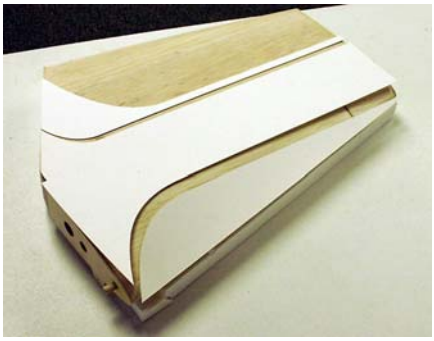
Covering and Paint
Vol. V, Part II

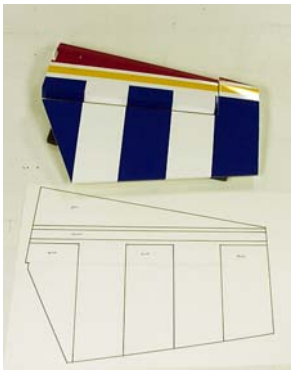
Things to keep in mind as you design your color scheme are to use colors that are easy to see and give the airplane good definition when it's in the air. The shape of the model—not just the outline—should be easy to see. Dark colors tend to create a flat silhouette that makes orientation more difficult. I use the analogy that dark covering tends to create a "hole in the sky" wherever it's used.

The direction of the design's lines can also aid in orientation. If the general design has elements that go from side to side on the top of the airplane, orienting the design longitudinally for the bottom of the model will help differentiate the top from the bottom. It can also help to use colors for the bottom that contrast with the colors on the top of the aircraft. The idea is to be able to instantly know your airplane's orientation without any real thought. A good design will have that effect on a subconscious level.

Once you've decided on a color scheme, trace all of the outlines for the fuselage side, wing, and stabilizer in full size. Drafting vellum works well for tracing the plans. When the outline is done, use it to finalize the separate color details in full size. Erik used it to cut full-size templates from poster board. After a template is used for one wing panel, it can be turned over and used on the other side to ensure a uniform pattern.

To make the curves of any rounded corners come out with smooth, flowing lines we used ship's curves. You can get a set of inexpensive plastic ship's curves or French curves from the hobby store, an art store, or a drafting-supply shop. Using these as templates, complex curves can be drawn in a smooth and precise manner.





When you're ready to start covering, following are a few hints that have worked for us that may help you too. I like to keep any part being covered on a suitable piece of upholstery foam to keep it from being damaged during the covering process. Cover the ends and edges first. That way, the main body of the covering hides the corner intersections or loose ends and makes for a neat finish.

In tight inside corners, such as the transition from the turtledeck to the vertical stabilizer, start with a strip of covering ironed into the corner using a trim iron. With that

you can cut your top layer into the corner without having to transition the covering. The result is a seam that is almost impossible to detect.

Stay away from putting covering over covering as much as possible by trimming your pieces to fit the shape needed before they are ironed on. I like to overlap the edges of neighboring covering sections by roughly 1x4 inch. Put the most transparent colors on first, and overlap with the more opaque colors.

In some cases it will be impossible to avoid putting covering over other covering because of material expanses that transition open bays, such as the fuselage sides on this model or between the ribs of a built-up wing on other models. Covering adhesive is activated with heat, and when it is too hot it will convert to a gas. When covering goes over covering there is no place for trapped air or gasses created from overheating the glue to escape, and the result is ugly bubbles in the finish!

The trick is to be sure that no air is allowed between the two layers of covering while heating the glue, and to heat it only warm enough to make it adhere without giving off a gas. This is a tricky process that takes patience, practice, and a lot of willpower, but it can be done.

There are many methods to get a smooth finish with multiple layers. The following works well and stays put. Smaller pieces are easier than large sections. Let's use a stripe as an example. Measure and cut the stripe to the needed size. The top layer of covering will be tacked down at the starting point and held off of the surface as it's heated, so you must first mark off an outline of the shape to be ironed on. Use a felt-tip pen to outline the section or to make intermittent dashed lines. Be sure to keep it wide enough so the covering doesn't go over the ink. The guideline will keep you on track. It may take some trial and error to get your covering iron's temperature just right, so try a few practice strips first.

The temperature should be approximately two-thirds of what you normally use to seal MonoKote to wood. Tack down the covering at your starting point. Using only the edge of the iron, slowly heat the covering while holding the unheated portion up away from the surface. Slowly work along the stripe, taking it down and heating just to the point where no bubbles form. Use your free hand to hold the MonoKote off the surface and guide its path.

Be sure to only heat a section the size of the iron's edge. If you lay the iron flat, it will heat too large an area and cause bubbles. Work your way to the end of the stripe, holding the free end of the covering up and guiding with one hand while heating with the

other. Don’t worry that it’s not strongly attached; it needs to hold only to the point where there are no loose sections or trapped gasses.

After you complete the section, use MonoKote Trim Solvent to remove the felt-tip-marker outline and seal the edges along the stripe. The solvent will secure the stripe in place in lieu of using a high level of heat. Be sure to get all of the stripes laid out on the fuselage before you begin the cowl-painting process. That way you can line up the cowl to match the stripes in paint.

For a nice finished look, any hole that needs to be cut after covering can be executed cleanly with an old soldering pencil. The high heat melts through the covering like butter and seals the edges so they don’t come loose.