

## Bearhawk #164 “Three Sigma” Checkout Report

Date: 27 Feb 08

Objective: Spray glare shield area flat black.

Background: The area on top of the instrument panel under the windshield needs to be painted flat black to prevent reflections in the windshield at night. Because this area is inside, protected from the weather, and not on fabric, there is no requirement to use expensive fabric paint, such as Aerothane.

Therefore, I chose to use Interior Flat Enamel from the aviation aisle at Home Depot. However, this paint is mixed for rolling or brushing. A procedure needs to be developed for spraying.

Procedure:

1. Weigh an amount of paint.
2. Thin paint until it runs 17 to 20 seconds through a viscosity cup.
3. Weigh thinned paint
4. Calculate added weight of thinner
5. Calculate ratio of thinner to paint

Results:

The paint used was Behr Premium Plus Interior Flat Enamel. This is a water based enamel. I learned that “enamel” just means it dries to a hard finish. It does not mean that it is solvent based.



The color was flat black, with the colorants as shown.



I also used a light gray mix of this paint for the instrument panel.

340 grams of paint were added to the mixing cup. 280 grams of water were added to thin the paint to 19 seconds through the viscosity cup. That calculates to 100 percent paint with 82.3 percent water.

Spraying followed the basic Aerothane protocol. 1 light mist coat, wait 20 minutes. Slightly heavier coat, wait 20 minutes. Two more fill coats at 20 minute intervals. Sometimes I waited a little longer to let the rest of the water evaporate. Since this was a flat paint, you knew the water was gone when the gloss turned flat.

It is possible that less water is required. I had problems with some runs on parts hung vertically.

Conclusions: Thin Behr Premium Plus Interior Flat Enamel for spraying with no more than 82.3 percent water.

Recommendations: None.