The Semroc Aphelion

By John Brohm, NAR #78048

The Semroc Aphelion is my most favorite Semroc model. There's just something about its rakish lines that, to my mind, makes it the quintessential model rocket. It's easy to build and fly, and it's a great performer.



Photo 1: The Semroc Aphelion, Kit KV-26

Photo 1 shows one of two Aphelion kits I had purchased from Carl and Sheryl during NARAM 55 (2013) in Aurora, Ohio. As he was to so many, Carl was a close friend to several of us in our section, and with his sudden and unexpected passing (August 11, 2013) our club decided to rename our Fall Regional in his honor – the Carl McLawhorn Memorial Flyoff.

CMMF-I was held that October, and of the roster of events one was specified to be flown with an actual Semroc-produced model. For CMMF-I the Semroc event was Set Altitude, and we chose this Aphelion as our Semroc entry. It was built and flown without paint, certain that altitude tracking powder would make a mess; the following photo evidences that suspicion.

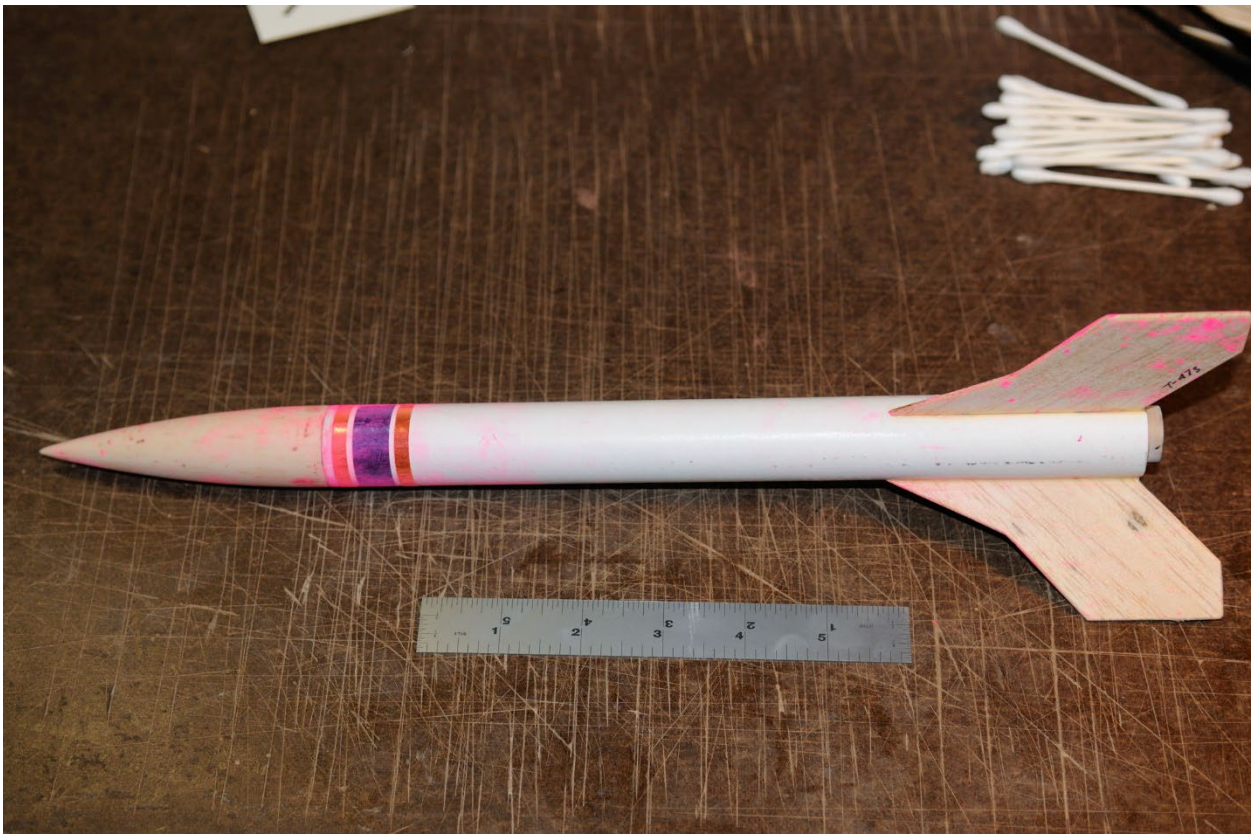

Photo 2: Aphelion Post-Flight

The model had a great flight, posting a perfect score in Set Altitude.

Following the meet, I started in on the second kit. It made it as far as the primer stage, but was then set aside as attention was diverted to our next scale project. Recently, I pulled out the primed but unfinished Aphelion, and decided to push it to the finish line.

Paint

The model had already been primed with a couple of coats of Rustoleum Grey Automotive Primer, and so the model was touched up where needed with surface putty, sanded, and then re-primed. Once satisfied with the primed surface, the model was given a final coat of GSI's Mr. Finish Surfacer #1500 White in preparation for the color coats.

To finish the model, I had decided to airbrush it, and Photo 3 shows the painted model ready to be masked for the roll pattern. The paint choices were GSI's Mr. Color #1 Gloss White, Mr. Color #2 Gloss Black, and Mr. Color #329 Gloss Yellow; all paints are lacquers.

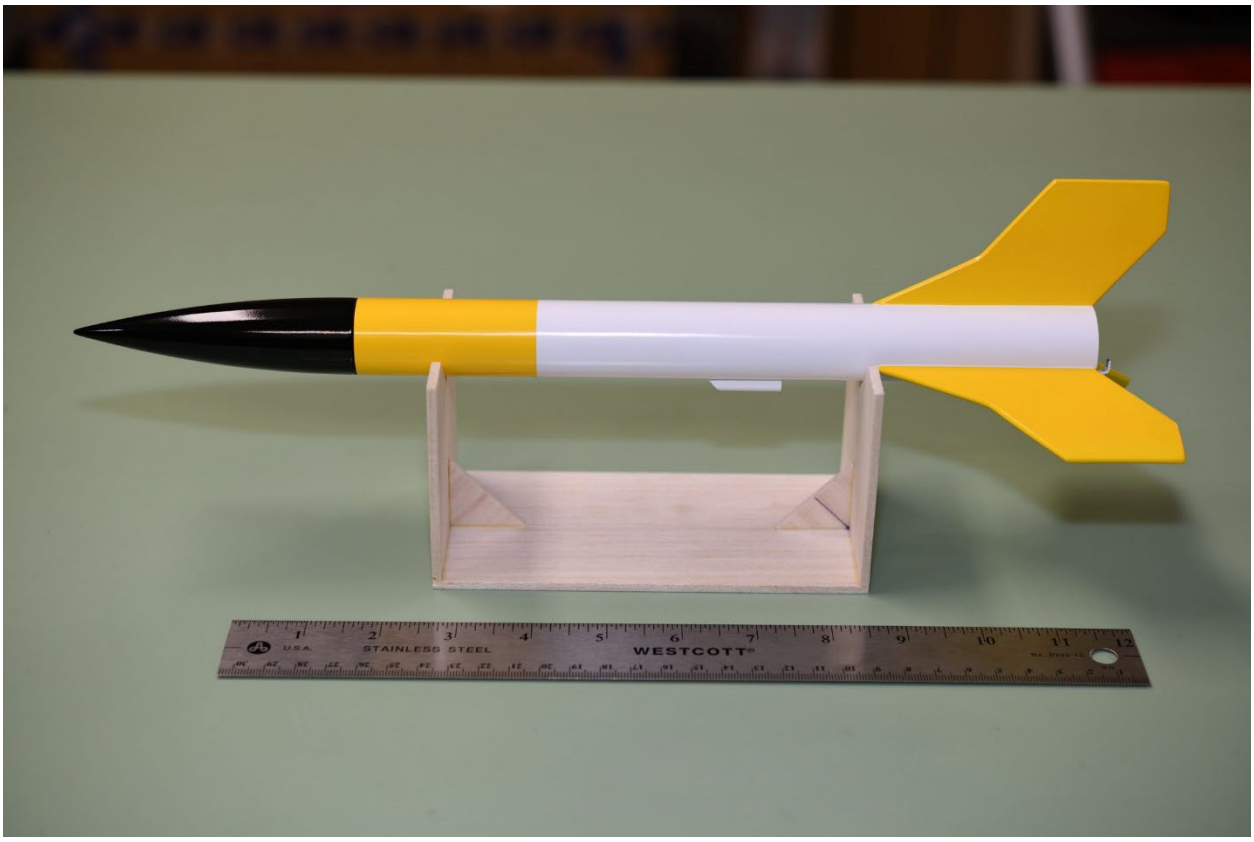

Photo 3: Ready for Masking

While the decision to mask and paint the roll pattern might, perhaps, point to possible latent masochistic tendencies, I had nevertheless decided to go this way for several reasons:

- First, painting the roll pattern would eliminate the risk of any shade mismatch between the roll pattern decal and the black nose cone paint.

- Second, painting the roll pattern would eliminate large clear decal film areas between the black bars; clear decal film is difficult to disguise/make invisible in a gloss finish.

- Finally, it would ensure that each of the roll pattern bars could be laid with a consistent width; decal wraps often end up with an overlap bar of a width different than the other bars, due to the variance that can occur in the finished diameter of the airframe.

So, paint (and tape!) it was.

Tamiya tape was used for masking, and the lower portion of the pattern was tackled first.

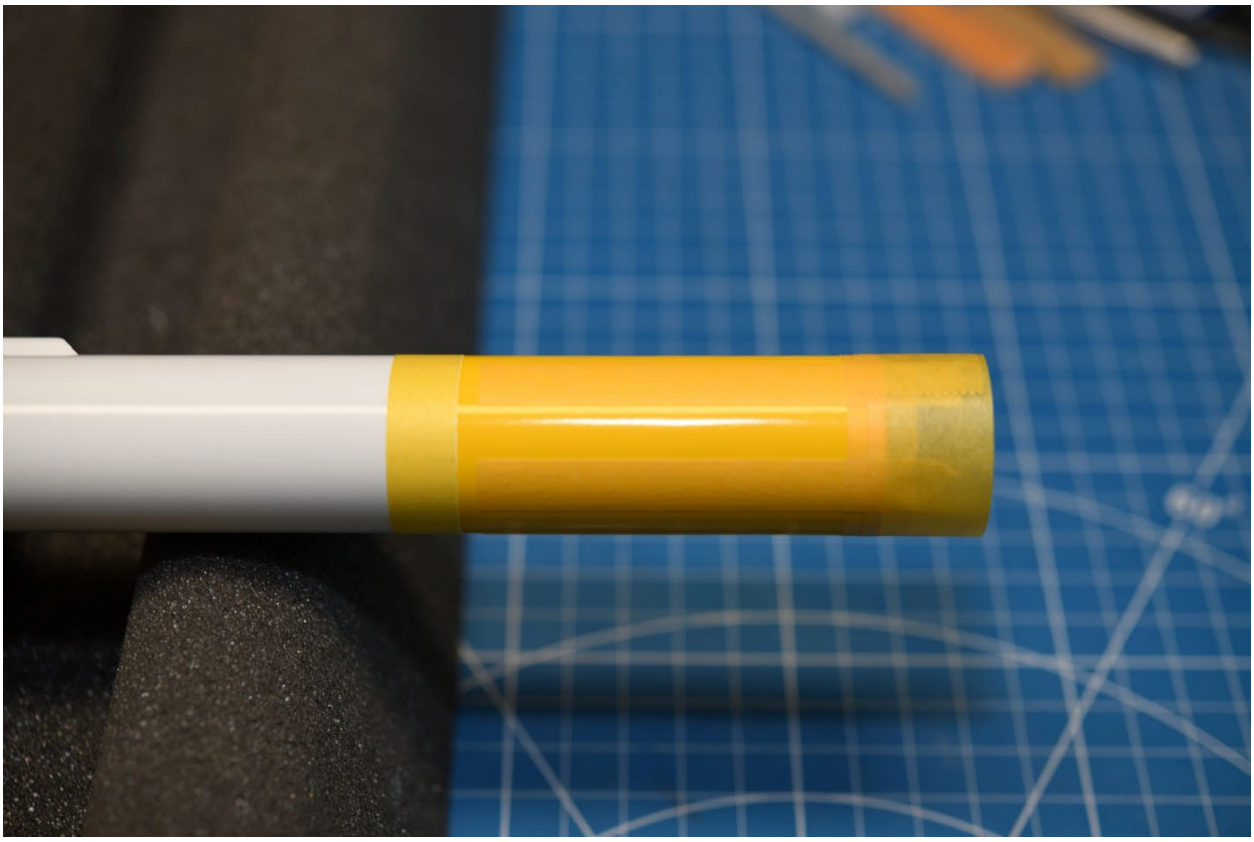

Photo 4: Lower Pattern Mask

If one looks super close, one can just make out a hairline gap between the masking tape on the left and the edge of the yellow paint. I did this to ensure the black paint would overlap and hide the aft edge of the yellow paint.

After an hour + of masking and only five minutes of airbrushing, we arrived at a finished lower roll pattern.



Photo 5: Masking Removed

Once the paint had cured, the upper alternate black checks were masked and then sprayed.

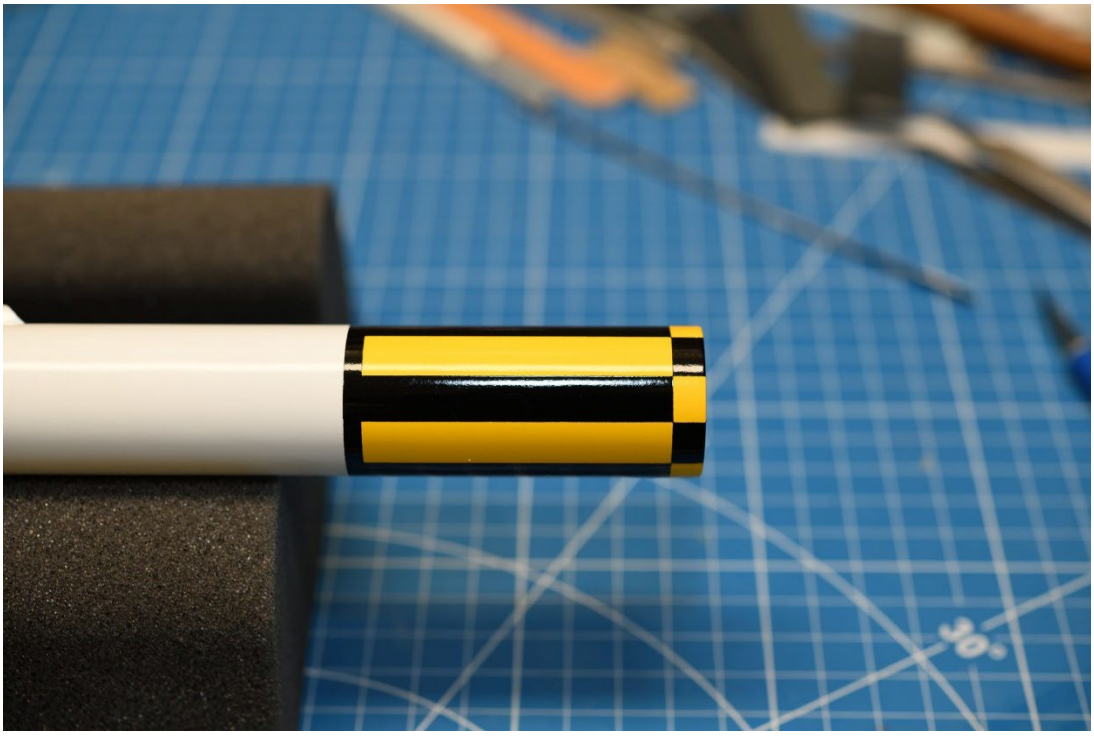

Photo 6: Roll Pattern Complete

Next, the Semroc Aphelion decal was placed with MicroScale's MicroSet.



Photo 7: Aphelion Decal

Once the decal dries, the model will be wiped down and then over-sprayed with GSI's GX100 Super Clear Gloss III. But in the meantime, we can take a photo of the completed model.



Photo 8: The Semroc Aphelion

And there you have it, a finished Semroc Aphelion. If you have the opportunity to travel to the Pittsburgh area October 21/22, why not join us for CMMF-XI? Info about PSC's annual Semroc commemorative Regional can be found at www.PSC473.org. Hope to see you there!