

## Hand Washing Stations for UNICEF by Jason

I was surprised to get a call in May from UNICEF in Guinea-Bissau. UNICEF is the arm of the United Nations that deals most with emergencies and improving living conditions in the poor-

est areas of the world. They were trying to figure out what they could do to help defend Guinea-Bissau as COVID as it was ramping up in Europe. They had a napkin-sketch idea for a pedal-operated handwashing station which could be used in places without running water. However, they didn't have anyone local to help them turn their idea into a real machine and proper drawings that they could use elsewhere. We have met with them several times in the context of the drinking water filter factory, and they have toured the factory and seen some of the machines I've made for the work there, so they thought of us when they were looking for someone to help turn this idea into a reality. It was a fun call to receive, not only because it's a bit of recognition that others value the kind of work that we're doing, but also because my shop is specifically set up for this kind of work: prototyping an idea and then producing batches of it.



The health infrastructure in Guinea-Bissau is very weak. So, while we are thankful that COVID hasn't taken off there, everyone knew that if it did, it would become unmanageable very guickly. Only a small handful of Guinea-Bissau's regional health centers and hospitals even have running water. The government and aid organizations have been working on mask-wearing, but the second major point of attack was to make sure that patients and health workers could wash their hands properly to prevent spread at the hospitals themselves. The other solutions that have been distributed to help with this are a bucket with a spigot, but those...





The design went through several revisions, and then the first prototype was installed at the United Nations building in Bissau (lower left)!





## Hand Washing Stations for UNICEF (cont'd) by Jason

... require everyone to touch the spigot, creating an infection sharing point.

After working our way through the UNICEF accounting system to get permission to start on the project, we worked with the guy who had the original idea, to build, test, remake, and retest the initial prototype. After we were all happy with how it was working, UNICEF told us that although the initial contract was just for help working out the prototype by making three of them, they actually



Our computer-controlled plasma cutting table got a serious workout, making 90 designed sides out of 11 sheets of steel, over 12 spread-out hours of cutting time. We're really looking forward to our own solar power system in the new shop!



I was able to finalize the design, finish the final assembly jig, and weld the first completed station before we left, leaving our team to do the final assembly of the rest.

needed us to make 45 of them to go to health centers all around the country! It was an honor, but also a huge job at a time when we were closing in on the time to return to the U.S. I got to work making patterns and jigs, and we were able to get most of the work done before we came back. Fortunately, I have a great team in Guinea-Bissau and they were able to finish the final welding, painting, and plumbing after we left to be able to deliver the stations to the organization responsible for placing them around the country. Our team in Guinea-Bissau deserves a ton of credit for their hard work, and we're hopeful that the hand washing stations all around the country are going to

contribute to better health at the hospitals in general, even after COVID.

When the project expanded the number of stations by 15x, I was interested to see how our shop and its equipment would handle the project. It's the most of a single thing we've needed to make at once. Fortunately, we were able to hire several former welding students and divert the guys who were work-



Bending the vertical pedal connecting rod was the first big job for this hydraulic bending machine that arrived in the conainer earlier this year. A big thanks to Legacy Metal in Michigan for donating it!



Each hand washing station required four different rectangles made of angle iron, so our guys built some muscle producing them on the manual angle bending machine!

ing at our new site to help with this, so we had enough help. Over the years, thanks to generous support from you all, we've been able to continue building the shop's capabilities through more and better equipment, so I didn't think that would be the bottleneck. My worry, however, was that the already-cramped shop space would have a hard time fitting all of us. I was right! We did our best, and moved functions that were portable, such as painting and assembly, out to the shade of a tree at our new site—but even so, were tripping over piles of raw material and subassemblies in the shop. Of course, you do what you have to, but it gave me a whole new appreciation and excitement about what we'll be capable of when we're able to build the new, larger shop building on the new site and move into it. It really is the last missing piece to be able to magnify our ability to help with other projects like this, and I'm excited! We're currently just over half way to reaching the \$45,000 goal that will let us build the shop when we return to G-B. Donations toward the project can be sent to the address below with "Atkins Special Project" in the check memo or online.



## To Give Online:

At JasonAndEmilyAtkins.com/give you can make a one-time donation or set up an automatic monthly donation by EFT or credit card.

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Please make checks payable to: Hope Remembered / P.O. Box 5 / Fosters, AL 35463 with "Atkins" in the memo.