

http://www.phrets.com/anastasia/

## Anastasia 2



This was the first year I attempted to build a Flying Crank Ghost, something I've wanted to do for years.

The Flying Crank Ghost was invented by Doug Ferguson of <u>phantasmechanics</u> in the mid to late nineties.

For those who aren't familiar with this classic already, it's comprised of a wire marionette of sorts, and is animated by means of a home built rig using a slow rpm gear motor mounted on an assembly constructed of either aluminum L channel or, as some people have preferred, wood. For more details, visit the site, although you'll get the idea from the description and photos below.

Everybody who builds an FCG, as they have come to be known, winds up with a ghost that is uniquely their own: no two FCGs seem to come out quite the same, even though in principle they're identical. There's a lot of room for creativity and interpretation of not only the marionette construction, but also the mechanical aspect. I chose to stick to the "book", so to speak, regarding the building of the motor mount assembly, although I did find a tip or two through trial and error that you might not find on their, or anybody else's, website. I took a little more liberty with the marionette design, something which the inventor encourages.

What follows is essentially a reasonably quick summary of my progress: while not enough detail to actually help you build your own, (which, given the amount of info already on the web is quite unnecessary), I will point out those things which I think improves the process or overall aesthetics of the project.



Starting with the crank arm itself, I felt it best not to drill the holes for the rope clamp exactly center - due to the relatively short length of the Dayton Z280's shaft, I set the clamp a little more to one edge. Unfortunately, the picture here is fuzzy, so it's almost impossible to tell.



I may have done this a bit backwards, but it worked just fine. I mounted the motor first, and attached the end braces afterwards. Some people make the basic frame first and then mount the motor. It did help to stabilize the assembly when attaching the end brackets though. If I were to do anything differently, I would have left a little more width to accommodate the motor: as it is, it's a darn tight squeeze. Then again, maybe the mount will act as a better heat sink that way, the motor does tend to get a bit warm.

Note the use of wood blocks to support the frame while allowing the shaft to face downward, the motor mount's normal operating orientation.



A distance shot of the assembly in the making. Notice the multiple styrofoam wig stands in the background, notably one covered in a blue velour or velvet. I've never seen one like that before. My wife got it from her Aunt. This becomes the single most differentiating factor of this ghost.



Here you can see the motor mount assembly almost finished.



## A different angle



Here's the completed assembly suspended in my attic, strategically placed in front of the attic window (not visible in the picture) for optimum viewing angle from the street.

Here I did the first test of the unit, and to my delight it worked flawlessly without kinking or binding or going up in smoke.

One tip: on the phantasmechanics website, they suggest using 3 in 1 oil to ensure smooth operation of the crank pivot: I'd suggest using powdered graphite instead - it attracts less dirt and is a superior lubricant. I also employed a turnbuckle in the rear for height adjustment, you want the whole shebang to be level. Later on, I took the assembly down and spray painted it all with flat black enamel paint.



You can see the blue styrofoam wig head clearly here. It didn't fluoresce quite as much as I'd have liked it to, so I brushed on slightly diluted liquid RIT brand laundry Whitener/Brightener to key areas, such as the cheekbones, nose ridge, chin, etc. It worked.

To accentuate the shadows, now that I had highlights, I needed something which would absorb or block UV, so I used some sun block cream, SPF56, on the eyes, lips, and underneath the cheekbones to create a slightly sunken look, which is apparent in the final photos. I have since gotten some RIT sun block, which I can dilute to give more control over how much UV blockage I want.



It's not quite evident here, but if you look closely, you'll see that I found that the "shoulders" seemed a bit too long, so I decided to bend the wire in a squared off zig-zag fashion along the top. This shortened the overall length satisfactorily but also served to provide more horizontal surface area for the cheesecloth to rest on and consequently, a more realistic bust.



The hands are cut out of standard manila folder paper. You can see the bottle of RIT whitener. I painted the hands blue, to match the head, and after they dried, brushed on the RIT to give it some fluorescence.

I couldn't get my hands on fluorescent blue paint, but it probably wouldn't have matched anyway.

You might also notice the LEDs I bought but never used. I even bought a pair of blue LEDs, which I thought would work a lot better than the red. In the end, I opted not to use them at all.



Now this is just creepy. Perfect!

At this point, I decided to name her, so let me introduce you to Anastasia.

This is a test picture, pretty much the way I finally decided on hanging the cloth. Of course, the final version had more tweaking, and creative cutting and shredding of the cloth to age it. I think here, you can see that the subtlety of omitting the LEDs comes through and the marionette just has a very gothic, genuine look to it.

More importantly, that special blue velour wig head has a unique look of it's own. I didn't cover the face with cheesecloth as outlined in the usual directions, I didn't feel I needed to, and I sure didn't. So now I'm on a hunt for more of these wig stands, but they're old and I have yet to find another.



Just as I was ready to finish up the shroud, the wire loops started to kink. I had to rebuild the left arm entirely, and what I discovered is that when making the loops out of the coat hanger wire, make sure to bend the loop *away* from the direction the joint bends.

This way, the lower piece may ride up on the higher piece, but can't get stuck on the top of the loop.

Also, don't make your loops any larger than they absolutely need to be. Too small, and they'll bind, but too loose, and there's too much flopping around and again, they'll bind. Lastly, you'll notice I used white coat hangers for my coat hanger wire. I tried painting the wire black, and found it to contrast too much with the cheesecloth rather than blend into the background, so I tried alternating colors by painting every other inch black, like zebra stripes. It probably wasn't necessary; in fact, I think the plain white is probably best.



Sorry, this picture is clear as mud. I made a sharp 1/2 inch bend in the wire behind the hand to act as a catch, just in case it worked loose and decided to take a trip down the arm. This aspect still needs work though. For starters, I'd prefer to use something more authentic for the hands than paper, but I was running out of time. Expanding foam has never satisfied my sense of realism.



Now we're getting somewhere ..



The window atop my house, Anastasia's portal to our world.



\*Sigh\* My digital camera sucks at night shots. I'll have to wait until our SLR shots gets developed... but here she is, making her debut.



And, of course, the whole package. Again, much too blurry to be very enlightening, but you do get the general idea. At least it was atmospheric.

Once I get the camcorder video digitized and the SLR shots developed, I'll update this site with much better pictures.