various colors can be combined to replicate the effects of older, dry mud or earth under newer, wet or moist mud or earth. This technique is a cross between the 3-dimensional textures discussed above and painted weathering.

**17) Detail painting.** Details can be painted so as to incorporate weathering into their finish. Achieving continuity and consistency in the overall finish and weathering of the subject model usually requires that details are painted to match the subject vehicle. Whether details should be painted separate from the model as sub-assemblies or after attachment depends on the modeler's skill in brush control, the desired fidelity of the finish, and other considerations. For instance, tools, such as shovels or picks, should show signs of use and weathering that match the look of the vehicle that they are attached to. Particular details can also be subjected to their own deliberate, planned finishing and weathering schemes. For instance, crew served weapons or tools can be finished and weathered to very high degrees separate from the base model as long as the continuity of the overall appearance is maintained. In other instances, detail parts might be finished and weathered separately, attached to the model, and then subjected to additional subsequent finishing and weathering steps.

**18) Positive masking.** Markings and camouflage can be painted on through masks over the underlying colors. When the masks are removed, the new colors contrast against the earlier colors over which they were painted. As with the other masking techniques already discussed, multiple positive masks can be used, one on top of another, to add multiple colors to the finish. Positive and negative masking can be combined on the same model, even at the same time. An example might be using "random" effects negative ("reverse") masking for highly distressed effects (rust and / or multiple layers of old paint) with positive masking (markings stencils) to create insignia or other markings. When both masks are removed, the painted on markings might appear to have areas of highly distressed base colors showing through them.

**19) Water-slide decals.** Application of water-slide decals usually requires a smooth, glossy finish in order to prevent "silvering" of the clear decal film. This clear gloss finish must be applied by airbrush or hand-brushing over the underlying finish and weathering layers. Because other finish techniques applied over gloss surfaces behave differently than when applied over flat or semi-gloss surfaces, you must vary the application of your later techniques accordingly. Decal setting and solvent solutions tend to work better over gloss surfaces. Often, additional clear coats are applied to hide the decal film by "blending" it into the surface of the model. See below.

**20) Dry-transfer decals.** Also adhere better to gloss finishes than flat finishes but will usually adhere to flat finishes. However, because they don't use clear carrier films, they are not prone to silvering when applied over flat finishes. Dry-transfers can be applied to clear water-slide decal paper before applying them to the model to make positioning easier. Dry-transfers can also be used as both positive or negative masks by using them similar to pre-cut adhesive masks. (Note that the dry-transfers used as painting masks can be hard to remove later if the paint is allowed to cure fully or if a "release agent" is not used under them.)

**21) Clear over coats.** Gloss, flat and semi-gloss (egg-shell) clear coats can be used as barrier layers between finish or weathering layers that use incompatible thinners or reducers; they can be applied to create surfaces better for decals and other markings; or they can be applied to create the

final desired degree of sheen on the model. Layers of clear (gloss especially) can be used to hide the edges of decal films by "blending" them into the surface of the model. Also, clear coats can be used to "seal" dry transfer decals and prevent them from later peeling or cracking. Thus, clear coats are often used at many different times during the finishing and weathering of any model and not just at the end.

So, there you have it, the contents of your finishing and weathering toolbox. We'll cover the details of how to employ these techniques in later parts of this series. For now, though, remember that you should think about these tools in the context of what you want to do with each of them. You can use any or all or almost none of them as indicated by your desired final results. Also, the sequence and order that you use them allows each to alter the effects of the earlier techniques, but any sequence should be selected with an eye towards the final result that you want and not according to someone else's formula or list.

Until next time, happy modeling!

### **"The Day Room"**

*In the US military, most company-level units have a "day room" in the barracks where the troops hang-out, relax, and BS. When you want to learn the latest in "rumor control," you swing by the day room and chat-up the Joes and Janes hanging out there. They might not always get it right, but they're always willing to tell ya just what they think! So, welcome to "the Day Room..."*

Well, like I said, it's been a slow month for club business, but on the other hand, I've managed to get in some quality time at the work bench, and I hope you have too!

I want to mention Jeff Nelson and thank him here in the newsletter for taking on the additional burdens of managing the photography and photo galleries on our website. For several months now, Jeff has been doing the photography at our meetings which has been a great help to me. Now, with taking on the monthly tasks of creating the galleries and up-loading those photos to the website, he's assuming a heavy load, but I'm sure that our website will benefit from Jeff's participation. Please take a moment or two the next time you see Jeff to tell him "thanks" for his continued support and hard work. If anyone has any ideas or thoughts about how our meeting or individual photo galleries are presented, let Jeff know. Also, if you take any photos of club events or related activities that you'd like to see on our website, Jeff's the man to see.

Before I close, let me ask each of you to give some thought to this month's agenda item: Should we host a contest in 2014?

If we decide to host a show next year, we need to start now lining up a venue and locking in a date. We may have to go it alone this year, but if that's the case, I believe that we have the resources and depth in our treasury to do so. I know I was really looking forward to the Fayetteville AMPS show, and I don't want to disappoint anyone by not running our own show. Our shows have always been a lot of work, but they've also been fun and rewarding. However, that's just my opinion. Before we undertake to put on another one, we need to know where everyone in the club stands.

Like the Musketeers, with this contest business, it's "All for one, and one for all!"

### **Mike Roof**

Chapter Contact  
AMPS Central SC "Wildcats"