It's only after you've lost everything that you're free to do anything.

- Tyler Durden, Fight Club

Every artist is a cannibal, every poet a thief...

- Bono, U2

Welcome to the Darkson Designs Painting Guide, Volume 1. This painting guide is for those of you who enjoy painting, whether you are just starting to paint or you have been into it for years. This is a complete guide for your painting journey, which includes a breakdown of painting terminology, color theory, multiple step-by-steps, and many NMM techniques. Full color charts for Vallejo Game Color and Vallejo Model Color as well as a large selection of ready-made color formulas; everything for your painting needs. Also included is a large inspirational gallery containing top quality painted miniatures from multiple manufacturers. We all need help at times whether it is finding the right color combinations or looking for inspiration to get over our painter's block.

Artists from around the world have helped in this monumental task of putting together a painting guide for painters by painters, enjoy.

Cheers,
Darkson

This is the second place winner of the front cover contest. It's such a beautiful miniature we just had to include it for everyone to see.

Gaihyan, Cynwall Helias
By: Rackham
Painted by: Thomas Breitwieser (Cheeba)

Congratulations Thomas, this is an incredible piece.
Credits

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Eugenie and the Vallejo family: Thank you so much for supporting such a unique project that was created by a not so well-known company.

Ron Souza of R&K Productions: What can we say, but thank you for allowing us to include such an incredible article.

Robert "Jester" Cruse: Thank you for going out of your way in providing some great articles and helping to contribute more than we expected.

Steve of Fantization: Thank you for having a positive foresight of believing in the project and for your continued support.

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Kirylo Christian of Roll Jordan: Thank you for your continued support and references to some incredible artists.

Sally White of Hassleref, Andy Foster of Heresy & Thierry Abgrall of Ilyad: Thank you for your willingness and persistence in getting some great photos submitted to the book.

We look forward to a long lasting working relationship with all of you, now and in future projects.

To mom and dad for putting up with me for 30 years and all your support.

Another Special Thanks to the guys at the EBGC

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Kirill Kanaev

Ogre Mage
Manufacturer: Reaper

Kirill Kanaev won the first place prize to have the photo of this Reaper Ogre Mage on the cover of the book. The incredible amount of detail put into this piece is definitely what got it a place on the front cover.

Congratulations Kirill very nice work.
A Guide to Color Theory

Written by: Robert "Jester" Cruse
Jester's Miniature Studios
http://jestersminieturestudios.com

Ok, so now you've got your miniature prepped, based, primed and you are ready to paint it! Then you stop and say to yourself, "what color should I paint it?" Aside from the fact that skin tones are skin tones, the problem of what colors to use are leaving you stumped.

Considering the sheer number of paint lines out in the marketplace today: Reaper Pro Paints, Reaper Master Paints, Citadel Paints, Vallejo Game Color, Vallejo Model Color, Foundry Paints, etc., I am not going to endorse or specifically name any one brand or color of paint in this article. There are multiple choices in terms of colors from all those companies, and being specific in using those would take up the entire book itself. This, however, is a primer and/or a refresher on color definitions, color schemes, and finally, color choice as it applies to miniature painting.

COLOR DEFINITIONS

Well, let's review the basics in terms of definitions, shall we?

Primary Colors: Red, yellow and blue.

Secondary Colors are a combination of two primary colors: Orange, green, and violet (purple).

Tertiary Colors are a combination of one primary and one secondary color: Yellow orange, red orange, red violet, blue violet, yellow green, and blue green.

There you have the basic 12 colors. Every paint out there is going to have some base in one of those twelve. Then you throw in white and black (and yes, grays), but that's for later on in this article. Now, for some other color definitions that will be used later on:

Warm Colors are generally defined as reds, oranges and yellows: Yellow, yellow orange, orange, red orange, red, and red violet.

Cool Colors are generally defined as greens, blues and violets: Yellow green, green, blue green, blue, blue violet and violet.

Key Color is the dominant color on your miniature.

Accent Colors are colors used in relationship to your Key Color based on what color relationship/scheme you are using.

Secondary Accent Colors: White and black. If you want to paint a miniature white or black as your Key Color, then any color you add will be an accent, and as long as you follow the relationships, the miniature will work fine. But if you wish to keep the relationships, use of white and/or black will be kept to a minimum if not outright used.

Intensity is the brightness or dullness of a particular color.

Value is the lightness or darkness of a particular color.

One of the handiest tools a miniature painter can have is a simple color wheel. Local art supply stores, crafts stores and books stores will generally carry a variety of color wheels. They are undoubtedly the handiest tool to assist you in developing your color choices. I provided a basic example to the right and more in discussion of the color relationships.

COLOR RELATIONSHIPS AND SCHEMES

Now that you know what the colors are, you can try putting them together and see how they work. For most of the article, I will just use the color blue as my Key Color in examples. But any color can be substituted as your key color once you understand the relationships between all the colors.

One of the most basic color relationships is the complementary one. This is using a color and the opposite color. For example: blue and orange, green and red, yellow and violet, blue green and red orange.

Another common color relationship is a triad relationship. You could use the primary colors: blue, red and yellow. Blue would be your Key Color and red and yellow your accent colors. This is generally pleasing to most eyes. Or, say you wished to use green as your Key Color, then you would choose violet and orange as your accent colors.

Now for the more obscure, but nonetheless, interesting color relationship choices.
**Diad:** This is using two colors that are two colors away from each other. For example blue and violet, green and blue. But it is only using those two colors on your miniature, with white and black being only useful as Secondary Accents and in very small amounts. You could make the two colors equal in area on your miniature, or you could assign one to be the Key Color and the other an Accent Color.

**Split Complementary:**
This color relationship is a bit tricky. It is assigning a Key Color and then instead of using its direct complementary color, you use the two colors on either side of the primary or complementary color. For example: blue with red or orange and yellow orange, or another would be green with red orange and red violet. It is a very tricky relationship to pull off on a miniature, but can be used well with the two complementary component colors covering small areas on your miniature.

**Tetrad:** This color relationship is based on four colors used that are equally distant in terms of contrast. For example: blue, yellow, orange and violet, or try blue, yellow green, orange and red violet. This color relationship is very difficult to pull off correctly on a miniature, but interesting choices nonetheless. Overall, this color scheme will look very busy on such a small area such as a miniature.

**Analogous:** Using colors that lie adjacent to each other. For example: blue, yellow green, and blue green. Again, this is a difficult color relationship to pull off when painting a miniature.

**Black and White**

Now we're into the fun part. Black and white, and by nature of the two, you can include pure grays also in this category. Using white, you can tint any color. Adding grey, you tone the color, and adding black, you shade the color.

One very important lesson to remember in tinting or shading a color is to add in a lighter (tint) or darker (shade) along with your white or black. Otherwise, your miniature starts looking either too pastel-like, or some muddy/black blob.

**Example:** If you want to tint blue, you can add white and it goes upwards in value. To keep it from becoming too white and/or a pastel color, you need to add in a small amount of a color brighter than this. Blue, blue green and white will be a stronger color in terms of intensity than a straight tinted blue.

The reverse holds true as well, for example: Adding black to blue shades the color, and dulls the intensity of the color. However, you can keep the intensity of the color by adding a small amount of blue violet or violet to the blue and black.

**Putting it all together**

So now you are asking me, "Fine, but what about THIS color from THIS company?" Well, look at the color. What is the base of the color? Is it a blue green? A red brown? A light pink? A dark yellow? A blue violet? What is it? There is your answer - the base color of any paint will give you the key of that particular color. Take colors such as a yellow green or a blue green, while still being a green color, one has a color base of yellow and the other blue. Identifying the color base will help you figure out which color relationships to use in conjunction with the paint color you've chosen! Now you could use a blue violet and a red-orange to form a triad for your color scheme. No matter if that color has a very high intensity or low intensity, the base color still remains the same.

The key to painting miniatures is to keep a balance. If you use a light (tint) color, balance it with a dark (shade) compliment, or darker (shade) compliments (triad, diad, split compliment, tetrad). If you want to keep it all warm looking, don't add in a cool color and vice versa.

You need to decide what your Key Color is and then work from there. Even if you want to use white, do you want a blue-white? tan-white? yellow-white? It's all about that first choice. Once you decide then you can go from there.

And yes, I know you will ask about metallics. But think it through - golds are yellow based, silvers are grey, coppers are red/orange, etc. You can find your schemes and relationships but identifying the base color will be your success to unlocking what color relationships to use on your miniatures.

Good luck and happy painting!
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Painting Figures with Model Color

Written by: Mario Fuentes

INTRODUCTION

As we know, the use of acrylic paints is nothing new to figure painting. Yet, for the last couple of years we have seen an increase in both the amount of quality work performed with them and more people that are finding out that acrylics are an easy to use, safe and adaptable alternative for figure painters of all levels.

In modeling magazines, month after month, we gaze through photographs of exquisite figures masterfully painted with acrylics and read through articles written by top painters that give all kinds of sage advice and recipes on what to do with them. However, there still seems to be a void in the "how to do it" area, or to be more explicit, the actual paint handling procedures. The need to fill this gap is what prompted me to write this article based on what I perceive to be the most basic concepts and to explain, as plainly as possible, how to work out specific techniques of painting with acrylics.

While some of you may find the next few pages downright elementary. I do believe that great figure painting comes from having a clear understanding of its most fundamental aspects. Besides, if this is to be a truly educational article, we cannot go any faster than our slowest student. So let's gather a few things and get started.

SUPPLIES

As with any other kind of paint, acrylics have their own special requirements, but nothing more than a few tools that will allow us to make the most of them. Let's do a quick run down of the basic tools:

Brushes: Save yourself a lot of money and frustration, "buy the best". The quality of your work will depend on the quality of your materials. Winsor and Newton Series 7, either standard or miniature (old Series 12) styles are still the top choice for round brushes. Series 7 brushes cost a little bit more, but well taken care of, will outlast and outperform any other brand. You will also need a good quality flat sable brush for coating large areas. Most major brush manufacturers carry at least one series of this type and they all perform quite well for our purposes.

As for brush sizes, I have found that the minimum practical size for acrylic painting is the #0, and there are good reasons for this, it holds just the right amount of pigment and the point is sharp enough to work on the smallest detail. Smaller brushes don't hold enough paint and by the time you load your brush and get ready to use it, the paint usually dries at the tip, turning your once enjoyable experience into a quite stressful event. Unless you are working on very large surfaces a #0, #1, and #2 standard rounds and one #4 flat should be enough for working on figures from 54mm up to 120mm. It is important to note that acrylic paints are inherently rough on brushes. You must make sure to religiously clean your brush often, during painting. At the end of your painting session wash them thoroughly with a good quality brush cleaner to get rid of all paint residue.

Read the excellent article by Bob Knee regarding this matter in Historical Miniature magazine, issue #16. Set aside a set of brushes to be used exclusively with acrylics, any traces of enamel or oil thinners can affect your water-based paints. It is also a good idea to use a cheap brush to thin and mix your paints, a process that really wears down your expensive brushes, which should only be used to apply paint.

Cotton Rag: You will be using it a lot, a lightly moistened lint free cotton rag like an old T-shirt, or even an old towel will do fine. A second choice is a lint free paper towel, although these are prone to break apart during long sessions.

Palette: A good size plastic or aluminum palette with several wells is a must when working with acrylics. They are inexpensive and keep everything well organized. I cover mine with tin aluminum foil for no other reason than I don't like to wash the trays all the time, so go with whatever makes you comfortable.
Cleaning Jar: A glass or ceramic container full of clean water and steady enough for you to swish your brush around in. Remember to change the water as often as possible during your painting session, enough brush cleanings will turn your water into very thinned paint and will contaminate your palette or even worse, mess up your figure.

Water Dispenser: An eye dropper, empty bottle of any device that delivers single drops of water roughly the same size as the paint drops coming out of the bottle. (Vallejo Acrylics come in a bottle with a built-in eyedropper dispenser.)

Water: Don’t be cheap here, tap water in most cities tends to leave a chalky residue when it dries. Knowing that all kind of funny chemicals are in it, makes me very cautious, so I rather stay on the safe side and use distilled water for all my painting needs.

Plasticard: A small section of primed plasticard (sheet styrene) makes great practice surface on which to try out the simple exercises found throughout this article, designed to get you acquainted with basic procedures.

Scrap Figure: I will use a scrap figure, built from my parts box, to illustrate the different techniques described here. The objective is not to paint a specific uniform or figure, only show the basic techniques and procedures and then, once you understand them, it will be your turn to try them on a figure set aside for this same purpose. As soon as you are done, you can always strip the paint from it and be ready to start again. Good quality figures that will enable you to make all kind of mistakes and experiment at minimum expense and anguish can be bought at bargain prices at any model show.

Vallejo Model Colors Acrylic Paint
Throughout this article 3 colors will be used for examples: 922 U.S. Uniform Green, 952 Lemon Yellow and 980 Black Green but if you prefer, in table #1, further ahead, you will find several color combinations that will also work well.

Using Vallejo Acrylics

Features
This relatively new product owes its success to the fact that it did away with all the problems that had plagued previous lines of acrylics. They are 100% water soluble, totally flat, quick drying, highly pigmented, have an excellent covering power (great for correcting any mistakes), plus they come in these neat bottles that dispense the paint a drop at a time.

Once you are done, the remaining paint at the tip of the nozzle seals the opening so airflow is minimized and the paint won’t set inside the bottles.

With a line comprised of more than 200 different colors, varnishes, mediums, glazes, florescent and metallic you can do a lot more other than undercoat with them. Even if you are a “dyed in the wool” oil or enamel painter, give them a try. You will find that acrylics are unbeatable for some applications and bring about some very remarkable effects. While I still rely on oils and enamels for certain portions of my figures, most of my former painting methods have been replaced, with significant improvement, by acrylics.

As with any other medium, a sound basic approach will be the cornerstone of a well-executed figure. This is where we start! Now that we have the basic materials and some paints, let’s go through the main parts of the process one step at a time.

Although I still favor oils for the skin portions of my figures, everything else on this Celt by Elite was painted with Vallejo Acrylics. The application of freehand designs like this one is simplified by the use of acrylics due to their color richness and ease.
**PLAN AHEAD**

Before doing anything else, clearly establish your objectives for a particular painting session. Arrange the paints and tools you will be using and very carefully study your figure. Familiarize yourself with all the different details and analyze the location and form of the main shadows and highlights. Always practice the techniques you will be using on a scrap surface and most importantly: take your time, don’t rush.

**PREPARING YOUR PAINTS**

**Shake Your Paint Bottles**

Do what???? You would be surprised at the amount of people that skip this necessary step and later complain that the only thing coming out of the bottle is a clear liquid with some paint on it! So don’t be shy about it, shake that bottle vigorously, tap the bottom against the palm of your hand and make sure that all the paint is thoroughly mixed. Now, get your palette ready for the next step.

**Thinning**

The use of “very thinned paint” is the essence of painting with Vallejo acrylcs. Coming straight out of the bottle, the paint is too thick for most purposes and different degrees of dilution are necessary to achieve the distinct effects that make for a realistic painting job. As mentioned before, we use only very clean water. In order to do this accurately and establish a reference point, we will add a certain amount of water drops for every drop of paint we intend to use. We will designate this as “dilution rate” and it will be noted as “parts of paint” to “parts of water”, (e.g. 1:1, 2:1, 1:3, etc.). The right amount of water is different for each particular situation, nonetheless there are three primary dilution rates with specific purposes that will give us a good starting point:

1:1 Minimum rate of dilution used primarily for basecoating. Good solid coverage.

1:2 Thin coatings, airbrushing, outlining and small details. Thin without being transparent.

1:5 Minimum for highlighting and shading. Transparent, base color will show through.

Vigorously shake your paints before and during your painting session to maintain uniformity on your mixtures.

Add the necessary amount of water to your paint with an eyedropper or empty bottle to reach an adequate consistency for your needs.

From left: Paint straight from the bottle is too thick and builds up easily. Next; 1:1, 1:2, 1:3 and 1:4 dilutions.

It is very important to note that these dilution rates are not absolute. Practice and experience will fine-tune them to your own painting style.

As you go along with your painting session, you may notice that paint will begin to dry on your palette. As soon as this happens, add the necessary amount of water and/or paint in order to maintain the same dilution and consistency, this is very important, so keep an eye on it. Adding a small amount of Vallejo #587 Slow Dry to your palette will delay the drying process and extend the working time of your thinned paints.

**PREPARING YOUR FIGURES**

Once your figure has been cleaned and assembled, it is time to lay down the foundation of our painting process by priming and basecoating. The application of these is straightforward and shouldn’t give you any trouble.

It is a good idea to prime all your figures, metal or resin. Although this is not necessary on resin, priming will always bring out any flaws that are not easily seen on bare materials and will leave a uniform surface over which to apply a good even
basecoat. Always prime with one thin coat, preferably with an airbrush, and let dry for 24 hours. (Vallejo has its own primer, #919 Foundation White, I personally don’t use it, but if you like white primers this is a very good one).

A uniform primer application is the first step for a quality finish and will show any surface faults not easily seen.

Three layers of 922 US Green diluted to 1:1 and allowed to dry, make a good basecoat to work over on our examples.

Once the primer has dried it is time to basecoat your figure with whatever color or colors you have chosen for this purpose. For any base color, always use a mid-tone value that will enable you to have enough latitude to work in your shadows and highlights, maintaining a good overall balance between them. Use the largest brush possible (use your flat brush) to lay in several thin coats with a dilution rate of 1:1 for an even coverage. Let it dry for about 3 hours before any subsequent paint application.

**APPLYING PAINT**

Prior to attempting any technique on an already primed and basecoated figure, we have to learn how to apply thinned paint exactly where we want it without causing any damage to the surrounding areas. This is known as “paint control”, the single most important thing you must learn while working with any kind of paint, but when working with very diluted water based paints, maintaining it becomes crucial. Any time you load your brush with these very thinned paints, capillary action within the brush will load an excessive amount right into it. This excess is a disaster waiting to happen, as some of us already know. You just need to touch that neatly primed and basecoated figure that you have been working on for days, only to see the paint running wild from head to toe, ruining an otherwise fine job.

Well, next time, after loading the brush on your palette, take a short trip to that cotton rag, mentioned before, and touch the side of your brush against it to unload the excess of diluted paint. Don’t worry, even if you see a big stain on the rag the paint is not going to be totally unloaded and leave you with a dry brush. This operation lets your brush retain the right quantity of diluted paint, allowing you to easily apply it and, as an added bonus, will eliminate those spayed brushes so common with acrylics and enamels.

You may need to touch the rag with your brush more than once depending on how diluted your paint is or how much paint you need. If you get too excited unloading water and mess up the point of your brush, simply reform it by gently rolling it over the rag.

**Very important:** once your brush has been unloaded, test it over a piece of paper or other surface to make sure that your dilution is working properly and if not, re-adjust the consistency of the paint on your palette and test again. A lot of paint jobs are messed up by skipping this step.

**PAINTING EXERCISE**

Don’t just take my word for it, try it! On your palette, place 1 drop of paint in 3 different wells adding water to prepare the 3 basic dilution rates mentioned before. For each one of them, start by loading your brush, unload it on your rag, and proceed to paint fine lines or shapes over your practice surface, maintaining good paint control throughout the process. Strive for a clean and even application of lines and shapes by unloading excess water as necessary. Watch how solid or transparent each dilution rate is and experiment by modifying them. Don’t forget to clean your brush each time before loading it again and test your brush before using it.

**METHODS OF APPLICATION**

Now that you know how to properly thin your paint and apply it where you want it, let’s analyze some methods for using your abilities.
Figure painting involves a lot of different techniques with specific applications, however, the most important ones have to do with the subtle color transitions necessary for achieving realistic effects. These color transitions comprise a process commonly known as blending, which has one single purpose: blur the border between two adjacent colors, making the transition from one to the other as “soft” as possible. This can be accomplished in oils and enamels by physically mixing one color into another, in order to soften the edge between them.

On the other hand, for acrylic paints like Vallejo, blending is predominately a visual effect and not a physical process as mentioned before. Once applied, they dry very fast and cannot be blended as well or as easily as oils or enamels. This is the main difference between using acrylics and other paints. Although it can be done in some very limited situations with the addition of a drying time extender, it is easier to treat acrylics like acrylics and let blending be the visual result of correct application using the following two technique’s.

**Layering**

Layering is the application of successive paint coats over the same area. It can be either:

- **Solid**: used wherever full coverage by a single color is desired. Best accomplished by applying several thin coats with dilution rates of 1:1 or 1:2. Used mainly for basecoating, patterns, and details.

**FEATHERING**

Feathering is the application of progressively smaller transparent layers of color (feathers) in order to visually blend each layer into the previous one. This visual blending is achieved by slightly increasing or decreasing the brightness or darkness (value) of

**Transparent**: used wherever gradual color build-up using a single color is necessary allowing the underlying coat to show through. Used for toning, shading, highlighting, and effects. Dilution rates start at 1:5 and up.

*Transparent layers of color are also known as glazes. I will refrain from using this term in order to maintain a clear and simple nomenclature.

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**PAINTING EXERCISE 1**

Now it's your turn to practice layering. Using a 1:1 dilution rate, paint a good basecoat with 2 or 3 solid layers over an area of your practice surface. Let it dry and then, using another color with a 1:5 dilution, apply one transparent layer over your basecoat. (Remember to unload your brush on the rag) Allowing each layer to dry before applying the next, apply a second and third layer on top, trying to keep your basecoat showing through. Add more water to your paint if necessary and experiment with higher dilution rates. By this time you should be automatically cleaning your brush each time you use it, don’t forget it.
each successive feather. It is primarily used for shading and highlighting. Dilution rates of 1:5 and higher is necessary.

This exercise is accomplished by using progressively narrower brushstrokes with each increase in value as described in the text.

PAINTING EXERCISE 2

To practice feathering: On your plasticard, using 922 US Green as basecolor with a 1:2 dilution, paint a wide brushstroke. While it dries, prepare your palette by progressively adding small amounts of 952 Lemon Yellow to the base color. We will do this in 25% increments. This means that you have a first well with only your base color, a second with 3 drops of base color and 1 drop of yellow, a third with 2 drops of each color, a fourth with 1 drop of base color and 3 drops of yellow and fifth with only yellow. Thin each mixture to a 1:5 rate. Starting with a clean brush every time and using each one of your color-increases, apply progressively smaller brushstrokes in order to feather each mixture into the previous one. Use "layering" to give more intensity to each increase if needed and strive for a subtle transition between them. As you become more experienced and expand your color knowledge, you will be able to mix your color increases or decreases as you go along on a single well. This exercise requires some practice a good feathering technique comes with a lot of it, so don't be discouraged if your first attempts fail.

HIGHLIGHTING AND SHADING

The particular theory on this topic is far too extensive for the scope of the present article and I will leave this to the excellent material available that covers it in depth**. This will let us stay within the application process, which by now, you should have a pretty good idea of how it is done. Highlighting and shading are made possible by combing both layering and feathering into a very simple process:

** "Building and Painting Scale Figures" by Shepard Paine D Chapter 3

As a general rule we highlight the raised areas of our figures where light gathers the most. When using acrylics, remember to highlight first. The reason for this lies in the fact that it is easier to cover any mistakes made while highlighting with your darker colors than the other way around.

Highlighting is accomplished by adding a small amount of a higher value color to our base color, thinning it accordingly (minimum 1:5) and starting with the widest feather that corresponds to the lowest point of the area to be highlighted, carefully apply this first increase layering it as required to
obtain the desired intensity. Next, add another small amount of highlighting color to your last mixture and apply the next feather on a smaller area again by layering it as necessary. Repeat this process until all your increases have been applied. Depending on the position and desired effect, highlighting can range from a single increase in value to the use of multiple feathers going all the way to the highlighting color itself.

**Shading**
For the most part, we shade areas where light gathers the least or requires a little help in defining their form and it is normally done once our highlights have been applied.

<table>
<thead>
<tr>
<th>Shading: By adding 25% of 980 Black Green to our base color, the first decrease is applied on the darker areas.</th>
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<tr>
<td>A second decrease is applied by mixing 50% of 980 Black Green with our base color and pure 980 Black Green is used for the darkest areas.</td>
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The application process is similar to the one used for highlighting, but in this case we will add a darker color to our base tone in order to create progressively lower values. Shading requires a higher dilution rate and is usually accomplished in no more than 3 color decreases depending on the particular depth of each feature or the desired intensity. Remember that the paint must be very thin; it is better to carefully build up each shadow by layering each decrease application than by using a strong single one that may obscure any painted detail or the base color. Start with dilution rates of 1:8 or higher and be sure to unload your brush on the rag several times before using it.

It becomes significant to understand that applying highlights and shadows is a matter of personal style, experience and a good knowledge of color theory. However, successful results with acrylics will always rest on three factors:

1. **The right color selection.**
   Here I can only stress that good results require a careful selection of compatible colors and values that stem from a suitable base color. This means that unless you are trying to depict a particular effect, your base color must be present throughout all your increases or decreases in order to maintain color harmony. The page after the article shows some easy single color highlight/shadow mixtures that you can use as a basic reference. Experiment with these mixtures to acclimate yourself with the technique.

2. **The number of increases or decreases over the color value.**
   These are determined by the size and configuration of the specific area. On large and shallow areas where subtle transitions are necessary, a higher number of increases or decreases of the base color will be required as opposed to small and deep areas like tight folds and creases, where swift changes between highlights and shadows allow for more intense transitions in fewer steps.

3. **The adequate placement of highlights and shadows throughout the figure.**
   Even if only a few, when precisely applied they go a very long way. A good understanding of the "Stop Sign Rule" is essential here. Always study your figure under an overhead light so you will be able to recognize the features and planes that give way to the predominant shadows and highlights and then accentuate them accordingly.

**Complementary Techniques**

Once we are done with our basic highlighting and shading it is time to add some important improvements and final touches that will adjust and enhance the contrast between the different areas and details of your figure. The transparency and color intensity possible with acrylics makes them the best choice for these procedures known as toning, outlining, and edging.

**Toning**
When painting with acrylics there are times when you may find that your highlights and shades are just too stark, you need a small value adjustment, or maybe a slight tint for a particular effect is required. In these cases we use what is known as toning, which is nothing more than a very diluted transparent layer of color applied over an area in order to soften harsh

Toning is applied here by using a 1:12 dilution of the base color in order to soften contrasts and provide a more pleasing balance.
contrasts, fine tune the overall valance or add that special effect. A dilution rate of 1:12 is a good starting point for this purpose and don’t forget to unload your brush several times before applying it.

**Outlining**
Outlining is the application of a solid dark thin line that separates areas and defines details like seams, pockets, flaps, etc. by acting as a bold shadow. This is done by layering a very thin line with the lowest color value for each area to be so defined using a dilution rate of around 1:2 in order to build up color slowly until the desired intensity is attained.

Outlining enhances a figure by separating and defining areas and details, acting as a bold shadow. Pure 980 Black Green was used here.

**Edging**
Although not as widely known as outlining, when accurately placed, it is just as important and its effects can be quite stunning. Similar to outlining, it is the application of a solid light thin line that separates and defines different areas and details by acting as a bold highlight furthermore increasing the overall sharpness of our figure. A high color value with a 1:2 dilution is required for gradual color build up.

**CONCLUSION**
Well, that’s it, and although a whole book could be written about the use of acrylics for painting figures, these few pages embody the core techniques, and as you see, acrylics are not so difficult to use after all. Practice and experience will make the rest. I hope the preceding concepts and ideas will be helpful in getting you started in the use of Vallejo Model Colors acrylic paint or at least provide you with a solid reference point to experiment and go beyond your present technique. This doesn’t mean that you should become an “acrylic only” painter. Each kind of paint has its own merits and excels in certain areas, it is for each one of us to identify and integrate these characteristics into our personal painting style. Let acrylics become another tool in your pursuit of excellence, you won’t be disappointed.

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Basecolor Highlight Shadow

Here are some recommended basecolor, highlight and shadow combinations mentioned in the previous article. All photos are courtesy of Acrylicos Vallejo.

- 922 USA Uniform
- 952 Lemon Yellow
- 980 Black Green

- 975 Military Green
- 850 Medium Olive
- 980 Black Green

- 850 Medium Olive
- 915 Deep Yellow
- 975 Military Green

- 915 Deep Yellow
- 951 White
- 981 Orange Brown

- 981 Orange Brown
- 915 Deep Yellow
- 940 Saddle Brown

- 940 Saddle Brown
- 981 Orange Brown
- 985 Hull Red

- 875 Beige Brown
- 917 Beige
- 984 Flat Brown

- 984 Flat Brown
- 875 Beige Brown
- 822 German Cam Black Brown

- 906 Carmine Red
- 956 Clear Orange
- 926 Red

- 909 Vermillion Red
- 851 Bright Orange
- 908 Carmine Red

- 851 Bright Orange
- 911 Light Orange
- 909 Vermillion Red

- 911 Light Orange
- 915 Deep Yellow
- 851 Bright Orange

- 844 Deep Sky Blue
- 951 White
- 985 Prussian Blue

- 965 Prussian Blue
- 901 Pastel Blue
- 898 Dark Sea Blue

- 901 Pastel Blue
- 951 White
- 899 Dark Prussian Blue

- 846 Mahogany Brown
- 929 Light Brown
- 872 Chocolate Brown

- 872 Chocolate Brown
- 875 Beige Brown
- 822 German Cam Black Brown

- 843 Cork Brown
- 847 Dark Sand
- 826 German Cam Medium Brown

- 856 Ochre Brown
- 948 Golden Yellow
- 983 Flat Earth

- 992 Neutral Grey
- 951 White
- 862 Black Grey

- 830 German Fieldgrey WWII
- 886 Green Day
- 979 German Cam Dark Green

- 886 Green Day
- 971 Green Grey
- 830 German Fieldgrey WWII

- 871 Leather Brown
- 977 Desert Yellow
- 822 German Cam Black Brown

- 921 English Uniform
- 917 Beige
- 871 Leather Brown

- 988 Khaki
- 976 Buff
- 941 Burnt Umber

- 864 Natural Steel
- 997 Silver
- 800 Gunmetal Blue
**Color Formulas**

All colors listed below are Vallejo Model Color unless indicated as (VGC), Vallejo Game Color.

(b) = Basecolor  (h) = Highlight  (s) = Shadow  (g) = Glare

### BRONZE

- (b) 856 Ochre Brown
- (h) 927 Dark Flesh
- (s) 43 Beasty Brown (VGC)
- (g) 918 Ivory

### ARMOR/STEEL

- (b) 836 London Grey
- (h) 989 Sky Grey
- (s) 866 Grey Green
- (b) 903 Intermediate Blue
- (h) 907 Pale Greyblue
- (b) 866 Grey Green
- (h) 836 London Grey
- (s) 807 Oxford Blue
- (g) 907 Pale Greyblue
- (b) 898 Dark Sea Blue
- (h) 964 Field Blue
- (b) 807 Oxford Blue
- (h) 907 Pale Greyblue
- (b) 836 London Grey
- (h) 907 Pale Greyblue
- (s) 866 Grey Green
- (b) 49 Stonewall Grey (VGC)
- (h) 1 Skull White (VGC)
- (s) 50 Cold Grey (VGC)

### GOLD

- (b) 914 Green Ochre
- (h) 949 Light Yellow
- (b) 978 Dark Yellow
- (h) 951 White
- (b) 913 Yellow Ochre
- (h) 918 Ivory
- (g) 951 White
- (b) 949 Light Yellow
- (h) 918 Ivory
- (s) 856 Ochre Brown
- (b) 949 Light Yellow
- (h) 951 White
- (s) 914 Green Ochre
- (b) 923 Japan Uniform WWII
- (h) 951 White
- (s) 828 Woodgrain Transparent

### BRASS

- (b) 978 Dark Yellow
- (h) 951 White
- (s) 43 Beasty Brown (VGC)

### COPPER

- (b) 818 Red Leather
- (h) 815 Basic Skintone
- (g) 951 White

### OXIDATION

- 808 Blue Green
- 32 Scorpy Green (VGC)
- 942 Light Green

### RUST/MUD

- 859 Black Red
- 814 Burnt Cadmium Red
- 982 Cavalry Brown
- 985 Hull Red
- 917 Beige
- 877 Goldbrown

### LEATHER

- (b) 872 Chocolate Brown
- (h) 923 Japan Uniform WWII
- (s) 938 Blue Transparent
- (b) 984 Flat Brown
- (h) 856 Ochre Brown
- (b) 941 Burnt Umber
- (h) 874 U.S.A. Tan-Earth
- (b) 43 Beasty Brown (VGC)
- (h) 914 Green Ochre
- (b) 43 Beasty Brown (VGC)
- (h) 40 Cobra Leather (VGC)
- (s) 45 Charred Brown (VGC)
Basic Painting Desk
By: Robert J Kingery

When people first start painting, many wonder what paint and tools they would need. This is a basic list to help the beginner on their way. Many of the items you may already have laying around your house.

**Basing** - To base your miniatures you can use sand, cork, flocking or static grass. You can find good basing materials at hobby stores as well as model train shops.

**Brushes** - Brushes can be very hard to shop for. The basic sizes you should own are: 000, 0, 1, and 2. When shopping for brushes, test them out in the store. A useful thing to do is ask for a glass of water to dip the brush in, then look at the tip to see if the bristles have come to a point. They should not hook, or have any stray hairs sticking out.

**Cork Bottle Tops** - These are great for holding your miniature while painting.

**Cutting Board** - A basic plastic kitchen cutting board works great as a work surface.

**Files** - Round, triangle, and flat needle files are good tools to remove mold lines.

**Future Floor Finish** - This stuff rocks! You can find it in most household stores in the cleaning section. This acts as an acrylic medium to help the paint settle in the recesses. It's great for turning any paint into a wash, adds a level of protection to the miniature, and will add a gloss finish (unless dull coated).

**Glue** - Super glue is useful for gluing multi-part miniatures, while white glue is good for basing.

**Knife** - An X-Acto knife is also great for removing mold lines.

**Lighting** - Fluorescent light bulbs run cooler and therefore, give off a truer whiter light than halogen bulbs, which tend to be more yellow.

**Nippers** - Metal wire nippers are great for removing parts from sprues and removing tabs from miniatures.

**Matte Varnish** - A spray matte varnish is good for dull clear coating and sealing your miniatures. For a more protective coating you can use a gloss spray coat for the first layer, let dry and then finish with the matte varnish.

**Paint** - To get started all you really need are 10 basic colors; Red, Yellow, Blue, Green, Brown, Flesh, White, Black, Silver and Gold.

**Palette** - CD's are very useful as a color palette for your paints.

**Paper Clips** - Can be used as pins for connecting multi-part miniatures.

**Pigma Micron Pens** - These pens are very useful for creating tattoos, writing on scrolls and litanies, adding pupils to eyes, black lining, the possibilities are endless. These pens come in a variety of colors and sizes, the most useful sizes I have found are: BR (brush tip), 05, and 005 in black, blue, and red.

**Pin Vice & Small Bits** - To drill holes for connecting the multi-pants.

**Poster Tack** - You can use this to attach your miniatures to the cork tops or paint pots. There are other colors available but the orange is the strongest hold that I have seen so far.

**Primer** - Black or white spray primer to base your miniatures before painting.

**Rub n Buff** - Useful for doing quick armor and metal effects. They come in gold and silver and can be applied with a sponge make-up applicator or an old paintbrush.
Colors of Feydreiva
Written by: Jeremie Bonamant
http://bragonart.free.fr
French Translation by: Eric "Xenon Wulf" Hariaux

Popular wisdom says that "you can't argue with tastes and colors", which means that, "the color is in us".
- Goethe, Treatise on colors

Through this figurine, I've tried to work on the fundamental basics of color and its harmonious uses, most notably through warm/cool contrasts and light/shadows.

PREPARATION

Resin figurines have the advantage, over metal ones, to have fewer mold lines and slighter slips between the molded halves of a figurine. Moreover, mold lines being made of resin; it is possible, with the use of an x-acto blade to remove them effortlessly with no risk of damaging the rest of the details. All that is left afterwards is to lightly sand the piece with fine sandpaper (about size 800) to totally remove traces of the joint line.

PALETTE OF WARM AND LIMITED COLORS

The model has all the characteristics of a femme fatale. I've therefore decided to use a palette of warm colors to paint it. Warm color; red for example, can be welcoming, but can also be provoking, even aggressive! Red catches the eye and it surprises and invites action instead of rest. Red ink is therefore the dominant color of my figurine. Thus, every other color (and I mean ALL of them) have some Red and Chestnut Inks added to their basic shades.

WHAT MUST BE KNOWN FIRST

Acrylic paint has the feature of drying quickly. Transitions between shadow and light are therefore not done through blending of colors, as in the case of oil painting (with the exception of "painting flesh"), but by overlapping very fine layers of paint (we'll play with the transparency of the layers).

APPLYING BASIC COLORS

This is a very important step. It is most often on this one step that will hang the quality and finesse of your blends. I used to prefer starting from an opaque base, but now, I like limiting this step to applying a transparent layer of very diluted paint. We must make sure not to get paint in the creases and to try and get a fine layer, which barely covers anything and is homogenous. The picture clearly shows the desired result. We can still see the undercoat through the transparency, as if we were making water paint. It's useless to go any further for the basecoat. Keep in mind that after a series of 20 to 30 washes for the shades and the lights, the colors will become completely opaque. Don't rush things.

BLENDING TECHNIQUE

On that base, I start applying my shadows and my lights in three "distinctive" steps: The wash, the wash with inking and then the glaze.

The Wash

Or "the art of working with transparency"...

We use the fact that diluted paint lets the layer underneath it show because of its transparency. There are no secrets. The colors must be applied like filters, starting from the inferior layer. We thus color the base color through a series of passages. The water, by evaporating, will then deposit most of the colors in the creases. We can therefore darken it (rarely lighten it), or give it reflections. This technique is very useful to blend colors. We call "successive wash" when this technique is used to lighten colors, after painting over the previous color many times over. What must be understood of a wash is that the pigment is what is really painted with, and that it is the local concentration of the pigment which makes the wash, not always the shade of the color.

Wash with inking:

Once the blends of a figurine are done in a very classical way (the colors used here are very important), we may believe that it is almost over, but that would be a wrong impression - that was only the basecoat!

The full technique rests on the use of inks and transparencies (thus washes). "Inks? But that's for beginners!" No, not when used this way. That's right, we'll be painting the model by very numerous passages with highly diluted ink (and when I say numerous, I mean at LEAST 15 passages with very, very, very diluted ink). So diluted in fact that the color can barely be seen in the water. This technique can be likened to watercolors: we don't touch lighter parts, and we paint the darker parts and texture with transparent paint. I've said that the choice of basic colors was very important, because the colors used to shade aren't always the complement of the basic one (blue with blue ink, etc.) but often opposing colors, or colors which jar against the basic colors.
Methods of Distinction

Example:
Blended base of beige and light maroon, worked with turquoise blue ink (which no longer exists by the way...) or green ink, etc. That's where the richness of the colors come from, along with its depth.

The Glazes

The glaze must not be mistaken for the technique called "wash," which is what is generally used. They are two different techniques. The glaze is used to unify a zone when the contrast between light and shadow is too strong or when the differences between two tones of colors are too sharp. It is in a way the application of a transparent layer of color over pigments of another color. The glaze is a technique of placing colors, which is done through heavy dilution of paint (1vol. of paint for 5-6 vol. of water). The paint then applied will create a near transparent layer which will subtly nuance the previous colors. We can thus tint the color of the model and give it interesting reflections. We can also mix it with medium to give it a slightly more plastic aspect and keep it from going into the creases like an ink.

Useful use of glazing

All of the colors used on my model being relatively close to one another, I don't hesitate to when I've got a satisfying paint mix, use it to nuance parts I've already worked on. Thus, when I've applied red/violet washes to the armor, I did not hesitate to touch up the shadows of the face using the same color. I do not clean my rinsing water on a regular basis either (well, within reasonable limits, of course). This has the effect of giving a hint more nuances to my shades when I dilute them all in the same water.

WARM LIGHTS, COOL SHADES

As with the blue, violet gives a sensation of distance. I therefore frequently mix in nuances of blue or violet inks in with my basic colors when mixing my shadow colors. Inversely, yellow (more so than red) gives an impression of proximity and closeness. You can guess the rest: I sometimes add a minute amount in my light colors. Guaranteed contrast!

Painting the Red Armor

I don't normally like to have to lighten my red through orange or pink on my figurines, nor to have black shadows. I generally use the following compromise: to go through peach and cream colors for lights and maroons/violets for shadows. The lacquered armor is characterized by deep shadows and acceleration towards the lights to simulate a brilliant sheen. These are the paints used for this figurine:

Games Workshop paint:
- Base: Blood Red + Magenta Ink
- Shadows 1: Chestnut + Red Inks
- Shadows 2: Red Ink + Violet or Blue Ink
- Lights 1: Blazing Orange
- Lights 2: Bubonic Brown + Yellow
- Light 3: Bleached Bone followed by White

COLOR PALETTE OF THE BLADE

Games Workshop paint:
- Base: Boltgun Metal
- Shadows 1: Boltgun + Black
- Shadows 2: pure Black followed by Black Ink
- Light 1: Chainmail followed by Mithril Silver
- Light 2: Enamel Humbrol 11

I prefer the use of a matte black for the shadows, in order to contrast more fully with the enamel lights, which will be more reflective and "Brilliant."

WHITE BASE, BLACK HAIR

Red looks dark on a white background while it looks light on a black background. I've therefore painted the hair black (while I was initially going for a red color), as black lightens surrounding colors, thus brings out the highlights of the armor.

Snowy bases seem to be in vogue, but it is justified here - white radiates and erases limits, it always adds luminosity and
freshness and puts in a good light for a figurine with a warm dominant. The snow was made by glass powder and sodium bicarbonate dusted on and held in place by wood glue.

I hope to leave you enlightened, and to have caused you to really think and plan ahead when starting to paint a model. If your first few attempts don't seem conclusive, don't worry, for Aristotle said, “Of all qualities, color is the hardest one to speak of.”
Methods of Distinction

A look at other figures painted by Jeremie Bonamant

Emperor Haghendorf
By: Ilyad Games

Knight of the Light
By: Ilyad Games
Painting A Drune Persecutor
Written by: Anders Eklund
Ritual Studio
http://hem.bredband.net/ritual

INTRODUCTION

This article will explain how I went about painting a Drune Persecutor. The article will cover the painting of all major areas and the techniques used. It will also give a detailed description of how I made the base for the mini. Instead of just listing what paints I used, I aim to describe in more detail how different techniques can be used for different situations and how simple tricks can be used to give more variation and depth to the finished result. I will also try to explain some of the thought process and decisions that lie behind the final outcome.

PLANNING STAGE

Before starting work on a mini, I usually spend a few moments contemplating what I want to do with it. I don’t plan my work in minute detail, but I do draw a rough mental sketch containing a basic colour scheme and general mood of the mini. The rest is then added as I go along and, sometimes, the plan is changed drastically along the way. If I find that some of the colours do not work out as well as I had planned, then by using some knowledge of colour theory, I can tweak the final result by applying some well-chosen coloured washes over the awkward-looking parts, thus changing the tone and tying the colour together with the rest of the mini.

On this particular mini I wanted the main elements to be earth tones, weathered steel and dark, somewhat lifeless skin. This is what comes to mind when I think of the Drune clan. I imagine their association with an evil god to have drained some life out of their bodies, leaving a semi-human creature without a will of its own. Their lust for blood would be visualised by making the axe look much used. The end result, I imagined, would be close to the classic fantasy barbarian look (like Conan the Barbarian), only darker and more sinister.

For the base, I planned a simple forest theme, consisting of a slab of rock, moss, tufts of grass and some fallen leaves. This is, in my opinion, a suitable framing for a Drune mini, since the Drune clan lives in a dark, inaccessible forest.

BLENDING

Before going into detail of how the painting was done, I thought I'd say something in general about blending. Blending is perhaps the most important aspect of mini-painting. No matter what fancy techniques one uses on a mini, it won't look good unless the transitions between colours are smooth. There are many blending techniques to choose from and the only way to know what technique to use is to try them out and experiment. I have found different techniques useful for different purposes.

For smaller surfaces and fine detail I usually use a layering technique. Layering is easy, but to achieve really smooth transitions it can be very time consuming. The idea is simple; just paint layer on top of layer and make the paint lighter each time. The more intermediate layers between shadow and final highlight you apply, the smoother the transition will be.

It is helpful to keep the paint semi-transparent. Each layer should cover a slightly smaller area than the previous, so that the colour transition will become apparent.

When doing large surfaces I tend to favour wet-blending. This technique is generally considered to be difficult, but with a lot of practice it's an effective and quick method. Explaining the technique is quite difficult, because it involves a lot of intuitive brushwork. It's a bit like learning to ride a bicycle. Once you master it, you don't really think about how it's done. The main concept of the technique is to apply two neighbouring layers of paint and, while still wet, fuse the layers together with the brush, thus achieving a smooth transition.

I usually combine wet-blending with another technique called feathering, to apply additional highlights. The idea behind feathering is to apply a layer of diluted paint and then increase the transparency to make it fade out and thus blend into the underlying coat of paint.

I also use a technique that I call cross-hatching. This is inspired by the technique used in black-and-white comics to achieve shading. Parallel or crossing lines are used to mimic greyscales where the thickness and spacing of the lines constitute different shades of grey. When painting minis, I can achieve a hint of texture to the surface by applying the highlights in thin, parallel lines and keep the paint very diluted. This vague texture gives the impression of a weathered and slightly dull looking surface while keeping the actual brightness of it. The technique demands a lot of layers of very thin paint. When I want a layer to blend in with the previous, I slowly lift the brush from the surface, thus making the line slowly fade out into nothing. There should be hardly any visible effect of one single layer, but as you go along, the combined effect of all layers slowly comes out.

I almost always apply washes with an intermediate colour over the blended surfaces. This evens out the transitions and ties the colours together. After a wash or two, I re-apply the final highlights with very thin paint.

GETTING STARTED

After the mini was cleaned, I assembled the head and prepared for the assembly of the hands and axe. I had to wait to glue
the hands and axe on since I needed to be able to reach the areas underneath. The mini was stuck to a wine cork so that I didn’t need to hold the actual mini while painting. Finally, the mini was given a black spray undercoat. The choice of undercoat colour is an eternal debate among mini painters. There are pros and cons with every choice, but I usually prefer black. The biggest advantage with black undercoat is that you can leave the black undercoat in those nooks and crevices that are almost impossible to reach with your brush. Also, I can leave thin lines between adjacent surfaces to achieve distinctly defined areas and details. This saves me the trouble to do blacklining afterwards and risk messing up the areas already painted. Since there would be no extremely bright colours on this mini, I didn’t have to worry about not getting light colours bright enough over a black undercoat.

Now the mini was ready for painting! I started out by applying base coats on all the major areas of the mini: skin, armour, clothing, fur, boots and the bracelets, which I had decided would be made of copper to break the monotony of the browns and greys of the rest of the mini. Here is a list of the colours used for base coats (all Vallejo Model Colors):

**Fur:** German Cam. Black Brown #822

**First layer of clothing:** 50% Cavalry Brown #982, 50% German Cam. Black Brown

**Second layer of clothing:** 90% Stone Grey #884, 10% German Cam. Black Brown

**Skin:** 40% Basic Skintone, 40% Sky Grey #989, 20% Cavalry Brown

**Steel:** Intermediate Blue #903 (I was using NMM technique for all metals)

**Copper bracelets:** Red Leather #818

**The fur inside & boots:** 50% Beige Brown #875, 50% German Cam. Black Brown

I now had a rough image of what the mini would look like. An important note to make is that I was painting the mini according to the zenithal lighting principle. The idea is to paint the mini as if the sun, for instance, lighted it from above. That means that highlights would be concentrated to the surfaces and edges facing upwards and shadows would be placed on surfaces angled towards the ground.

**PAINTING THE SKIN**

The first step in painting the skin consisted of applying a few thin washes of Black Red #859, which would provide shading and pick out the details in the richly textured muscles of the Persecutor. In order to achieve a smooth transition between the dark wash and the base coat, it is important to keep the wash extremely thin. It is better to have to apply layer after layer in order to achieve the desired effect than to try to do it in one or two layers and have a rough, blotchy result.

To make the shading even smoother I gave the skin a wash of Beige Red #804, which evened out the blending between the base coat and the Black Red. I then re-applied some thinned down Black Red in the deepest crevices of the skin, where I wanted the deepest shadow. Now I was ready for highlighting!

I started the highlighting process by applying Beige Red #804 to all the raised areas of the skin. I then mixed Pale Flesh #3 (Vallejo Game Color) into the Beige Red and added further layers following the fibres of the muscles. I added more and more Pale Flesh for each successive layer and then used pure Pale Flesh to give emphasis to the surfaces facing upwards.

When the skin was done, I was not happy with the skin tone. It didn’t have that lifeless character I was going for. For this, a bit of colour theory proved handy. What I wanted to remove was the peachy, yellow and leave the greyish brown/purple colour. I washed all skin areas with a light blue with a purplish tone. This effectively cancelled out the yellow in the skin and left a sickly purple tone, which was exactly what I wanted. This was actually done when the mini was finished, but I thought it was better to
mention it at this point.

**PAINTING THE FUR**

Since the fur covers basically the entire backside of the mini I wanted to do something out of the ordinary on it to make it more interesting to look at. A plain brown fur of that size would look very dull. I got the idea to tint the lower part of the fur with a blue green colour to make it look dirty and slightly decomposed, while using a reddish tone on the shoulder part of the fur where the strands of hair are a bit longer. This would create an interesting gradient between an orange brown on the upper part and a rotten, greenish brown near the hem.

I started picking out the basic topography of the fur by wet-blending a mix of 40% German Cam, Black Brown #875, 40% Beige Brown #675 and 20% Sky Grey #899 into the base coat of pure German Cam. Black Brown. I continued to pick out the raised areas by adding Yellow Ochre #913 to the mix. The lower part of the fur was given a few washes of very diluted Dark Blue Grey #904 and the upper part was washed with Red Leather #818.

The major highlighting was done by dry-brushing the lower half with 50% Beige Brown and 50% Stone Grey #884 and then Stone Grey on its own near the edges, while the upper half was dry-brushed with 50% Beige Brown and 50% Beige Red #804 with Pale Sand #837 added for the final layer. The longer strands of hair were picked out with thinned down Pale Sand on its own.

**PAINTING THE METAL PARTS**

The steel parts of the mini was given a couple of washes of 50% Intermediate Blue #903 and 50% Black #850. The majority of the steel surfaces were then retouched with Intermediate Blue before I applied a wash of thinned down Smoke #939.

Highlighting was done by mixing more and more Pale Greyblue #907 with Intermediate Blue for each successive layer and then use pure Pale Greyblue on its own. The highlights were applied on the edges and areas facing upwards towards the imagined light source. After having applied the layer of pure Pale Greyblue, I finished with applying some careful spots of pure White #951 on the uppermost edges of the steel parts. These white spots are in fact crucial for achieving a life-like metallic look. Without them, the steel would just look grey. Likewise, the shadows need to be quite dark. Contrast is essential when doing NMM!

The copper bracelets were given a wash of 50% Red Leather #818 and 50% German Cam. Black Brown #822. They were re-touched with Red Leather and then given a wash with watered down Smoke. I did highlights by mixing Basic Skin tone #815 and Red Leather.

A couple of layers was applied with the final layer consisting of 75% Basic Skin tone and 25% Red Leather. I then applied a layer of watered down Pale Sand #837 and finished by applying a few spots of White.

**PAINTING THE CLOTHING, BOOTS & INSIDE OF FUR**

The clothing of this Drune Persecutor consists of two layers of fabric tied around his waist. The inner layer was base-coated with 50% Cavalry Brown #982 and 50% German Cam. Black Brown #822. I started highlighting this layer by wet-blending a mix of Medium Flesh tone #860 and Pale Sand #837 into the base coat. I used the cross-hatching technique to apply further highlighting with the same mix of colours. This time I used crossed lines instead of parallel lines to give the notion of a weaved texture. The shaded areas were given a few washes of Field Blue #964 to de-emphasise the red and to give the fabric a decomposed look. To further the rotten look I gave the hem
a wash of Yellow Green #954. I added a layer of thinned down Pale Sand to the highlighted areas to make them look a bit sharper.

The outer layer of fabric was base-coated with 90% Stone Grey #884 and 10% German Cam. Black Brown. This was given a wash of Field Blue, and then highlighted with Stone Grey and then Stone Grey with more and more Pale Sand added for each successive layer. The finishing layer was watered down Pale Sand on its own.

The inside of the fur was highlighted by wet-blending a mix of 50% Medium Flesh tone and 50% Pale Sand into the base coat. The edges were given some further highlighting by adding a layer of watered down Pale Sand. This was feathered into the underlying coat.

The boots were painted with the same colours, but the highlights were applied using a standard layering technique. There are some strips of fabric strapped around the boots, and I wanted to paint these in another colour to add some variation to all the brown. I base-coated them Pale Greyblue #907 and used White #951 for highlighting.

**FINISHING THE MINI**

Now, when all the larger areas are done, it’s time to finish the smaller details, such as the horns on the helmet, the tress of hair on the helmet, the cut-off hands and fingers etc. I won’t go into detail on how these were painted. Now, all that remains is the axe. I attached the primed axe to the mini and painted the hands the same way as the rest of the skin was done. The axe blade and handle was basically painted the same way as the rest of the steel, but here I used the cross-hatching technique to acquire that weathered finish. I decided to further the weathered look by adding a metal oxidation effect, i.e. rust. The rust was applied before painting the final highlights on the axe blade. I began by applying a very thin mixture of Beige Brown #875 and Black Red #859. I painted it in blotchy stains concentrated to the area near the filigree patterns. When the first layer was dry, I added Orange Brown #981 to the mix and applied a second layer, concentrating the area to the center of the stains. Finally, I added small dots of pure Orange Brown, heavily watered down. I also made a nick in the edge of the blade. When applying the final highlights of pure White #951, I made some scratches on the blade with very thin paint.

**BASENING THE MINI**

The base of the mini is not to be overlooked! It is an important part of the finished result. A good base puts the mini in a context without distracting from the mini itself. A cluttered, overdone base can easily steal attention from the mini and create a “busy” impression. Therefore, I like to keep my bases simple, but spend a lot of time on creating the right atmosphere.

As mentioned above, I was going for a dense forest look. The main part of the base was going to be a piece of cork sheet painted as a flat rock. Surrounded the rock would be a mix of smaller rocks, dirt and some tufts grass. The rock would be partially covered with moss. For the smaller rocks I used crumbs of the same cork as the larger rock. I then covered all empty spots of the base with PVA glue and dipped the whole thing in sand. I drilled a hole in which I fastened a bunch of cut-off bristles from a large brush to look like a tuft of tall grass. These bristles need to be natural fibres and not plastic, since that would look quite tacky. I painted all the rock using Intermediate Blue #903 for a base coat. I gave it a few washes of German Cam. Black Brown #822 and then dry-brushed it with Intermediate Blue, Sky Grey #989 and finally White #951. The sand was painted German Cam. Black Brown, then dry-brushed with Beige Brown #875 and finally Beige Brown mixed with Sky Grey. The tall grass was painted with the Beige Brown/Sky Grey mix and then highlighted with Pale Sand #837.
When everything was dry, I applied some watered down PVA glue on spots of the rock with some of it going down the sides and spreading out on the dirt floor. I covered the base with green flock and pressed it into the glue with my finger. I shook off the excess flock and when the glue had dried painted it with a mix of Yellow Green #954 and Sky Grey. I gave it a few uneven washes of browns and greens to give it a non-uniform look and then dry-brushed it with a mix of Ice Yellow #858 and Pale Sand.

The final touch was to apply some static grass and a few fallen leaves, for which I used Forrest Litter from Hudson & Allen Studios. When the glue was dry, I painted the static grass with a very thin mix of Beige Brown and Sky Grey. It is important to have very thin paint when painting static grass, since you will up-root the grass otherwise. I highlighted the grass with watered down Pale Sand. The leaves were painted with various mixes of brown, orange, and beige to make them look like randomly coloured dried leaves.

When the base was finished and all paint was dry, it was time to fasten the mini. I removed the mini from the cork I was using as a handle and dipped the pins under the feet in white paint. I positioned the mini as I wanted it on the base and pressed the pins against the rock. The white paint made two marks where I would need to drill holes. I drilled the holes through both the cork and the plastic base, so that the pins could secure the cork plate as well as the mini. All that remained was to put some glue on the pins and attach the mini to the base.
Painting a Spyglass Scarecrow
Written by: Michael Holzapfel
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This tutorial explains, step-by-step, how I painted the limited edition Scarecrow sculpted by Steve Buddle of Spyglass Miniatures. The Scarecrow is a great miniature in my opinion, a truly unique sculpt and definitely very interesting to paint. The miniature reminds me of the villain "Scarecrow" from the Batman comic books as drawn by Kelly Jones, so I decided to go for a rather dark look.

Now before painting a miniature there is always the preparations...

PREPARATIONS

The Scarecrow is a one piece miniature, so no assembly was required. Using an exacto knife and a small file I removed the few mold lines I found. To remove any residue from the casting process I washed the miniature with warm water and a little dish liquid. Next, I glued the mini to the base and filled the base with epoxy putty (I used Milliput, but simply because it was the first putty I had at hand. Green Stuff or another similar product works just as well) to create a level surface. While the putty was not fully cured I sprinkled some sand over it and pressed a few little stones into it (model railroad supplies come in handy here - alternatively bring some sand from your next holiday, a small bottle is a big enough supply of sand and small stones to last for a very long time). With all the cleaning done and the putty finally cured, I primed the miniature with black spray primer. I applied two thin and even coats. A few thin coats are always better than a single thick one - you can easily clog fine details this way. The parts of the miniature that were hard to reach with the spray were painted with watered down black paint (Picture 1).

All right, finally time to do some painting...

THE CLOTHING

First things to paint were the shirt and trousers. For the basecoat I mixed a color of Vallejo Game Color (VGC) Royal Purple #16, VGC Scar Red #12 and some Black I applied this mix in two thin coats to get good coverage (Picture 2).

At this point I want to say a thing or two about thinning paints. First of all thinning paint is very important and can't be stressed enough. If your paint is not thinned enough it becomes grainy and the coverage will get thick and clog fine details. The main question is: How much to thin the paint? Unfortunately, this can't be answered, because it depends on many things like the effect you want to create and most important experience. Often you read something about "milky consistency," that's a good starting point. Try it and go from there. But enough theory for now, time to get back to the painting.

With the basecoat applied it is time to start highlighting the shirt and trousers. To do this, I added a small amount of VGC Earth #62 to my initial mix. The brown helps to keep the colors muted and gives a worn and used appearance. I applied the first highlight all over the shirt and trousers leaving the underlying color only visible in the deepest folds. I continued to add VGC Earth to my mix for two more layers (Picture 3).

To create smooth transitions between the layers I use a damp brush to "blur" the transition between the last applied and the still wet underlying layer. This technique is called "feathering" and with a little practice you can create very smooth blends.

Continuing with the highlights I now switched to VGC Cold Grey #50 as the color to add. The Grey again helps to mute the overall appearance and helps to create a worn look on the raised parts. I painted one layer with Cold Grey added (Picture 4). Next, I added a small amount of VGC Stonewall Grey #49 to create a sharper highlight. I painted this mix only on the most raised parts of the
Methods of Distinction

shirt and trousers (Picture 5). To create one final highlight I added a bit of white to mix. The last highlight was carefully applied to only a few selected areas (Picture 6). Satisfied with the shirt and trousers I moved on to the hood and the right arm.

I used a custom mixed color as a basecoat. I mixed approx. 1/3 VGC with 2/3 Vallejo Model Color (VMC) Smoke #939 with just a tiny drop of VGC Royal Purple #16 added and applied the color freely over the hood and the right arm. I needed two thin coats to get a good coverage (Picture 7). For the highlighting, I added VGC Khaki #61 to the mix. I did three layers, again using the feathering technique to create smooth blends (Picture 8). For the next three layers I highlighted by adding VMC Light Sand (a great color to add very soft highlights) concentrating the layers more and more on only the most raised parts (Picture 9). For one final sharp highlight I used Reaper Linen White on a few selected spots, around the lower parts of the eye sockets (Picture 10).

With the biggest parts of the clothing painted it is time to finish the few remaining areas. The left hand and shoulder were painted with VGC Cold Grey #60 and highlighted by adding VMC Light Sand for two layers and Reaper Linen White for another two (Picture 11). Using cream or bone colors to highlight, grey makes for very smooth highlights without any sharp transitions. The final piece of clothing were the bandages around the left arm and left leg. As a basecoat, I used the same mix of VGC Royal Purple #16, VGC Scar Red #12 and Black, I used for the shirt and trousers. This time I wanted to create a different appearance so I used VGC Dead Flesh #35 as the highlight color. I used four or five layers to create the final result (Picture 12). At this point, I repainted the various leather straps (around the neck, arms, legs and waist) with thinned down Black paint. The effect I wanted to create was very old and worn leather. This means creating sharp and somewhat irregular highlights concentrated on the edges without worrying about blending too much. The highlights were created with VGC Earth #62, followed by VGC Khaki #61 and finally VMC Light Sand. I did not use any mixes (Picture 12).

This concludes the painting of the clothing and it is time to move on to the details...

THE DETAILS

One of the typical characteristics of a Scarecrow is of course the straw. I started by painting the straw with VGC Charred Brown #45 to create deep, dark shadows between the strands. Next I picked out the individual strands with Cobra Leather (Picture 13). To create more depth I added successive layers of VMC Japan Uniform #923 (thinned down a lot), VGC Desert Yellow #63 and VMC Pale Sand #837. To a few selected strands I added a final highlight of Reaper Linen White to create some diversity (Picture 14).

Painting such tiny things as strands of straw makes brush control and controlled release of paint very important - especially when painting with very thin paint. It is vital to control the amount of paint you carry on the brush, because too much paint results in a mess. I always hit a paper tissue with my brush to unload excess fluid before applying the paint to the miniature.

Next, I painted the wooden parts of the Scarecrow, the stick on his back and the handle of the knife. I applied a basecoat of VMC Black Green #980 followed by a layer of VGC Charred Brown #45, leaving the green only visible in the recesses. Highlights were made by applying successive layers of VGC Earth #62, VGC Khaki #61 and VMC Light Sand to a few selected spots. I find that the green sheen in the recesses helps to give the wood a very old and battered appearance. While I had these colors on the palette, I quickly painted the stitches on the trousers and the shirt with
VGC Earth #62 followed by a quick highlight of VGC Khaki #61 (Picture 15).

With the Scarecrow mostly painted it is time to move on to one of my favourite parts, painting metallics...

**THE BLADE**

While I do appreciate non-metallic-metal (NMM), and even try it myself from time to time, it is very hard to beat well done metallics. Metallics can be painted quickly to an acceptable standard, but well done metallics can take up at least as much time as well done NMM, and in my opinion, are much more fun to paint.

To start things off I painted the whole blade with Games Workshop (GW) Boltgun Metal. Even though metallics have a sheen of their own they look much better when highlighted. I highlighted the blade with GW Chainmail, again feathering the edges of layers, because blending is important for metallic paints too. On the sharp edges I applied a little GW Mithril Silver (Picture 16). Now the most enjoyable part begins, weathering.

For weathering or shading effects on metallics, glazing is the best way in my opinion. A glaze is basically extremely thinned paint (1 part paint to 10 parts water/thinner at least), used to alter the hue of the underlying color. To do this, the glaze is applied in very thin layers, letting each layer dry before the next one is applied. If done correctly the first few layers will hardly be visible but as you build up more layers the stronger the effect will get. Controlling the amount of paint on your brush is even more vital here. If your paint starts to pool or flow around on the miniature you definitely have too much paint on your brush. It is also important to pay attention to the brushstroke. Start your stroke were you want the least paint to be and paint towards the spot were you want the effect to be the strongest. For the blade of the Scarecrow, I started my brushstroke at the tip and painted towards the handle.

The first color I glazed on was VGC Cobra Leather #40. I applied 6 layers. I wanted to create a strong rust effect so I started glazing with colors having an orange/red hue. I started with VGC Scrofulous Brown #38, followed by VMC Orange Brown #981, I painted less and less of the blade concentrating closer and closer towards the handle as I wanted the effect to be the strongest there (Picture 17). At this point the blade already looks worn and rusty, but I wasn’t satisfied yet. I glazed the blade with VGC Tan #66, VGC Terracotta #65 and VGC Dark Fleshstone #44, applying multiple layers of each color. The final color I used was VMC Black Red #859 painted very close to the handle and only 2 very thin layers (Picture 18).

Satisfied with the result only the finishing touches were left...

**FINISHING TOUCHES**

With everything painted I looked at the Scarecrow and still felt something was missing. That’s when I decided to add glazes to selected parts of the clothing too. Parts of the right arm and hood were glazed with VGC Bloody Red #10, VGC Scar Red #12 and the original mix I used for the shirt and trousers (remember: VGC Scar Red #12 + VGC Royal Purple #16 + Black). The darker the color the more I concentrated the glazes around deep folds. I used another color combination on the bandages on both arms, the left hand and the trousers. Here I used VGC Sick Green followed by VMC Black Green to create a complimentary color effect. I like the final result a lot and feel the glazing added more character to the miniature (Picture 19).

All that is left to do now is the base...

**THE BASE**

I wanted the base to be quite simple so it does not distract from the miniature. The base was painted with VGC Charred Brown #45, heavily drybrushed with VGC Earth #62 and lightly drybrushed with VGC Khaki #61. At this point I washed parts of the base with GW Catachan Green and GW Terracotta to create some diversity. Now, I drybrushed with VGC Khaki again and finally a very light drybrush with GW Bleached Bone to finish the earth parts of the base. The rocks were painted with Reaper Armor Grey and drybrushed with VGC Cold Grey #50, VGC Stonewall Grey #49 and Reaper Linen White (Picture 20). The last thing to do was add a little static grass here and there. To do this I applied a little white glue to the base and simply sprinkled
on the grass. After the glue was dry I washed the grass with GW Catachan Green and VGC Earth #62 to tie it in with the base. A drybrush with GW Bleached Bone finished the grass (Picture 21). Drybrushing helps to add some color variation to the strands and also helps to make the grass stand upright instead of lying flat to the ground. The final touch was to paint the border of the base with Black, nothing can ruin the look of a nicely painted mini more than a sloppy border of the base, in my opinion.

Phew, this concludes the step-by-step tutorial of how I painted the Spyglass Scarecrow. I hope you had as much fun reading this article as I had writing it and that some things will be helpful to you. Now what are you waiting for, get some painting done ;)
Painting an Elf Prince Hawthorne

Written by: Michal "Mahon" Machowski
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I started by attaching the mini to the base with a lump of greenstuff, and priming the mini. I usually prime my minis black, unless I want them to look bright, or to get cleaner colours. This time - as with most of my elves - I chose black undercoat because I want them to look natural, and prefer somewhat muted colours for them.

I chose the colours for the mini. As I wanted to go for the Hawthorne theme, they were: green (Vallejo Model Color, VMC Olive Green #967), red (Vallejo Game Color, VGC Gory Red #11), and white (VMC #951). I applied the base colours to the mini to see if they would look good together. Some of them had to be applied in several layers to cover the primer.

To add some depth to the white, I started with a layer of VGC Bone White #34, shaded with VMC Khaki #888.

Skin was painted with VGC Elf Skin Tone #4, and the hair with VGC Cobra Leather #40. I tried to keep the skin pale, because I prefer to paint elves this way.

White highlights finish the highlighting of the shirt. Further, some VGC Bloody Red #10 is added to Gory Red and this mix is used to highlight the cloak.

Highlighted of the cloak continues with more and more Bloody Red, until pure Bloody Red is used for the last highlights.

VMC Olive Grey #888 is thinned and washed over the trousers to pick up the detail and create some shading.

Some VMC Olive Green #967 is mixed with Olive Grey and the colour is used to clean the trousers, then more Olive Green is added and some highlights are placed.

Some VGC Dead Flesh #35 is added to the mix, and further highlights are placed. I try to keep the highlights low, because I wanted to avoid a cartoonish look of the mini. I decided that the paintjob should be fairly subtle.

The armour was repainted with black, and at the same time I painted the eyes and the trimmings black. I know it isn't too neat at the moment, but I will clean it up later. I used VMC Intermediate Blue #903 to pick out the details of the armour. Now it is looking pretty flat, but highlighting will change it soon.

Some VGC Ghost Grey #46 was added to the Intermediate Blue, and the armour was highlighted - especially the front part of it. The sides weren't highlighted this much.

Yet more Ghost Grey was added and the highlights are added especially on the chest and the stomach.

A bit of white is added to the mix, and the final highlights are placed on the chest and on the stomach. The armour can be considered done.

The parts that will be painted as gold are painted with a mix of Cobra Leather #40 and Citadel Flesh Wash. Eyes are painted with White, leaving just thin outlines around the whites. Black pupils are added. Cleaning up will be done later.

Another layer is added to the gold. This time it's VGC Cobra Leather #40 + some VGC Bronzed Fleshtone #36.
A bit of VGC Sunblast Yellow #6 is added to the mix, and another highlight is placed. Yet another one is done with white added to the mix, and finally, very subtle touches of pure White.

The sword blade is painted with a transition from almost pure White, through White + VMC Intermediate Blue #903, pure Intermediate Blue, then Intermediate Blue + Black, to pure Black. The colours were wet-blended with each other.

The hair is highlighted now. VGC Bronzed Fleshtone #36 is mixed with VGC Cobra Leather #40 and this is used for the highlight.

Pure Bronzed Fleshtone is used for highlighting the hair, followed by Bronzed Fleshtone with a small amount of White.

The hair is given a thinned wash of VMC Smoke #939. Shading of the skin begins. VGC Elf Skintone #4 is mixed with some VMC Olive Grey #888. I decided to shade by adding a complimentary colour to achieve a natural effect. I added a bit of it to the skin tone and painted shadows everywhere they could be.

More Elf Skintone is added to the mix and it is thinned. A thin layer of this colour is added to make the transition smoother and more subtle. Also some cleaning with Elf Skintone is done. Then Elf Skintone is mixed with VGC Pale Flesh #3 and the mix is used for highlighting the raised areas of the face. A thinned brownish colour is used to place the shadow between the lips.

Further cleaning of the face is done, and more highlights are added - with Pale Flesh.

The final highlight of pure Pale Flesh is placed. Also some corrections of shading were done with the colours used earlier.

The circlet is painted with a mix of VMC Intermediate Blue #903 and VMC Smoke #939, and almost whole highlighted with Intermediate Blue, so that only the outline is darker.

The circlet is highlighted by adding more and more white.

The gems are painted with VGC Gory Red #11.

The gems are highlighted with Gory Red mixed with a tiny amount of White. The boots are washed with VMC Smoke #939.

The armour on the forearms is base coated with VMC Intermediate Blue #903, and highlighted by continually adding small amounts of White to the base color.

The final highlights are placed on the gems with more white, and the reflections of light are painted as dots of pure White. The shield is attached after its reverse was painted with VGC Cobra Leather #40 and washed with VMC Smoke #939 to achieve the effect of wood.

Also a heavily thinned mix of VMC Olive Grey #888 and Smoke is used for placing shadows on the trousers, and picking out the details. I felt that some more shading would look good with the rest of the miniature.

The shield is primed grey, then painted with a transition from VMC Intermediate Blue #903 + VMC Smoke #939, through just Intermediate Blue, to White. The colours were wet-blended. Some decorations of the shield were painted with a mix of Black, Smoke, and Cobra Leather.

More and more Cobra Leather is added to the mix, and several highlights are placed on the
The remaining mistakes and flaws are touched up, corrected, and cleaned. Some snow is removed by blowing the excess off from the base. The side of the base is painted black, just because I like it this way. The miniature is finished. Flat varnish is applied all over.

VGC Sunblast Yellow #6 is added to the mix, and another highlight is placed. Then White is added for another highlight. The shape is outlined with a mix of VMC Smoke #939, VMC Intermediate Blue #903 and VMC Black #950.

The colour transition on the shield is improved and cleaned. A hole in the shield is picked out by adding a highlight in that place.

The base was painted with various browns I had on my palette, and some dried marjoram spice leaves was glued to the base. The leaves and shoes were slightly dry-brushed White, as the base will be partially covered with snow. I also placed some white highlights on the decorations of the shield.

The last golden leaf (under the big gem) was painted in the same way as I painted gold before.

Cleaning of the white clothes begins. I used the same colours as before to make the transitions smoother and the black lines thinner.

Snow is applied. I used a mixture of Snow Flakes produced by Tech Star and white glue.
Painting a Darkelf Hero

Written by: Holger Schmidt
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The Darkelf hero which was released in March 2004 by Freebooter Miniatures is a great model which stands out among similar figures by other companies. A finished painted version of it will be a gem in everyone’s showcase.

The Assembly

Before painting the miniature, you usually have to assemble it and before that you must clean it. You will need a knife and a file. You have to examine each single part of the miniature for casting edges and faults. This work is not beloved, but very important because every casting fault can be seen after painting the miniature and can ruin even the best paintwork! If you want to paint a miniature for a competition and there is still a casting fault visible, just forget about it!

After the cleaning, you hold all the single parts of the miniature together to see how they fit. This helps to define how you will attach them and in which position. In the case of this Darkelf, I just used superglue to build the complete miniature. Pinning wasn’t necessary. The lizard had some gaps between the different parts, which I filled with greenstuff.

I painted the lizard and the rider separately because the rider was much better to handle this way. The miniature was then primed white.

Painting the Rider

I started the actual painting of the miniature with the rider. I usually start with all the deeper lying parts of the miniature working my way to the outer surfaces. Usually this means painting the skin first followed by the inner clothes (e.g. shirt, trousers etc.), the outer clothes (cloak, jacket, boots) and finishing it with the hair, the smaller details and all handheld items. This is not the best way to paint a miniature everyday, so don’t follow it strictly. Now, before I started with the actual painting, beginning with the skin, I painted all deeper recesses black. I blackeden all areas which are not really visible and difficult to reach with a brush. While some miniature painters consider this a sacrilege, I think it has two major advantages. The surfaces I paint black are very hard to see so they are in the background of the miniature. I do not think it is necessary to paint those parts. I rather concentrate on all the visible parts of

With one or two exceptions, I painted the rider this way: the surfaces were primed with a dark version of the color of my choice, after which I used more and more lighter tones of the color to work out the shadows and lights. I used thinned down acrylic colors (artists colors of Daler-Rowney and Rembrandt) mixed with water. Because the colors are thinned, they are not covering the surface. This way you can achieve very fluid transition between the different color tones. Paint the tone only once over the surface and let it dry. After that, you can paint it a second or third time until the part of your choice will reach the color tone you want it to have. I also paint the different tones by starting with the brush at the darker shade and moving it towards the lighter part of the surface. This is another way to make sure the transition between the different tones will become fluid. The first surface I painted was the skin as mentioned before, in this case, only the face. I decided to paint it grey (consisting only of white and black) and give it a glaze of purple. I used a blue purple thinned with a lot of water. I do not use any form of inks or washes prepared by some hobby companies.

The eyeballs came next for which I never use a pure white, but add to it a tiny bit of yellow to make it look natural. Next come the pupils as well as the eyelashes which are important to separate the eyes from the rest of the face and make them clearly visible for each viewer. I used black for the eyes of the darkelf. To add life to the face and the eyes, I also paint a white reflection point on the pupils. If you take a look at the step by step pictures of the face, you will see that those little points make a big difference.
When I first saw the miniature, I imagined it wearing heavy leather and so I used a lot of different brown tones for the clothes. My goal was to make it look harmonious, but also to define the different parts of the clothes. For the cloak, I used Raw Umber and added Naples Yellow Deep for the highlights. For the trousers and the rest of the clothes, I mixed a brown tone out of Leaf Green and Cadmium Scarlet. For the rest of the leather parts of the miniature, I mixed Opaque Oxide of Chromium with Cadmium Scarlet. I mixed Naples Yellow Deep and White into those tones for the highlights.

The wooden parts of the miniature were painted different from the above. I primed it with a light brown tone (Raw Sienna) and painted it darker with a couple of glazes of thinned Vandyke Brown.

For the metal, I decided to use the NMM (Non Metallic Metal) technique. It means that you do not use metallic colors, but any other colors to imitate a metallic surface. For steel, I use a mix of Payne’s Grey, White and a little Blue. For gold, I use Yellow Ochre, White and a little Cadmium Yellow. To build up the highlights, I add White to those mixtures until reaching pure white for the reflections. By adding reflections, the surface gets the brightness of shiney metal.
The lizard does have a big surface compared to the rider with a very detailed skin. If I were to paint it the same way as I did the rider, I would need loads of time which I usually do not have. So I decided to prime the skin with the lightest tone of my color choice and add some layers of glazes of darker and darker tones. The thinned down acrylic paint allows the lighter color to shine through and runs into the deeper parts. At those deeper parts, it covers the lighter surface much better and defines the shadows of the structure. This technique is also called a wash. Although this sounds simple, you will need some practice to get good results out of it, which do not show the technique you used, but look natural. If you do not thin down the color enough, the complete surface will become too dark and stained. The latter can also appear if you used too much color at once.

Using the wash technique, I was quite satisfied for most of the skin, but I wanted to define the back and the head of the lizard much better. Therefore I used lighter grey tones to work out the highlights just as I described above by painting the dark elf.
A simple grey lizard seemed a little boring to me so I took a look at a book about reptiles which I have for reference. I found a very nice color combination with orange. For the stripes, I used Cadmium Orange and added White for the highlights. I also found the blue-purple tongue in the above mentioned book, which I also used here.

**THE FINISH**

After the complete painting of the two parts, I only had to place the rider on the lizard and work on the base. To glue the dark elf onto the lizard, I figured out exactly where I wanted him to sit and scraped the color from the back of the mount. Glued directly to the metal of the lizard, the complete model will be much more sturdy.

The base of the Freebooter Miniatures are usually sculpted with some details. Here I found some stones and bones which I painted with some brown and grey color tones.

If you want to use the miniature for gameplay, you should finish it with a matte finish to avoid damage to the painting. If it is only for a showcase, I usually decide to leave out the varnish because it looks more natural.
Painting Lysette
Written by: Natalya Melnik (Alexi_Z)
Russian Translation by: Olga Martinez

**INTRODUCTION**

When painting miniatures I always use a Wet Blending technique, and never use any paint in its pure form. Here, I only indicate the intermediate nuances, but in between all of them are always many layers of paint. All paint colors indicated are Games Workshop, Citadel paints.

**PREPARATION**

Before approaching the painting, I made a base and thoroughly cleaned the miniature at the seams, and then I attached it to the base and primed it with Chaos Black.

**THE FACE**

Usually, I begin painting miniatures with the face. For female skin, as a rule, I use the following paints: base color of Scorched Brown, then highlight the face by a mixture of Scorched Brown + Elf Flesh, leaving the eye sockets and the lips unpainted. After this, I paint the eyes. First, I paint the eye sockets Elf Flesh, then highlight the irises with Storm Blue and then, lighten them up with Ice Blue + Storm Blue. To finish the eyes, I drew pupils with Chaos Black and added specks of light with Skull White. Then, I continued to even out the color of the face with Scorched Brown + Elf Flesh + Skull White, adding in highlights with Skull White. For the cheeks, I used Terracotta, for the upper eyelids I used Chaos Black, and then painted the eyebrows with Scorched Brown. To finish, I painted the lips with Scorched Brown + Terracotta and lightened them up with Terracotta + Elf Flesh.

I then started painting the dress. I used a base color of Catachan Green + Hawk Turquoise. For highlights I used Graveyard Earth + Camo Green. For the corset, I used a base color of Scorched Brown + Terracotta. The skin on the breast I painted like the face. Then highlighted the upper part of the dress with Graveyard Earth + Camo Green + Rotting Flesh and lightened it up with Camo Green + Rotting Flesh. Using the same method I painted all light green sections of dress and lightened the color of the corset with Dwarf Flesh + Terracotta. To lighten the dark green sections of dress I used Catachan Green + Hawk Turquoise + Rotting Flesh.
THE HAIR

After the dress was finished I started painting the hair. I used a base color of Scorched Brown, and then gradually lightened it up with Bestial Brown. The lighter sections were highlighted with Bestial Brown + Elf Flesh, and for the specks of light I used Elf Flesh + Skull White.

THE BAGS

One of the bags I painted Chaos Black + Codex Grey, then highlighted with Codex Grey + Fortress Grey, and then, I highlighted with Fortress Grey + Space Wolves Grey. The second bag I painted with Scorched Brown + Graveyard Earth, then highlighted with Kommando Khaki.

GOLD NMM

I painted all the gold details on this miniature as follows: first Chaos Black + Snakebite Leather, then Snakebite Leather + Skull White, and finally the specks of light with Skull White.

THE SCABBARD

I painted the scabbard Red Gore + Terracotta and highlighted with Red Gore + Fiery Orange.
**The Staff**

The staff was based with Scorched Brown + Bubonic Brown, and highlighted with Kommando Khaki. The emerald was based with Chaos Black + Dark Angels Green, then Dark Angels Green + Camo Green, then Camo Green + Skull White, and finally the specks of light with Skull White.

Next, I finished painting the wrappings on the staff with a base color of Shadow Grey, then highlighted the hand, nails and buckle with Catachan Green + Rotting Flesh.

**The Sword**

First, I outlined the upper and lower edges of the sword. The upper area must be brighter than the lower. For the upper area, I used Space wolves Grey + Ice Blue + Fortress Grey, and then towards the bottom I darkened it with Chaos Black. The lower area was painted with Chaos Black + Graveyard Earth + Fortress Grey. After this, I evened the color by blending the same paints, but with a small amount of Skull White added. I painted the runes on the blade with Chaos Black and highlighted with Space Wolves Grey + Skull White. The handle of the sword was painted gold, like the rest of the gold details.

**Dress Pattern**

After the entire miniature was painted, I decided to add a pattern on the dress. First, I outlined it with Rotting Flesh, and then finished the pattern with Rotting Flesh + Camo Green. I drew in the flowers with Skull White.
THE BASE

I used a base color of Chaos Black + Codex Grey + Graveyard Earth, then highlighted with Fortress Grey + Graveyard Earth, then Fortress Grey.

THE FINISH

I glued static grass to the base.
Under-Painting and Controlled Washes

Written by: Robert “Jester” Cruse
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This miniature was one of my first successes in dealing with the concept of under-painting and controlled washes. In a lot of ways, it was the turning point in my own painting techniques and style.

To paint with controlled washes, the paint must be kept very thin. Generally a ratio of 5 parts water to 1 part paint is necessary for use. Even if you are just establishing the base (undercoat) color, 2 parts water to 1 part paint is useful to keep the layers smooth and the color from being too saturated on the miniature.

The flesh of the Goblin was painted as follows: undercoat/basecoat of Vallejo Model Color (VMC) Ivory. Then I next washed in with 2 coats of VMC Golden Olive to start to establish the depth of the green, making sure not to completely color the areas green, but to see a blending of the Ivory and Golden Olive. Next came a wash of VMC Dark Blue, paying more attention to the halfway point of the green and shading down into the recesses. The final coat was added by a very thin mixture of 8 parts water to 1 part VMC Burnt Umber to establish the darkest shadows.

To clean up the skin, I mixed a bit of the VMC Golden Olive and VMC Ivory together and started picking out the highlights, and continuing to layer up the highlights by adding more Ivory to the Golden Olive. Any rough areas I could smooth out by just reapplying the wash of Golden Olive as necessary. The nose, as well as the rest of the miniature was handled in much the same manner. First, I based the nose in VMC Ivory, then successive washes of Vallejo Game Color (VGC) Squid Pink and finally again with VMC Dark Blue.

The leather armor and shield were done with VGC Cobra Leather, washed with VGC Beasty Brown, and then with VMC Burnt Umber. The more layers of any one color you add, the deeper the saturation, so that is why there is more of the Cobra Leather apparent on the shield and the armor is darker in tone, while you see less of the Cobra Leather but more of the undercoat. It is all about the number of washes and where they are positioned that count. I used less Burnt Umber on the shield, while doing multiple layers on the armor to darken the color. The rat’s muzzle, ears and tail were done with Cobra Leather and then with equal parts Cobra Leather and Burnt Umber, it was given a wash. Then I highlighted with VMC Pale Sand added to the Cobra Leather.
Skin Basics

Written by: Robert J Kingery
Darkson Designs
www.darksondesigns.com

When starting to paint we often overcomplicate doing skin, when in reality it is very simple, once we know the basics. Painting skin is no different than painting clothing or weapons. All you need to do is break down the skin into its mid-tone, highlight and shadow. Here are two different techniques in doing typical human skin. The first technique that is shown here is useful on small areas of exposed skin, such as a face framed by a helmet, bare hands, skin showing through clothing, etc. This is a quick painting method that can be done on multiple figures at once to help speed up your painting process.

The first thing you need to do is paint all exposed skin areas with Vallejo Game Color (VGC) 41 Dwarf Skin. Once this is completely dry, you will need to make a wash using Vallejo Model Color (VMC) 828 Woodgrain Transparent watered down to a milky consistency, which is approximately 1 part paint to 3 parts water. You then apply the wash to all the skin areas and let dry. When it dries you will notice that your wash has gathered in the recessed areas. In the case of a face, it would be around the eyes, nose and under the lips and cheekbones. Next, you re-apply Dwarf Skin to the raised areas as a highlight. You can even take it a step further and add another highlight by adding a small amount of VGC 4 Elf Skintone to the Dwarf Skin and apply to the raised areas again; tip of the nose, eyebrows, cheekbone and chin.

The second technique is useful in painting miniatures that are covered with large areas of skin or doing more detailed skin. This technique does require more time but is still not too complicated to use on multiple miniatures at once. The first thing you need to do is base all the exposed skin areas with VGC 56 Tan; apply in several thin layers to keep the skin looking smooth. A heavy highlight of VGC 41 Dwarf Skin is applied in several thin layers leaving the base color only visible in the recessed areas. VGC 4 Elf Skintone is then added to your Dwarf Skin and applied to the raised areas as a highlight, specifically to the nose, brows, tip of muscles, ears, etc. Finally your last highlight of pure Elf Skintone is applied as needed on all the high points that you have previously highlighted.
Once you understand these basics you can begin to break the rules and do just about any type of skin color you want. For example, Orc skin can be done using a mid-tone of VGC 30 Goblin Green, a highlight of VGC 32 Scorpion Green, and a shadow of VGC 28 Dark Green and can be further highlighted by adding a small amount of VGC 34 Bone White to your Scorpion Green.

Here are some other examples of this skin technique I’ve applied in various color schemes.

- **Ghoul King**
  By: Reaper

- **Wendigo Warrior**
  By: Crocodile Games

- **Doom Reaver**
  By: Privateer Press

- **Formor Fiend**
  By: Rackham

- **Wandyr the Bloodthirsty**
  By: Rackham
The Skin of Rutch

Written by: Stefanie Arndt (Amber)
www.ambers-nightsky.de

**PRIMING**

I prime all of my miniatures white; one thin layer should be enough. The miniature doesn’t have to be pure white because many more layers of paint will follow. The primer ensures that the paint will stick to the miniature properly.

**EYES**

I always paint the eyes first. Apply a layer of white, paint the iris/pupil then the rim of the eye in a dark (nearly black) color. As a finishing step, you can apply a little dot of white as a light reflection on the iris. In this case, the white of the eyes was covered with a very thin layer of red to give them a mad look.

**SKIN BASE**

The skin tone was made of 3 or 4 thin layers of turquoise mixed with a little bit of an ultramarine blue. The skin must be covered evenly with the paint. My next steps will make the shadows.

**SHADOWS**

Mix the skin tone with more of the blue and make sure the paint is very thin. This is the only secret of my painting style! It has to be thin enough to let the color underneath show through, but should not be so thin that it will flow away. I paint all shadows and NEVER let the paint flow into the creases of the miniature, which could ruin everything! Now paint the shadows step-by-step making them darker by adding more blue and later a little bit of black to the skin tone. I use a retarder to avoid the paint drying too fast. After applying a thin layer of paint, I clean the brush and obliterate the line between the colors. Just remove a little bit of the paint at the edges of the new color and the transition will be smoother. The lines between the skin and other areas of the mini were lined with a very dark blue (nearly black). The same procedure will be done with the highlights.

**HIGHLIGHTS**

Add white to the basic skin tone and highlight up to the points of the nose, ears, muscles, etc., till the paint is nearly white. If the highlights are too extreme, cover them with a glaze made of the basic skin tone, but be sure that it is only a very, very thin layer. The last touches were made by painting the mouth, nails, hair and cloth in the same style.
Real Metals
Written & Photographed by: Robert J Kingery
Darkson Designs
www.darksondesigns.com

The purpose for this article is to provide insight into the Non-Metallic Metal (NMM) technique and the theory behind it. This painting style is based off of real life metal and replicating its appearance. The best way to do this is to examine real examples of metal and the effect weathering has on them as opposed to copying the examples of other painters. In the metal examples that follow, observe all of the colors that can be found. One will find everything from grays, browns, and tans, to colors that one might not expect like blues, greens, and whites. When looking at these photos, look at the different patterns in the weathering and try to incorporate them into your own work.
**Armor**

Written by: Eric Won

**Miniature:** Joan of Arc

**Sculpted & Painted by:** Eric Won

1. Based with an acrylic Black
2. Brushed on Testors Enamel #1180 - Steel to create texture
3. Used an oil color in Burnt Umber, very watery, for a weathering effect
4. Finished with a Semi-Gloss Topcoat

**Belt**

1. Used Tamiya Enamel X-12 - Gold Leaf for the belt frames

**Face**

1. Based the face with Humbrol Enamel Matt Flesh No 61
2. Used some oil color for darkening

**Hair**

1. Based with an acrylic Yellow Ochre with a little bit of White mixed in
2. Highlighted with a mixture of permanent Yellow Light and a little bit of White
3. Added 2 more layers of the Yellow mixture with more White added
Well, first I'm going to show you my style of NMM steel to a point, and then we're going to mess it up and rust it out. First off, I'm using the following paints: Reaper Master Series Pure White, Snow Shadow and Twilight Blue; Vallejo Game Color Wolf Grey, Chaos Black, Skull White, Dark Fleshtone, Parasite Brown, and Orange Fire. You will also need clean water, a 0 or 1 painting brush with a good point, and a brush for stipling - usually an older brush that the bristles are out of shape.

For this exercise, I selected Grindak Bloodbreath, Trollkin Mercenary from Privateer Press. He was primed in white. NMM is much easier to paint, and looks better - whether silver, steel, gold, bronze, etc. when painted over a white surface.

Now, you can either paint NMM in two ways: leveling up in color, going from darkest to lightest, or shading the steel, going from light to dark. I generally go for the shading technique more often. It offers me a bit more control and can be faster with a bit of practice.

Here we have the plain, white primed miniature. Easy enough.

Paint over the entire surface of the blade, or anywhere you want the NMM, a layer of Wolf Grey.

Taking a thin layer of Pure White, define the edges of the various planes on the blade and areas you wish to make metallic. You will shade from the Wolf Grey to the lightened edges downward, to create the reflective white. Use Skull White to highlight the very edges and create sharper whites.

Now, you will make a wash using the first shading color. A mix of four parts water to one part Snow Shadow is generally how I begin. Start to layer in about a quarter of the way in from the Wolf Grey and go up towards the white edges. You may have to paint these areas three of four times to get the saturation of color you desire. I would caution you to let it dry between washes.

Once the Snow Shadow has dried, then you are next going to make a shading wash of 4 parts water to 1 part Twilight Blue. Again, start about a quarter of the way in where the Snow Shadow is showing and paint/stroke up towards the white edges. If at any time you need to, go ahead and touch up the edges with some Skull White.

Now, thin out some Chaos Black for a wash, and add two parts Twilight Blue and one part Chaos Black together. Now you are looking to just hit the very undersides of the white edging. Remember to keep it thin and small - just a line will do very nicely here. Shade around any areas and/or do some lining with the thinned Chaos Black also.

Clean up any highlights you need to and get ready to get RUSTY! Generally, if I was stopping here, I would line in some more and add a bit of a glaze (10 parts water to 1 part paint) of Wolf Grey to smooth out transitional areas. But since we're
going to mess it up, I omitted that part.

Now you need to take that old brush and stipple - dot - in a random pattern, a thinned out Dark Fleshtone. To thin, just use about two parts water to one part paint. You can use thicker if you wish, but as you go randomly over areas, the saturation of color will thicken. It is best to start thin and build up your layer of coverage.

Now, take a thinned out Parasite Brown and stipple that directly over and randomly on the Dark Fleshtone.

Lastly, stipple a layer of Orange Fire randomly about, and closer to the edges. If you cover an edge, don't worry, we will fix that in a moment.

Now if you need to clean it up a bit, just take some Wolf Grey and stipple back around the edges, especially on the overly painted/rusted ones. Generally metal will show through on areas of wear like the edges. So take some Wolf Grey, and stipple/dab it on the edges, and if you wish a bit of Skull White can be used to highlight those areas and to clean up the other edges on the blade!

Remember, you can paint the NMM in any color you want, just remember to shade/highlight appropriately. If you want to "rust" a NMM gold, just use a dark turquoise and a turquoise color for the same effect as rust. Practice will help. Good luck!
Metallic Metals (MM) are thought of as being the simple way of doing metals, but as most things, a task is only as easy as you make it. MM can be just as complex as Non Metallic Metal (NMM) and look just as good, if you want to put the effort into it. You can do a standard dry brush of Vallejo Game Color VGC 54 Gunmetal Grey over a Black basecoat and highlight with VGC 52 Silver. This is fine for a quick job, however, if you want a nicer looking metal you will have to mix some paint.

I tend to work with Vallejo paints because of their high pigmentation and the convenience of the eyedropper bottles.

I started out with a base coat of a 50/50 mix of Vallejo Model Air (VMA) 71 Artic Blue and VMA 72 Gunmetal, and then diluted it with 50% water. This was applied in several thin layers. The next step was to apply a black wash in the recessed areas; I used a mixture of VGC 68 Smoky Ink diluted with 50% water. The first highlight was placed using the mixture of Artic Blue and Gunmetal. The next highlight, I added some VMA 63 Silver to the mix. Then a final highlght was placed with almost pure 63 Silver.

You can stop at this point and you would have a great MM, but I like to dirty things up a bit. To do this you can create oxidation by a mixture of 25% VMC 808 Blue Green to 75% water. This is applied to some of the recessed areas, apply as you see fit. Here, I applied rust under some of the bolts, rivets and plates, using VMC 859 Black Red.

Another example of this metallic technique:

Warrior of Blood
By: Rackham
Combining Fantasy with Reality

Written by: Kirill Kanaev
Russian Translation by: Olga Martinez

It is extremely complicated to define the clear boundaries of any style of painting miniatures. Designating where realistic painting ends and fantasy painting begins proves practically impossible, just as it is difficult to separate one musical note from another. It goes without saying, many methods of fantasy painting arise from the flat "Nuremberg" miniatures, since they are produced in a similar size. 28mm is considered the standard size for fantasy miniatures. When painting miniatures, we not only give them color, but we also create an illusion: the illusion of large volume, the illusion of a polished metallic surface, the illusion of the appearance of material and much more. All of this can be achieved by painting, creating an illusion of something that simply does not exist on the clean white surface. I will be more precise and highlight the techniques of painting miniatures, whether they are fantasy or historical figures.

For example, if you apply too much color on the surface of a small figure it will not reflect the depth of light and shadow as it does on real objects. The natural reflection of light, which appears on the surface show the actual size and shape of the detail, but we should create an illusion of shape, especially in the case of flat figures. When painting miniatures, the artist must control and create the reflections of light and shadow in a manner that is necessary. Shape is created by the combination of light and shadow. For this, it goes without saying that a light source is a necessity. In the case with the flat figures, the light source is traditionally located above and to the left. Fantasy figures also need the correction of shape. Remember, emphasizing shadows creates the illusion of shape. Light is necessary for shadows; therefore, three-dimensional figures need directed light. This does not have to be as straight as with flat miniatures. The illusion of a transparent material (such as glass lenses) can also be achieved with the help of color and light.

All methods mentioned above are necessary to create the shape of the miniature and to make them appear larger when seen from a distance. I consciously do not mention bright, clean colors, as they are not required for this. Fantasy is an abstract concept, consisting not only of elves and goblins, but rather anything that does not exist in the real world. Space infantrymen and Imperial Guardsmen serve as an example, and thus fit into the realm of fantasy or science fiction. Artists have their own preferences, like a favorite style or color palette. My preference is historical figures with a realistic style of painting, but I feel subtle colors convey the concept of fantasy figures effectively. The most important thing, however, is the creation of the illusion.

For these veterans, I chose a color scheme usually depicted for soldiers of Wehrmacht in the winter period in
urban combat conditions. This is a combination of the special winter camouflage outfit and field uniforms of different shades of fieldgrey. The basic color feature for this force is shades of brown, which are present on almost all parts of the uniforms and ammunition, in one form or another. These brown shades are indicative of the color of mud, simply because in an entrenchment or during street fighting, clothing becomes soiled very quickly with the absence of washing.

I will begin with the helmet. It is painted with a white camouflage pattern. The first rule when painting white is to never use it in its pure form, because white details are soiled very quickly. For example, none of the elements of the uniforms; white camouflage pants, jacket or insignias are painted with pure white paint. Rather, they are painted with earthen grey-brown tones, close to white, though white in its purest form can be used for highlights. Therefore, the base color for the helmet is 821 German Cam Beige WWII. It is shaded slightly in the deepest places around the communication unit on the back of the helmet, using a thinned 941 Burnt Umber, then blending it up with mix of 821. Highlight the rim of the helmet in Pale Sand 837. Add the element of rust and marks of leakage from under the helmet with 875 Beige Brown. Blend it with thinly diluted 821. Add the effect of chipped paint with a mixture of Black and 984 Flat Brown. The gas mask is painted Black and highlighted with a mix of Black and 884 Stone Grey. The edges on the face of the mask were highlighted with a mix of White and 884.

One veteran is wearing a helmet with protective goggles. The lenses of the goggles are flat, therefore, you can imagine the figure is being viewed from only one position and all reflection of light is fixed on one spot. Since the lenses are seen from different angles, the light spot exists only in one lens; the other lens reflects the light source from another angle. The light spot is painted as a gradient from white to light pink, using 8 parts of White to 1 part 909 Vermilion. The color extends diagonally across the lens. The other lens is also painted with a gradient, but with dark shades of red. This consists of 1 part Black to 2 parts 946 Dark Red to the gradient of pure Vermilion. The rubber parts of the goggles are highlighted like the gas mask. The filters of the gas mask are painted 889 US Olive Drab (by the way, a very useful and universal color, it is used on many details of these figures) and 894 Russian Green (for the details, which appear more green). These are then shaded with a mix of Black and 984 Flat Brown, and then highlighted with 806 German Yellow on the sharp edges. Add some white specks for the sun's reflection. I did not add rust or chipped paint on the filters, since these small details would be difficult to distinguish, and are unnecessary.

As for the uniforms, all figures except the heavy bolt and the flamethrower operator are in winter pants with the Arctic camouflage and tunics similar to fieldgrey. The color of the
uniforms is fieldgrey - from the grayish-green to the dark shade of khaki. However, many real objects of German uniforms, that I have seen, have shades closer to 889 US Olive Drab. Therefore, I used this paint as the base color for painting the tunics. Shading highlights the deepest, darkest places, and it also divides the elements of the uniform. I did not begin to shade strongly, since the base color of 889 is sufficiently dark. For the shading, I used a mix of 889 and Black with a 1:1 ratio. For the highlights, I used a mix of 889 and 808 German Yellow. The elbows of coat are very dirty. To accomplish this effect, I covered the area with 1 part 889 to 3 parts Beige Brown, using a thinned wet feathering technique, so that the spot would be blended on the edges. Then, using a dry brush, I very delicately outlined this section with 889 in order to create the "effect of noise." The dirt covers the clothes unevenly and the "effect of noise" helps to give the dirt a more real feel. The insignias, similar to the German, are also present on the coat. As I mentioned earlier, their white color is not pure. I used 884 Stone Grey, and then highlighted by adding White.

The body armor is very worn and corroded and the rust is seen through the layer of gray-blue paint. To do this, I based the armor with a mix of 884 Flat Brown and Black in a 1:1 ratio, shaded with Black, only in the creases of the armor. Further, I gradually added in a brown tone, then 898 Dark Sea Blue in order to obtain a smooth passage from the brown in the creases to the indeterminate bluish shade on the remaining surface. When the bluish shade began to dominate, I started highlighting with 943 Grey Blue. The basic finesse in painting the surface is not uniform, but by small chaotic sections, imitating the chipping of paint and shallow dents, the "effect of noise," is then present over the area. The finishing touches to create the look of the worn armor are small strokes of brown along the edges of the armored plates. The paint in those places would chip more rapidly and subsequently the metal would rust. I used several shades of brown: 898 Flat Brown, 940 Saddle Brown, and 929 Light Brown. It's important that the edges be painted unevenly. Originally, the markings on the armor were once painted white, but now they are almost invisible. To achieve this I painted it with a mixture of 917 Beige and 943. The shadow is predominantly 943, while the highlights are lean more towards 917. In some places where the paint chipped off completely, I intentionally used the color of armor. In real life the numbers would be painted on using a stencil. I reproduced this effect on the miniatures. The numbers are divided by lines, the color of the armor. Remember that the highlights are unequal in different sections of the armor. These highlights influence the color of the lines just as they do the color of the numbers.

Like the helmet and the body armor, the white pants and jacket look dirty as well. I used a base color of 884 Stone Grey and shaded with a mixture of 884 and 889 US Olive Drab. US Olive Drab gave the shadowing the necessary hard-to-define brown aspect, the very thing necessary to show the wear. Highlights are made by mixing 884 and White. The camouflage design made of geometrical shapes is produced according to the same principle as the numbers on the armor. The folds of the clothing are darker than the raised sections of clothing. To do this I first painted shapes with the first darkest color, which was a mixture of 4 parts 992 Neutral Grey and 1 part 994 Dark Grey. I painted only the part of the figure, which was in the shadow with this tone. Next, I gradually added into mixture 990 Light Grey, and simultaneously highlighted the shapes, which I painted with the darker color earlier. This is the most difficult part to depict in the camouflage. It is necessary to try to keep the ratio between
the colors that make this camouflage pattern. Otherwise, one of the colors might be lost among the similar colors and then the pattern will be distorted. The dirty areas on the knees I drew with the same technique as on the elbows, except US Olive Drab was replaced by 884 Stone Grey.

The satchels holding the ammunition are a Khaki color. The base color is 941 Burnt Amber, shaded with a mixture of 941 and black. It is highlighted with a mixture of 921 English Uniform and 917 Beige. The rubber lining of the military coat is painted using the same technique as the gas mask. Which is a mixture of black and 884 Stone Grey. The elbows, knees and bottom portion of the coat are also dirty as are the clothes of the rest of the members of the division.

The footwear is painted black and due to the dirtiness, deserves special attention. Dust and mud settle in the folds of the footwear. This means that the recesses should be shaded with a leather hue.

When you paint 28mm models, you'll have to make corrections the same way you painted the camouflage. That is, you highlight the outline at the same time, changing the hue/shade. For example, I gradually added 874 US Tan Earth into the basic black color of the footwear, then I did the highlighting of the folds and stitches on the upper part of the footwear. The bottom part of the footwear I painted completely. Every new shade contained more and more 874 as it moved closer toward the sole of the shoe. The last highlighting I did with pure 874. I applied it only to the tip of his boots and to the back of the sole of the shoe. The dust and the dirt covered the bottom part of the footwear, which I used more US Tan Earth on the bottom part of the footwear, to represent dirt. The gradual blending produces a more realistic dirt effect.

The metal parts of the sword, pistol and grenades are painted with dark green paint according to the same principle as the armor. The basic tone is a 50/50 mixture of 984 Flat Brown and black. I gradually added 894 Russian Green to create a common greenish-brown hue. I did highlights with pure 894 then and added 806 German Yellow. Small spots of rust are painted with 940 Saddle Brown and 929 Light Brown, though less apparent than on the armor.

I'd like to say a couple more words about the details regarding painting with a NMM technique. I tried to show the difference between the materials that make up the armor. That's why I used different shades of steel armor and light polished steel for the buckles, buttons, and spear. For the steel, I used a mixture of black, 898 Dark Sea Blue and white for highlighting. For lighter steel I painted with 900 French Mirage Blue and highlighted with white. To create the effect of a smooth surface, I added the light reflected from the earth with a mixture of 874 US Tan Earth and 917 Beige. There are some additional details that have the common basic color; black, which is used to depict the gas masks, coat, gloves made from rubber and the barrel of the rifle made from plastic. The rubber parts I highlighted with 884 Stone Grey. The plastic I highlighted with white. As a result, the final shades are different.

Finally, I'd like to talk about the bases. The prototypes of these figures were the German soldiers fighting in the city streets, such as in Stalingrad. That's why on the base, I depicted broken bricks and debris slightly covered with snow. The bricks are made from pieces of plastic taken from Games Workshop sprues. The bricks are painted with a mixture of brown, orange and red in any proportion. The snow is made from regular baking soda mixed with Elmer's glue. Because the baking soda cannot cover the bases thick enough to make it appear completely white, I painted the top of the base white first.

I hope this article illustrated how you can incorporate reality into your fantasy painting.
All photographs in this article are:

**Miniature:** Imperial Guard (converted)

**Manufacturer:** Games Workshop

**Painted By:** Kirill Kanaev

*Unless otherwise noted*
Esquire Phidias of Basarac Diorama

Written by: Frederic Bisseux (MINOS)
French Translation by: Eric "Xeron Wulf" Hartaux
www.figurinesfr.org & www.creatigs.com

Behind each and every one of our creations, whether they be single figures or dioramas, lies a love for the miniature. We must then have the motivation, along with a great deal of perseverance, to give life to our imagination.

This time, my attention was grabbed by the concept of “Phidias of Basarac,” from Rackham. Spacially, I mean that the illustration, which was used by the sculptor to create the miniature. After being colored, this drawing was used to promote the figure during its limited edition run for the “Monde du Jeu” in Paris back in October 2003. This character caught my attention immediately due to his charisma and his rebellious attitude.

Let me quickly explain his background. This way you’ll understand the context of the scene I intend to recreate. Phidias is from the Hybrid game universe created by Rackham. Their universe is filled with varied races and, of course, has “bad guys” and “good guys.” Phidias is mostly a “good guy,” a member of the Lodge of Hod, a group of redeems whose goal is to purify the continent of Aarklash from the clandestine laboratories of the “evil” Alchemists of Dirz, in which hideous genetic manipulations take place in order to create the ultimate warrior, and thus gain power over every other race. All in all, a nice and normal world! I think I’ve found in that background the basis for my diorama.

Due to molding constraints, the figure could not be a 100% exact replica of the illustration. Therefore, I decided to make the changes necessary for it to regain the spirit, which had so thrilled me. This was my first conversion. Indeed, I had never dared grab a pair of cutting pliers or other torture instruments to mistreat these little pewter men. Since it was a limited edition release, and thus not to be found again afterwards, my hand was shaky at first. It was after much hesitation that the pliers were finally put to use.

This photo shows us that the basic piece is facing the wind. The hair is blown backwards and the outside right-hand fold of his cape is upturned. The illustration gives off a stronger impression of twirling wind with a dominant action at the back of the figure. The fold of his cape is raised, and has a tendency of moving to the front of the miniature. The hair is wind-blown and hides a part of the face.

PHIDIAS

First operation: remove the excess matter, mostly a large part of the right hand side of the cape along with all his hair. These changes are done using a sharp and cutting pair of pliers in order to get clean cuts without deforming the rest of the miniature.

I then started to re-sculpt the hair. It was a rather drawn out process, as I did them strand-by-strand. The concept had a little Manga “look,” which I liked and wanted to keep. The solution: make small snakes of Duro, flatten them out between cling wrap-type of plastic paper, place them on the head and remove the excess. The hair must have at least 50 to 60 strands, I’ve lost count! As I started with Duro, it was the putty I used to redo the fold of the cape as well. I flattened, still between two sheets of plastic paper, a triangle of putty, which I then placed on the cut made by the pliers. Once it was stuck in place, I re-worked it to follow the existing shape of the cape, then, as it dried, I patiently shaped it into the way I wanted and smoothed it out so that it would keep the position I wanted it to keep. I followed that with a slight change of the right arm, so that its position would be a bit lower and that the sword would be more horizontal, so that it would be more like the basic illustration. The transformation is then complete.

After a lot of sweat and about 3 hours of work, I end up with a result which is satisfying to me. I’ve given a white undercoat in order to see if all the putty additions were seamless, especially around the cape.

I’ve followed that with my painting process, using acrylic as I usually do. For the most part, I use Vallejo brand paints. As I stayed as close as I could to the concept while doing the conversion, I wanted to keep as dark a look for the colors as well. I always start painting with the face, this time being no
exception. I didn’t insist too much on the highlights. Painting the eyes and getting the stare right gave me a lot of problems because of the hair which covered part of the face. After a few unsuccessful tries, I finally managed. The intensity of the stare is primordial, as it’s what will convey the dramatic side of the scene, and the tension of the moment. The fear or the rage must be felt. This, I believe, is where 80% of the figure’s success resides. I moved on to the hair and followed by the boots.

The coat, after the face, is the key element of this figure. I’ve managed to give it the slightly shiny look of leather by evening out the paint. I’ve then added numerous washes and glazes in order to blend the shades and give life to matter. Diverse splatters and spots round out the aging work.

CONVERTING THE PESTS OF FLESH

Once these details were over with, I started to think about the actual scene of the diorama. I felt as though the character was threatened by many opponents and fighting fiercely, so I had to make sure not to crush his presence by pitting him against overly imposing opponents. For their Hybrid game, Rackham created a sort of little alien on the side of the “bad guys.” The menacing physique of these “pests of flesh” (as they are called in the game) was perfect. To give more movement to the scene, I decided to convert two of them, despite the difficulty due to their small size (as these measure 15 mm). They have their arms trailing along and have a huddled look (see the figurine behind Phidas). I wanted to have one leaping and another as it was being hit by a bullet. To do that, I removed its arms by using a very thin saw blade, re-drilled through the body at the height of the shoulders, passed a brass wire through the holes, before bending and gluing that wire once it had the posture I wanted. The hands were kept and the rest re-sculpted using FIMO. It was also the first time I used that sort of putty. It is nice to work with, as it sticks less than DURO. The downside is that it must be baked to harden, but, on the other hand, it does give enough time to work. I then made a few slight transformations for the corpses, cut a miniature in two (as Phidas did not miss with his sword), hollowed a chest with a dremel and added some guts made in Duro.
Applications of Theory

I painted the opponents next, and to help explain how, have made a series of step-by-step pictures. Each picture shows the passage to a new application of color and you will be able to look at the final result through numerous angles. The painting of one of these "pests" takes about 1.5 hours, so three pests plus two corpses equal 7 hours of painting. On this kind of small miniature, it becomes easier to realize how long it takes to get a nice painting result.

**INCUBATOR FETUS**

I now have all the protagonists painted. The basic idea of the diorama is simple: Phidias bursts into a room of the laboratory, faces strong resistance and battle rages... But why does battle rage? Of course! The critters are defending the future generation, obtained by cloning, and whoever says "cloning" also says "incubator!" This is the train of thought which got me to the final scene I made. But the incubator must be made from scratch, along with the creature inside... oh well, too bad - it'll be my first sculpture, if that can be called a sculpture! One way or another, it's still a Green.

Things are moving along well. I find materials to make the incubator with—which will be a tube for pearls that my daughter has. It's practical, since it's made of plastic, I can cut it easily at the right height. To make the part where the fetus meets the tube, I had the bright idea of making a Duro placenta at the back of the tube and to link it up to the fetus with a sort of umbilical cord. The whole is painted in colors similar to those of the earlier "pests," but using colors which give the impression of gestation, so with milky and pinkish shades.

Once the paint was dry, the entire thing was placed in the tube and slowly filled with resin. The tube must be very well stabilized, and the resin is very liquidy and takes a long time to hardened. I used this delay to my advantage to get a suspect chemical liquid effect, by mixing minute amounts of paint to the base of the tube, which, thanks to gravity, mixed-in with the rest. That gave an extra feeling of life.

The scene was built up around the incubator. I measured up the size of the base by placing the tube and the mints around it. Using a measuring instrument and cut the base for it (I make all my bases myself). It's made up of numerous wooden boards one atop another and screwed in place. I used that fact to add a LED with a potentiometer, to change the intensity of the light, under the incubator and powered up by a 9V battery, after going through a resistance, placed in a hollow. All this is of course optional and is a bit of handyman madness, but the effect in the dark is guaranteed.

What completes the scenery, which we were talking about a moment ago, is craft work. The walls are made of plaster, molded, then cut out before being engraved and brushed while still moist. Using plaster, it's possible to create many kinds of textures. It's a wonderful and inexpensive material, which any scenery-maker should learn to master. Note that it can only be worked when moist and that if it becomes too dry, it can be wetted again infinitely, so there's no cause to worry.

The ground is also made of plaster, while the piping is made of rigid 1.5mm copper wire, with or without sheathing. A few strips of balsa decorate the walls or the ground here and there. Almost all miniature painters were modelers at one point or another, weren't they? They used to own a box of spare parts where all the unused parts of those models went to wait, for years on end sometimes, until a use was found for them. That day has arrived for some of them and, even then, one must use his imagination and be ready to try anything. I don't recall exactly where what came from where, but I believe there must be a few hydraulic jacks from construction machinery, many formula
Once everything was glued to the base, I undercoated everything in white - as that's the only moment when one can see if the effect is good. Beforehand, the variation of colors and textures perturbs the scenery, and quite frankly, I wasn't sure it would work. Once undercoated, everything is painted with acrylic, mostly drybrushing and washes, to come back and blend.

1 parts (at a 1/24th scale) and mooring chains from boats. It doesn't matter, as long as the scene is rich without being overly charged. One must also know when to stop, and that may even be the hardest part. I didn't do everything at once: I first placed the walls and the incubator, defined the ground, placed the miniatures and took in the remaining space. How to fill that space as best as possible without overcrowding what should be seen in the scene? It took me a few hours, and I made multiple attempts before everything suited me.
Applications of
Theory

some precise spots or bring out a detail.

As I paint the scenery I often place the miniatures in the scene's context in order to judge the final effect: too dark, too light - I correct as I go along. In order to better fit in the bases of the minis, I played around a bit with the stains and leaks by using the roughness of the wood. I've also forgotten to mention that to give a more sinister and unhealthy look to the lab, I've added bits of bio-organic mass, a sort of primal living matter which feeds the infernal machines, and that they were varnished with gloss to look even more disgusting.

And thus my Phidias is let loose in the role which was given to him, fight the Alchemists of Dirz in the very heart of their hidden laboratorones. Between the birth of the idea and putting the finishing touches on the diorama, a whole year has passed - no doubt the time it took me to think things over.

I had a lot of fun creating this scene, and I hope I've given you the desire to personalize your minis by creating your own unique displays.

STEP BY STEP WITH PHIDIAS

Skin

Base Graveyard Earth (Citadel), shade with Vallejo Model Color, VMC Burnt Umber (941), highlight with Dark Flesh (927) + Burnt Umber, highlight with Dark Flesh + Burnt Umber + Orange Brown (981), highlight with Ivory (918), wash Cavalry Brown (982) in the creases

Hair

Base German Cam. Beige WWII (821), highlight with Ivory (918), highlight with Offwhite (820), shade with Buff (976), highlight with Ivory (918)

Eyes

Base Sky Grey (989), highlight with Ivory (918), Dark Red (946)

Coat

Base Graveyard Earth (Citadel), Black (950), highlight with Brown Violet (887), shade with Brown Violet + USA Olive Drab (889), shade with Dark Sea Blue (898), highlight with Brown Violet, highlight with Green Sky (974), highlight with Sand Yellow (916), glaze of Flesh Wash (Citadel) + Dark Green Ink (Citadel), highlight Japan Uniform WWII (923), highlight with Sand Yellow

Buttons

Japan Uniform WWII (923) + Black (950), highlight with Flat Yellow (953), highlight with White (951)

Pants & Gloves

Graveyard Earth (Citadel) + Flat Brown (984)

Boots

Dark Prussian Blue (899) + Black (950) + Dark Flesh (927), highlight with Dark Flesh

STEP BY STEP WITH THE PESTS OF FLESH

1: White undercoat

2: Black Red (859) wash

3: Dark Sea Green (868) on carapace, Dark Sea Blue (898) + Magenta (945) + Black Red (859) on skin

4: Black (950) wash + Blood Red (Citadel)

5: Highlight Dark Sea Blue (898) + Magenta (945), then highlight Dark Sea Blue (898) + Magenta (945) + Sky Grey (989)

6: Highlight Dark Sea Green (868) + Sky Grey (989)

7: Highlight Bronze Green (897), claws and teeth Green Ochre (914)

8: Highlight Sky Grey (989) + Pale Sand (837)

9: Highlight a touch of Emerald (838) highlight with Pale Sand (837)

10: Highlight Magenta (945) + Pale Sand (837)

11: Touches of Hull Red (985)

12: Glaze of Snake Bite Leather (Citadel)

13: Touches of Blood Red, Flat Earth (983), Emerald (838), White (951)
The following photos are a selection from our gallery submissions. The intention of these photos is to give painters inspiration and help with possible color schemes. We all get a touch of painters block at times, so use these as inspiration to get over that hump and start painting.

**Black Paladin**
By: Rackham
Painted by: Maciej Zylewicz (Morfeo)

**Wood Elf Archer**
By: Thunderbolt Mountain
Painted by: Michal “Mahon” Machowski

**Flu the anti cold Dragon**
By: Fenryll
Painted by: Stefanie Arndt (Amber)

**Monique de Noir**
By: Reaper Miniatures
Painted by: Kirill Kanaev
Falconer of Alahan
By: Rackham
Painted by: Stefanie Arndt (Amber)

Lorielle Silverrain, Female Elf Archer
By: Reaper Miniatures
Painted by: Takahiro Hashinaka (Qiao-Zhong)

Arianrod of the Obsidian Spear
By: Urban Mammoth
Painted by: Angela Imrie
**Kjaran Pirate**  
By: Hasslefree Miniatures  
Painted by: Peter “Avicenna” Bell

**Murata**  
By: Ilyad Games  
Painted by: Thomas David

**Malachia, Murderor Master**  
By: ManorHouse Miniatures  
Painted by: Matteo “Beltane” DeFranceschi

**The Baron, Ordo Hereticus Inquisitor**  
By: Scratch built with GW bits  
Painted by: Emanuele Giovagnoni (Poupee Canope)
Problem Child with Knife
By: Hasslefree Miniatures
Painted by: Mark Craggs

Pistol Wraith
By: Privateer Press
Painted by: Maciej Zylewicz (Morfeo)

Khor Warriors
By: Rackham
Painted by: Przemek Jeske
Dwarf Tavern Patron
By: Hasslefree Miniatures
Painted by: Angela Irrie

Wood Elf Noble Water Lily
By: Thunderbolt Mountain
Painted by: Michal “Mahon” Machowski

French Guard Officer 1720
By: Drabanth
Painted by: Kirill Kanaev

Sebeki Hero with War-Mallet
By: Crocodile Games
Painted by: Jeff Freeman
S. Celestine
By: Games Workshop
Painted by: Emanuele Giovagnoni (Poupée Canope)

Velrys, Prince of the impure
By: Rackham
Painted by: Maciej Zylewicz (Morfeo)

Big Boris
By: Heresy Miniatures
Painted by: Ian Haynes

Limited Edition - Freebooter Girl
By: Freebooter
Painted by: Stefanie Arndt (Amber)

Golem Abominium #1
By: ManorHouse Miniatures
Painted by: Luca Fachini
Kristian Male Dwarf
By: Hasslefree Miniatures
Painted by: Glyn Evans

Bloodthrister
By: Forge World
Painted by: Roger Johnston

Nicodemus from Mordheim
By: Games Workshop
Painted by: Giacomo Chelucci
Gallery of Inspiration

Tamaor the Vulture
By: Rackham
Painted by: Robert "Jester" Cruse

Space Marine Unit
By: Games Workshop
Painted by: Anja Wettergen

Sophie the Succubus
By: Reaper Miniatures
Painted by: Mark Rupp

Big Boris
By: Heresy Miniatures
Painted by: Peter Bell
Hybrid
By: Rackham
Painted by: Christoph Eichhorn (Trovorian)

Desdemone
By: Ilyad Games
Painted by: Thomas David

Heavy Cavalry
By: ManorHouse Miniatures
Painted by: Alessio "Wolfbane" Cisbani

Axenarf, Armoured Ogre
By: Hasslefree Miniatures
Painted by: Michal "Mahon" Machowski
Gallery of Inspiration

Absol Mereth with Victim
By: ManoHouse Miniatures
Painted by: Alessio "Wolfbane" Cisbani

Conwyn the Hunchback
By: Rackham
Painted by: Anders Eklund

Eve Archeologist
By: Hasslefree Miniatures
Painted by: John Morris

Frulla, Female Giant
By: Reaper Miniatures
Painted by: Angela Imrie
Bane Leader
By: Dark Age
Painted by: Anja Wettergren

Gargoyle with Victim
By: ManorHouse Miniatures
Painted by: Matteo ‘Beltane’ DeFranceschi

Wismerhill
By: Ilyad Games
Painted by: Thomas David
Gallery of Inspiration

Asar Harbinger of Horus, Aspect of the Defender
By: Crocodile Games
Painted by: Marike Reimer

Seherin
By: Assassin Miniatures
Painted by: Anja Wettergren

Man-at-Arms with Hammer
By: ManorHouse Miniatures
Painted by: Alessio “Wolfbane” Ciabani

Guardian Angel
By: Reaper
Painted by: Paolo “DragonPaint” Guion
The Coryphaeus
By: Rackham
Painted by: Maciej Zylewicz (Morfeo)

Inge the Sorceress
By: Spyglass Miniatures
Painted by: Angela Imrie

Laurana the Elementalist with Crystal Falcon
By: Reaper Miniatures & Iron Wind Metals
Painted by: Angela Imrie

Archer
By: Manor-House Miniatures
Painted by: Alessio “Wolfbane” Ciabani
Chaos Demon
By: Freebooter
Painted by: Stefanie Arndt (Amber)

Lord Jester, Mercenary
By: Reaper Miniatures
Painted by: Robert "Jester" Cruse

My Hero
By: Hassiefree Miniatures
Painted by: Michal "Mahon" Machowski

Urgzahk Bodyguard Orc Trooper #3
By: DragonRune Miniatures
Painted by: Rex Lyver

Beloved of Sobek
By: Crocodile Games
Painted by: Marke Reimer
Gallery of Inspiration

Provost Marshall of Uren
By: Rackham
Painted by: Keith Koene

Chaos Champion of Khorne on Juggernaut
By: Games workshop
Painted by: Takahiro Hashinaka (Qiao-Zhong)

Laurana the Explorer
By: Reaper Miniatures
Painted by: Angela Imrie

Kjaran Pirate
By: Hasslefree Miniatures
Painted by: Andy Wedmore
Female Eldar Guardian
By: Scratch built with GW bits
Painted by: Kirill Kanaev

Tiriel Paladin
By: Hasslefree Miniatures
Painted by: Mark Craggs

Tara the Silent and friend
By: Reaper Miniatures
Painted by: Angela Imrie
Gallery of Inspiration

Sin Assyris
By: Rackham
Painted by: Hedley Coppock (Corpuscle)

Warcaster Irusk of Khador
By: Privateer Press
Painted by: Robert "Jester" Cruse

Sophie the Succubus
By: Reaper Miniatures
Painted by: Angela Imrie
Blackbeard
By: Freebooter
Painted by: Stefanie Arndt (Amber)

Inquisitor Karamazov on Throne of Judgement
By: Games Workshop
Painted by: Michal “Mahon” Machowski

Axenarf, Armoured Ogre
By: Hasslefree Miniatures
Painted by: Ben Brownlie
Kaellis the Silent
By: Rackham
Painted by: Georges Goetz

Converted Champion of Khorne
By: Games Workshop
Painted by: Kirill Kanaev

Lykai the Freed
By: Rackham
Painted by: Georges Goetz
Griffin Exorcist
By: Rackham
Painted by: Christoph Eichhorn (Trovidan)

Mounted Daemonette Champion
By: Games Workshop
Painted by: Kirill Kanaev

Asura de Sarlath
By: Rackham
Painted by: Maciej Zylewicz (Morfio)
Female Cook
By: Freebooter
Painted by: Stefanie Arndt (Amber)

Hawk Silverblade
By: Magnificent Egos
Painted by: Darin Hlavaz

Sethin
By: Rackham
Painted by: Anders Eklund

Misericord
By: Rackham
Painted by: Emanuele Giovagnoni (Poupée Canope)

Heavy Cavalry
By: ManorHouse Miniatures
Painted by: Alessio "Wolfbane" Cistiani
We have collaborated with more than 20 different manufacturers around the world to show you the diversity that is out there, hence the tagline, "stepping out of the box." Below is all the contact information for all the manufacturers that appear or are mentioned throughout this book. We would also like to express our gratitude to these companies, the book could not have been done without your support, thank you.

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OTHER
This is a great new site to post and vote on miniatures
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www.miniatureagora.com
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This is a very talented group of painters and sculptors
Roll Jordan Painting Studio
rolljordan@hotmail.com
A Look of Things to Come...

From Darkson Designs

2005 by H. G. Hegre

for Darkson Designs

whereas Nazis are very uniform. Americans should not have exact same layout of equipment, but each gear should be very individualized.

For Future Reference: Helmet has webbing inside.

Tactical Knife

Pouch held on by arm band & strap going under epaulet.

Close up of comm link

Bendable

comm link power pack

Straps connect to pack vest

Back pack

Bed roll

Entrenching tool

Pants cowl over spats

(Same rifle as 1st American Airborne.)
This is a complete guide for your painting journey, which includes a breakdown of painting terminology, color theory, multiple step-by-steps, and many NMM techniques. As well as, full color charts for Vallejo Game Color and Vallejo Model Color and a large selection of ready-made color formulas, everything for your painting needs.

A Guide to Color Theory.................................................. Robert "Jester" Cruse
Vallejo Color Charts
Painting Figures with Vallejo Model Color......................... Mario Fuentes
Tips, Tricks and Techniques
Colors of Feydreiva..................................................... Jeremie Bonamant (Bragon)
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