DISRUPT THE FUTURE

ENERGY WARRIOR PROFILE

EMFN LUIS GUITERREZ

ELECTRICIAN
USS MAKIN ISLAND (LHD 8)

"Did you know that by using hybrid electric propulsion systems 50 percent of the time, we can increase time on station by as much as two-and-a-half days? These systems can also increase the time between refuelings. This means extra time on station or greater endurance when the ship's Captain and crew may need it the most."

Q: WHAT'S IT LIKE WORKING ON USS MAKIN ISLAND?

When I joined the Navy, I wasn't quite sure what I was getting into. I had no idea that I was going to be working on a ship with such advanced technology. So, when I first came on board Makin Island, I was really excited. I felt like I was going to be one of the few who would actually be able to experience this ship. I felt like it was some kind of a future ship, like Star Wars or something. As an electrician on board Makin Island, I work on the ship's electrical distribution system, the generators, the 400 hertz system, and the degaussing (demagnetizing) equipment. Not many people can say they work on a ship with hybrid propulsion; this is something I take great pride in. I felt blessed that I was able to get a ship like this for my first ship.

Q: WHAT WOULD YOU TELL OTHER SAILORS ABOUT WORKING ON A SHIP WITH A HYBRID DRIVE?

I would tell others Sailors that it's something to be excited about. It's a little bit different and can be complicated at times. If a problem arises, we often have to go through a lot of trial and error to solve it. There isn't always someone who can answer your questions since it's still kind of new to all of us. But once you've taken the time to figure it out, then you'll be the person people always go to for help and you'll be able to say, "Oh yeah, I had that problem once. Let me help!"

Q: WHY IS BEING ENERGY EFFICIENT IMPORTANT FOR THE NAVY?

Being energy efficient is important not only because it allows the Navy to save money but also because we are trying to keep this environment as clean as possible for future generations. Leadership talks a lot about going green but sometimes we ignore it. But who doesn't want to refuel less often? If you can save money, help our environment, and refuel less often, why not be energy efficient?

Q: HOW DO ENERGY EFFICIENT TECHNOLOGIES SUCH AS HYBRID PROPULSION BENEFIT THE NAVY?

The hybrid drive allows us to stay on station longer. Because the hybrid system consumes less fuel at slower speeds, drawing energy from the ship's generators rather than the gas turbines, we are able to stay out at sea for a longer period of time. At one point, the only reason we had to come back to replenish was because we had to get food. Other ships normally have to get fuel before food but because we have this technology on board, we often had to get food before fuel. While this can be a bit stressful at times, it does allow us to better accomplish our mission.

Q: WHAT ARE YOU MOST PROUD OF?

I most proud of the way my lifestyle has changed. I was a completely different person when I was a civilian. I never expected myself to be out in the middle of the sea—working here. I was just one of those kids who had other goals in life. Working with the hybrid drive and all the new equipment on board is exciting—I never stop learning.

Q: WHAT'S THE BEST PART OF WORKING ON MAKIN ISLAND?

It's so cool to be working on Makin Island. The hybrid drive makes it a unique ship—it's great. But, the best thing about it is the people I work with. People say we are co-workers but we're more like a family, especially while on deployment. We have a love -hate relationship—one day you won't talk to them, the next you're like brothers and sisters.

Q: WHAT MOTIVATED YOU TO JOIN THE NAVY?

I really felt like I wasn't doing enough for myself and that I could be doing more. My mother has been taking care of my brothers and me all by herself our entire lives. I wanted to make her proud, so she could brag about her son.

Q: IS SHE BRAGGING?

Yes. She is definitely bragging now.