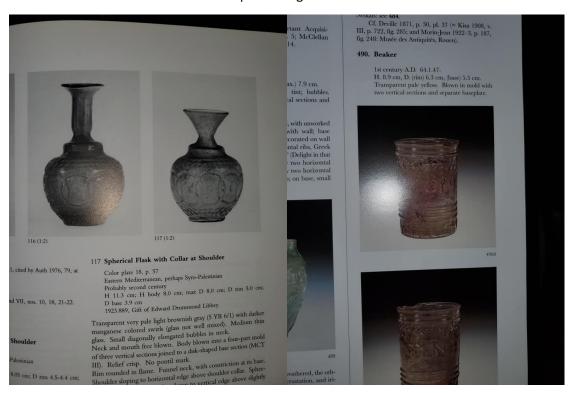
I was contacted to provide glass for Etienne's Pelican. I started looking at roman glass and doing a molded glass. I also looked at his heraldry. My first draft was to put a pelican and fleur de lis on the glass with interlocking rings which are a big roman motif and are part of his heraldry.

This mold is loosely based on roman mold glasses of the first century common era which are also known as gladiator glasses. Many of the ideas and motifs are based on glasses found in serval books showing molded roman glasses.

Very few molds and fragments of molds have survived from period. But from traces left in the glass we know that molds were made from plaster, clay (terracotta), wood, and metal in period. Most of the research of the molds comes from the pieces of glass found.



I started making positive for this mold and realized in the time I had I could not sculpt the pelican or the fleur on the side of the cup so I quickly changed the pattern to be a the interlocking rings with the words art is service and having the waves of atlantia at near the bottom of the cup. I also tried to make a fleur bowl mold with 2 fleurs on either side of the mold.

The process of making a mold is start by making clay positive. The clay positive needs to be slightly smaller than the final product will be as this a glass blowing mold and when you blow the glass the item will grow large than the mold.

Since this was to be a quick mold the letters were put into the positive by carving them into the positive. Many roman molds had the lettering carved into the negative to be able to read them better as well as to have them stand out of the glass other than moving into the glass. I decided not to do that because the dry time of the mold and that I was on a time crunch to make the mold and blow the glass in under a month and get it in the mail.

The clay positive was made and I put a top to the positive to make it easier to enter and exit the mold.



The positive was left to sit for a day so that it could form a skin around the positive so that it would not stick to the paster that the mold will be made out of.

I started the mold by cleaning the board and setting up a box of that can be broken down. The box that forms the outside of mold is held together by utility clips.

To start to pour the mold I first created a clay pillow for the positive and tried to seal the sides of the box.



Then the I put in the positive in the Pillow and filled box so up to the half way point of the with clay to make a smooth side of the mold I placed 2 hole to help key the mold when it was done.



At this point I double checked all the sides of the mold where sealed with clay gaskets.

I then mixed plaster of paris and water to make a slurry. This was mixed by hand to make sure there were no lumps in the mixture. Once the plaster was mixed I poured the first half of the mold.



This half of the mold dried for about 24 hour before I broke it out of the mold. I made the mistake of taking the positive off the mold at this point I should not have. Which caused issues with pouring the 2^{nd} half.



I then re-build the box around this half of the mold re sealing the box with clay gaskets. RE mixing more plaster of paris and pouring the 2nd half of the mold. When pouring the 2nd half of the mold the gaskets did not hold. I had to close the gaskets and re-seal this mold while I was pouring as well as make sure I had enough plaster to make the mold.



Once the mold was broken out of the box and opened. I also cleaned the mold. No pictures

I then used a piece of metal hanger as a drill bit to create holes in the mold to allow air and moisture out of the mold while it is being blown into. I also sprayed the mold with graphite to stop the glass from being bonded to the plaster. The spray graphite is easier than trying to us graphite solids and adding and removing the graphite solids from the plaster as they would in period.

Below is a picture of both halves of the mold after being used a few time.



To blow the mold I did a decent gather of glass and blew a starter bubble marvered the bubble to be near the size of the mold. Got it hat and dropped the bubble into the mold and blew hard until I felt resistance on the blow tube. Then I brushed off any plaster that was stuck to the glass reheated and tried to put in a jack line at the point that neck and the base met. They where then puntied and transferred to a punty rod to be reheated and opened.









For the 2 glasses pictured both times I felt like I had too much glass and the walls are too thick as well as glass was not hot enough or thin enough to get a good imprint of the mold. I did try to redo the glass thinner with green glass but for the 2 tries that I did I was too thin and could not transfer the glass to a punty with out over heating it. I am hoping to redo this glass with the correct amount of glass in the future to get a better end product.

Referenced books:

- Ennion: Master of Roman Glass (Metropolitan Museum of Art (Paperback)) Paperback –
 Illustrated, February 17, 2015, 0300208774
- Roman Mold Blown Glass 1st Edition, by <u>E Marianne Stern</u>, 8870629163
- Roman Glass in the Corning museum of glass Volume 2 by David Whitehouse