

An Electrifying Experience

By AT3 Anna Rhees

It was a typical day, except the schedule had changed slightly, and that difference caused me to vary my routine. The important point is I nearly lost my life.

Normally, we wait until after the morning meeting to begin our assigned tasks, but, in an effort to expedite the workload, I was asked to start prepping the plane first thing in the morning. Right before the birds launch, the ATs “button up” the plane, including spot-tying newly added cables and reinstalling boxes that had been removed for other maintenance.

I had to reroute a cable. Typically, this simple job requires one person. However, this particular cable was far back in the rack, behind boxes, monitors, computers, and wires. It required a good flashlight and someone able to fit into a cramped space.

Aircraft power was secured, and I crawled into the rack and began pulling off the nuts and clamps holding the cable in place. Through experience and training, I have learned to take note of my surroundings and look for potential hazards associated with such a small work area. I noticed a power outlet next to one of the clamps that needed to be removed. With no power to the aircraft, the outlet was not a threat, but I stayed aware of it while working.

After 20 minutes, I successfully had rerouted the cable and all that remained was to replace the post nuts on the clamps. I decided to tackle the hardest one first. The post right next to the power outlet was the most difficult because of its challenging angle; my arm was bent around the back of the outlet and out of sight. The post also was unusually long, and none of our sockets were deep enough to fit over it. I grabbed a wrench from the toolbox and started working the hardware down the post little by little, still unable to see it. I could see the post I was working on only if I moved farther into the rack, blocking what little light was available.

Frustrated at not being able to reach the clamp, I crawled out. A fellow maintainer, working on a separate gripe, asked if he could turn on aircraft power. Knowing



that with power would help me see my work better, I agreed. As the aircraft power whirred on, I made another mental note of the outlet sitting in the way of my post and reached as far around and away from it as I could. I fixed my eyes on the outlet and used my hands to work



Taking every precaution, the paramedics loaded me onto a stretcher and drove to the hospital. Once there, I had calmed down. The shaking had decreased, and I felt totally exhausted. A heart monitor was attached to check for arrhythmia or other problems. They took blood samples, too. The medical folks hooked me to an IV and pumped me full of saline. After two hours and a much-needed nap, the docs gave me a clean bill of health.

After three days SIQ for rest, to give my muscles time to heal from the convulsions, I was back at work with a small burn on my arm and a sore arm and leg.

What did I learn? More than I had planned to on that day. No matter how cautious you are, unplanned situations occur, and you always need to be watchful. It is OK to ask for help, even for something as simple as having someone

on the post through touch. Since the post was long, I was using a wrench instead of a ratchet. Unfortunately, it had been slipping off the nut all morning.

I was careful, but the wrench suddenly slipped again. So did my arm, which hit the back of the power outlet. The shock went through my arm, and it felt like lightning had struck my whole body. I should have released the wrench when I felt the shock, but it was hard to do while huddled in the rack.

I fought and freed myself from the compartment, only to slump onto the ground. I must have screamed because a shipmate came running and asked if I was OK. I sat on the floor, with my body shaking and arm tingling. I also began to feel really cold. I don't know if I was shaking more from shock or the cold.

My shipmate took me to maintenance, and someone called for an ambulance. My teeth were chattering, and a small burn had started forming on the inside of my right wrist. A couple maintainers led me to a couch and told me to lie down. I was fine physically, but I continued to shake, feel cold, and suddenly became scared. Several people covered me with jackets and sleeping bags to keep me warm; they stayed by my side to make sure I was OK.

The CO heard about the incident and made a trip downstairs a few minutes later to check on me.

The ambulance arrived shortly after, and the paramedics hooked me up to an EKG machine. They took my vitals and questioned my chief and supervisor about what had happened. They told him I had been hit for approximately two seconds with 120 volts and an unknown amount of amps. This is a small amount of voltage, but even a tiny amount can be fatal with enough exposure.

sit and hold a flashlight. I learned that even the simplest jobs can be difficult and dangerous. I appreciate the people I work with much more now. They came to my side at the first hint of trouble and stayed throughout the whole process. I'm extremely lucky. Far more dangerous pieces of equipment reside in the back of the aircraft, and that gear would have given me a much more dangerous shock. After preparing for my safety stand-down presentation and seeing pictures of "bad" electrical burns, I'm glad my incident didn't turn out any worse.

Three months, 1,000 jokes, and a few new nicknames later, I have nothing wrong with me, except for the small scar on my arm that serves as a constant reminder of what could have happened. 🌟🌟🌟

Petty Officer Rhees works in the avionics shop at VPU-2.

A note from the commanding officer: Since this incident, VPU-2 has made several changes to the way we operate to prevent a recurrence and to facilitate first aid and emergency response. We have fabricated a shock-strap to be used to pull personnel off of live electrical equipment should they come in contact that gear. These straps are mounted in the AE and AT shops, on the hangar deck, and are available on the aircraft. At the first safety stand-down following this incident, we gave a presentation on electrical-shock hazards and prevention tips to better inform the squadron of this danger. We have purchased and mounted an automatic external defibrillator (AED) on the hangar deck for first-response use. We also now have an AED program incorporated into ground safety and NAVOSH instruction.