

# Painting Aircraft Camouflage Patterns

## by Dick Smith

There are few nations of the world that have not adopted some sort of camouflage scheme for their military aircraft. During the Vietnam War, fighters and bombers from the United States arrived in the war area with pre-conflict light gray paint overall. Some Republic F-105's, were pressed into service in unpainted aluminum or with anti-corrosion silver lacquer and bright, colorful unit markings.

As the war heated up, it became necessary to tone down the bright colors and shiny skinned aircraft. The familiar South East Asia scheme of two greens and tan sprayed in irregular patterns began to emerge. The paint served two purposes; it made the aircraft more difficult when parked on the ground and it served to protect the aluminum skin from hostile climatic elements.

Modelers have wrestled with camouflage painting for years. The intricate German World War I lozenge patterns were made easier to reproduce with the introduction of various specialty decal sheets. However, from World War II to the present day things took a different shape. In the Battle of Britain, the British initially used a dark earth and dark green scheme over, a very pale green called Sky, type S.

The question of a "soft line" versus "hard line" pattern also must be considered. Hard line camouflage is generally accomplished with paper masks, masking tape, or after-market purchased vinyl masks. Soft edge camouflage patterns are a little more complicated but not difficult to create using the right tools.

The question of which type of camouflage, hard or soft line, is best solved with careful research. Which colors are appropriate is also a subject for research.

The most important tool to duplicate soft edge camouflage schemes is a good quality airbrush. There are several quality products on the market however my preference is the one made by a Chicago firm, Paasche. There are two versions of this brand, one an internal mix, the other an external mix. The external mix brush is my favorite and the one we'll use during this article.

The external mix Paasche "H" model creates a spray pattern at the very tip of the airbrush. Adjusting the tip, with a knurled knob at the base of the (tip) cone of the unit, controls the paint flow. A regulator on the air source controls the airflow. The airbrush set includes three separate tips, labeled H-1 through 3. The number "1" tip produces the finest spray pattern. The use of each tip is explained in the instructions that come with the airbrush.

Good references are essential in duplicating any camouflage pattern. Most of the quality after-market decal sheets from SuperScale, AeroMaster, Eagle Strike, Third Group, and the like publish three-view drawings on accompanying instruction sheets. AeroMaster and Eagle Strike even detail the correct colors with Federal Standard color references.

Next is the selection of the paint. Model Master, Gunze Sangyo, and Humbrol are fine examples of colors that are matched to Federal Standard specifications. Straight from the bottle or tin these paints need to be thinned with a solvent specified by each manufacturer. For best results, use the thinners recommended for each brand of paint.

The paint you select should be thinned to a consistency where it runs quickly off of a nail dipped into the bottle. Some paint will require a greater amount of thinner more than others. If the paint does not flow quickly and smoothly, it will not pass through the airbrush cleanly and will clog in the tip.

Before applying the color coats, it's a good idea to "prime" the model with a light color. This serves two purposes. It will show up any flaws in your construction, filling, and sanding. Second, it will give you a solid color on which to draw out your camouflage pattern.

If your model has a single color underside, paint it first. With a drawing or photo of the topside of your model close at hand, take a soft lead pencil and lightly draw the camouflage pattern on the wings and fuselage. Draw these lines lightly so as not to mar the surface of the primer. These lines are for reference only so if they are not exact don't be too concerned. If your model has a "wrap-around" camouflage pattern, continue drawing the pattern on the underside using whatever references are available.



If your pattern is complicated, lightly pencil the last two numbers of the Federal Standard color code into the corresponding area. In the accompanying photo of an Academy 1/48<sup>th</sup> scale MiG-21 PF, there are four colors in the scheme, a medium and dark green, light earth, and sand. The underside is a pale blue-gray. The hard demarcation line between the underside and topside colors will require masking before going further.

Using the lightest color of the scheme, load a small amount of paint into the airbrush and set a spray pattern to about 1/16<sup>th</sup> of an inch wide. This may sound difficult but with some practice, and with properly thinned paint, the job is quite simple. Practice creating patterns on a sheet of paper or a three by five file card.

When you're sure of your technique, reset the width of the spray pattern and go to work. Outline the pattern you drew on the wings and fuselage in pencil with the lightest color. When the outlining is finished, fill that area in completely.

Using the next darkest color, spray the adjoining areas with increasingly darker colors until the model is completely painted. You should now have a good general pattern of your scheme complete. Look closely at the lines between each color. There should be some overspray. In some areas, the overspray might be heavier than others.



To explain the next step, we'll use a specific aircraft. Look at the accompanying model photo of the 1/72<sup>nd</sup> scale Hasegawa Beaufighter Mk.VI in British WWII Mediterranean camouflage. The two colors used on the topside are British dark earth and middle stone.

Some photos show these aircraft with "soft line" camouflage. After you have painted the basic color pattern, thin each color to a point where you can spray a very thin line. Outline the middle stone color area in the pattern. When you are satisfied with that pattern, outline the dark earth area. Be sure to spray each color into itself.

In other words, aim the flow of spray of the middle stone into the area already painted middle stone. Do the same with the dark earth. With some practice you'll be able to put down a fairly "tight pattern." It is not unusual to go back and touch up the pattern several times. During the touch up phase, you can make any adjustments to the pattern shapes that are required.

The important item to remember is to spray each color into itself. Another important factor in painting a tight pattern is to set the regulator on your air source at about 20 to 25 pounds per square inch. The higher the air pressure, the more difficult it is to control the amount of overspray. Wrap-around camouflage patterns of some modern day jets are not as difficult as they seem. The most important step is to draw the outline of the pattern and make a note of the colors and where they will be placed on the model. It is possible to transpose the colors in the pattern when the model is turned over during painting.



Using the 1/72<sup>nd</sup> scale Monogram British Tornado F.1, we've carried out the green and gray patterns around the underside of the model much like the pattern that appears on top. The important step in painting this scheme is to remember to always spray each color "into itself" to avoid overspray. On 1/72<sup>nd</sup> scale models this step is very important. Another tip is to spray as close to a 90-degree angle to the surface of the model. The lesser the angle of spray, the less overspray. Also be careful not to spray too close to the surface of the model or the paint may puddle or build up a ridge between colors.

Unusual camouflage patterns can turn a rather ho-hum model to a real eye catcher. As an example, check out the Aztec Latin Eagles I decal sheet for the Academy 1/48<sup>th</sup> scale Mig-21 MF in Cuban camouflage colors of turquoise blue (FS-25275) and forest green (FS-24138) topside and a light gray (FS-26495) underside.