

Technical Security maintenance team marks 20 years with no lost-time injury

Deborah Dunn, FH

Their jobs take them into situations that could be dangerous, yet Technical Security's tight-knit security maintenance workers have racked up 20 years without anyone having to miss a day of work because of a job-related injury.

Dave Van Leuven, Fluor Hanford executive vice president and chief operations officer, called the security maintenance 20-year achievement "phenomenal" as he presented a Safety Excellence Award plaque at a Presidents' Zero Accident Council meeting.

There are about 30 people in Technical Security — including engineers conducting security engineering and bargaining-unit electricians and instrument technicians performing security equipment maintenance work for Day & Zimmermann Protection Technology Hanford, also known as PTH. Part of the group is responsible for security systems south of the Wye Barricade, working from a shop on Butler Loop near the Richland Airport. The rest of the group, located in the 200 East Area's 2727-E Building, covers security systems north of the Wye Barricade, principally Plutonium Finishing Plant and Spent Nuclear Fuel facilities. Paul Seipt is the Technical Security manager, and the organization is part of PTH Security Operations directed by John Maguire.

"These folks make up a great maintenance team," Seipt stated. "Their exceptional safety record clearly shows how worker involvement and actively caring for co-workers can benefit the safety program. It's a pleasure to see these integrated safety principles in action."

Rigorous work

To assure proper operation and maintenance of Hanford's security systems, security maintenance personnel spend a lot of time on the road, answering calls that may originate from any Hanford facility. They sometimes work far above the ground in "bucket trucks" or atop camera towers. Other jobs take them into unoccupied spaces that may house rattlesnakes or rodents that can transmit disease.

Safety success secrets

"We've had the same kind of problems everyone else has," said Bill McCollom, an electrician at the Butler Loop facility. McCollom is a member of the PTH Safety Council and is a steward for the International Brotherhood of Electrical Workers Local 77 of the Hanford Atomic Metal Trades Council.

"But we're very conscientious," McCollom said. "We look out for each other, so we all go home safe. We typically work at least two together, or more, and no one gets offended by a safety reminder. We work smart. We're not into pain."



Randy Phenneger, electrician, credits longtime job experience in a tight-knit group as key to the security maintenance safety record.

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Technical Security maintenance team; 20 years with no lost-time injury, cont.

While no one has had to stay home from work because of an injury, things happen, and part of the safety culture is to immediately seek medical attention.

“In 19 years, have I cut my finger? Yes,” said Randy Phenneger, electrician. “I have the nurse look at it. Just walking along one day, something blew into my eye and my partner drove me to the HEHF health care center. If I get hurt, I’m going to get it taken care of.”

“All this demonstrates an excellent safety culture,” said Ray Curry, a Technical Security engineer and safety point of contact.



Roy Yates holds a new, inexpensive security camera and points out older, bulkier and heavier models that are more difficult to install and maintain.

Records researched

The safety award resulted from sleuthing by Dave Kauer, Curry explained. Kauer, supervisor of the 2727-E Building’s Technical Security maintenance staff, wanted to determine when the entire organization had achieved 5,000 days without a lost-time injury. His research showed that the 5,000-day clock started ticking at consolidation in 1986, when many site contractors merged under one prime contract and began keeping records in the same way. The Technical Security organization achieved 5,000 days (13.69 years) last March 5.

While Technical Security was honored for its 5,000-day achievement, additional research indicated the record stretched further back.

The Human Resources department was called to verify safety records for Technical Security’s bargaining-unit security maintenance workers as far back as possible. These records began in 1981, when security maintenance work was declared a specialty to be performed only by appropriately trained crafts workers. Before that, plant workers included the work among their other tasks. Human Resources checked the personnel records of every security maintenance electrician and instrument technician working in the organization since 1981 and determined that no one had missed a day of work because of an injury while doing this type of work in this organization.

“It’s really been longer than 20 years,” McCollom noted. “There were people doing this kind of work before it was declared a specialty in 1981 and they did it without missing work because of job injuries. But we can only count it from the time it became a specialty.”

“This 20-year award is really for our crafts people,” Curry said. “It really means something when those in the field achieve this kind of record.” ♦

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Locked on a safe work approach

The five locksmiths working alongside security maintenance personnel also have an extended safety record.

It hasn't been verified as extensively as the one for security maintenance, but the only job injury within memory happened long ago, when a back strain occurred while a safe was being used in order to work on it. Except for that, the locksmiths can't recall missing work because of job injuries.

Collocated with Technical Security in the Butler Loop facility, the locksmiths are in the Physical Security organization managed by Dennis Haskins. These groups, along with Administrative Security, comprise the Security Operations organization of Protection Technology Hanford.

The modern locksmith profession involves more than keys. The Hanford Site has many electronically controlled locks and the locksmiths work closely with security maintenance instrument technicians who are experts at computer-based access control systems. Collocation for more than five years has made the interface between locksmiths and security maintenance more convenient and efficient, according to members of both groups.

Locksmiths are also machinists. Their expertise has been called upon to devise custom-made locking systems.

"We came up with the ideas, produced the parts and made the devices. We've obtained two patents for our custom work," said locksmith Robert Hendricksen.

Key-making is a routine part of the locksmith job at Hanford. Safety has been incorporated into the routine through safe operating procedures and the use of personal protective devices such as safety glasses.

A broader safety outlook was demonstrated with the recent replacement of a key-making machine. The traditional machines require hands-on operation, with a degree of risk from having the hands close to moving parts and the possibility of flying metal shavings. The replacement machine is hands-free. It is hooked to a computer where the locksmith determines the proper key blank and configuration for the cuts.

" You punch it in on the computer, tell it the angle and the depth, and with your hands away from the machining equipment, you can make one to 500 keys," Hendricksen explained. "There was an article about locksmiths getting carpal tunnel from key-making, and this new automated key-making machine saves us from that." ♦



Locksmith Robert Hendricksen makes a key, hands-free, using a new automated key-making machine. This reduces the risk of repetitive motion disorders for the locksmiths, while required safety glasses protect eyes during the key-making process.

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Secrets of Tech Security's safety success

Technical Security members attribute the security maintenance safety record to several interrelated factors:

- **Longtime experience working with each other** — “When you’ve worked with someone for 20 years, you know which tool they’re going to pick up next,” commented Rita Thorne, instrument technician.
- **A family-like attitude of looking out for one another** — “There’s always someone to look out for you,” said Rick Barrett, 2727-E Building.
- **Job knowledge and experience** — “These people built it and installed it. They know the location. There is personal ownership of the job,” said Jim Gideon, a team leader at the 2727-E Building. “Attention to detail is a way of life here,” added 2727-E Building electrical engineer Carl Kinkel.
- **Best practices including the buddy system and safety walk-downs prior to conducting work** — “I’m the newest member here,” said electrician Rick Estes, who’s been on site for 21 years and at the 2727-E Building for three. “We work in teams. During these last three years, I’ve probably worked by myself on only one or two simple jobs.”
- **Training** — “Extensive training is required for each system and for each facility,” said John Daniel, an electrician north of the Wye Barricade. Seven to nine months of special training are required to work in some facilities including the Plutonium Finishing Plant and K Basins.
- **Proper tools and equipment** — Roy Yates, electrician north of the Wye Barricade, offered an example by holding up a large, slick-sided, bulky surveillance camera, about the size of a full-grown Hermiston watermelon. Security maintenance designed a special backpack to safely haul the cameras to the tops of towers for installation. He compared that camera to the new, less expensive models that are about the size of a cell phone. Not only do the new models save money, they save complication and risk to the workers who install, operate and maintain them.
- **Management support of the safety culture through safety meetings and response to concerns throughout the chain of command** — “We have weekly toolbox meetings and sometimes separate safety meetings,” said Brian Dahl, steward for the instrument technicians. Phenneger added, “If we have an issue, it goes to our supervisor, John McGee, and they respond all the way up the line at PTH”. ♦