

President's Corner

Mar 2008

Every year there seem to be fewer and fewer amateur radio operators. The internet and cell phones clearly have overshadowed some important aspects of long-distance communication that were previously the exclusive domain of ham radio. But I am here to tell you that the skills that amateur radio operators bring to the world of technology are still quite vital – and I'm living proof!

I'm currently on my third career. I started my adult life off as a professional archaeologist, doing contract work (in advance of state and federal construction projects) in the northeastern U.S. for 14 years. Yes, it was interesting at times, but oftentimes tedious as well (one thing you'll never see on the Discovery Channel is someone digging thousands of holes over five months, and finding **nothing** – but I've done exactly that!). Working outdoors was often pleasant – and just as often not (those of you who have worked outdoors in rain, cold and snow know what I'm talking about).

Some years ago I decided to settle down and get married. Having a wife meant that I could no longer spend months away from home at a time, so I found a job working at (what was then) Lockheed Martin in their computer hardware lab, doing setups and repairs. Luckily, as a lifelong electronics hobbyist and someone who had worked with computers beginning in the 1970's, I had a skill to fall back on. But the lab I was working in was understaffed and severely overworked; I got pretty stressed out, so after six years there I started weighing my options. But I didn't have any education or experience that would lend itself to any other career I could imagine ...or did I?

By this time Lockheed Martin had sold our plant to BAE Systems, and a friend of mine who worked there encouraged me to apply for an open EMI Technician position. For those of you who aren't familiar with the term, EMI stands for Electromagnetic Interference. It is vitally important that the products that they make (controls systems for jets, rockets and ground vehicles) do not give off radio interference, and do not fail in the presence of interference from other devices. To that end, they have labs set up with special "shield" rooms to keep stray radio waves out (for pristine measurements of interference being generated), and to keep the high levels of RF energy generated there (for testing immunity to interference) from harming the personnel. The technicians are the ones who get to play in the shield rooms with racks full of expensive equipment, like signal generators, high-power amplifiers and spectrum analyzers (the Engineers, on the other hand, get to sit at their desks and write reports).

I didn't think I'd qualify for such a high-tech position, but at friend's insistence I applied. After numerous interviews with Engineers, managers, and the other Technicians, I learned that I had gotten the position! And the main reason: my familiarity with radio waves and the electromagnetic spectrum, owing to my background in ham radio. It turns out that there are no formal degrees nor training programs for the kind of work EMI Technicians do; it's a matter of starting with the right skills, and learning the ropes as you go along. Although my background in math and radio theory isn't the hottest (it is

improving as I gain experience), my familiarity with radio technology was deemed to be an adequate starting point for further developing my skills in this field.

Not everyone getting involved in amateur radio is going to find a job like mine. But the knowledge, experience and skills obtained in becoming a ham are vital to a growing technological field. As we approach the second decade of the 21st century, more and more devices are abandoning wires in favor of wireless technology, including cellphones, internet connections, and a growing array of remote-controlled devices (think automobile keychain fobs, garage door openers, cordless phones, etc.). There is a growing, *not* a shrinking, need for the knowledge and skills that are an integral part of amateur radio operations, providing yet another reason (in addition to emergency communications, which I discussed in last month's column) that amateur radio has much to offer in today's world.

— 73 de allen lutins, KC2KLC