



Adding a Touch of Realism

Weathering and Detailing a Stock ARF

PART 1



In this day and age of scale modelling we are somewhat spoiled by the availability and finish on modern ARF (almost ready to fly) models. In some cases the level of scale detail and finish is really quite remarkable. Often however, the factory finish is so nice that it actually creates an unrealistic result. In my mind this lack of personality in the model not only detracts from the scale appearance, but it also does little to separate it from other similar models on the flight line.

It would be nearly impossible to detail every technique and idea to achieve a more realistic finish in a single article. However, I do hope that in sharing a couple simple techniques one or two may resonate with the reader and provide the starting point that one can build upon on their own model.



The subject for this article is the 1/6 scale BVM F-16 (see the Aug/Sept 2014 issue of RCJI), and while it comes with an impressive factory finish I felt it could benefit from a little additional detailing to appeal to my tastes. Certainly the techniques that follow can be applied to any scale model, not just a modern jet fighter.



It's a simple fact, airplanes in use get dirty. Even airshow display models will show indications of wear and use if you look closely. It's this wear that when replicated on our



models really bring them to life, and in the process can enhance molded in details already supplied by the manufacturer.

Most of us have witnessed realistically detailed models, as well as those that have been so over weathered that they have lost any aspect of believability. The key to an effectively weathered model is in the planning and the discipline to know when enough is just enough. For example, if you can tell a model has been weathered from clear across the flight line, then chances are when you look at it closer it does not appear authentic. So, a subtle approach is key.



Before we start distressing our model some planning is in order. First, look at as many photos of your full size subject as possible. If you can visit the living example, even better. With the popularity of the internet, getting detailed photos of full sized aircraft is easier now than ever before. As you closely observe these photos it becomes apparent that there are many sources for the wear and weathering found on aircraft. Dirt and oil appear around maintenance hatches, filler and drain locations, and ordnance points. There is also often evidence of wear from the model sitting outside for periods of time, perhaps streaked from heavy rains, or faded paint from hot sun-rich environments. Note also the direction of streaking of the wear. Some streaked wear will be perpendicular to the ground from storage outside, and some will be streaked back in the direction of air flow during use.



All this dirt and wear doesn't come from a single source or at a single point of time, rather is due to varying reasons and occurs over an extended period of time. Because of this, our weathering approach is done in stages and layers to achieve credible results.



After studying our full sized subject and getting some ideas for how our end product should appear, it's time to plan the execution. In the case of my ANG (Air National Guard) F-16, the full sized subject from a distance didn't exhibit a lot of wear and appeared to be very well cared for.



(By SMSgt. Dennis L. Brambl, USAF - U.S. Defense Imagery photo VIRIN: DF-SD-04-08039, Public Domain.)



Looking at some close up shots it's clear that wear and dirt is present and with the extended service life of the jet there is paint fading present.

The BVM F-16 comes with an authentic 3-tone grey finish and some of the key markings already painted on the model. Here is an 'out of the box' photo:



I enlisted the assistance of Tailormade Decals for the additional smaller markings on the airframe, as well as on the myriad of pylons/rails and external fuel tanks and missiles. My primary technique for weathering involves artist oils and mineral spirit solvents to remove them (more on this later).



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Due to the nature of the solvent it's very important to ensure the base paint and/or markings won't be affected. Using raw solvent on a rag, I rubbed it over some inconspicuous locations on the airframe, and I encourage you also do this no matter how certain you are that paint and solvent are compatible. Areas such as wing roots, hatch edges, etc. aren't seen when the model is assembled so these are ideal locations for testing. In the case of the F-16 the base paint was not affected by the mineral spirits so we could move on. If it had damaged the base paint, then a protecting coat of clear paint or a less aggressive manner for applying the weathering would be required.



Untreated dry rub-on markings as well as water slide decals can be damaged and even removed with mineral spirits, so it's important to protect them. The small markings for the airframe were dry rub-on transfers, and the markings for the external stores were water slide decals. Because of this two different strategies were used:

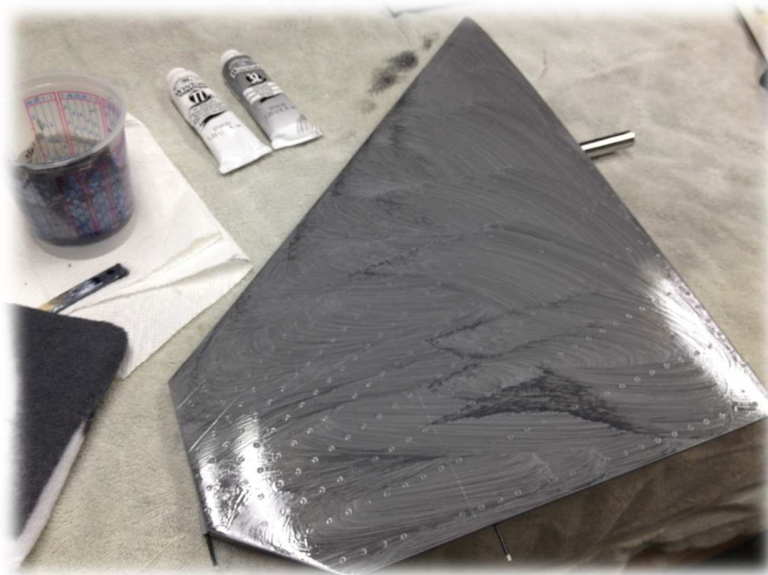
1. The dry transfers were applied AFTER the weathering was complete, and
2. the water slide markings were applied BEFORE the weathering.

The latter was sprayed with a matte 2-part clear for protection before weathering.

Many of today's composite airframes contain molded in surface detail such as panel lines, rivets, hatches, etc. The first weathering step is to bring this detail to life. Artist oils are ideal for this purpose as they allow a long working time and can be layered



easily. First step is to thin the oil with some mineral spirits then using a cloth rag or sponge wipe the oil into the surface detail.



Any random pattern for application is fine, the goal being to get the oil into the molded detail. This process can be messy so protecting your work area with a drop cloth and your hands with disposable gloves is recommended. Also, it's recommended to do this work in a well-ventilated area.

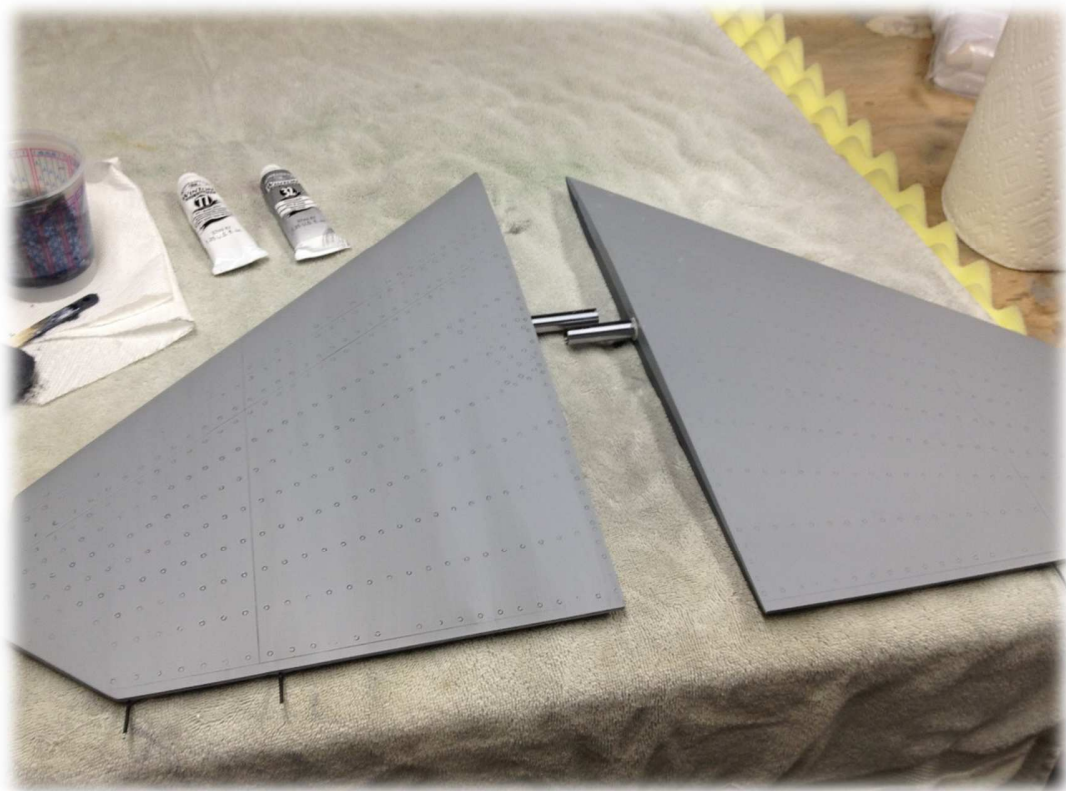
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When weathering a dark surface, using a light grey or white mix works well, and the opposite is the case for weathering a lighter surface. Black and dark grey were my preferred colors on the F-16, with some rust brown also used.

After applying the oil you can start to wipe it off using a clean rag and mineral spirits. The more you wipe the more oil you remove; however the oil that has penetrated the rivets and panel lines will for the most part remain. This is what we are aiming for. When removing the oil I like to wipe the area in the direction of the weathering. Simply it's in the direction of airflow for the wings and stabs, and for the fuselage and fin it is perpendicular to the ground.



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The oil won't dry quickly so you can apply this thinned oil to the entire airframe if you like; however I have found it easier to concentrate on one smaller area at a time. The amount of oil you remove dictates how weathered your airframe becomes. If you find you have removed too much it's easy to repeat the process to add more. Varying the color also adds another degree of interest.



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At this point I also weathered the inside of the gear doors as these remain open when the gear is down.





Remember to be disciplined and when apply weathering erring on the side of less is better than more.

After the overall airframe has been weathered with oil, focus can turn to some smaller detailed weathering. We will cover these details in Part 2.



Links:

BVM: www.bvmjets.com

Tailormade Decals:
www.tailormadedecals.com



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