ERT
TA-55 Emergency
Response Team

FACILITY SAFETY & NEWS

Community Service

Nuclear Materials Technology Bulletin

Volume 5 July Issue, 1992

Lab ERT's Serve the Community

In This Issue:

Members of the Emergency Response Team (ERT) always stand ready to help at TA-55, but did you know that they also are active helpers in the community? For example, when the Presbyterian Hospital sponsored Project Heart Start, we had three volunteers from our won Emergency Response Team there as cardiopulmonary resuscitation (CPR) instructors. This was held in the Albuquerque Sports Stadium on May 25 (Memorial Day). On that date anyone who wanted to learn CPR could get free lessons by simply going to the stadium where qualified instructors were available. Instructors came from all over the state to participate. Jan Croasdell, Sammi Owens, and Doug Tuggle represented TA-55

Doug Tuggle (center, wearing cap) and Sammi Owens (standing) Instructors for Project Heart Start sponsored by the Presbyterian Hospital at Albuquerque Sports Stadium

On another occasion, ERT team member Chester Higgins used his first-aid training to help an injured player at a recent baseball game. One of the players fell and Chester recognized that he had a broken leg. He began administering first aid and prevented further serious injury by keeping well-meaning teammagtes from moving the man before the ambulance could arrive. The man's leg was so badly broken that he might have suffered greater damage if he had been moved before ambulance personnel arrived.

Doug Tuggle is busy making plans for the CPR instruction class to be held on the lawn at TA-55. More than forty people have signed up. *See page two for details.*

(ERT, CONTINUED FROM PAGE 1)

Sammi Owens and Jan Croasdell, (center, wearing cap) Instructors for Project Heart Start sponsored by Presbyterian Hospital at the Albuquerque Sports Stadium, May 25, 1992 .

Becoming Certified in CPR

The TA-55 Emergency Response Team will give classes in Basic Life Support techniques during lunch hours the week of August 17-21.

The classes will be in two parts.

Lecture will be in the PF-1 Auditorium.

Practice and demonstrated proficiency will be on the lawn outside PF-1.

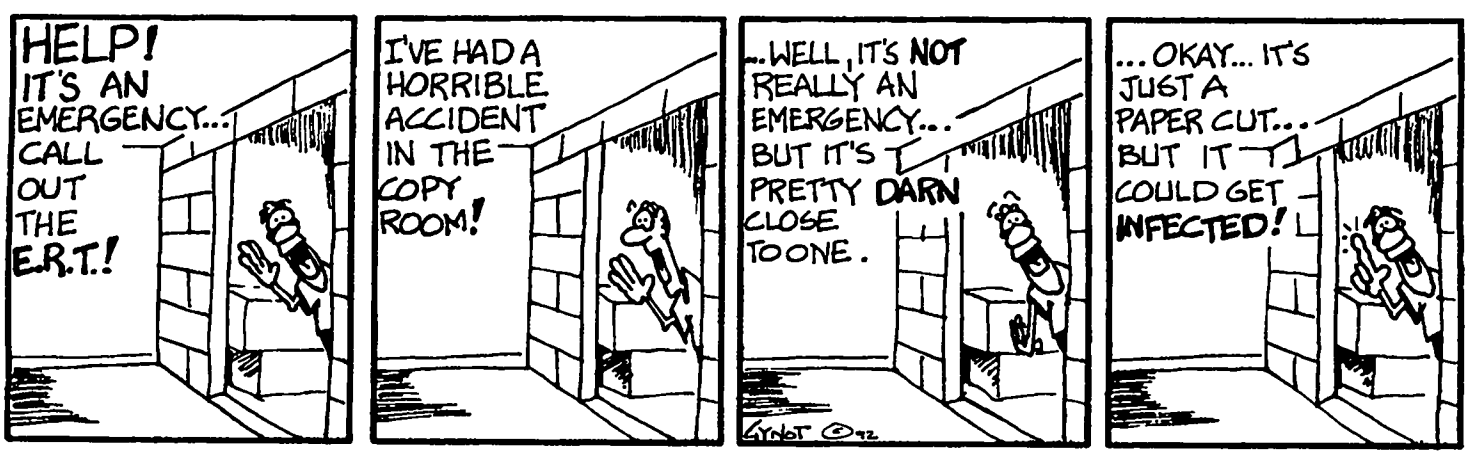
You may take the training to become certified or just come to learn the process. See ERT members to sign up.

Cellular Phone Alert

The number of cellular phones at TA-55 has increased from only four in May to dozens. Owners of these phones are briefed as to their proper use. We should all be aware that when the power is turned on, **it is possible for them to be recorded or monitored.** If you are discussing classified matters in the presence of a cellular phone, please make sure that the power is turned OFF (not standby). Should you attend a meeting within a **technical security area (TSA),** you may not introduce a cellular telephone.

A TSA is a room, building, or group of buildings that have been specifically approved for frequent and predictable discussions and/or audio-visual presentations of information classified ***Secret*** or above. At present, there is no official TSA at TA-55, according to Carl Ostenak, OS Division Leader.

GLOVEBOX ALLEY



Conduct of Operations

by Annell Danczyk, Department of Energy Facility Representative, TA-55

In this and each future "NMT Safety Bulletin," I plan to share a few words with you on Conduct of Operations. Conduct of Operations offers a disciplined and formal approach to conducting business. The goal for implementing Conduct of Operations is to improve the quality and uniformity of operations. Simply stated,Conduct of Operations is a DOE Order (5480.19) which serves as a guide to good practices in operating this facility.

Conduct of Operations can be applied to large programs such as maintenance and training or it can be applied to a simple activity performed each day. Some examples from the Order include the following:

BASIC COMMUNICATION

"Oral instructions should be clear and concise. In all communications, the sender and intended receiver should be readily identifiable. Instructions involving the operation of equipment should be repeated by the receiver to the extent necessary for the sender to ensure the instructions are correctly understood."
In other words, it makes sense for the person listening to **repeat what was said** in order to make sure it was heard correctly. Repeating the instruction is easy to do and it might eliminate an error made due to a miscommunication.

BELIEVE YOUR INDICATORS

"Operators should believe instrument readings and treat them as accurate unless proven otherwise. Ignoring an unusual reading because the operator believes an instrument is faulty can cause abnormal conditions to be undetected. In general, operators should check other indications, if possible, when unexpected readings are observed. Prompt action should be taken to investigate the cause of abnormal or unexpected indications so that prompt corrective action can occur. When malfunctioning or inaccurate instruments are discovered, they should be appropriately identified to prevent subsequent confusion and instrument and control personnel should be notified to effect repairs. In situations of operator doubt, operators should be instructed to achieve facility, personnel, and environmental safety *above facility production."*

Faulty gauges, warning lights, and audible alarms should be corrected so that you can believe your indicators. Numerous industrial accidents have occurred because an abnormal reading was ignored. Be technically inquisitive. Trust yourself. You have the experience and the knowledge to notice if something doesn't seem right.

LOGKEEPING

"Information should be promptly recorded in the logs. Delaying the recording of activities or events often leads to incomplete or inaccurate entries."
Keeping logbooks updated is a simple idea, but effort is required to ensure it is done appropriately.

TA-55 has many fine examples of good operating practice and it has many ongoing improvements. My goal is to give you a few common sense ideas to think about applying in your day-to-day operations.

Reminder:

Safety Suggestion Prizes:

First Prize: $50

Second Prize: $25

Third Prize: $15

Prize money to be applied toward safety-related purchases.

Awards also for safety posters that are chosen for display.

FACILITY SAFETY & NEWS

LALP-92-8
Volume 5 July Issue, 1992
This is a publication of the
Los Alamos
National Laboratory
NMT Division, P.O. Box 1663,
MS E583
Los Alamos, New Mexico 87544

Bulletin Staff:
Barbara Connellee ..... Editor
Joe Riedel ..... Staff Photographer
Gynot ..... Cartoons

Los Alamos
NATIONAL LABORATORY

May Safety Suggestion Winners

Chester Smith, NMT-7

First place winner of the safety suggestion contest for May was Chester Smith, NMT-7. He suggested that the holding tanks in PF-4 should be tested for corrosion.

Second place winner for May went to a suggestion with no name. This individual suggested that the northwest and southwest PF-4 exits should be kept free from material piled or stored near these exits. In case of an emergency evacuation, these could become a traffic hazard.

No third place winner was chosen.

June Safety Suggestion Winners

Robert Cart, JCI

First place winner of the safety suggestion contest for June was Bob Cart, JCI. He noticed that the front vehicle gate operates using a very heavy counterweight and it was possible for someone to be injured while doing maintenance on it. Robert suggested a solution to this hazard and his idea could prevent serious injury to workers if the lifting mechanism should fail during the maintenance operation.

The June second place winner was Gary Chavez, NMT-8, for his suggestion to place barrier tape and floor stands to keep personnel out of an area where chemical or hazardous spills have occurred.

Third place was awarded to George Montano, JCI, for his suggestion to install a submarine type ladder to PVD #14, PF-4 basement, when pump maintenance is required.

Facility Safety Committee Safety Tips

During the FSC tour it was discovered there were still some containers of "Tap Magic" in the 400 area. You must dispose of this product. There were also some discovered in some of the gloveboxes. This is considered hazardous waste and must be handled accordingly.

The recent evacuation drill highlighted the need for improvement in personnel going to their assigned assembly area. Please make sure you know your area and that you do not wander about after you get to your area. We must concentrate on keeping the commingling to a minimum. In case of contaminated booties or clothing, it is important to keep tight control over tracking or smearing.

During an evacuation, assembly area leaders need to wear identification so they are easily recognized . Once in the proper area, leaders need to remain in one spot so they may be found quickly.

Set up a regular time to check any first aid kit for which you are responsible. If you wait until an emergency, it may be too late to restock your kit. For example, you could automatically check the kit every payday or every day after a holiday.

TO YOUR GOOD HEALTH

by Jan Croasdell
TA-55 Nurse

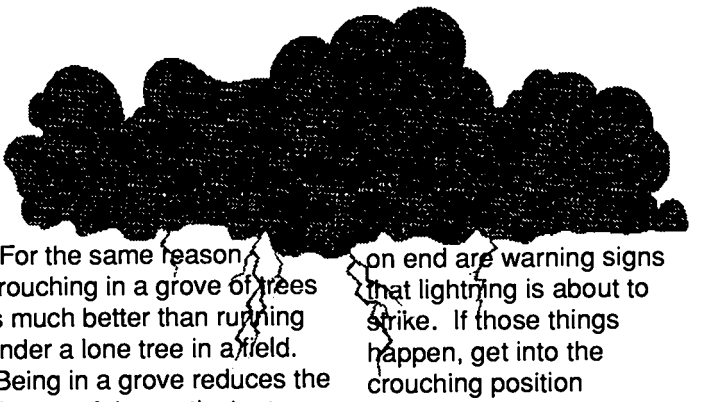
LIGHTNING SAFETY

We are now beginning what the weatherman fondly refers to as our monsoon season. With increased rain we also can expect the occurrence of lightning strikes. Each year, according to the National Oceanic and Atmospheric Administration statistics, thousands are injured by lightning and property damage costs reach more than $400 million.

PROTECTING YOURSELF

Your best protection is to stay indoors whenever the weather looks threatening. A large building with a metal structure is the safest because if the building is hit, the current will run along the outside of the metal framework and into the ground. A car with a metal roof serves the same purpose for its occupants. Convertibles or fabric-topped cars are ***not*** safe in a storm because lightning can burn right through the fabric.

Lightning meteorologist, Jim Campbell, offers this advice for anyone caught outside. "You should be able to see a thunderstorm coming if you're in an open field or on a beach. Try to get away from there and to a house or automobile before the storm hits." Campbell says lightning will strike the tallest conducting object on the landscape. More people are struck by lightning when they're out in the open than in any other situation.



For the same reason, crouching in a grove of trees is much better than running under a lone tree in a field. "Being in a grove reduces the chance of the particular tree you're under being hit," Campbell says. Stay 6 feet away from the tree trunk, if possible, to avoid being affected by a side strike if the tree is hit.

HUMAN LIGHTNING RODS

If you can't find a grove of trees, get to a ditch or ravine. You want to get as low as possible so you don't act as a lightning rod. Low doesn't mean flat on the ground, though. A person stretched out on damp soil could be affected by currents flowing out of a tree into the ground. Also, the greater the distance between body parts that touch the ground, the more chance there is for the person to become a kind of human switch with high-voltage currents running between the body parts in contact with the electrified ground.

The aim then is to minimize contact with the ground and to keep body parts that must touch the soil as close together as possible. Put your hands on your knees and your feet right next to each other. Then crouch as low as you can, and let your knees touch—but don't put your hands down to steady yourself. A tingling sensation on the skin or hair standing on end are warning signs that lightning is about to strike. If those things happen, get into the crouching position immediately.

Side strikes actually injure more people than direct strikes do. A side strike occurs as lightning seeks the best current conductor for a fast trip to the ground. A tree does not conduct current as well as a human body, so as the electricity flows down the outside of a tree trunk, it will jump to a person standing nearby. For that reason people huddled together in a storm are in more danger than those standing with at least 6 feet of space between them. If one person in the huddle is struck, chances are everyone will be affected by side strikes. The huddle also provides lightning with multiple paths to the ground instead of a single path, which means the energy will be dissipated more quickly. Thus the huddle becomes a prime target for a strike.

In homes made of wood or brick, that aren't protected by lightning rods, the possibility of a conducted strike is very real. A conducted strike travels down natural conductors such as wiring or pipes and into the ground. When that happens anyone touching a faucet or piece of electrical equipment that isn't grounded could be badly shocked or killed. On rare occasions (in only 1 percent of lightning fatalities) a person talking on the telephone may be struck if a telephone pole in the area has been hit. NOAA advises that no one use the phone during a thunderstorm except in an emergency. Never touch a metal fence during a storm for the same reason. The current may travel miles along it from the point where the strike occurred.

LIGHTNING AWARENESS

PEOPLE CAN BE REVIVED

If someone is hit by lightning, ***never*** assume the person is dead, even if breathing and heartbeat have stopped. The force of the current disrupts the body's nervous system temporarily. But with artificial respiration and cardiopulmonary resuscitation performed by a trained CPR rescuer, many people can be revived in a matter of minutes. Don't be afraid to touch someone who's been struck. Once the lightning flash is over, the person no longer has any current running through his body. Even if someone seems only slightly stunned, seek immediate medical help. There may be internal organ damage from the bolt.

Excerpts from Family Safety, Spring 1992

PSAP

Dale Sanchez and Paula Dransfield stand beside the mobile testing unit at PF-1.

DRY RUN FOR DRUG TESTING UNIT

Definition: dry run. 1. Military. A test exercise in bombing, attacking, or other combat skills without the use of live ammunition. 2. A trial run; a rehearsal. *The American Heritage Dictionary*

On two occasions in June the Personnel Security Assurance Program manager, Paula Dransfield, visited TA-55 with the mobile testing unit. This was done to acquaint TA-55 personnel with the physical layout of the unit and to answer any questions.

According to Paula Dransfield, the drug testing program has not yet been scheduled to begin. The next time we see this unit at TA-55, though, it will be for actual collection of samples. Samples are to be sent to a National Institute of Drug Abuse (NIBA) certified laboratory. Paula says there are many laboratories available to run the diagnostic tests but the Illinois laboratory was chosen because of its excellent reputation with clients. This large laboratory screens 4,000 - 5000 samples each month.

Visitor Guidelines

Since TA-55 opened in 1978, there have been more than 30,000 visitors who toured PF-4 and other areas of the plutonium facility. Initially, most visitors were escorted by Jere Green, then Group Leader of MST-11. But the number of visitors grew and the frequency of tours increased until it became necessary to ask others on the staff to share this responsibility.

On average, we now set up tours for about 4,000 people each year. The visitors are usually government or military officials or business associates of the Laboratory. Groups may be small or "by the bus load". Whatever the occasion, we must assure the safety of each person, and we have set up these guidelines to inform visitors of the rules they must observe.

INTRODUCTION

- Most of TA-55 is within a security-controlled **Protected Area.** An escort will be assigned to guide you and assure your safety.
- Visitors must stay with their escort at all times.

PROTECTIVE CLOTHING

- visitors entering PF-4 must wear anti-c lab coats, booties and safety glasses. Dresses, shorts and high-heel shoes are not allowed in PF-4. Personnel entering PF-4 will be given a visitor identification badge to wear while in PF-4. A thermoluminescent dosimeter badge (TLD) will also monitor for any potential radiation exposure.

SPECIAL RULES

- You must complete a short training course.
- Do not touch any surface in PF-4.
- Be alert for and obey all signs, warning lights and barriers.
- Monitor your hands and feet upon leaving any lab.
- Before leaving PF-4 the health physics monitors will monitor your entire body and you will again monitor your hands and feet.