

CROSS PROJECT

Fr. Jeff Bayhi was instrumental in opening Metanoia, a non-denominational shelter for children and/or adults rescued from human trafficking. I contacted Fr. Bayhi and inquired if the new facility could benefit from public service work by the Baton Rouge Woodworkers Club. He forwarded my inquiry to Sr. Norma, the director of the new facility.

I met with Sr. Norma and she said she needed sixteen small wooden crosses on which to mount a metal corpus of Christ crucified to place in each of the guest rooms. She and I agreed on a sketch and size. Using the Minwax web site on my cell phone, she selected "Gun Stock" as the color she preferred for the wood. I just happened to have a full can of that color in my inventory. Each cross would be 5" wide and 8" tall. She gave me the metal objects to mount on the crosses after fabrication.

I consulted with Lee Owens on a suitable material to use. He said not to use poplar as it sometimes presented problems with staining. When I went to the lumber yard, the only material with suitable grain structure I could find was poplar.



Lee Owens assisted me in ripping the stock to width for the project. I returned to my shop and built a prototype.

I used my table saw to slot the pieces for a lap joint between the two members, vertical and horizontal.



On Lee Owens advice, I fabricated extra ones to allow for any fitting, staining and finishing issues. That was sound advice.

Next, I glued the lap joint. Some had a slightly greater clearance so I decided to reinforce the joint with screws.

Since I was not an experienced router operator, Lee Owens put a radius on all of the front edges of the fabricated crosses. I profited by watching him do this.

Due to the lack of contact area for the metal corpus on the wood (touched at only two points) I felt it necessary to drill a 3/8" counter sink under the main point of contact and a smaller one where the bottom touched. This would deter shifting or sliding on the wood. See photo below for details of contact between the metal and wood.



After multiple sandings, last was 220 grit, it was time to stain. I wiped on two coats of stain, twenty four hours apart with a light steel wooling between coats of stain.

Achieving what I thought was the desired shade, it was time to top coat with polyurethane varnish. Again, I enlisted aide and advice of other BRWWC members more experienced than myself. Bob Chambers gave me a hint that I will not soon forget because of the results. He suggested I thin the varnish 50/50 with mineral spirits and wipe it on. I had never applied polyurethane in this fashion. The results were fantastic. I had heretofore only brushed polyurethane and the resulting brush marks and runs were obvious. This was not the case using Bob's method. It required multiple coats to get the desired finish but the extra effort was worth it.

After all had been finished and dried, I applied a coat of Briwax, buffing it on my Beall Buffer. I got the results I wanted.



It was now time to attach the metal corpus to the wood crosses. I tried several schemes before deciding on what I would do. I first tied the metal to the wood with 12# monofilament, making loops through two 1mm holes drilled inside the countersinks. I could not get a satisfactory, tight knot to pull the metal snug against the wood.

I then went to "Plan B". I went to Hobby Lobby and found some 26 gauge, silver plated wire. It was a little pricey, but worked just right. I was able to pull it tight, twist it, and get the results I wanted. I found out that needle nose pliers were too strong to twist the wire but got good results with my fingers.



The work was tedious, but I was pleased with the results.



It is difficult to detect what is holding the metal corpus to the wood cross.



I have made arrangements to deliver my finished products to Sr. Norma. I hope she is pleased.

Jack Carmena

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