

Respecting the Power of Electricity

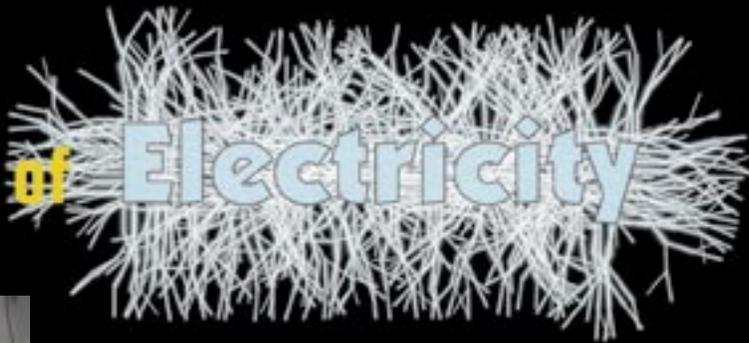


Photo by PHAN Ricardo J. Reyes

By AT3 Sean Smart

It was a beautiful day in Fallon, Nev. We had been operating for two weeks as an airwing det and finally were getting into the groove of things. That morning, I went out to aircraft 600 with an ATAN for a routine man-up. When we got to the power station, we pulled out both power cords to perform our pre-power application procedures. After pulling out the cords, we proceeded to the aircraft for our inspection. Inside the aircraft, we made sure all circuit breakers were pulled and all knobs and switches on our control boxes were in the proper positions. We exited the aircraft and made sure it was grounded before we applied power. The ATAN headed to the power station, which we thought was secured, and waited for me to insert the power cords into the aircraft-power receptacles.

I picked up the first power cord to insert it into external power receptacle No. 1. As soon as I inserted the plug, I heard a loud pop and saw a bright blue arc of electricity about the size of a basketball shoot out from the receptacle area. I was thrown back about four feet onto the starboard mainmount.

The ATAN rushed over to me and asked what had happened. After a moment of cursing at myself and kicking the ground, I told him I had been shocked. I

immediately walked over to the power unit and discovered that the power cord was energized—the power never had been secured! I secured power to the cord and inspected the cord leads and the aircraft receptacle leads. I saw that no damage had occurred to either. I plugged in the cord and turned on power to the unit and the aircraft. I instructed the ATAN to go on with the man-up as usual and that I would return in a few minutes. I dizzily walked back to my workcenter, informed my supervisor of the incident, and immediately was taken to medical.

My main error was that I did not inspect the external power unit before I attempted to plug in the external power cord. I always had assumed that the person using it last would not remove the cord from the aircraft unless it was de-energized. The process is somewhat similar to changing a light bulb. You need to make sure the switch is off before you try to screw or unscrew the light bulb. Had I taken a moment to notice the light on the power station was on, I easily could have pushed the off switch and avoided the shock. Instead I jeopardized my life and took up precious man-hours that could have been spent helping maintain aircraft.

The lessons learned go beyond simply making sure that power is secured before plugging in the cord. Attention to detail is the key. Overlooking minor details can cause big problems in the end, and vice-versa. Attention to minor details will help avert these problems. My mom always said, "A stitch in time saves nine." Well, it really does. Had I been able to go about the man-up without being electrocuted, I wouldn't have had to waste two hours being prodded in medical. I had to have an EKG performed to make sure my heart hadn't been knocked out of beat. Also, my LPO wouldn't have had to waste two hours waiting and worrying at medical.

The biggest lesson learned is to respect electricity: 115 volts does not sound like a lot to some people, but, believe me, it is. Keep that in mind when working with and around electronics in the Hawkeye community. 🍀

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