Painting Pilots

A "How to Guide"

Hello all! I hope everyone is enjoying their latest project, and look forward to seeing them all in the air soon. The one single part of building model aircraft that I have the most experience with, is painting pilot figures. Figure painting is something that I've enjoyed for many years, and would love to share some tips and tricks with you. I would not consider myself, in any way, "talented", but once you know a recipe for a colour, applying it well becomes a simple matter of repeating a process. So, to start, I'll cover some basic "rules of thumb".

1. **Tools**. You will need: brushes, kitchen tissue to wipe excess paint off your brush, a water pot, a palette for mixing colours and thinning paint, and some paint. For brushes, you can spend as much or as little as you like. Relatively expensive genuine sable hair brushes will last longer, and hold a better point, however some people have concerns over sable farming, and ultimately slightly less expensive synthetic brushes can be used to the same effect. For paint, I highly recommend acrylics. Readily available from most model shops, they're easy to mix, easy to clean up and make brush care much more simplistic.

2. **Thin your paints.** Two thin coats will always achieve a better result than one thick one. The convenience of acrylic paint is that this can be done with common tap water (although, if you really get in to it there are products available to do this "properly" and achieve slightly different results for desired effects). Depending on brand, and intended use (paint intended for air brushes, washes, base paints, glazes) how much you need to thin the paint will vary, but ultimately, you're aiming for the consistency of full fat milk. This is just a guide, and you'll need to experiment to find your preferred consistency. Having thinned the paint, dip the tip of the brush in, and then wipe the brush on your kitchen tissue so you've got a good controllable amount of paint on the brush.

3. **Work inside, to outside.** To achieve a nice neat finish between colour blocks, it's much easier to paint the lower surfaces (such as skin), before the upper surfaces (such as a jacket). You'll notice there are some exceptions to this in the guide, but it's a good place to start.

4. **Some colours are harder than others.** Thanks to the removal of lead paints, some colours and pigments just don't cover like they used to, and some colours are just plain difficult to achieve a good result with. Fortunately, this guide covers the most commonly accepted "three hardest colours" (white, yellow, and black) to paint.

5. **Enjoy it!** Ultimately, most of this work will be hidden inside a cockpit, and let's face it, no one will ever see a boss-eyed smudge of paint from the pilots' box at the field. You're only doing this for fun and personal satisfaction, so don't worry about small mistakes. If you make a big mistake, and need to take paint off, Dettol is safe on most plastics and is a great paint stripper. Practice makes perfect!

Step one: Undercoat.

Acrylic paints are not great at sticking to plastic, so an undercoat is necessary. You don't really need to worry about full on "primer" (so no etch is required), but a good even coat of black aerosol paint is a must. If you're feeling a little adventurous, you'll notice that I've used black AND white. This is a technique called, "zenithal basecoat". I've done a good, even, all over coat of black and let it dry. I've then followed this up with a light coat of white, from one angle. This angle is the direction I want the light to be hitting the figure from. I've chosen the light to be coming from above his left eye, as though he's scanning for Spitfires in the sun. This technique gives a good guide as you work through for placing highlights and leaving shadows, and can be the basis for some cool effects, such as making a Stealth Fighter pilot look like he's being lit from underneath by his instrument panel.

Step two: Skin base.

Skin tones are one of those more difficult schemes, purely because skin isn't really a flat colour. Lips, cheeks, facial hair, eyes, are all fairly nuanced in tone, but with a couple of little tricks, you can achieve a good result.

To lay the base skin tone down, I've used two thin coats of a flat skin tone (Games Workshop Kislev Flesh). To achieve a healthy colour for lips and flushed cheeks, take some bright red (Vallejo Bloody Red), and just give him some outright rouge and lippy. Once both of those are dry, cover the skin with an all over flesh wash (GW Reikland Fleshshade). For reference, a "wash" is a very thin paint, pre-thinned with acrylic medium, that flows in to low points, and changes the tone of the paint underneath. An excellent tool.

Step two (a): Eyes.

Well done eyes can make or break the face. These are done slightly differently to the "rules of thumb" above. First of all, don't thin your paints. You're effectively just dabbing the colour on, in a very small area. Obviously, we've broken from the "inside to outside" rule by putting the base of the skin on first, buts it's useful to have that lighter colour under the eye colours, to help them show up a little. Avoid tiny brushes. The smaller the brush, the faster the paint dries on the bristles, and then you'll have to push the brush down harder, ruining the effect. So, a small to medium brush, with an excellent point is what you need.

To start, paint the eye colour (Vallejo Sky Blue), over the whole eye. Once this dries, use your small to medium brush with an excellent point, to paint the white in to the corners. If the point is good, it should fill that corner and leave a good round section of colour for the centre of the eye. If working on larger scale figures (this is only 1/12), where a pupil would be seen, use this method, but starting with the pupil.

Step three: Skin Highlights.

So, with the skin base and eyes done, it's time to start making this skin look real. So, we take the original skin stone (GW Kislev Flesh), and mix in a touch of darker skin tone (Vallejo Medium Flesh Tone), and thin it down. Use that in the darker, shaded areas, make sure you can still see the red coming through.

While that's still wet, add a couple of drops of a light skin tone (Vallejo Light Flesh), and then start layering up towards the lighter areas. Again, whilst the previous layer is still wet, add another couple of drops of light skin tone to the mix, and add another highlight. Continue doing this, until you're happy with the overall skin tone. This took maybe four layers, and by now that bright red on the lips and cheeks should be perfectly muted to look like lifelike blushing.

For the finishing touch, add the smallest drop of black ink to the final skin colour, and go over any facial hair you want to add. Avoid making the paint too dark, if you want to darken a five o'clock shadow in to a full beard, just layer more of the "skin + black" over the area, leaving a good fade between the skin and beard for a more lifelike result.

Step four: Silk Scarf.

Now, white is one of those "difficult" colours I mentioned earlier. If you paint flat white, it will look flat, and lifeless, and how do you highlight the lightest colour? Not to mention the difficulty of making non-lead based white cover the black undercoat that's been used. Well, there's two ways of thinking about white: cold white, or warm white. If you're painting something like a German soldier in winter camouflage, you may consider using the "cold" white, where you basically consider it a very light blue. Start with an even coat of off-white-blue, use a blue wash to add depth, and then coat highlights of thinned pure white, exactly how you did the skin highlights. For our subject here, he's looking for enemies in the sun, probably soaked with the sweat of combat and a long sortie, so I've decided on the "warm" white, which is effectively a very light brown. So here we start with an even coat of off-white-brown (Vallejo Stonewall Grey), followed by a coat of very thinned (1/1 or thinner) brown ink. And now, with thinned pure white (the consistency of full fat milk, the excess wiped off the brush on tissue), start building up layers of white, making the white "whiter" for highlights, and leaving a muted brown in the shadows.

Step five: Flying Jacket and Helmet.

Black! Another of the more difficult ones. Obviously black paint will cover easily, but how do you add shadows to the darkest of colours? The trick is, to treat it as a very dark version of any other colour. For metallics, you could work it as blue, giving an almost "dark chrome" effect as you work through the highlights. These two items being black leather, I've used a very dark brown, due to the way that leather gets worn and scuffed, maybe it'll crack slightly in the creases. You'll also notice at this point, that I've broken one of the "rules of thumb" by painting the scarf before the helmet. This is because it's just more convenient to do the two blocks of the same colour simultaneously, and I won't be wasting paint mixing up a second batch, trying to get the mixes of the highlights to match.

Start with a base coat of a dark, rich brown (GW Rhinox Hide), and let dry. Then give it a coat of undiluted black ink, if it's not dark enough to your tastes in the shadows, don't be afraid to add a second coat of black ink. This will make your base black, which you can now add some subtle highlights to. Once the ink is dry, add a drop of dark grey (Vallejo Cold Grey) to your dark brown, thin it, and add some subtle layers to high points of the folds. Continue adding layers until you achieve a nice subtle highlight, just where the leather would catch the light (using your zenithal undercoat as a guide, if you did one). For the very last, starkest highlights, add a drop of white to the brown/grey mix, and use the edge of a brush to pick out, just the very sharpest edges.

Step six: Life Jacket.

Yellow is generally regarded as the hardest colour to make work. This is where thinning your paints, wiping the excess off the brush, and working to achieve good, smooth layers becomes very important. As with some of the other colours, it's best not to paint yellow as "yellow". Think of it as a very bright brown (I believe yellow and brown actually use the same family of pigment), and you'll not be far wrong. One thing we will do slightly differently here, is that the "base coat, wash for shadows, add highlights" method will be modified. Because yellow covers so poorly, we just build up a good even coat of the brightest yellow, and use washes to carefully tone it back, leaving our yellow as highlights in place. So, lay down a base of medium brown (GW Balor Brown), make sure to be smooth with as many coats of thinned paint as is needed for good coverage, once that dries, add purple wash (GW Druchii Violet) to set the deepest shadows. Having let that dry, begin adding layers of the yellow, leaving the purple in the deepest areas, making sure that you are as smooth and consistent as possible. I've had yellows that required 15 layers to get them good enough! Again, let dry, then we start toning down the bright yellow with 1:1 brown ink, that should pool in the recesses, followed by a coat of orange wash (GW Iyanden Yellow), just to set the proper tone of yellow we want.

Step seven: Seat and Goggle Straps.

I painted these as plain brown leathers, although not entirely accurate, it is a quick and simple recipe. It's handy to note this for helmets and jackets on RAF and USAAF pilot uniforms. Lay a base of medium brown (GW Balor Brown), followed by a coat of 1:1 brown ink. Once the ink is dry, mix a touch of cream (GW Screaming Skull) in to the medium brown, and just pick out any patched that would shine, or scuff.

Step eight: Fur collar.

A slightly different black, and painted with a different technique due to the texture of the collar. Lay a basecoat of dark grey (Vallejo Cold Grey), and then cover with undiluted black ink. Once this has dried, you need to "dry brush" (very little, undiluted paint on the brush, wiped off on the tissue until it only picks up the raised areas as the brush is drawn across the texture) the dark grey back over the top, but very lightly. Start adding light grey (Vallejo Stonewall Grey), to pick out areas where the fur would shine.

Step nine: Metallics.

Due to scale, the metallics (buckles, clasps, goggle lens surrounds) were simply painted with a single coat of either (Vallejo Gunmetal) for steel, or (Vallejo Brassy Brass) for the brass zip on his jacket. If you're working on larger scale figures, you may wish to expand on those with the following recipes:

Gunmetal, shaded with 1:1 black ink, highlighted with gunmetal or silver.

Brassy brass, shaded with 1:1 brown ink, highlighted with gold.

Step ten: Goggle lenses.

The trick with painting glass, is to not to. By which I mean, paint what it's reflecting. The simplest way of doing that, is sky. If you want to be very fancy, you could add reflections of the inside of the canopy or cockpit, but that's an incredibly advanced technique, which I've personally never attempted. Start with a base of dark blue (Vallejo Imperial Blue), and shade with a blue wash (GW Drakenhof Nightshade) to start darkening around the edges. Then mix a light blue (Vallejo Deep Sky Blue) in to your dark blue, and use the layering technique we've used all the way through, to lighten the reflections. Finally, add white to the mix, and put the suggestion of clouds in to the sky reflection.