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The Festival Is Cock-A-Doodle-Now

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The Festival Is Cock-A-Doodle-Now

by

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Thesis

Presented to the Faculty of the Graduate School

of The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Fine Arts

The University of Texas at Austin

May 2017

FORWARD

Journal Entry March 29th, 2017.

"The journey is the process. I have achieved my goal even if no one ever sees the final product. This has been my artist's voyage. It has challenged, inspired, stretched, stressed, elated and strengthened me. It has brought me more confidence as an artist then I could have imagined. I feel at my fullest potential when I step into my studio and begin to work."

DEDICATION

To my parents for loving and supporting me in every way. For teaching me the value of working hard and seeing the good in everyone. To all the inspiring teachers I have had throughout my education, in and out of the classroom. They guided and pushed me to meet my fullest potential. To my amazing friends and family for supporting me and being there to keep my life balanced with not only art, but laughter, nature, music and tacos.

ACKNOWLEDGMENTS

I would like to express my pure gratitude towards Jim Glavan for accepting me into this outstanding program. He gave me wings. What starts here truly changes the world. The knowledge I have gained is beyond what I even imagined and hoped for. I am an artist. If you can dream it, I can build it. Jim Glavan facilitated this in me and it is the biggest gift of my life.

I would also like to deeply thank everyone who collaborated on my thesis and made this dream possible.

Thesis Advisors
James Glavan & Dr. Megan Alrutz

Puppeteers
Emma Huff & Danielle Ruth

Actor
Jill Young

Dramaturg
Bianca Barrera

Videographer
Jon Hass

ABSTRACT

The Festival Is Cock-A-Doodle-Now

Jacqueline Rose Heimel, M.F.A.

The University of Texas at Austin, 2017

Supervisor: James Glavan

By designing and building a nine-foot rooster puppet I am utilizing my foundation in: pattern making, sculpting, mold making, fabric paint and dye, puppet building, garment construction and project planning. I will use the skills I have obtained in my master's program while pushing them to new levels. I chose to challenge myself with a materials budget of only seven hundred dollars when a project of this scale could easily cost fifteen hundred to five thousand. This budget limitation forced me to utilize products and resources already available in our fabric and craft supplies and very carefully plan out where my money would be best served. I feel the task of learning how to build big on a small budget while maintaining quality best emulates a professional theatre setting. My second objective was to learn how to build on a large scale while staying under fifty pounds. It was important to me that this puppet stay light enough to be sustained for a minimum of thirty minutes by a variety of body types. My third objective was to make the puppet to be easily disassembled and transported in my Honda Fit. This project was accepted into the Cohen New Works Festival and concluded with nine live performances of Randy the Rooster and his Farmer Friend improvising with the public. This project demonstrated not only a technical proficiency but the ability to convey personality and story with a large-scale puppet.

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CHAPTER 1: INTRODUCTION

I. Questions

Project Description: To design and build a nine-foot rooster puppet, utilizing my foundation in: pattern making, sculpting, mold making, fabric paint and dye, puppet building, garment construction and project planning. In my technical plan for this character there were four mechanical parts that were key elements of my design: articulating feet, blinking eyes, a moving beak and an articulating head and neck.

How much does a nine-foot rooster weigh? This was my biggest question because it was in turn my biggest concern. From my professional experience, puppets of this scale can weigh between sixty-five and one hundred pounds. This makes them only operational by extreme athletes, typically men, and only operational for up to ten minutes at a time. My initial plan was to build this puppet suit for me, a 5'4" female weighing in at 125 pounds. The requirements for overall puppet weight and movement needed to conform to my body type and fitness level.

My desire to serve as the puppeteer was twofold. First, I spent 20 years of my life performing and knew that I would get much enjoyment out of bringing Randy the Rooster to life. Second, if I was the performer, then Randy would only need to be built to fit one specific person. This was the first walkabout costume I had ever made and I fully expected there would be challenges with weight distribution, balance, the fit of interior structure, and overall comfort.

Two weeks into the construction process, my fitness regime and my construction work schedule became overwhelming. There were simply not enough hours in the week to devote

ample time to both activities. The logical solution was to audition trained performers to join the project as puppeteers. I was able to choose athletic performers who moved well, identified as female, were visibly strong, and were between 5' and 5'4" tall. It was important to me that they were female because I wanted this puppet, which was ultimately worn and operated on the body as a suit, to be accessible to a variety of body types, including my own eventually. The goal was to keep the suit to a weight that my performers could maintain for a thirty-minute set. The challenge was that I had no way to gauge how much the puppet suit would weigh until it was completed. I could find no examples of large scale rooster puppets or information about the specific weight of large puppets in general. My plan therefore was to make weight the guiding force behind every design aspect of the project.

Lightweight /strong materials are never light in price. This is where my budget of 700 dollars limited my options. My first impulse was to build the frame out of lightweight and very sturdy aluminum tubing which is not very expensive—however, the structural welding of the aluminum connections is costly. This route would have consumed nearly half my budget. I knew that PVC pipe was commonly used in the engineering of large-scale puppets. However, the stronger it is, the heavier it gets. I did some research (wandering the aisles of Home Depot) and discovered that the plumbing section is a puppet builders dream. The variety of pipes, tubing, connectors and angle joints available at a very affordable price fit all of my engineering and budgetary requirements.

Once I discovered the plumbing section at Home Depot, my question became: will these plastic products be strong enough to support all that Randy the Rooster would become? The PVC in particular lent to my objective of having Randy, the puppet, constructed in autonomous, yet interconnected sections so that they could be disassembled to fit into my Honda Fit hatchback. I

wondered if this requirement would present additional issues in the build process and for the longevity of Randy? Due to the extreme height and width that I planned for Randy, I was also faced with choosing materials for the body frame that were strong, yet flexible enough to conform to doorways and small spaces. Early on in this project, it became clear that my engineering skills would be tested.

II. Project Overview

In the spring of 2016 I applied for a GO-GRANT from the Cohen New Works Festival. I was very grateful to receive a grant of 325 dollars. Over summer break of 2016, I built a $1/6^{th}$ scale maquette of Randy the Rooster. This time period was completely experimental and unguided by my thesis advisor, Jim Glavan. It proved very useful as a way for me to try out products and ideas on a small scale before committing to them. Now that the project is complete it also serves as a very entertaining reminder of how far I have come.

Illustration 1: 1/6th Scale Maquette

Returning to school in the fall of 2016, Jim helped me understand why the only part of my maquette I would be moving forward with would be the backpack as a base. Although I could have progressed faster with Jim's help throughout the maquette building, it was an essential step for me to get as far as I could on my own and to then humbly take in the professional advice of an experienced walk-about puppet builder.

The next step was to research products I was considering—from fabrics to foams. Choosing the feather material and design was such an important decision, as it became the part of the puppet that was most visible. I anticipated the combined mass of the feathers to be a

significant part of the total weight. However, I was most surprised to learn that the twenty-four yards of silk that I chose only weighed four pounds, including shipping materials.

During this research period, I was also working on an application for the Cohen New Works Festival which would take place April 10th-14th 2017. I believed that Randy, in addition to making an amazing mascot for the festival, would bring awareness to the ongoing political movement on UT campus of, "Cocks not Glocks," (a student led protest, involving strapping large dildos to the outside of backpacks in response to the open carry law passed in August) Randy the Rooster fit with this style of protesting of fighting absurdity with absurdity. At the end of November, I found out that my project had been accepted into the festival. Fortunately, this acceptance came with a 600-dollar grant for materials!

Come winter 2017, Jim and I agreed that the support base for my giant rooster would be a backpacking frame fitted with PVC pipe extensions. The body and neck structure would be a series of plastic hoops attached to mesh skin (like a period hoop skirt), the head, cast in plastic resin, and the feathers laser cut from a silk satin fabric. My desire was to jump into the building process, working immediately from what I already knew and finishing with the areas I was not sure of. However, through Jim's guidance I was convinced to start with the areas of this project that needed the most R&D (research and development). To this end, I started by completing full-scale technical drawings of the eye blinking and beak opening mechanisms as well as the feet mechanics. From these technical drawings, I built and testing a full-scale mock-up of one rooster foot as the engineering to successfully accomplish this part of the build was an area in which I did not feel confident. From there, I purchased the bulk of materials needed for the entire build, and solidified the feather color palette. This process was a mental struggle for me as it is not how I am inclined to work, but how I will always conduct builds from here forward. Having a tested

plan for the full project before entering into any one part means your mind can truly focus on the task at hand. I've come to know that overall it is a much more efficient method for planning a build.

During this time, I also held auditions for two puppeteers and the character Farmer Friend, whose job was to accompany Randy during his performances. The performance was to take place outside of the Winship Drama Building during times of the day that UT students would be traveling from one class to another. This gave us maximum exposure to the UT community. The rehearsals evolved around improvised scenarios with the public. April 10th-14th, 2017 Randy was introduced to the UT community as part of Cohen New Works Festival.

I will outline details of the build of the head as well as the evolution of the performance, the puppeteers experience, reflections on articulated feet and my artistic process in later chapters.

CHAPTER 2: MOTIVATION AND SIGNIFICANCE

Why a giant rooster? This is a very valid question and the one I have received the most throughout this process from colleagues and audience members. The short answer is because I was born in the year of the rooster. The long answer is that I have had a love for chickens since a young age. When I was five years old my mother brought some baby chicks home for us to raise as a family. A neighbor of ours eventually got fed up with the five-a.m. alarm clock and not so politely requested that the chickens no longer be members of our community. Luckily a family friend had a farm only ten miles from us where the chickens could live out their lives in full volume and where we could visit any time we pleased. That was the beginning of my bond with chickens, but not the end of my interest in them by any means. There are many photos of me holding other people's chickens and roosters throughout my life. The key to catching chickens is to surprise them with a quick pick up. They generally have something to say about it, but once tightly held in your arms, they are quite content. It is fair to say that I am a bit of an animal whisperer though, so not everyone may have the same luck with chickens.

Outside of my chicken holding, I have spent most of my time in the theatre. Mainly, I performed on stage, but I happily volunteered for any area in theatre where help was needed. I built sets, stage managed shows, ran lights and even designed costumes for a few productions in high school. Upon graduation, I attended a traditional acting conservatory in California for one year before discovering my true passion was in devised work in physical theatre. My research into this field led me to attend Circomedia in Bristol England, the Academy for Contemporary

Circus and Physical Theatre. There I fell in love with street theatre and European style clowning (think Kramer from Seinfeld not your American birthday clown).

Upon returning to the US in 2001, I was discouraged by the lack of access and support of street theatre, circus and especially clowning. Nowadays, a class in circus arts is as common to find as one in yoga. Determined to pursue my love for these art forms I moved to Alaska for the summer to teach clowning to teenagers for TBA theatre in Anchorage. Though it is not known as a booming theatre hub, there was a very strong community and I absolutely fell in love with the beauty of Alaska and decided to make it my home for the time being. During this stay, I answered an ad for an MC at the Alaska State Fair. I was hired to MC for such prestigious events as: Dance till You Make Butter, a scarecrow building contest, and pig herding.

Illustration 2: Scarecrow Building Contest

I took my position as MC very seriously and curated a character and a costume to match each event; I am most proud of my scarecrow costume (See Illustration 2). After the pig herding contest, in which I wore a pink tutu and told very corny jokes, I was approached by a scout from the Washington State Fair. He was very impressed with my work and wanted to hire me for their fair the following month. However, he requested that I come up with a new elaborate costume just for their event. I responded instantly with, "How about a giant rooster?" It had been at the back of my mind since circus school that what the world needed was a huge rooster to show up to every fair, festival, parade and grand opening! The scout loved the idea and so I went about finding a technician to design and build my giant rooster. Before construction had begun, I was informed that the job fell through. I was very disappointed, but that's show business.

Fast forward 14 years, and building a giant rooster puppet was still at the top of my bucket list. When picking a thesis project, it seemed most appropriate to take on building my rooster since I now had the skills to build my dream bird. Building a giant rooster would not only utilize all of the skills I gained while at UT, but it would push my work to new levels and provide an amazing product that could be my calling card for the rest of my career. Plus, according to the Chinese calendar, we are currently celebrating the year of the rooster!

CHAPTER 3: SELECTED PROCESS

I am often asked which part of building Randy was most exciting to me. This is a difficult question as I honestly enjoyed every part for different reasons. I have chosen to elaborate on the two areas where I feel my skills as a technician were most challenged and therefore I felt most elated when successful.

I. Constructing the Head

The most memorable moment of this whole build was when I finally got Randy's eyes to blink. In that moment, he came to life and it was truly magical. Overall, building the head was the most interesting part of the process because I had to meld engineering with art and combine many different materials and skills into one area of the puppet.

A. Sculpting and Molding

Plastalina is a non-drying clay and comes in three consistencies: soft, medium, and medium-firm. For the skull sculpt I used a medium firmness. I started with a styrofoam head as a base. I cut away the parts of the styrofoam that I didn't need, stuck a long plastic chop stick into the head to help support the weight of the beak, wrapped it all in tin foil and then added clay.

Illustration 3: Skull Sculpt Out of Plastalina Clay

When the sculpt was completed I sprayed it with four light coatings of Krylon Crystal Clear to add layers of protection (See Illustration 3).

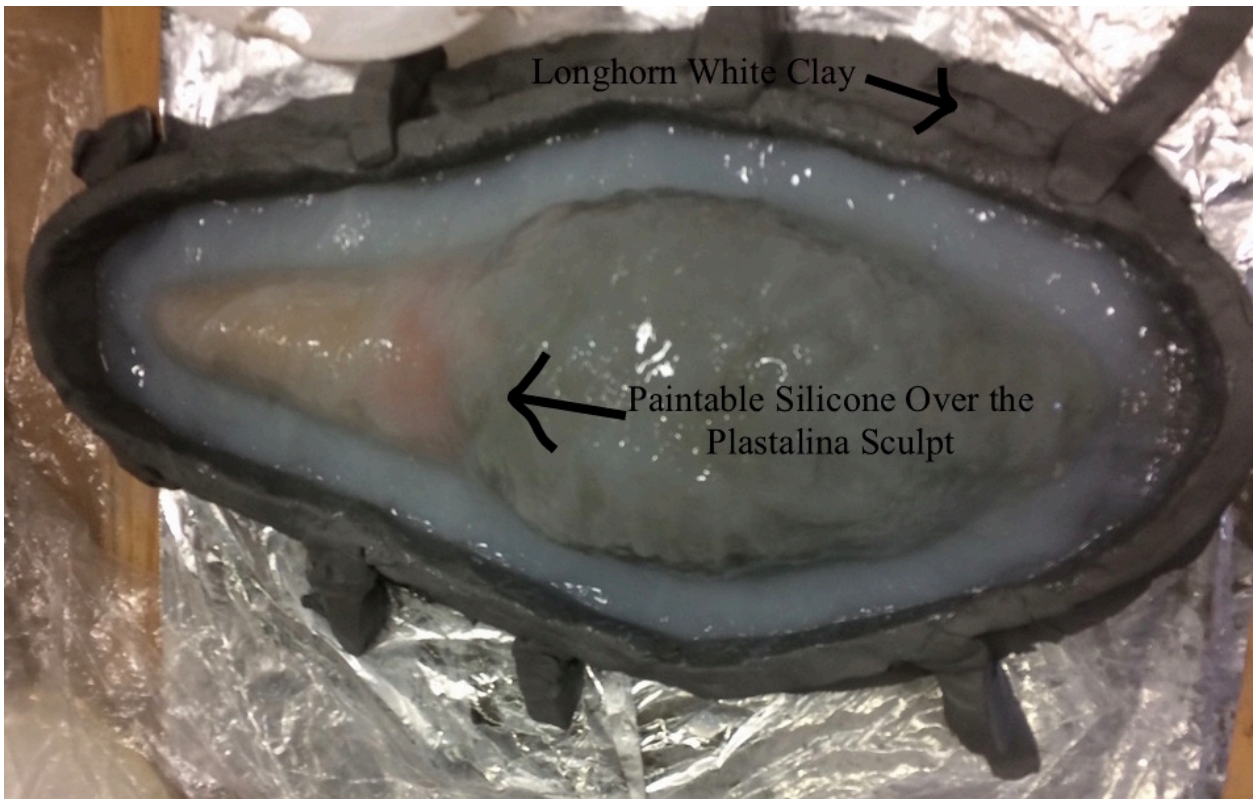


Illustration 4: Creating the Silicone Mold

To contain the liquid silicone mold material, I built a 2” high wall of water-based clay called Longhorn White (from Armadillo Clay in Austin) around the head sculpt leaving a 1” space between the wall and the sculpt. I used Monster Magic’s, two-part paintable silicone to make the mold. Equal parts A and B of Monster Magic were mixed together and then poured over the sculpt in a thin layer. I repeated this process three times. I found that while I was waiting for the silicone to cure it would start to slide down from the top of the sculpt so it was necessary to keep brushing it back up till it set.

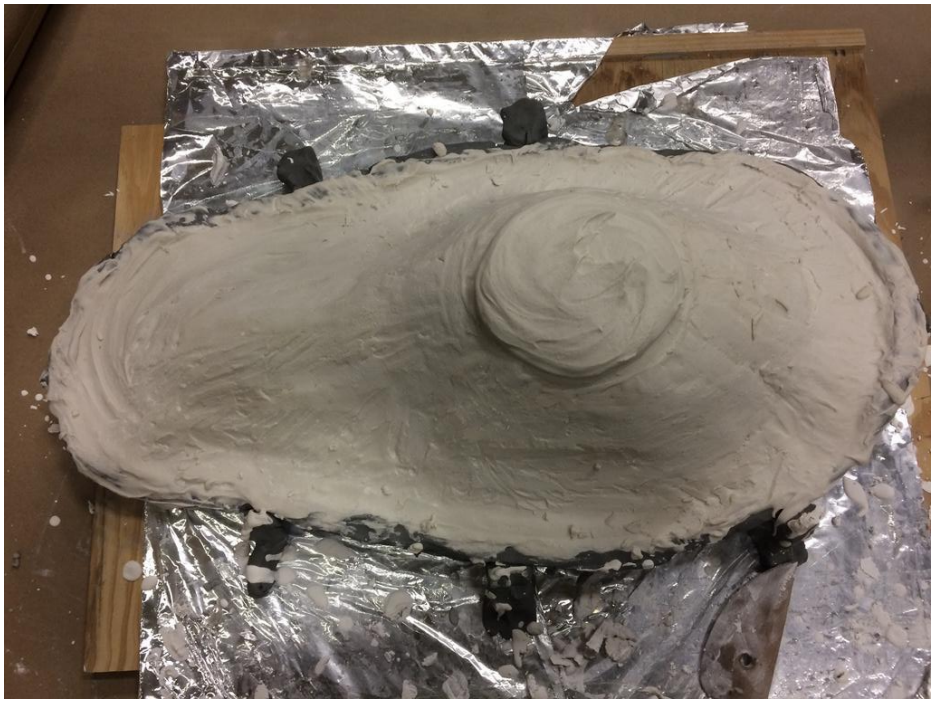


Illustration 5: Plaster “Mother” Mold

When using a flexible mold such as silicone it is necessary to make a supportive structure called a “mother mold” out of a hard product such as plaster or a stone in order to support the flexible mold (Plaster of Paris is not recommended). I used USG HYDRO-STONE Brand Gypsum Cement for this part. I applied six different layers of the plaster/stone in order to achieve a 1 ½ inch final thickness on the mother mold. Each layer gradually gets thicker as you go, starting with a consistency of pancake batter and ending with the thickness of bread batter. The fifth layer contains strips of burlap dipped in the plaster to add extra strength to the mother mold. The plateau is then created in the last two layers, creating a flat spot for the mother mold to sit on when it is flipped over to be filled. When finished with the last layer, I let it set up overnight.

Illustration 6: Plastic Resin Cast of Skull

In an attempt to achieve a 1/4th inch thickness of plastic resin throughout the skull, I prepared small batches of Smooth-On 300. This is a two-part product; when mixed with equal parts by volume, sets up in about 3 minutes. It is important to continually slush this viscous liquid around the mold until the second it began to set up. This proved to be the trickiest part of the whole process because gravity pulls all the resin to the bottom of the mold if you do not keep the mold moving. It is also quite difficult to perfectly time the curing process so that the resin meets the edges of the mold before it begins to solidify.

Illustration 7: Plastic Resin Skull and Beak-Sanded

Once the skull/upper beak and the lower beak finished curing, I removed them from their molds. It is important here to mention that personal safety must be maintained when working with chemicals and electrical tools. To that end, with a dust or particle mask on, I used the sanding attachment on my Dremel Power Tool and removed any excess resin. With the Dremel Power Tool, I smoothed the edges of the cast and sanded down any areas that were noticeably thicker than others.

B. Eye and Beak Mechanics

Illustration 8: Connecting the Beak

In order to animate the upper and lower parts of the beak, I fabricated a hinge mechanism from Plexiglass. I found this product to be somewhat useful, but it was too brittle and broke after a few tries. Then I switched products to a type of thermoplastic called Worbla (a plastic material that comes in sheets that can be shaped when heated). I cut two small strips, heated them and pressed them together for extra strength and then molded them to mimic the curve of the outside of the beak. This worked great. I drilled holes in the beak and punched holes in the Worbla to fit the machine screws through. The screws had to be left a tiny bit loose so that the beak could easily open and close. I used a drop of super glue on each nut to keep them from getting any looser than desired.

Illustration 9: Drilling the Hole for the Eyeball

To create the eye socket, I drilled a small ¼" hole in the middle of where the eye ball would go to give myself a starting point. Then I used my largest spade bit to drill a bigger hole. I then used the sanding bit on the Dremel Power Tool to enlarge the opening to meet the specifications of my technical drawing.

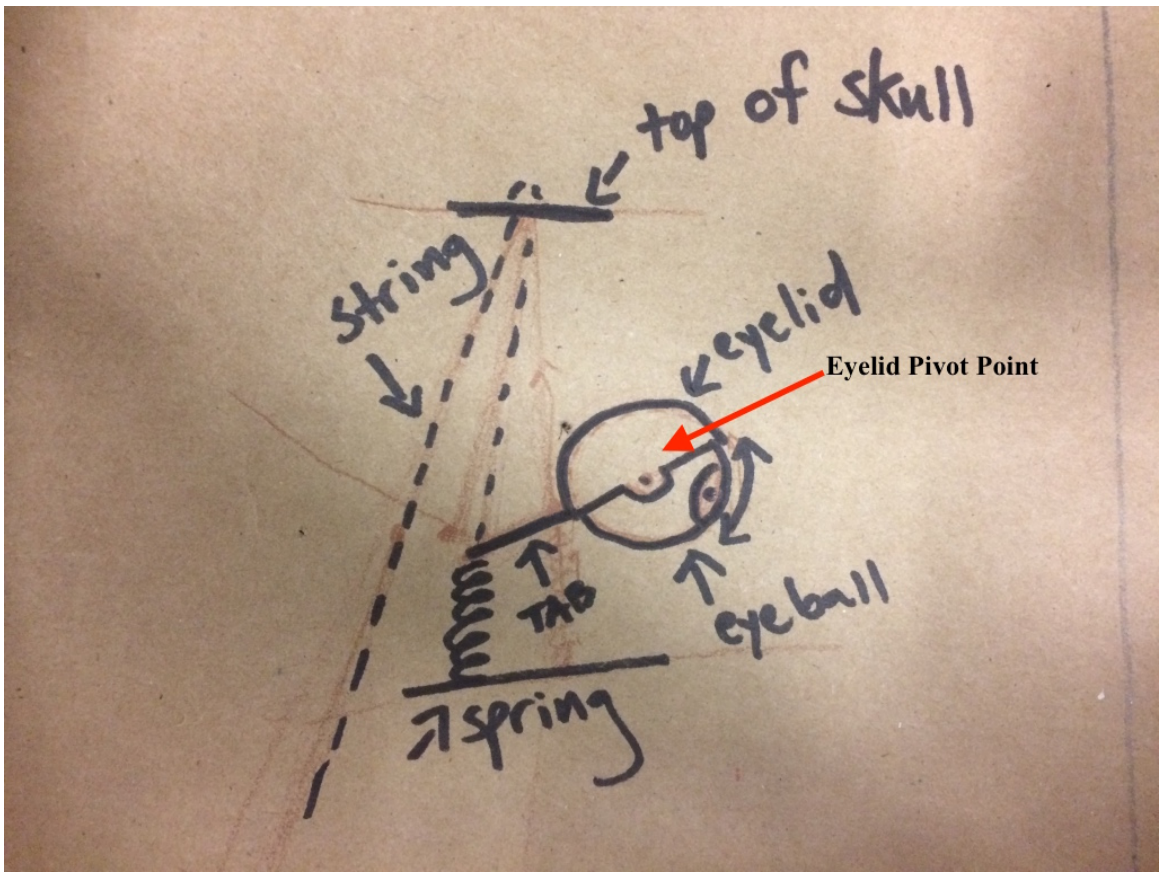


Illustration 10: Technical Drawing of Eye Mechanics

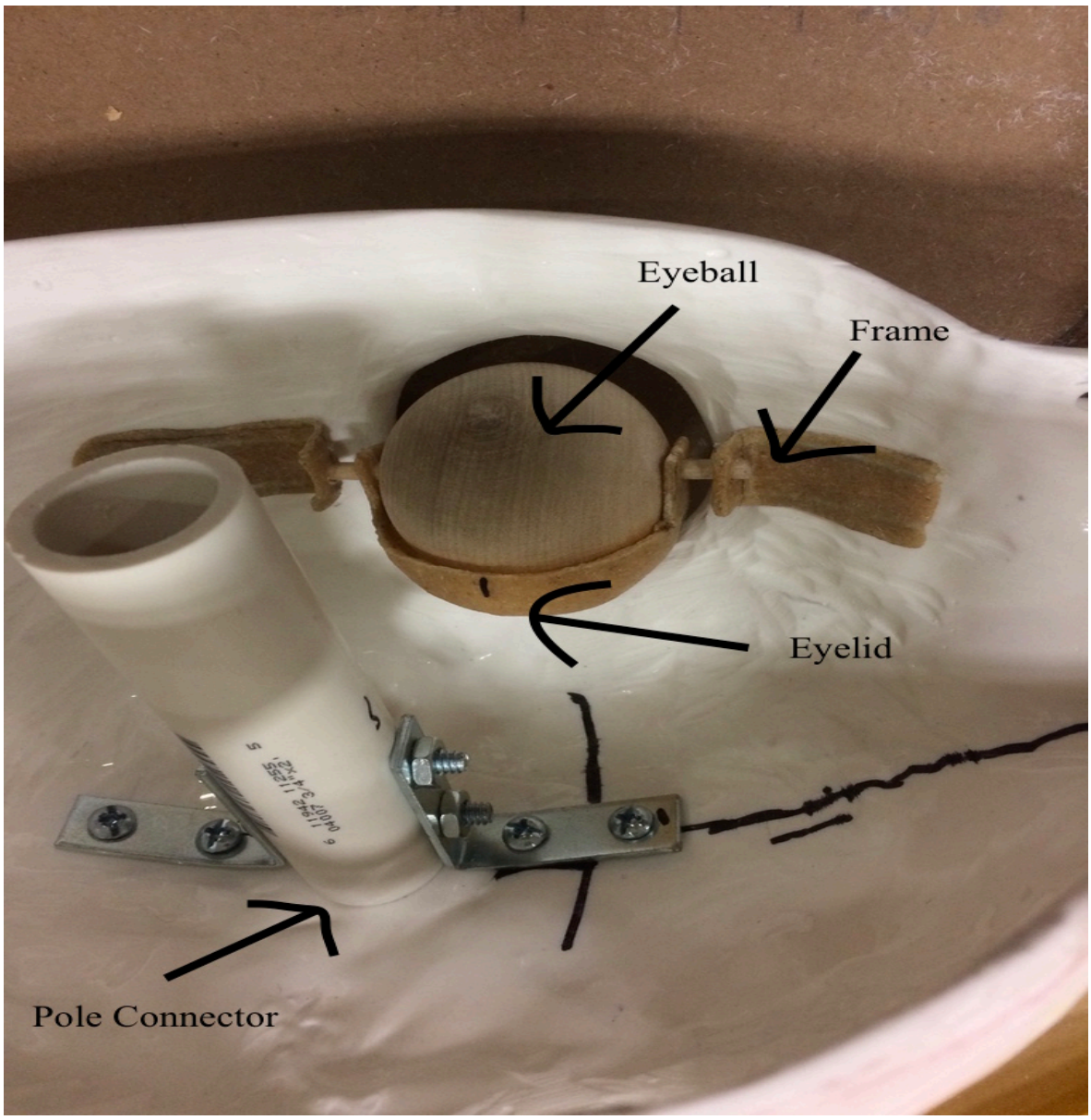


Illustration 11: Inside of Skull / Eye Mechanics / Pole Connector

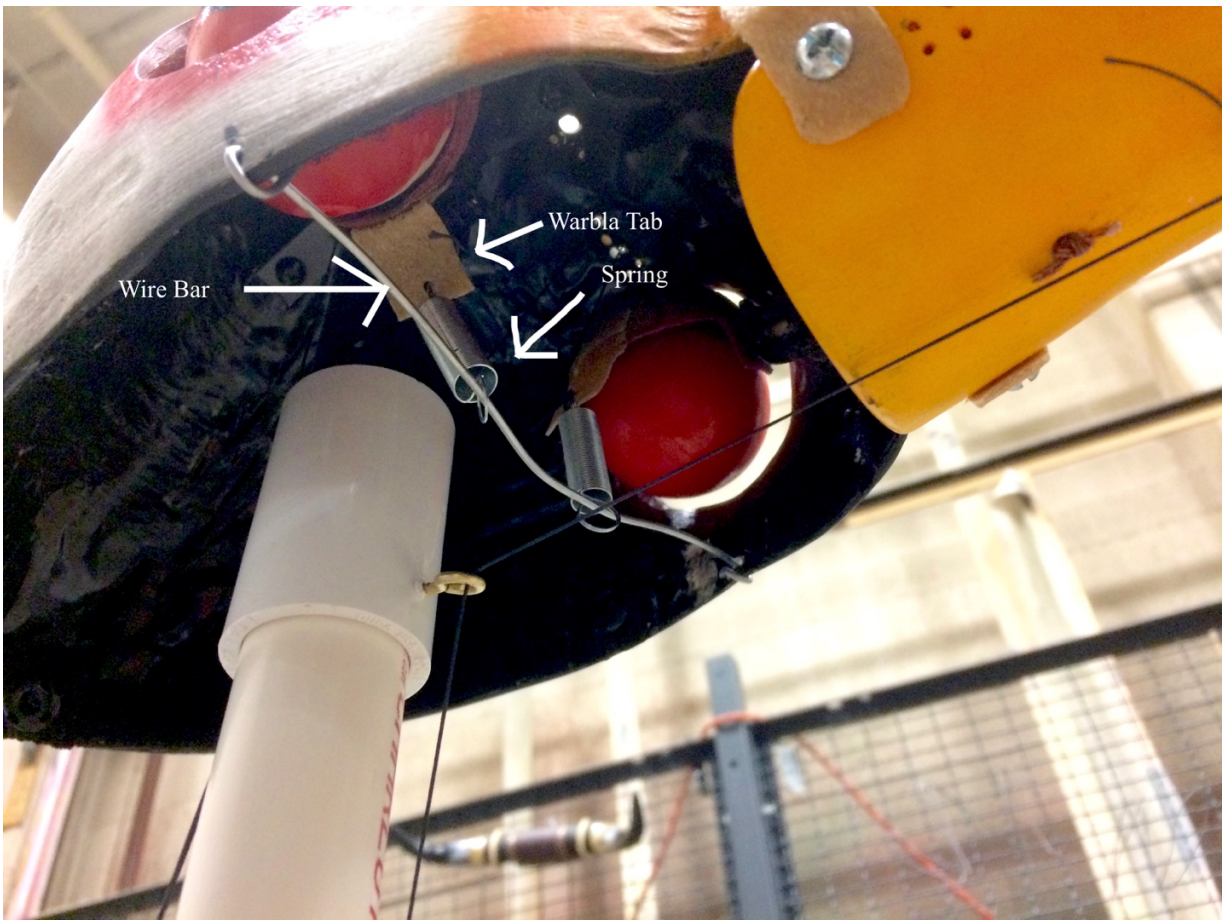


Illustration 12: Eyelid Tab and Eye Ball Strings and Springs

Illustration 13: The Control Lever for the Eyes and Beak

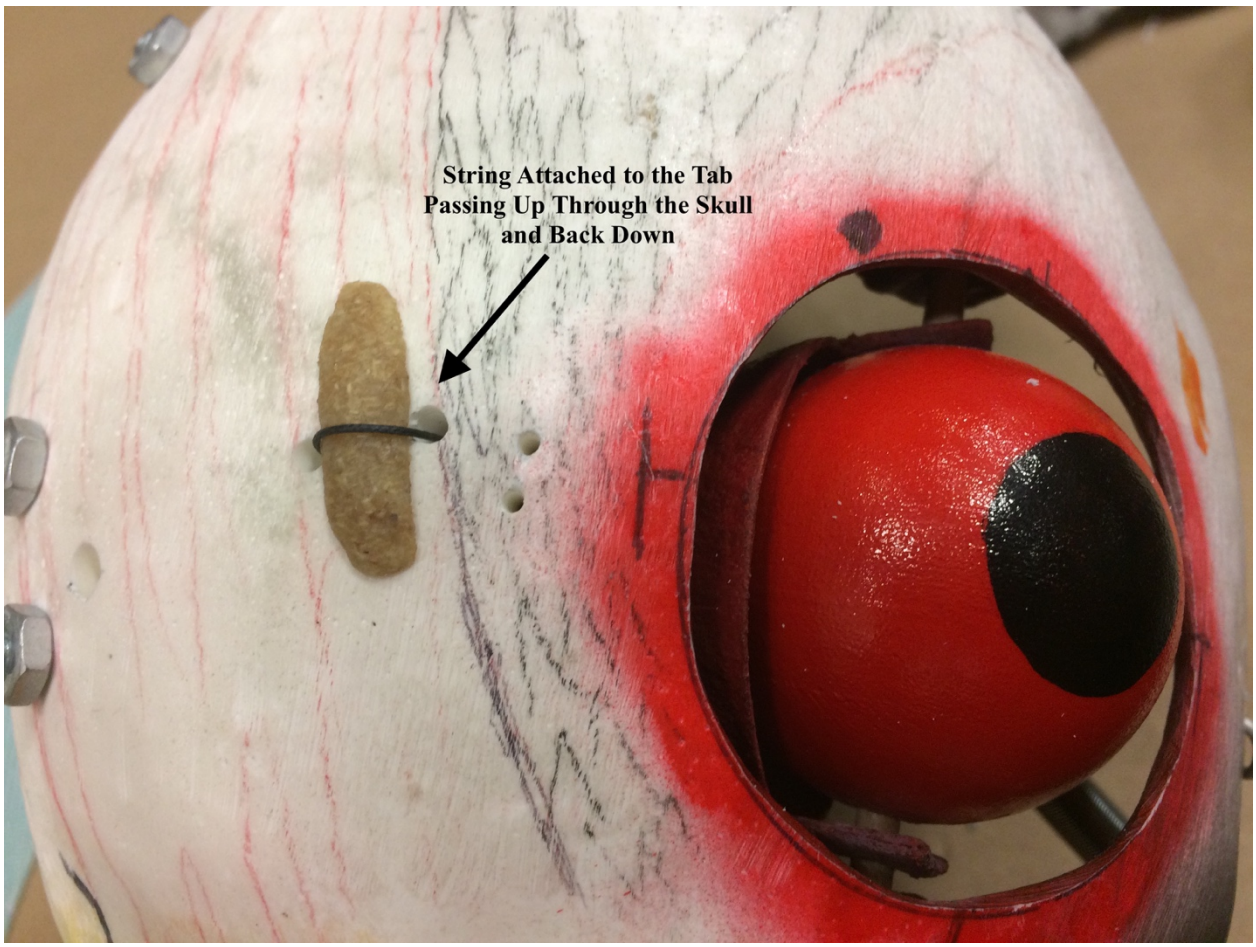


Illustration 14: String Going Through the Skull

- To truly bring Randy to life and convey personality it was essential that his eyes blink, and his beak could open and close.

As shown in illustration 11, the eyeball is made from a wooden ball into which I drilled a hole through and through. A wooden dowel was inserted through the hole and was slotted into the frame holding the eye in place. The frame (See Illustration 11)is made of two strips of Worbla fused together over 16-gauge wire for extra strength. I used super glue to attach the Worbla strips to the skull. The eyelid was made from Worbla and formed over the eyeball. To get the correct size needed, I built up the wooden eye ball a $1/8^{th}$ of an inch with clay and then wrapped it in tin

foil so I could form the Worbla over it without it sticking. I trimmed away the excess Worbla to get a clean line at the edge of the eyelid. I added rectangular tabs to the edge of the eyelid for the dowel to run through, connecting the frame, eyelid and eyeball. In my first attempt to make the mechanism that opened and closed the eyelid, the eyelid only closed half way. As shown in illustration 10 and 12, I added a Worbla tab to the center back of the eyelid in order to extend the pivot point and create the distance needed for the eye lid to completely close. In a hole punched in the end of this tab a spring and a string are attached. The spring attaches to the wire bar that runs under the eyes and connects to the skull and the spring keeps the eyelid in the open position at all times until the string is pulled. The string runs from the tab on the back of the eyelid, up into the top of the skull and back down through the skull (See Illustration 14). The string had to go all the way through the top of the skull and back down in order to gain the full advantage of the length of the tab added to the eyelid. I learned over time that right angles create too much friction against the control strings to allow for smooth movement. This makes it harder for them to do their job and the constant rubbing will eventually break them. I fixed this problem by using a small domed shaped piece of Worbla to create a rounded transition for the string to slide over when it traveled through the top of the skull and back down. The strings that control the eyelid blinking are attached to a control lever on a pole connected to the head (See Illustration 13) The strings from both eyes connect to the control lever, which sits at a comfortable position on the pole for the puppeteer to pull without having to take their hand off of the pole. The control lever is made of a ½ inch wooden dowel, screwed to the PVC pole with a bolt and washer set. The wooden disk between the dowel and pole offers ease of movement. When the lever is pulled down, the eyelids are pulled shut. When it is released, the spring connected to the eye lid pulls the eye back open. The pole connector pictured in illustration 11, is a 3-inch-long piece of PVC

tubbing specifically designed to connect two pieces of PVC together. In my project, it is used to join the head to the PVC pole that the puppeteer holds. The connector is needed so that the head and the pole can be disconnected and packed up for easy transport. I originally thought of using a flag pole holder but upon further investigation I realized there was not enough room in the top of the skull and I needed to invent another method. I conferred with Connor Hopkins, the artistic director of Trouble Puppet Theatre Company here in Austin, and he suggested using the L-brackets to screw in a piece of PVC that could then be connected to the long PVC pole by a PVC connector piece.

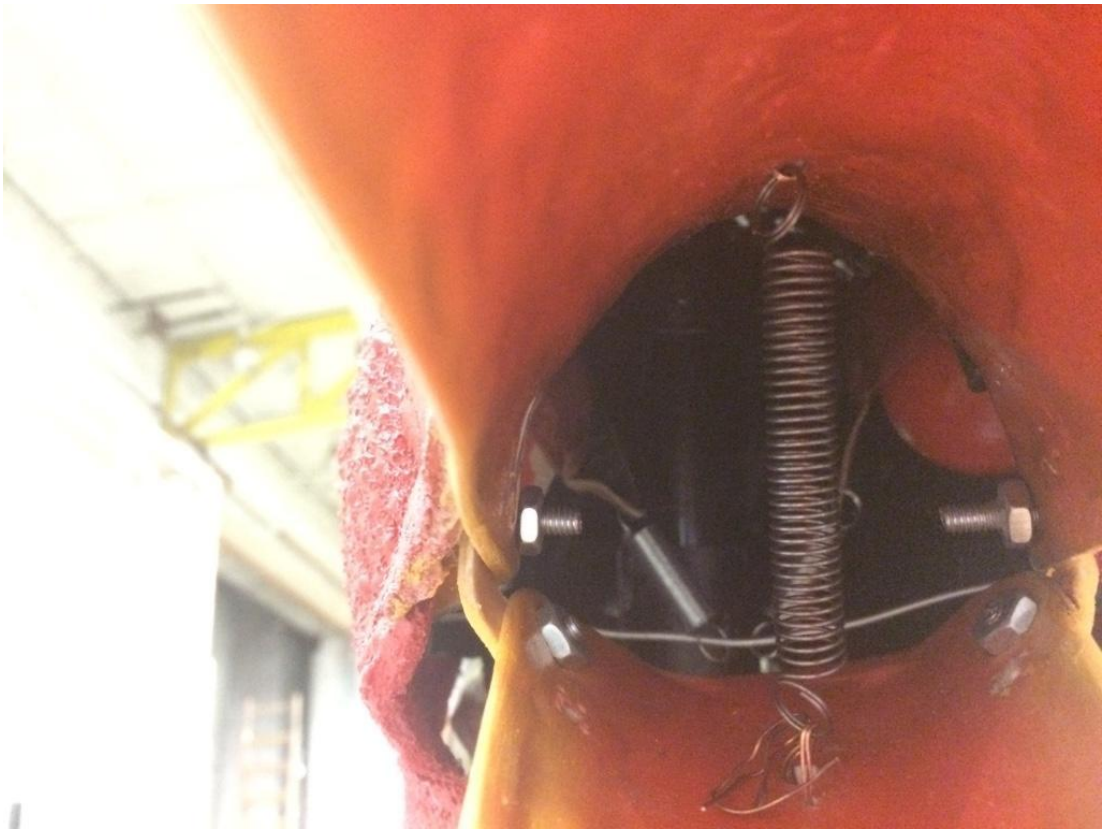


Illustration 15: The Beak Mechanisms

The beak, designed to open and close, is operated in a similar manner as the eyelids. A small hole was drilled in the upper and lower beak that allowed me to loop a doubled piece of copper wire to the end of a spring on the inside of the beak. The wire was twisted tightly and secured on the outside of the beak. When the string connected to the eye screw on the bottom of the beak is pulled using a control lever on the pole, the beak opens. When the control lever is released, the beak snaps shut, making a very satisfying snapping sound.

C. The Wattle and Comb

Illustration 16: Wattle and Comb

The wattle and comb for the rooster are made out of a material called FOSSSHAPE, a low melt synthetic polyester fiber that can be easily shaped and distorted when exposed to varying degrees of

steam and heat. I chose this product because it holds its shape well and gave me the ability to shape the waddle by only steaming certain areas to create a more natural appearance. To imitate the rubbery textured surface of a real cock's comb, I first applied small dots of Tulip dimensional fabric paint. Once this dried, I applied red, Tulip Color Shot Instant Fabric Color to quickly turn any still exposed FOSSSHAPE red. I then coated the entire surface with red Plasti Dip spray. This rubberized coating feels and looks like the real thing. Early on in the process I thought about sculpting the waddle and comb in clay, casting it in plaster and making it out of latex to simulate the rubbery feel of a real cock's comb. This process would have been more expensive, time consuming, heavier and would still require an interior structure to hold the latex in the right shape. I also thought about using L-200, a closed cell foam but it wouldn't have given me the organic shaping ability of FOSSSHAPE or the ability to use traditional hand and machine sewing techniques to assemble it.

D. Fur Application

Illustration 17: Fur Application

Jim informed me that fake fur is often used to emulate small delicate feathers. This was a brilliant solution to avoid having to cut out and apply hundreds of tiny feathers. The fur blended into the rest of the black and white feathers perfectly. Fur was also used under each of the large black and white feathers to fill out and support the layers by adding volume and bridging spaces between the fabric feathers.

II. Laser Cutting of Feathers

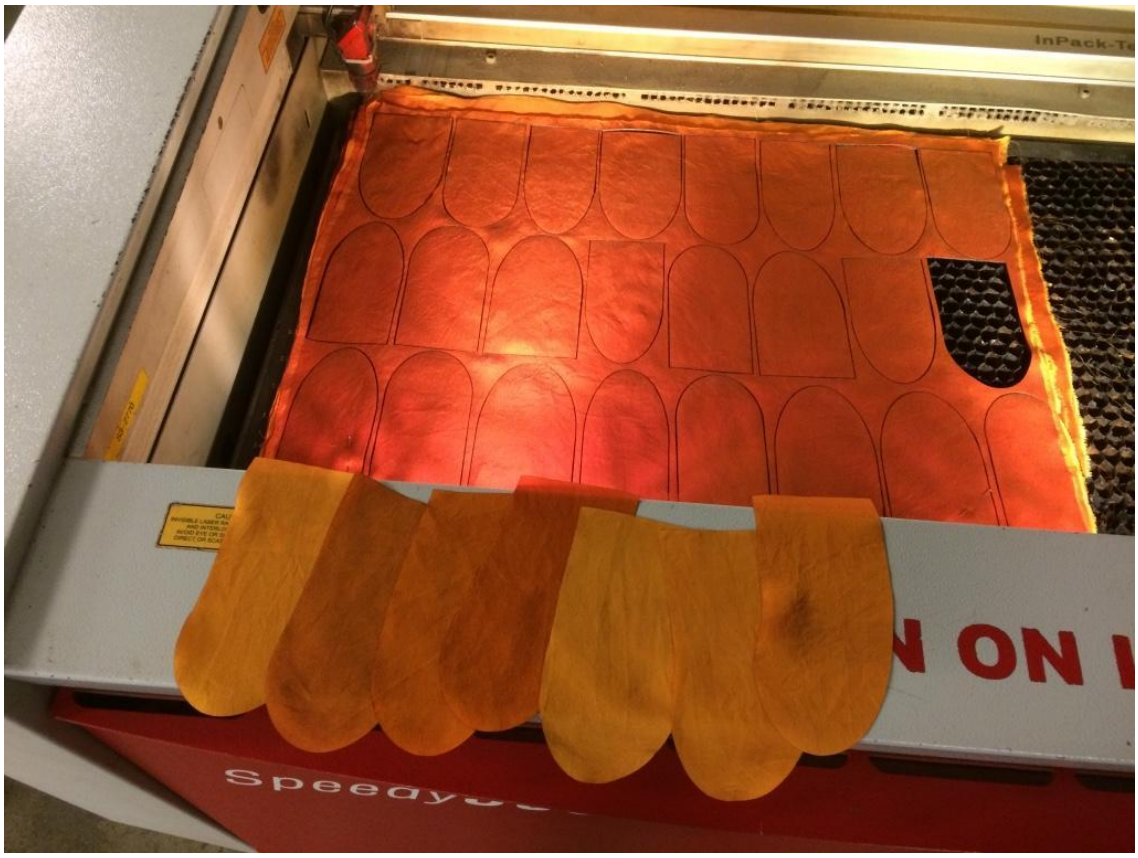


Illustration 18: Laser Cut Feathers

It is a requirement of the Costume Technology thesis to incorporate an element of digital technology into the project. A colleague used laser cutting for their thesis last year to create a metal crown, leather armor and a fabric lace collar. This made me curious if using laser cutting technology to cut out the feathers would benefit my process. To learn about the laser-cuting process, I took a tour of TechShop, a makerspace in North Austin and found that a laser cutter could cut through six layers of fabric at a time and therefore very quickly cut the hundreds of feathers needed for this project. The only requirement was that I use a fabric consisting of natural fibers, such as silk or cotton. Synthetic fabrics, when cut with this technology, produce

toxic fumes when burned and this is not allowed at this company. In addition to saving time, it would provide perfectly uniform feathers with edges that did not fray. As the heat of the laser cuts the fabric, it melts the fibers along the cut edge. This made my desire to use a fabric of 100% silk, (woven fabrics tend to fray when cut), a possibility without having to do any extra steps to keep it from fraying. In an effort to learn the laser-cutting technology, I became a member of TechShop where I was able to I take a class in Adobe Illustrator, the program I would use to design my feather shapes. From there, I took the class on how to use their Trotec Laser Cutter. I find learning technology much more effective when I have a teacher on hand to ask questions as they come up. The additional bonus of working at TechShop was always having someone on staff to help me troubleshoot and answer questions about the machines. This was a huge timesaver because the computer I was using was having trouble with my Illustrator files and I would have lost hours trying to troubleshoot the problem on my own. All in all, I spent 10 hours total learning how to use the technology, creating the files and cutting 500 feathers! I am absolutely sold on laser cutters; there are so many time saving possibilities and material options when it comes to doing detail work for costumes.

CHAPTER 4: REFLECTION

I. Weight of Randy and Comfort of the Performer

Randy's total weight is 27 pounds! Six of those pounds are the feet of this wearable puppet. The puppeteers were perfectly comfortable performing for up to 30 minutes. They did complain about it being hot even though they performing inside in a climate controlled building. From my experience working with performers at Universal Studios who do up to 30 minute sets in costumes of this nature, they are just hot and that is life. Randy, however, is cooler than costumes of this style as he is not made out of foam, all of his layers breath. From the puppeteer feedback, it seems it's not an issue of heat that limits the performance time to 30 minutes, however arm and back fatigue become an issue. If a puppeteer with a stronger upper body was used, the performance time could be extended.

II. Deciding Not to Be a Performer

Deciding to cast puppeteers was possibly the smartest decision of this project! The emotional impact of this decision couldn't have been known until we went into performance; when I got to stand back and witness how, upon seeing Randy for the first time, people would absolutely light up. As I walked around with Randy, I heard everything from "this is the most amazing thing I have ever seen," to "I feel like I'm in a Harry Potter movie." Seeing Randy in action made me feel as joyful as the next person. I looked forward to every performance, knowing that he would come to life again.

Being on the outside had its practical advantages as well. Not only did working with puppeteers free up much needed time and energy, it allowed me to be on hand as technical support throughout the rehearsal and performances should anything have gone wrong. Being the most knowledgeable person about how the puppet works, I could instantly spot if anything was off or needed fixing. I felt responsible for the safety of the performers and the audience first and foremost, and therefore it made me feel more relaxed knowing I was the one keeping an eye on everything.

III. Evaluating Rehearsal While the Build Was in Process

Ideally there would have been more rehearsal time in the finished puppet. The first time the puppeteers got to physically experience Randy with all of his feathers and the finished feet was the day before we opened. Parts of the build took longer than expected to be completed. The first rehearsal was held on March 11th, 2017. At this point, the base, body frame, head and tail feather attachment were all completed (See Illustration 19)

Illustration 19: First Rehearsal

Rehearsing in Randy as he was being completed allowed the puppeteers to gain comfort with the eye and beak mechanisms and to develop his personality before having to deal with the weight and limited visibility that would come with the finished product. When I conferred with my puppeteers I got two different responses to this process. On the one hand, it was beneficial to become comfortable with the different elements one at a time. Overall however, it built false confidence because of how much puppeteering Randy evolved in response to changes in visibility and weight. In earlier rehearsals before the significant weight increase of the feather

layer, it was easier to continuously move his head. The feather layer snaps onto the head so the puppeteers really feel the weight increase in their arms, which leads to quicker fatigue.

Without the feet the puppeteers were very nimble, quickly moving around the space. From a director's perspective, the physical limitations of the final product enhanced the performance as it forced the puppeteers to be very calculated about their movements and to travel slowly. This resulted in a more realistic looking rooster, however no variation in walking speed was possible.

IV. What I learned About Feet

Illustration 20: Completed Rooster Feet

In the plethora of cheesy rooster and chicken costumes I found online, no one had attempted to make authentic looking feet. Jim and I were in agreement that if I was going to go

to the trouble of making a 9-foot rooster that I was going to make the best rooster puppet anyone had ever seen. That meant making realistic feet. For the feet, Jim was adamant that they should be fully articulated so that when the puppeteer lifted one leg, the toes of the lifted foot would curl under just as a real rooster's toes do. This was a huge challenge, requiring invention and lots of trouble shooting.

There was a good supply of free bass wood on hand for me to build from so I decided to construct marionette style digits using disk and dowel hinges to hold individual parts together, with the movement controlled by strings. This type of mechanism would allow for full movement of the foot. Holes were drilled through every piece for strings to run through in order for the toes to be pulled in (See Illustration 21).

Illustration 21: Holes for Strings to Travel Through

The elastic stapled to the tops of the toes acts as a spring to pull them back into neutral (See Illustration 20). I built them as designed and they are stunning. The mechanics worked individually on each of the feet but when it came for them to work in conjunction with the performer it was concluded that too many things could go wrong. For example, if a string was to break or to get caught on any of the channels it would need to travel through, it would make it difficult for the performer to keep their balance, creating a dangerous situation. The feet as they

were, with the toes able to wiggle as he walked were captivating. Articulating rooster feet are a thesis in and of themselves.

Even with the design simplified, unfortunately articulating feet was just not practical. To maintain correct proportions of the design, the width of both feet from outer toe on the left foot to the same toe on the right measure four feet. This alone makes it very difficult to get through average doorways without catching or banging a toe. It requires the puppeteer to stand on one foot, lean against the doorway and move the other foot up and over the stationary foot, a difficult balancing act. Making each digit of the toe flexible means that it is vulnerable to being caught on something and breaking as the performer step forward, often not even knowing they are stuck. When this happens the discs that connect each digit break. If I had used a stronger material for the disk, say aluminum instead of acrylic, I believe the basswood that the digits are made of would have broken instead.

On the first day of our performances, three toes on the same foot broke. The toe nails got caught somehow in a metal grate backstage at the opening ceremony and snapped the plastic joints. Feeling discouraged and short on time, I decided to reinforce the outside toes with a steel bracket. This meant that it would no longer have any movement, the thing that I had spent so many hours working to achieve. In addition, I tightened the elastic on all of the toes so that they would have less movement and sit a little higher off the ground. A pleasant surprise was that the puppeteers found the feet much more comfortable after these changes. They felt more solid and therefore safer.

What I learned from this experience and from confirming with other puppet builders is that there is a very good reason people don't build realistic rooster feet. Solid foam feet that fit

over the performer's foot, though not anatomically correct, would allow the performer to go up and down stairs, pass more easily through doorways and give them the confidence to know that nothing will break. In the near future, I will be building Randy a new set of practical feet, what I will call his "festival feet." His current feet (see Illustration 22) are his fancy feet and will eventually only be used for when he is being displayed.

Illustration 22: Foot with Steel Bracket Attached

V. The Performance

In the weeks leading up to the performances in the Cohen New Works Festival, the weather report was not in our favor. There were thunderstorms predicted every day of the festival. Planning for the possibility of rained out performances, we decided to hold our show in the Atrium of the Winship Theatre and Dance Building instead of parading outside or in the streets. This would limit our exposure to the greater UT community as I had initially envisioned. If the weather cleared up however we could still head outside for some of the performances.

Then at our first rehearsal in the Atrium, the day before we opened, we discovered that Randy could go down stairs, but not up. The rooster toes were simply too long to fit on the stair runners in our building. The handicap access ramp was too narrow for the feet to fit up as well. This dictated that all of Randy's performances would take place on the top level of the Atrium, rain or shine. I was disappointed by this because if I had completed the feet earlier, I would have found this out in time to build a ramp.

During our first performance, my mind was changed. Being in the Atrium, in the center of our community, made it feel like a celebration, one that was being shared by those that worked so hard to make this festival a success. The moments in the show where the audience is clucking like chickens, protesting, or shouting "the festival is cock-a-doodle-now," drew in even more people. Seeing Randy stopped people in their tracks; they couldn't help but join in the fun. Randy became a facilitator of joy, an instant crowd favorite. A video put together by one of his fans had over 4,000 views in just 3 days. He was plastered all over social media, with dramatic captions such as, "I never understood why people love meeting theme park mascots until I met Randy. I would give my life for this giant rooster puppet." The choice to make him timid as he enters the space, with the humans in the crowd having to get low and cluck like chickens to make him feel more comfortable really endeared the audience to him and turned what could have been a giant scary bird into a lovable friend. Another fan put it perfectly, "Randy the Rooster is the friendliest protest art you will ever see."

VI. My Artistic Process

I was curious to see what part of this process motivated me the most. I've been shown through my class projects that when I'm the designer, as well as the technician, I feel most

excited about the process. I get great joy out of building which is why I chose to be a technician, but there is an additional excitement that comes with having to come up with the design ideas myself. I make joyful art. When deciding on a design I think about where it will live when it is done and what it is I want to look at for the duration of the build and beyond. I'm drawn to strong primary colors and whimsical characters. Setting up challenges and then exceeding my own expectations builds my self-esteem and compounds on itself, continuously motivating me throughout the project.

I found it hard to jump into this project in my second to last semester. I knew in my final semester I would have lots of allotted time for my thesis. I preferred to be able to spend long chunks of time working on one thing instead of fitting in an hour or two here and there. I didn't want to feel distracted when attempting a project of this scale. There were times over the three months that I built Randy that I regretted not putting in more hours the previous semester. I didn't fully understand how ambitious of a build I had undertaken. When I officially started building Randy at the beginning of January 2017, it quickly became apparent that I was in over my head. I worked 7 days a week, an average of 13 hours a day for the next three months (this includes attending my other classes and completing homework). I worked on the assumption that I was already a month behind schedule and until proven otherwise this was the pace I had to maintain. I finished the build 18 hours ahead of schedule. In all I estimated it took me 600 hours to complete Randy.

Despite the intense time commitment, it was the most enjoyable 3 months of my artistic career. I woke up early in the morning, excited that I got to go into my studio space and just work. I have kept a journal for over 15 years now and it is how I start my day. Prior to building Randy I would write about my feelings and things going on in my life. During the build, it was

as if I no longer had feelings, only ideas. I was completely consumed by the project in a healthy and joyful way. The project tested all of my skills and gained me new ones, my mind was constantly stimulated by the current and/or next step. I kept a journal specifically for my thesis, it contained: ideas about products to use and the order of the steps to each individual build, how I did things, what worked, what didn't and why, and products used. I found the process of writing out my thoughts very useful in outlining my build plans. In writing down the steps, I could see where there were gaps in my understanding or when things would make more sense to be done in a different order.

It's a common saying that projects will always take the time they are allotted. Knowing this, I set firm dates to be done with each section of the build. If I wasn't done when scheduled I moved on anyway—knowing this was likely to happen as it is hard to gauge how long something you have never done will take. I built in a three-week buffer period to finish up things that took longer than scheduled. Sticking to this strict schedule forced me to decide done is beautiful at times and to modify design choices. Many decisions were made because of the reality of time and money, but never at the detriment of the quality of the finished product. By following my schedule, I discovered that being a perfectionist does not necessarily make one a good professional. Getting the work done is what matters. What makes me good at what I do is being consistent. I show up, I stay calm and I just keep working.

From the overwhelming positive feedback received from industry professionals and students alike, it is clear Randy the Rooster has a future in performance and education. In response to his performances in the Cohen New Works Festival I have been approached about Randy performing at art and music festivals, presenting workshops to costume technicians and designers about the build process, and I have been nominated for the 2017 Roy Crane in

Performing Arts Award. The excitement about the quality of construction and design combined with how light weight and inexpensive he is, from costuming professionals specifically tells me I have tapped into an area of wearable costumes that has room for growth. I intend to share what I have learned and find a name for myself for this area of my industry. This is above and beyond what I hoped to achieve with my thesis. I'm thankful beyond words for the opportunity to study at UT and find my voice as an artist.

Illustration 23: Randy and I

APPENDICES

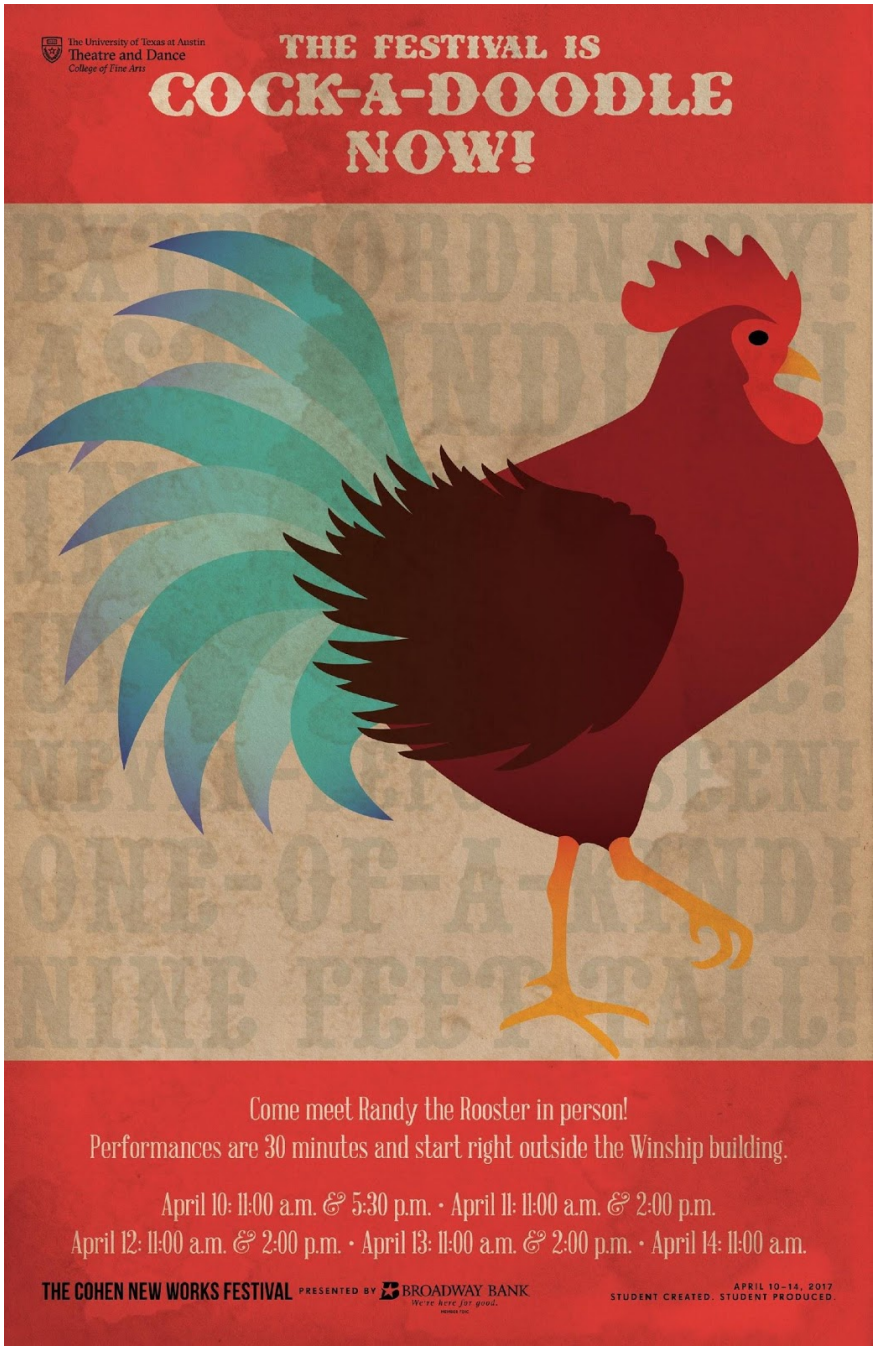
APPENDIX A: PERFORMANCE OUTLINE

The Festival Is Cock-A-Doodle-Now! —Show Outline

- At a half hour before go time everyone arrives and uses the craft room to get dressed.
- The puppeteer gets suited up in the cage at 10 minutes till.
- Walks into the craft lab.
- The chest cover is put on.
- When randy crows for the first-time Jill opens the door, and props it and Jacqueline holds opens the second door.
- Randy steps out into the atrium.
- Jacqueline closes the doors behind him.
- Jill leads Randy farther into the atrium.
- Once Randy reaches the pillar and can see all the protesters he gets shy.
- Jill tries to coax him forward but he won't come.
- Jill gets the idea to give the protesters jelly beans to tempt Randy to come closer-because they are his favorite snack.
- Randy takes his sweet time but shows that he is excited by clapping his beak.
- Randy eventually reaches the crowd and pecks out of their hands.
- Once he has eaten he lightens up and lets Jill scratch his head.
- Jill tickles Randy to show the crowd that he is friendly.
- Randy looks back to the crowd and once again gets shy.
- Jill suggests that Randy might be intimidated by seeing so many humans for the first time and she tells everyone to get down low and act like chickens.
- Randy slowly approaches, curious about all the chicken sounds.
- Once Randy reaches the crowd and seems calm, Jill invites them to slowly stand up.
- Randy gets startled when they all stand.

- Jill thinks of one last thing that might work, she tells the crowd that Randy has recently started a Twitter account and would get excited if everyone takes out their phone and takes photos of him to put on Twitter.
- The crowd takes out their phones and Randy starts to pose for the camera.
- Then Jill tells the crowd that Randy is so excited they showed up for the rally.
- Jill tells them to follow her lead and circle around Randy as they show their support of the Cocks not Glocks movement.
- Do two full circles around Randy.
- Randy prances in the middle with pure rooster joy.
- Jill ends the protest and tells the crowd that Randy would be overjoyed if they would take a group picture with him for so he can put it on twitter.
- Jill gets everyone gathered around Randy and has them shout "the festival is cock-a-doodle-now," when she takes the picture with her phone.
- They Jill tells the crowd that if they want to hang out and take selfies with Randy he would love that.
- When it seems that people are done getting photos and starting to disperse Jill tells the crowd that Randy has reminded her that they have to head to their next new works festival show.
- Jill tells Randy to take a bow and reminds the crowd that Randy will be back at whatever the next show time is.
- As they walk back towards the craft room Randy shakes his tail feathers.
- Jacqueline opens the doors for Jill and Randy.
- Once Randy is inside Jacqueline will close the doors.
- Jill will remove the breast cover so Emma/Daniel can see better.
- We will all head back to the craft cage.

APPENDIX B: PERFORMANCE POSTER



APPENDIX C: COST, MATERIALS AND TOOLS

I. Cost

A. Materials Bought

My budget was 700 dollars. I spent 718.43 dollars. The exterior layer being most visible, my largest purchases were fabric. The 24 yards of charmeuse silk from Darma Trading Company used for the feathers cost 210 dollars. The FOSSSHAPE used for the wattle and comb cost 68 dollars. My membership to TechShop for one month, the laser cutting class and the Illustrator class totaled 237 dollars. I did not include this in my budget as I consider it an education cost just as all of the classes I have paid for while attending UT.

B. Free Materials and Tools

Over the years there have been lots of scrap materials left behind by previous students or left over products from classes taught that need to be used up before they expire. In addition, I personally had a lot of leftover materials I could use from previous classes. Whenever possible, I used these free materials. This challenge emulated a professional theatre setting, as the shop manager will require you to use what is already available before buying new whenever possible.

- All tools except the Trotec Laser Cutter I already owned or I was able to use tools provided by UT for free.

II. Materials (* means the material was free to this project)

A. Head

- Plastalina modeling clay-medium*
- Water based clay-Long Horn White, from Armadillo Clay*
- Monster Magic Plastsil Gel 10 parts A and B*
- Smooth-On Cast 325 *
- FOSSSHAPE 600
- Springs
- Machine screws and nuts-various sizes
- Acrylic paint*
- Worbla-thermoplastic*
- Puff paint
- 16-gauge steel wire*
- Tulip Color Shot-Red
- Plasti Dip-Red
- Wooden Ball-¾ inch
- Wooden dowel-½ inch
- Fishing line-black*
- Lacquer Spray*
- Super Glue
- PVC -¾ inch
- PVC connectors-¾ inch

B. Feet

- Bass wood*
- Worbla-thermoplastic*
- Acrylic sheeting-1/8th inch-clear
- Dowel-1/8th inch
- Copper tubing-1/8th inch*
- Aluminum bar
- Dance rubber
- Machine screws and nuts-various sizes*
- Barge-contact cement*
- Acrylic paint *
- Airbrush paint
- Airbrush paint thinner
- E6000*
- Wood plank-1/4th inch*
- Spandex*
- Webbing straps-1 inch*
- Buckles-plastic-1 inch
- Elastic-1 inch*
- Staples*
- PVC-3/4th inch
- Spray paint-gold*
- Crystal Coat*
- Wood glue*
- Cardboard tubing*

- Wood screws*
- Washers*

C. Frame

- Backpacking backpack
- Leather-Veg tan-10 oz.*
- Aluminum sheeting*
- Steel bar
- Rivets *
- Buckles-plastic-1 inch
- D-Ring
- Machine screws and nuts
- PVC-3/4th inch
- PVC-3/4th inch 45-degree angle connectors

D. Body Frame

- Crinoline-black
- Velcro-1/2 inch*
- Bias tape-1 inch-double fold*
- Snap tape*
- Rigilene-plastic boning-1/2 inch*
- Thread*
- Irrigation tube-1/2 inch

E. Feather Layer

- Tulle-white*
- Zipper-4 feet
- Velcro-1/2 inch*

- Thread*
- Bias tape- 1 inch-double fold*
- Snap tape*
- Rit Dye-burnt orange*

F. Tail Feather Vase

- Closed cell foam-3/4th inch*
- Thermoplastic*
- Webbing strap-1 inch
- Machine screws and nuts
- Buckles-plastic-1 inch*
- Dog clip-metal
- Gaff tape*

G. Tail Feathers

- Charmeuse Silk
- PVC-3/4th inch
- Electric tape-black
- Irrigation tube-1/2 inch
- FOSSSHAPE 300
- Thread*
- Whopper poppers
- Spray paint-black*

H. Feathers

- Charmeuse Silk
- Satin*
- Acrylic paint

- Jacquard Acid Dye-Aztec gold, turquoise, sapphire blue, gold ochre, crimson
- White vinegar
- Fake fur-husky

III. Tools

- 3M respirator-gas and vapor
- Chop saw
- Dremel-multi tool
- Dremel attachments (sander, cutter, grinder)
- Wire cutters
- Band saw
- Hand drill
- Scissors
- Pliers
- Wire cutters
- Ruler
- Paper for patterns
- Dye vat
- Mixing containers
- Paint brushes
- Air brush
- Trotec Laser Cutter
- Illustrator-Adobe
- Sewing machine
- Janome-My Lock-204D

- Iron
- Dress form
- Belt sander
- Heat gun
- Hair dryer
- Hammer
- Rivet setter
- Hole puncher
- Hand sewing needles
- Sewing pins
- Safety pins
- Burnishing tool-for leather
- Edge cutter-for leather
- Grinder-for metal
- Clamps
- Measuring tape
- Sponges
- Rooster-plastic-18 inch (used as a dress form for pattern creation)
- Draping tape
- Magic tape
- Plastic wrap
- Rubber eraser (used to make a stamp)
- X-Acto blade
- Palate paper
- Ink roller

- Sculpting tools
- Clay cutter
- Head stand
- Styrofoam head
- Tin foil
- Chopstick (used to support beak sculpt)
- Drill bits-various sizes
- Dust mask
- Gloves-latex

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