

Big Surprises Can Come in Small Packages



By AT3 Pedro Godinez

I have read about other mishaps in *Mech* magazine and thought to myself, “Well, that’s stupid. Weren’t they thinking?” Now you can read my story and learn how quickly you can hurt yourself when you don’t think about what you are doing.

Having worked all night on a college report, I dragged myself out of bed after only four hours of sleep and went to work. I began troubleshooting an electronic discrepancy for a radar transmitter used in the S-3 Viking. I set up the transmitter, and the support equipment flashed an advisory on the monitor, “WARNING! 17,000 volts will be present during final testing stage. Ensure safety covers are installed.” At this point, I just wanted to get this gear ready for issue (RFI) and finish the job. I thought to myself, “I’ve done this plenty of times; I can skip this step and save 15 minutes.”

I came to the last step of the troubleshooting process and finally got what I wanted; the screen read: Unit under test is RFI.

Yes! I had gotten it done. As I detached the grounding clip from the transmitter, full of pride, I forgot that the transmitter still was charged. There was enough charge on one of the contact points (that should have had safety covers) to arc through the air, enter my right hand, travel through my chest, exit my left forearm, and knock me back three feet—all within one second.

Fortunately, my co-worker was standing behind me and immediately called for help. I was stunned for a few



minutes as the paramedics looked me over and tried to determine the extent of my injuries. At this point, the whole shop had shut down for a safety inspection, and khakis were everywhere, investigating what had happened. Due to the nature of the injury, an ambulance carted me to the nearest trauma unit, where doctors monitored my vitals for the next two days.

Between the sirens blaring from the ambulance, paramedics inserting needles in every limb of my body, and the burnt smell from my skin; I thought to myself, “I should have taken those extra 15 minutes. I could have been having lunch right about now.”

Please don't become complacent about safety procedures. The moment you start thinking it won't happen to you is when you just might find yourself lying in the trauma unit with a rectal thermometer measuring your vitals—I still can't figure out the purpose of that procedure. 🦋

AT3 Pedro Godinez was assigned to AIMD, NAS North Island, California, at the time of this incident.

What safety precautions do you or your shipmates routinely ignore in your haste to get the job done quickly? Are you willing to become the next mishap victim because of a shortcut that may save you 15 minutes?—Ed.

Be Sure to Read Between the Lines

By AE2 Ron Ellis

I had checked into my new command six months earlier. As a prior aviation electrician's mate collateral-duty inspector with more than six years of experience, I felt comfortable with my knowledge of the P-3C platform.

That comfort level led to this mishap.

It was a normal day. We were asked to assist the AMEs in reading out the electrical continuity to a primary cartridge-actuated device (CAD) for the engine fire-extinguishing system. They had replaced No. 1 primary CAD, and the maintenance manual requires a check of the system following installation.

I was inexperienced with this task, so I asked another electrician to guide me through the process. We went to the aircraft with the maintenance manual and the test set and connected the equipment, following the manual.

My first big mistake was adhering only to the steps related to the portion of the system being checked. In my haste, I disregarded a **WARNING** statement that read, “Failure to remove all cables can result in accidental activation of CAD.”

Unlike most electrical systems, the CAD system is designed with an alternate path, which is activated upon loss of power to the primary path. I pulled the circuit breakers for the engines I was testing, but I didn't disconnect the harness leads. I effectively had prepared the system to fire off as soon as I tried to read the circuit.

I looked at it from an electrical standpoint: “Securing the circuit breaker to the alternate system would prevent the CAD from being energized,” I thought. So I pulled the breakers and skipped ahead in the book to the steps I thought would test the system.

Photo by Matthew J. Thomas



Bam! The explosive device (CAD) in the No. 2 extinguishing bottle suddenly activated and routed extinguishing agent to the No. 1 motor via the transfer circuitry.

I immediately stopped my work, secured aircraft power, and went into maintenance control to report the mishap. Quality assurance was notified expeditiously, and an investigation was conducted. The QA team concluded that my disregard of the warning, e.g., skipping an important step in the maintenance manual, directly led to the mishap.

It sounds basic, but I'll say it again: There is a reason for the **WARNING** notations written in our publications. People in the past have made similar mistakes that have caused loss of life and equipment. Under no circumstances should any step in a manual ever be disregarded for any reason.

Trust me: If it can happen to me, it can happen to anybody. 🦋

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