Spookineering.com

http://spookineering.com/Jackula.html

Count Jackula

The Beginning

This project started out as just a different idea for a 3 axis prop head mount.

There are a multitude of designs out there for a 3 axis mount (pan, nod, and tilt) and most work pretty well. I just wanted to try one with parts I had laying around. I also wanted something besides a skull to animate. A foam pumpkin filled the bill.

All the materials used are readily available from better hardware stores, and all fabrication was done using common hand tools. (except for a drill press)

I started with a 1 1/2" length of 1 1/2" square aluminum tubing then drilled it out for 1/8" ID bearings using a hole saw. This is the mounting block that everything else moves on.



Then the "U" joint was fabricated using aluminum channel. The cross block is made from 3/8 thick stock. After drilling and tapping, bushings were used for smooth movement. Here you can also see how the tilt/nod servo bracket was mounted to the bottom of the "U" joint. The pan servo is mounted to the main bearing block and moves the universal joint.



Tilt and nod are done with the use of a "V tail mixer" available at most hobby shops made by DuBro who also makes a great assortment of linkages and small parts used on radio controlled (R/C) model airplanes.



You can see here the upper attachment of the 2 link rods that control tilt and nod movements as well as the pan servo mount.



The pan servo with linkage to the base of the U joint.



Now, to get this on to that!



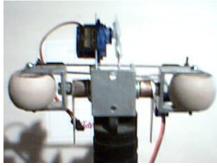
Since foam pumpkins are very light weight I thought this might be good to start with. A 1/4" ply piece was cut to fit for the central mounting surface.



This project was turning out a bit front heavy, so it required a "counter balance" spring to take some load off the nod servo and linkage.



With lots of room left over, I fabricated some 2 axis eyes. Again, using cut up scraps of various aluminum shapes. Since there was almost no force required to move the eyes, micro servos were used. I'll do a how-to on the eyes at a later date, for now, here's a couple of pics.





And now, it's time for a Face!

The Middle

So I had a nice working 3 axis pumpkin with eyes that moved. Not very impressive as a prop. He needed a face, something to give him a little personality.

I was discussing the project with my friend Laurie Franklin. An accomplished sculptor and artist in Southern CA who has done some remarkable work with

mache' and other mediums. You may know her from the forums as "Lauriebeast". After trying to explain to me how to use different sculpting mediums without any comprehension on my part, she said "Oh hell, just ship him to me!" So I did!

Laurie is the "Creator", I'm just the mechanic!



Indeed, not very impressive in the "looks" department, he got boxed up and sent off for his "procedure".



The following photos were sent to me by Laurie to document the evolution from "pumpkin" to Count Jackula









His Resting Place

Beginning The End

When he arrived home, and after I picked myself up off the floor, all the plans I had for a simple mount went out the window. He would have to be displayed prominently! That's when the idea of a tombstone hit me.



I started by constructing the base and center supports from 3/4" plywood. Jackula had put on a bit of weight since I sent him off, so a heavy sturdy base was in order.



Then layers of 2" foam were glued to it until it looked like a tombstone.



After some filler and a coat of flat grey latex paint it started to look like something.



The name and date plaques were then carved and glued on, but it looked too new. Jackula is OLD!



Since Jackula had vines and such on his face, these were added using Celluclay.



After some airbrush work to "age" the tombstone, Jackula was finally mounted and ready to perform!