EASE F

Naval Facilities Engineering Command

Abstract of an Accident

94-6

ACCIDENT TYPE: Electrocution (Probable)
INJURY: Near-miss
TYPE OF WORK: Installation of Fans

DESCRIPTION OF A NEAR-MISS ACCIDENT:

An electrician was installing blower fans inside a building. This required some rewiring so he had to de-energize the electrical system to complete the installation. When he checked his equipment, he didn't find the proper lock-out device for the switch. He took a short cut rather than taking the time to get the right device. He turned the switch off, and taped it in the "OFF" position. Then he filled out the appropriate danger tag and taped it to the switch. He intended the tag to inform anyone reading it that the switch was off for a reason and should not be turned back on. The electrician's work was in another room, out of sight of the de-energized switch. As he began working on the neutral wire, he noticed a blue spark. He quickly realized that if the neutral was sparking the "hot" wire was really "hot". He returned to the panel and found someone had removed the tape and turned the power on. Once again, he turned the power off and taped the switch. This time, when he returned to the work site, he tested the lines to confirm they were de-energized. To his surprise, they were energized again! Again, he returned to the panel and found the tape removed and the switch on. This happened not just twice, but FOUR TIMES!!

LESSONS LEARNED:

- Short cuts can kill! Getting the right equipment for the job may sometimes take longer, but its better than injury or death.
- Use a lock, not a tag, to ensure a circuit remains de-energized. Circuits must be locked out unless physically impossible to do so. In unusual cases where lock-out is impossible, post a co-worker (guard) by the switch to ensure no one re-energizes the line before you're ready.
- Test the locked out circuit every time before touching bare wires to ensure the power is off. Never assume anything when working with electrical energy.
- Look for warning signs. When a near-miss occurs, stop and remove the hazard.
- Communicate with others. Check who may be affected by your power outage. Coordinate with them to discuss and control problems created by the action.

Your **SAFETY** contact is...