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NEWSLETTER

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Advanced Finishing Tips To Enhance The Appearance Of Your Rockets

Cover Photo: DynaStar LexxJet rocket kit. Get one at:

www.ApogeeRockets.com/LexxJet.asp

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Advanced Fininshing Tips To Enhance the Appearance Of Your Rocket

By Chris Michielssen

In this article, I'd like to share a few finishing tricks that can bring your next model build up to "catalog page" standards. I'll use the DynaStar LexxJet as an example, but most of the techniques can be used on other models too.

Removing Seams From Blow-Molded Nose Cones

On every blow molded nose cone I've seen, there are seams on either side of the nose cone. If you look closely at the seam, you'll notice some of the line is above the surface, on other areas the seam is below.

Photo 1: The seam line on a blow-molded nose cone.

While many would simply sand down the seams above and below the surface, this could leave a dip in the nose contour. You should sand off the convex seam and fill any concave areas.

First, sand the seam with 220 grit sandpaper on a sanding block. Don't go too deep, just remove the raised surface.

All that should be left now are the concave mold seams below the surface.

Using the same Super Glue Gel (Thicker CA) that you'll use in the model construction, lay a bead of glue over the recessed seams. You are trying to build up the surface to be sanded down later after the CA dries.

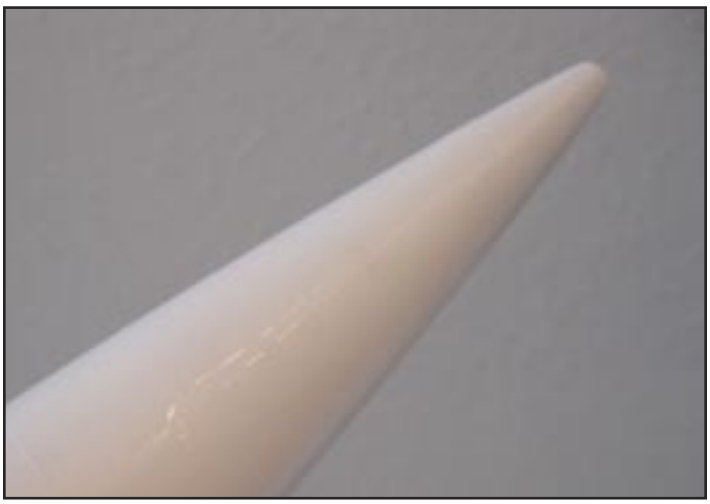

Photo 2: Sand down any raised areas on the nose.

Why not use wood filler? It won't adhere to the plastic nosecone. The thick CA will bond itself into the surface, where a wood filler set in a shallow seam would be knocked out from sanding.

After the CA filler has dried, sand the surface with 220 grit sandpaper on a block. You'll find the dried CA to be like glass. It'll be a little hard to sand, but will stay in and fill the recessed mold seam.

Follow up with progressively finer grades of sandpaper until the nose cone is smooth.

The catalog picture paint job? That's where this model really shines!

Painting the Engine Exhaust Tubes

I haven't seen a model with such an great paint scheme in a long time. I wanted to duplicate (and maybe add to) this look!

In Step 18 you make the Jet Exhaust Tubes. The face card picture show the outside tubes are white with gray trim. The interior angle cut tubes are gray. I've had great results using Monokote Trim material over the years. This model looked to be a great candidate for this finishing medium.

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Monokote Trim is available in most hobby stores or on-line. It's a self adhesive sheet available in many colors including metallics. A single color sheet sells for under $3.00, usually cheaper than buying spray cans! One 5" X 36" sheet will go a long way, providing trim for many rockets.

Photo 3: The interier of the tubes will be painted black.

On the gray areas of the Exhaust Tubes I decided to use chrome. I also wanted to visually balance the black on the nose cone so the interior of the angled exhaust tubes will be black.

Note the edges of the tubes are dark. This is a light bead of thin CA applied around the tube edge for extra strength.

The interior of the tubes have been brushed with thinned Carpenter's Wood Filler and sanded smooth.

The outside of the tube is wrapped tightly with paper to mask the outside from the black spray. This is just to keep the outside of the tube clean for the chrome overlay to come.

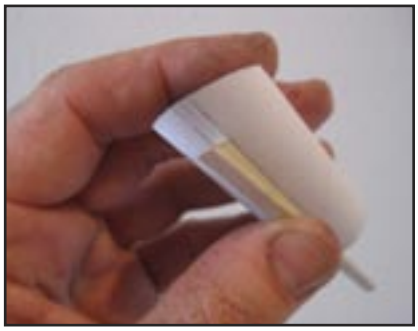

Photo 4: Mark the tube where the standoff will be attached.

Before starting the chrome wrap, set the standoff piece against the interior angled tube and mark it with a pencil line. The chrome wrap goes right up to (not over) this line on both sides. Leave the area between the two lines clear for better adhesion to the standoff.

Before using any Monokote Trim material, be sure your hands and the area you will be covering are clean! Any dust speck will show through the thin skin of the Monokote.

This is by far the easiest trim wrap in the build and good practice for the upcoming trim. Start with a slightly oversized piece. Set a straight edge of the wrap against one pencil line and wrap it around the tube, smoothing it as you go. Don't burnish the trim down hard yet! If you make an error, it can be lifted and moved if it is not firmly attached.

You'll have some overlap on the other side. Set a straightedge on the second pencil line and cut off the excess with a new razor blade. Cut only through the trim material, try not to cut into the tube.

Photo 5: A comparison of the tubes before and after applying the silver trim Monokote.

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Photo 5 shows an Exhaust Tube before and after the chrome trim is applied. On the edge of the *before* tube (on the left) you can see a little of the black interior paint. This is well covered by the chrome trim.

Inside the larger Nacelle Tube a 3/32" strip of masking tape was set inside where the chromed interior tube would be glued.

To paint the outside of the Nacelle Tube assembly, I made a holder from a dowel and expended engine casing. Tape was doubled over with the sticky side out to hold the white Nacelle assembly. The stand-off and Nacelle tube are painted white.

Photo 6: Double-sided tape was used to hold small parts against a stick to make painting easier.

A 1/8" wide chrome trim band was applied to the front of the Nacelle tube as shown in Photo 7.

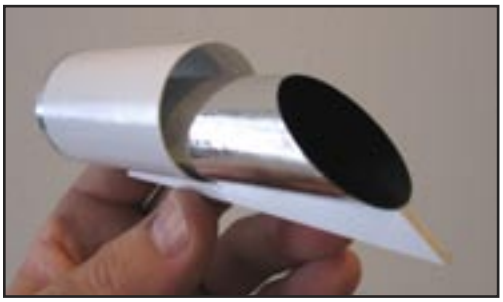

Photo 7: A strip of trim Monokote was added to the leading edge of the nacelle for extra enhancement.

The interior angled tube was glued to the masked areas inside the Nacelle tube. The results look good, no color masking and clean separation lines!

Painting the main body

Body tubes with multiple color patterns can be challenging. By using the Monokote Trim sheets you can get these results without the frustration of masking! Start with the lightest color, such as yellow on the Lexxjet, and work forward to the orange and red trim sheets.

First up, draw a light pencil line down the center of the main tube top opposite the centerline of the wing. You'll use this line for alignment of the Monokote trim pieces.

From the end of the body tube, mark the centerline at 2-3/4" (front of Yellow trim) and 3/4". (start of Orange trim)

Draw an alignment line down the center of the BACK of the yellow Monokote Trim sheet.

Cut out the Paint Pattern Marking Guide. The folks at Apogee were thinking ahead when they printed this with no instructional copy on the back. You'll use this guide to mark the Monokote Trim sheets.

Lay the center line of the Paint Pattern Marking Guide on the center line of the back of the yellow trim piece. Draw around the bell shaped arc of the Marking Guide. Mark the center of the Yellow trim piece for alignment on the body tube line.

Photo 8: Draw a line down the backside of the Monokote.

Using sharp scissors, cut out on the line you just drew.

Cool tip: You can easily sharpen scissors by cutting through 400 grit sandpaper a few times.

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Lining up the center guide line again, draw a second bell shape on that yellow piece 1 7/8" back from the scissor cut line. 1 7/8" will be the width of the Yellow and Orange body color bands.

Before peeling off the trim backing, be sure the model surface and your hands are clean! Any spec of dust will show up as a small bump through the thin Monokote film.

Line up the center mark of the cut yellow piece and the centerline drawn on the top of the main body tube. Lightly set the Yellow piece down, and roll it around the body tube.

Check to see the ends line up at the bottom of the wing. If not, lift up the trim and try the placement again. If your white body paint was throughly dry, it shouldn't lift when you remove the Monokote.

Don't press the ends of the wrap down yet. You'll have to do some tucking and trimming next.

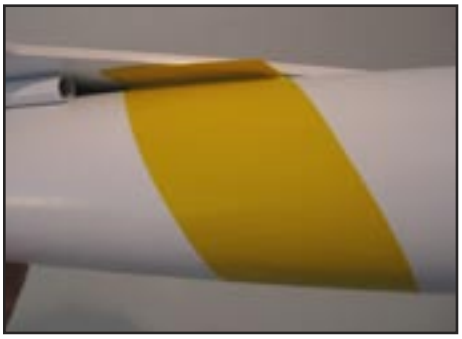

Photo 9: The yellow trim is tucked into the edge where the wing is attached.

I used the back (rounded metal wrap) of a razor blade to push the ends of the wrap under the wing joint. When everything is in line, burnish the Monokote down.

Trim the excess off with a sharp Xacto knife and remove it as shown in Photo 10. Use the flat side of the blade to press the cut ends down.

Cut the next Orange wrap the same way you did earlier with the Yellow. This trim band is also 1 7/8" wide.

Placement and trimming is a little more complicated with the Orange wrap. To assure coverage, you should overlap the yellow band slightly.

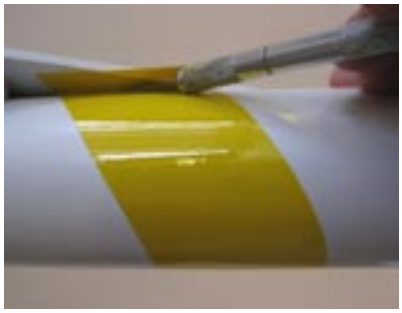

Photo 10: The excess is trimmed off with a hobby knife

You will have to trim the orange band around the front of the wing tip. The picture explains it all. Cut the tip first, then the sides.

The two outsides of the Orange band will overlap where they meet. Lay both ends down, one side on top of the other. Set your straightedge over the top and cut through both layers. Remove the top cut overhang. Lift the upper layer and remove the lower underhang. Burnish the lower edge and lay the top edge down next to the newly cut lower edge. After burnishing you should have two cut sides with a nearly unnoticeable seam.

Photo 11: The orange layer has to conform around the tip of the wing.

The Red trim follows as before. Any Red overhanging the front of the body tube is cut off with a single edge razor blade.

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Photo 12: The final color overhangs the tube, and is trimmed off with a razor blade.

On the LexxJet, trimming the horizontal tail fins is much easier than the main body wraps.

Starting again with the Yellow, cut two bands 1⁄2" wide. Set them on the tail as shown, overlapping in the front.

As done before, cut through the two overlapping ends. Remove the top overlap. Lift the upper piece and remove the lower cut underwrap. Press both cut ends down end to end matching up the seam.

Photo 13: Trim pieces added to the vertical tail.

A 3/16" wide orange strip follows using the same method for trimming.

The Red trim follows. After both sides are in place, trim the front seams, removing the overlap as before.

Photo 14: Cut the overlap, and burnish the edges down to the rocket.

Carefully trim around the sides of the tail fin with a new razor blade. The picture shows the right side tail surface edges trimmed.

Nose Cone Masking

The nose cone of the LexxJet received an overall coat of Rustoleum Painter's Touch Gloss Apple Red. This color is almost a perfect match to the red Monokote trim.

Photo 15: The final color added, just prior to being trimmed.

Over the red, almost half of the nose cone is painted black.

The canopy decal is surrounded by a heavy black border. I cut out the decal close to the outside of the printed area. It was left on the backing sheet for now.

Photo 16: Clear tape was used to mask around the permiter of the decal.

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I've had great luck using clear Scotch tape for clean mask lines.

Scotch tape was set on my patio door glass for cutting. The canopy decal was set over the top. The rear arc of the decal was used for a guide to cut the tape.

It's hard to see in the picture (Photo 16), but the right and left sides of the arc cut go beyond the edges of the canopy decal. This will allow for the wide black border to extend around the sides of the canopy decal.

This shows the spacing for the black border around the final canopy decal.

Photo 17: Masking tape is layed over the clear tape and over the rest of the nose.

Scotch tape is used for the sharpest mask edge. Masking tape is used outside of the clear tape. The Black will bisect the nose cone all the way around the tip.

Photo 18 shows the Scotch tape being removed showing how sharp the clear tape masking lines can be.

Photo 18: Removing the tape shows a crisp paint line.

Final Touches

When adding the self adhesive trim decals, don't use your fingers for placement. Fingerprints and dirt will show through the clear areas.

Remove and set the decals in place using the tip of a

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Quarter shown for size comparison

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Photo 19: The finished nose cone and the multi-colored Monokote trim on the front of the body tube.

Photo 20: Use a clean knife blade to position the decals so you don't get fingerprints on the adhesive.

clean Xacto blade.

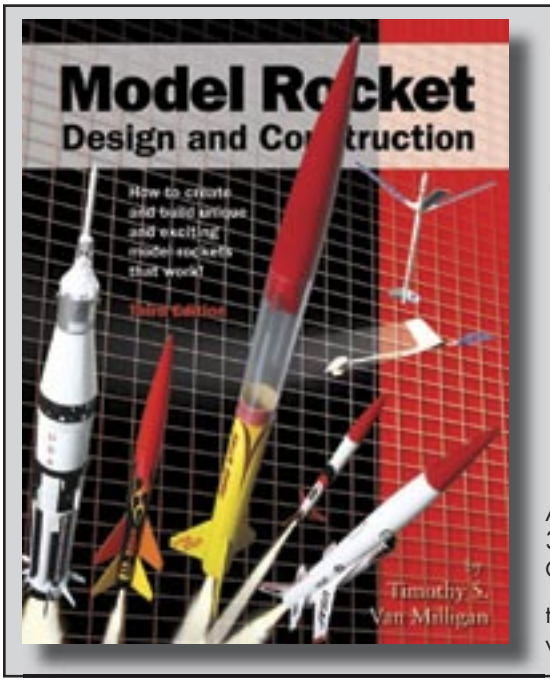
Before placing the LexxJet name, I marked the center of the body tube placement. The center of the word "Lexx-Jet" was the middle of the second "X". The "X" was simply lined up with the pencil tick mark. After placement, the tick mark was erased.

Add the rest of the decals and you are ready to fly!

About the Author

As you can tell from this article, Chris Michielssen is a master model builder. He is trained as a graphic designer, but currently is a full-time musical entertainer living in Orlando, Florida. He also has a passion for rocketry, and is currently producing kits as Odd'l Rockets (www.oddlrockets.com). In addition, Chris offers a blog on building rockets at: http://modelrocketbuilding.blogspot.com/

Photo 21: Chris Michielssen preps the LexxJet for launch.



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