

Bob Schlosberg on Airbrushing

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The Cactus Squadron's Bob Schlosberg needs no introduction to free-flighters who have been in the hobby for a while and keep up with scale modeling activities. Bob is well known for his masterful use of the airbrush and his success in the FAC Power Scale class. Always willing to share his knowledge, he gave us a good briefing on his Power Scale experience and results in August 2003 Windy Sock. Lately he has been writing some very substantial, meaty stuff for the Cactus Squadron Newsletter and has brought about a major improvement in that journal (six issues per year, send \$10 to Bob Schlosberg, 7420 E. Buena Terra Way, Scottsdale, AZ 85250). His latest article, "Air Brush equipment and technique without the Mumbo Jumbo," has impressed us in the way it sticks to the title so well. He tells us exactly what we need to do, and there is no better way to pass on his advice than to quote excerpts directly, so here goes.

"A new friend who owned a hobby shop steered me towards a new airbrush that was described as a 'single action - EXTERNAL mix model' that would eliminate all the problems of the internal mix style airbrush. I was skeptical, but he was a good friend and said 'take it home and try it, you'll like it', as the old TV commercial said. I tried it and I liked it and I've never used anything but this type of airbrush since. For our type of modeling it is the most trouble-free paint delivery system you can use, as well as the most reasonably priced. Starting about 1975 I have only used two different brands of airbrushes, Binks for over 20 years, and for the last 7 - 8 years, Paasche. The Binks airbrushes have become about impossible to acquire, so if you are interested in an airbrush purchase you cannot go wrong with the Paasche, Model H single-action external mix.- Model H is the designation for 'external mix.' In fact I now use this model for 90% of my model painting, it's that good. The reason is there is more tip control in the pattern of paint delivery. and by today's standards it is reasonably priced, especially so if you can go to some large hobby retailer who sometimes discounts them 20 - 30%. - If they do, buy two, you'll not regret it if you are serious about the appearance of your models over a long period of time.

"Some of the basic supplies needed for airbrushing are either a 5 or 10 lb. cylinder storage tank that can be refilled with CO2 as previously mentioned, and has a mandatory Federal inspection of its safety every 5 years. It sounds annoying, but it's really not. Over the years though, this system will be more costly than the investment of a good small electric air compressor that has at least a 60-psi output at its high end of efficiency. Anything less is not recommended, although it will work, but with reduced efficiency (Get the 60 psi model. Speaking from experience, low pressure will quickly discourage you....editor) Reduced pressure is annoying, much like a computer that takes a long time to download. More than 60 psi is fine, but it is wise to have an adjustment that can control the psi. In many parts of the country you need to have a moisture trap, but here in the desert of Arizona, I've found it is not a necessity (another advantage of CO2 - a moisture trap is not needed....editor). The moisture trap keeps condensation from entering the paint flow when it's spraying paint, which will cause a problem in higher humidity areas .

"I use both types of air delivery, the CO2 cylinder storage tank in the workshop for small-area painting because it is noiseless, and the air compressor in the garage for large-area painting and where the noise is of no matter to the rest of the house. If you can put up with the chugging or chatter of the air compressor, it is in the long run much more economical.

"Just because you paint a model and produce opaqueness with an airbrush does not mean you have made the model significantly heavier and therefore won't fly. If you are of the thought that ANYTHING applied to a model is weight then this is not for you. With practice, airbrushing a model will add hardly more than 'anything' as weight, and if competition for Kanones doesn't interest you (or at least doesn't mean 'do or die'....editor), you can add more color and details and still have a very good flying model with times in excess of 60 seconds and more, depending on the underlying structure weight. If your structure weight is light you will have a competitive model regardless. Many times I have weighed parts of models that have been covered with tissue and have the required 1 - 2 coats of thinned dope to seal the tissue before I paint. After I've painted the color on with an airbrush, weights of 2/10 of a gram on each tail surface and 4/10 - 5/10 of a gram on a wing, etc., will total only 2 - 4 grams of weight on a 24" span model. You can see that this is not a reason a model will not fly well. I have checked these inconsequential weights so often that I no longer bother to. I think fellow modelers who fly with me will attest that my models are not hindered much by this added weight.

"Why do I do it at all you might ask, well, I like color, and I like color that lasts. So many times I see a nice older model well done in just the plain tissue and clear dope and the tissue has faded so badly it's barely recognizable as to what its original color was and has negated the work the modeler has invested in it. The other reason is that I dislike tissue seams that double the color concentration of unpainted tissue. With the exception of white and yellow it is an unavoidable result. Airbrushing will hide this, or at the very least will reduce the curse of this look. These are my reasons, other modelers have their reasons why they do not paint and my reasons do not bother them. Flying is the main purpose of building the model, and that's fine, we all have our own ideas, but if you want some color that will not fade at all, then please read on."

Schlosberg tells all (Concluded).... "I've told you why I like airbrushing and what I think is an effective painting and delivery system. Now you need more specifics. First, the airbrush comes in different tip sizes to spread the paint, essentially — small, medium and large. The Paashe numbering system for this is: #1 = small, #3 = medium, #5 = large. Usually the 'H' series comes with one of these tips as a starter, some more elaborate kits come with all three tips. If you only want to start with one tip use the #3 tip. This size will be by far the best all round one to have. The #5 tip is my second choice and is for larger models in the 30-40 inch range. The #1 tip is for very fine small area applications, so it will take much longer to paint a wing or fuselage. It should be mostly used for peanut size models (but is not a necessity) or small area painting for repairs in tight areas of larger models. By far the #3 tip is the best one. All of these tips are adjustable in paint flow, but of course the smaller you go the less range there is due to the tip opening. The #3 medium tip has the ability to go from a range I would estimate to be 2 to about 4, so it has the most adaptability. Start with the #3 tip.

"I paint my models with only Sig dope 99% of the time. I seldom mix colors because unless I'm able to save the mixed color for a long time I'd never be able to exactly duplicate it again 6 months or 3 years down the road for repairs. This is important to me. There have been times I've used Floquil RR paints and have recently used water-based acrylic paints for a brief return to some plastic airplane modeling - all with good results. Probably any paint will work with an airbrush if it is properly thinned with the appropriate thinning product and to the right consistency to pass through the airbrush. I like dope because it is essentially traditional, even though banana oil type paints were the paint product in the good old days. I don't think dope, as we know it now, was available in the '30's and 40's for modeling. Please don't jump down my throat you other old timers if my memory is incorrect on this. But dope was used on real aircraft and still is, so why not on your nice Stinson or Fairchild model.

"Sig dope has been a very consistent product for me for many years, as compared to the Aero Gloss brand that has been so prevalent everywhere for what seems like forever. I'm never quite sure what will thin Aero Gloss properly, as it did some strange things to me in the early years. I think sometimes it's nitrate based and other times butyrate, but I have no proof of that, so I stay with Sig dope because it has never given me a problem. Sig is all butyrate and is sold in many colors and is a lite-coat based dope if you read their catalog carefully. In other words, it is not a full-strength butyrate dope that will cause excessive shrinkage. When you thin this dope in the area of 3 parts thinner to one part color you have a paint that will not shrink tissue any more than it has already before it was painted. 75% of what you have applied has evaporated because it was thinner.

"My choice of thinner has been for years a good grade of automobile lacquer thinner that I purchase at an automobile body paint and supply store, of which there are many. I use a PPG product #DTL-876 DURACYL that is in the vicinity of \$21 per gallon. A gallon will go a long way thinning dope for an airbrush. In recent years I also buy a cheaper acrylic thinner for cleaning the airbrushes that is about half the other price. There's no sense spending a lot of money just to clean the equipment. The cheaper product might also work for spraying the paint as well, but I've never tried it. Home Depot probably has something inexpensive for this purpose, but I use #102 medium dry acrylic thinner by 'Advantage', also purchased at the auto body store. Always use the recommended thinner for the paint you are using. "The next easy trick to bring color to your model is to paint the model with the same color as the tissue. Red tissue, red dope. You'll see how quick the vibrant color happens, and of course if you are worried about weight, no matter how little, this will help. Covering a model in white tissue then painting it another color is wasting paint, but more important it is now adding more weight than is necessary no matter how little that might be. However there are times when you will have to paint small areas of any tissue a different color because it will facilitate the ease in applying the trim design, such as black over red, etc. The trick in applying the paint is not rocket science. Several light coats is much better than one wet one; drying between coats with a hair dryer will speed up the drying process so that several coats only take a matter of minutes. If you have masked the model to separate paint colors, or one color from some natural tissue such as yellow or white, a heavy coat has a good chance to bleed under the mask and spoil your paint job.

Masking your model will be an upcoming subject in another newsletter.

"If your paint hasn't been thinned enough, the airbrush will clog and the tip build up as it dries which will prevent any more spraying until it is cleaned and the paint thinned some more. Also, if it hasn't been thinned properly it can spit heavier droplets that will dry and spoil your paint job, so always thin properly. My rule of thumb is that when you are stirring up the thinner, the paint should run off the stirrer like water would. If it has a heavy run-off, it's not thinned enough to spray properly. When I'm painting, I always have a spare piece of cardboard to test on before I spray. This is to adjust the spray pattern and to make sure the paint is flowing properly. I do this every time I start a painting sequence. Experimenting with the pattern size or flow on the model is the WRONG place. The spray pattern is adjusted by opening or closing down the nozzle that is threaded on the needle tip. "Airbrushes come with a small siphon cup and usually with a glass bottle with an airbrush attachment Both work well, but I prefer the bottles because you can store the paint in the bottle longer (as in days or even weeks) while you are building the model. A siphon cup requires constant filling, can be spilled easily, and has to be used up and cleaned daily as it has no lid to prevent evaporation and drying up. Multiple storage jars are a must because once you start airbrush use you will want to use multiple colors - and another good reason to have a second airbrush is so you can switch colors with ease. It is not recommended to go from one color to another with the same airbrush without a thorough nozzle and tip cleaning. If you go from one color to the other without cleaning, you will surely get some of the other color spit out right in the middle of the color you are applying. You will be annoyed!!! This is yet another reason for at least a second airbrush. Cleaning one airbrush between colors is not difficult or even very time consuming, but you will see how much faster the painting will go if you don't have to do that. There are times I have four airbrushes on my workbench at once to facilitate the paint application and building time. I did start my airbrush experience with only one though, and all I've learned has been by doing it. I've had no teacher to help me, just plain old more than 30 years of experience of mistakes and successes to pass on. If you want to invest the money and time, I think you will be pleased with the results, but please, don't expect to be an expert the first time you use one. The learning experience for me has been a source of enjoyment and satisfaction for many years as now I can come close to the box art I've wanted to emulate since I was a kid. My last reminder is this, Don't be sucked in by a salesperson to buy an internal mix airbrush. You want a 'single-action, external mix' airbrush."