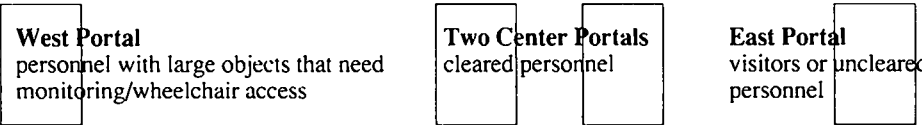


FACILITY UPDATE

**Three New Portals To Speed Up TA-55 Entry**

Three new portals at Station 402 will soon be in use, increasing the number of portals from one to four. All four will be open during peak hours. Which one should you use? The diagram below will help you decide.



Paul Fresquez stands beside new TA-55 portal.

**Fresquez looks forward to new portals**

Paul Fresquez, a PTLA designated supervisor for the area, talked about how they've handled problems during the one-portal years.

Paul said, "Jan DeField has been a lifesaver." She helps PTLA get uncleared visitors into TA-55 much faster by notifying Station 402 in advance when large groups are coming. When the visitors arrive, PTLA already has their names written down, which saves a lot of time at the gate.

On the down side, some people get very irritated with the portal procedures. Paul said, "PTLA strives to maintain the integrity of security at TA-55. We want to do our job in a professional manner and follow all the regulations dictated by DOE and the Laboratory. It is often difficult to keep people happy while doing a good job."

Even when the new portals open, there will still be special times when patience will be required when entering or leaving TA-55.

Fresquez explained, "We are not avoiding you or intentionally keeping you waiting. Sometimes other things must take priority."

**Ways you can speed things up at Station 402**

Under ordinary circumstances, there are two ways you can help speed things up at the portals.

- Make appointments with visitors after 8:30. PTLA has a work peak at 7:30. This is when shifts change, the morning equipment checklist has to be completed, and people are waiting to get in.
- If you wear steel-toed shoes, be sure you place all other metal in the tray and send it through the x-ray machine. Otherwise, when you are hand-monitored for the safety shoes, the wand will pick up all other metal on your person. It picks up metal like the foil lining in a pack of cigarettes, the metal strip on the credit cards in your pocket, and metal belt buckles. If you wait for the security inspector to ask you to remove these items one at a time, you are causing an inconvenience to everyone. ♦

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The Facility Safety & News Bulletin provides safety information and facility news to TA-55 employees. It also seeks to recognize workers who contribute to the safe operation of the facility.

**Los Alamos**  
NATIONAL LABORATORY

Los Alamos, New Mexico 87545



**SAFETY AWARD WINNERS**

**June-Mark DeVolder**



**Mark DeVolder, NMT-8**, won the first place safety award in June. He saw several places throughout the Facility where exposed ends of threaded rods and the sharp ends on unistrut could cause cuts if employees bumped into them. He has suggested that rubber bumpers, similar to those used on re-bar for concrete, be placed on the protruding ends to protect personnel from injury while working around these items.

**July-Bill Zwick**



Second place was awarded to **Bill Williams, NMT-2**. Bill suggested that several "Lens Cleaning Stations" for safety glasses be installed in the hallways of PF-4 and PF-3.

No third place was awarded in June.

**Bill Zwick, NMT-6**, was the winner of the first place award in July. On several occasions at several different TA-55 locations, Bill has seen access to fire extinguishers and fire hoses blocked by equipment or boxes of trash. Bill has suggested that the area on the floor directly below the fire extinguishers and hoses be painted a bright yellow to remind personnel to keep these areas clear. No second or third place awards were given this month.

**August-Gus Ortiz**



In August, first place was awarded to **Gus Ortiz, NMT-8**. Gus has recognized that the Operations Center has no way of knowing if there are any ERT members on site for after-hours emergencies. He has suggested the letters "ERT" be entered after each ERT member's name on the Entry Control System. The Operations Center would then be able to identify what ERT members are inside TA-55. No second or third place was awarded in August. ♦

**FACILITY SAFETY PROCEDURES**

**Lockout/Tagout Procedures Are Big Lifesavers**

OSHA believes the Lockout/Tagout Standard will prevent nearly 122 deaths and 28,400 lost workday injuries annually, according to an article in *Occupational Health & Safety* (Nov. 1991). Lessons learned at Los Alamos clearly show that many injuries and even deaths at the Laboratory could have been avoided if lockout procedures had been used.

The TA-55 Safety Office and NMT-8 have developed two new procedures. These GEN procedures, which became effective on April 30, implement the requirements of the Laboratory lockout/tagout procedures for red locks and blue locks.

Lock	Laboratory Procedure	TA-55 Procedure
Red	LP-106-01.1	503-GEN-R01
Blue	LP-106-02.0	546-GEN-R00

**Red locks.**

Red locks are used to *prevent injury to personnel who are working on equipment and nearby personnel*. For example, a red lock is used to lock out the power to high voltage systems when the equipment is being serviced.

**Blue locks.**

Blue locks are used in two ways (1) *to protect personnel during normal operations* and (2) *to protect equipment or the environment by preventing unauthorized access*. For example, a blue lock is used to lock doors that lead to exposed electrical terminals or hazardous materials. A blue lock is also used to lock the acid drain valve to prevent dumping of unanalyzed waste acid to TA-50.

**Training Workers to Perform Lockout/Tagout**

The table below shows what groups should do to get employees trained on lockout/tagout.

These people	do this.
Group leaders and JCI Supervisors	appoint an employee who will be responsible for performing lockouts tagouts.
Supervisor of appointed employee	makes sure the employee gets the proper training.
Employees authorized to perform lockouts and tagouts	must complete the following: • HS-8, Course #6713 (Red Lock) • HS-8, Course #7561 (Blue Lock).

To register for the HS-8 courses, call 7-0059. ♦

## JULY OCCURRENCES

### Update on TA-55 Facility Occurrences

by Bill Parras



#### WHAT TA-55 INCIDENTS ARE REPORTABLE ?

A proposed DOE Categorization Matrix defines the kinds of incidents that are reportable per the DOE Order on Occurrence Reporting (DOE Order 5000.3B). According to a recent occurrence reporting assessment of the CMR Facility by the DOE, this Categorization Matrix should be considered only as generic guidance and should be modified to meet facility-specific needs.

TA-55 group leaders were recently asked to provide input and recommendations for developing a TA-55-specific Categorization Matrix. Once completed, this matrix should make it easier to understand the kinds of incidents that should or should not be reportable per DOE Order 5000.3B.

#### CONTAMINATION CONTROL PROGRESS

TA-55 management reviewed eight separate incidents during July. Of the eight incidents, our goal is to handle six as nonreportable and complete internal evaluations and lessons learned.

In most of these incidents, affected TA-55 personnel (NMT-3, NMT-6, NMT-9, and JCI) did exactly what they were supposed to under existing TA-55 procedures. They located the glovebox glove breaches without spreading the contamination or incurring any skin contaminations. TA-55 management and DOE mentors have indicated that the efforts of these affected personnel and the lessons learned from the incidents demonstrate that we are making progress in improving TA-55 contamination control.

#### UPDATE ON JULY OCCURRENCES

The following is an overview of July TA-55 occurrences:

#### July 8: Personnel Contamination In PF-4, room. 207

While monitoring his hands in the HFM-6 located at Station 403, a technician was found with contamination concentrated on the back of the right hand, below the knuckle. Progressive measurements of the same location of skin contamination revealed the following:

Time	dpm Reading
11:35	1,200
11:40	3,000
11:45	20,000
11:50	30,000

The technician's hand had extensive perspiration from doing strenuous glovebox work and wearing double surgical gloves. As his hand was drying, the contamination readings indicated progressively higher contamination in disintegrations per minute (dpm) levels.

#### July 8: Loss of Control of Radioactive Material - Area Contamination

Three separate contamination incidents affected two JCI electricians as they were installing electrical conduit in PF-4, Room 207. Contamination was discovered at various intervals on their surgical gloves, right shoulder area of outer paper coveralls, screwdriver and pliers, and on the work floor near a glovebox leg shim. In all instances, the contamination was found by implementing good self-monitoring techniques.

#### July 12: Loss of Control of Radioactive Material - Area Contamination

When attempting to leave Station 403 at the end of the day, a technician was found to have his right hand contaminated (5,000 dpm) on a one-inch wide strip extending from the wrist to the base of his little finger. Prior to reaching Station 403, the technician had been working in a glovebox in PF-4, Room 401. A lower, left-handed glovebox (GB 437) glove was discovered to be contaminated (4,000 dpm). The glovebox glove is being examined to determine if contamination of the individual could have been the result of glove failure.

#### July 16: Contamination Detected In a Controlled Area

In attempting to locate the source of contamination on a technician's protective clothing, contamination was detected on three glovebox gloves in PF-4, Room 208. The contamination readings of these three contaminated gloves were 750, 1,000, and 5,000 dpm.

## JULY OCCURRENCES

### July 20: Loss of Control of Radioactive Material - Area Contamination in PF-4, Room 207

While replacing a cable and severing a connecting ring inside a glovebox, a technician determined by self-monitoring that his left-hand surgical glove had been contaminated between the thumb and index finger. Contamination was subsequently found inside the right-hand glovebox glove that had been used by this technician. It is speculated that cross-contamination could have occurred when the technician crossed his gloved hands while tying down the glovebox gloves on the exterior of the glovebox.

### July 26: Area Contamination in a Controlled Area as the Result of a Glovebox Hole

While inspecting an oxygen analyzer in PF-4, Room 20, a JCI craftsman climbed a three-foot ladder to get to some conduit above gloveboxes 216 and 218. After climbing down from the ladder, he self-monitored and found contamination (5,000 dpm) on his left surgical glove. Contamination was found on a glovebox glove located next to the connecting ring in the arm pit area of the glove. A second glove in the lower glovebox was also detected to have an area 1 cm. sq. that was contaminated in the arm pit region.

### July 27: Safety Class B System Degradation - Glovebox Glove Failure Resulting in Loss of Contamination Containment

A technician was performing a cleaning operation in PF-4, Room 207, glovebox 266. While self-monitoring, he found contamination (2,000 dpm) on his left surgical glove. A one-eighth inch diameter hole was found in the left-hand index finger of the glovebox glove in GB 223, which had been used by the technician, and was contaminated (3,000 dpm). The hole in the glovebox glove is suspected to have occurred when the glove was pinched while closing the port door to the glovebox.

### July 28: Safety Class B System Degradation - Glovebox Glove Failure Resulting in Loss of Contamination Containment

After working to remove furnace elements and tubes in a glovebox in PF-4, Room 429, a technician found through self-monitoring that his right surgical glove was contaminated (5,000 dpm). A pinhole was found in one of the glovebox gloves that had been used by this technician. The location of the pinhole in the glovebox glove corresponded to the same location of the contamination on the technician's right hand surgical glove.

## LESSONS LEARNED FROM JULY OCCURRENCES

### 1. Be aware of masking effects that prevent accurate contamination determinations.

All TA-55 personnel need to be aware that perspiration can mask contamination levels. As was discovered with one of the cited occurrences on July 8, contamination levels can increase on bare skin as it is drying. Precautions need to be taken to prevent excessive perspiration by using cotton liners inside gloves, changing surgical gloves when perspiring, and/or allowing for complete drying of hands prior to self-monitoring.

### 2. Self-monitor prior to tying glovebox gloves outside the glovebox.

To avoid the potential for cross-contamination in the process of tying glovebox gloves outside of the glovebox, it is recommended that you self-monitor immediately after extracting your hands from the glovebox gloves and prior to tying these gloves. Once you are certain that your surgical gloves are not contaminated, then proceed to tie the glovebox gloves.

### 3. Examine glovebox gloves before use/self-survey after use.

The TA-55 Safety Manual includes general guidance for the examination of glovebox gloves prior to use and surveying after usage. Your safety and that of your coworkers is dependent on how consistent you are in conducting pre-use glove examinations and post-use surveys. The pre-use examination should include visual inspections for any potential breaches or fatigue in the glovebox glove. If there is any doubt on the condition of the glovebox glove or suspicions regarding pinholes, have an HS-1 RCT survey the glovebox glove by using a radiation probe detector.

### 4. Support HS-1 RCTs in locating and decontaminating any sources of contamination.

Determining the sources of contamination is an integral aspect of the TA-55 contamination control program. Without a quick and firm determination of the sources of contamination, decontamination can be delayed or jeopardized, thus placing you and other TA-55 coworkers at risk of being further contaminated. All TA-55 personnel involved in contamination incidents are required to provide HS-1 RCTs with their fullest cooperation and support to locate and decontaminate the sources of contamination as soon as they are first detected.

**FACILITY SAFETY MANAGEMENT**

**TA-55 Waste Management Team Tackles Troublesome Waste in the Facility**

Workers throughout the Facility have noticed the remarkable progress that the TA-55 Waste Management Team has made in moving waste and discarded items out of the Facility. Those responsible for all this hard work are listed below. When you have waste problems, please contact them.

<b>These people</b>	<b>do these jobs</b>	<b>and can be reached at these numbers.</b>
Jim Balkey	Waste Management Section Leader and Nitrate Operations	7-2319 104-1750
<b>Radioactive Waste Operations</b>		
Kathleen Gruetzmacher	Radioactive Waste Coordinator and TA-55 Hazardous Waste Coordinator	5-4356 104-6756
Susan Ortiz	Data Package Coordinator	7-2025 104-6762
Ron Wieneke	Waste Management Team Leader	5-0269 104-6317
<b>Low-Level and Liquid Waste Operations 5-1654</b>		
Lorenzo Trujillo	Functional Supervisor, TA-55 Spill Coordinator, and Low-Level Hazardous Waste Coordinator	7-2317 104-1527
Tim Gallegos Dennis Martinez Rick Romero Richard Salazar	Team member Team member Team member Team member	9-988-0746 104-6406 104-6368 104-1491
<b>TRU Immobilization Operations 7-2573</b>		
Bill Schueler	Functional Supervisor	7-1193
Chester Smith	Lead Technician	7-2568 104-6537
Steve Griego Samantha Harmony Mark Rivera	Team member Team member Team member	104-6781 104-6485 104-6720
<b>TRU Solid Packaging Operations 5-0545</b>		
Ron Wieneke	Functional Supervisor	5-0269 104-6317
Dennis Wulff	Lead Technician and TRU Hazardous Waste Coordinator	5-0545 104-1045
Joe Gutierrez John Rayburn	Team member Team member	104-6338 104-6717

**IN THE NEWS**

**Worried About the Hantavirus?**

Here are some precautions you can take to avoid exposure to the hantavirus.

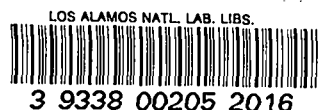
**1. Control your exposure to rodents**

- keep food covered or in the refrigerator,
- don't leave dirty dishes soaking or sitting in the sink,
- keep all bulk grains and animal foods outside in secure containers,
- don't overfeed birds, and
- don't clean outdoor rodent homes, such as woodpiles.

**2. Disinfect if you see signs of rodent exposure indoors**

- use a disinfectant to mop floors,
- if you find dead rodents, bedding, or nests, first put on rubber gloves, then
  - spray with flea killer,
  - soak with disinfectant,
  - remove with a long-handled shovel,
  - wash rubber gloves in disinfectant before removing them, and
  - in rural areas, bury bedding, nests, or dead animals two feet deep.

If you have questions, you can call the Department of Health between 8 a.m. and 5 p.m. at 1-800-879-3421 or the Centers for Disease Control and Prevention 24 hours a day at 1-800-532-9929. ♦



## TO YOUR GOOD HEALTH

## Jan Croasdell provides nursing care at TA-55

Jan Croasdell has been the nurse at TA-55 since 1984. Many of you know her from visiting her office in PF-3, room 142 — she gets over 2,000 visits per year. Her office hours are 1:00-5:00 Monday through Friday.

Jan has an extensive background in nursing. Before coming to the Laboratory, she worked at Los Alamos Medical Center for 15 years. While she was there, she worked in the emergency room and as the evening supervisor.



*Jan Croasdell checks Fred Hampel's blood pressure.*

### TA-55 Health Services

Some of the many health services Jan provides at TA-55 are described below.

**work-related injuries** - Jan's primary responsibility is to give first-care in case of work-related injuries. This often saves employees a trip to HS-2 if the injury is not serious. If you do see a doctor at HS-2, Jan may be asked to do the follow-up, such as checking your wound for signs of infection.

**blood pressure checks** - Jan can help you monitor your blood pressure. She will keep records of your blood pressure for you to take to your doctor.

**nonprescription medications** - If you have a cold, headache, allergies, indigestion, insect bites, or athlete's foot, Jan may have something for temporary relief.

**dressings and bandages** - If you work in PF-4 and need a bandage to cover a wound before you go to work, Jan can do this for you. She also follows doctors' protocols for changing postsurgical dressings and treating burns.

**general medical consultation** - If you wonder if your child has chicken pox or what the doctor's diagnosis of your parent's illness means, perhaps Jan can help you. Besides her own knowledge, she has an extensive reference library with books, articles, and brochures. She'll let you check the material out for short term loans.

### Jan's contributions to the ERT and FSC

Jan has also voluntarily integrated her skills into the larger picture at TA-55. She is a member of the executive committee of the Emergency Response Team. She helps with the continuing education of the members by participating in refresher courses on things like taking blood pressure, doing CPR, and applying bandages. She also helps plan drills and makes the "victims" wounds look real. As a member of the Facility Safety Committee, she keeps track of the number and kind of injuries at TA-55.

Jan enjoys her work at TA-55. She likes the people and she likes caring for people she knows. The job has more variety and opportunity to treat patients than many nursing positions. She feels good about her work when people stop by and thank her for what she's done or bring her a note from a family member thanking her for information.

The TA-55 management particularly appreciates Jan's willingness to make significant contributions to health and safety at TA-55 through her voluntary involvement in the ERT and FSC.

### Why reporting work-related injuries is important.

Jan said, "Some employees don't seem to understand the importance of reporting job-incurred injuries. If they request treatment from me, but don't want the injury to be reported, they get to hear my story." Jan has also been told that some employees do not report their injuries for fear of retaliation, losing "points," or being reprimanded. For these employees, she repeats her story here. An employee (not at Los Alamos) reported a few minor on-the-job injuries, just as he was instructed to do. After a supervisor reprimanded him and told him he was an accident waiting to happen, the employee did not report his next injury. It appeared to be a minor laceration, but later it became infected and resulted in an amputation. The employee was responsible for huge medical bills and received no pay once he had used up his sick leave. Because the injury had not been reported, it was not covered by workman's compensation.

Jan said, "We do the paperwork for your own protection. Injuries may appear minor at the time, but you never know what may develop in the future." HS-2 has been assured there will be no reprisal for injuries reported. Contact the TA-55 safety officer or the Laboratory medical director immediately if this happens. ♦

### G Y N O T



What do ya mean you can't see what you're doin' in the glovebox ?

## COMMITTEE PROFILE

### TA-55 Criticality Safety Officers Committee

#### *Purpose of the Committee*

The purpose of the TA-55 Criticality Safety Officers Committee (CSOC) is to ensure that criticality safety is implemented consistently within TA-55. It is not an oversight committee; oversight is done by the Laboratory Assessment Office (LAO) and the Laboratory Criticality Safety Committee.

#### *Makeup of the Committee*

The CSOC is composed of the group criticality safety officers, the TA-55 safety officer, and the committee chair and vice chair. A representative from HS-6, the Laboratory Criticality Safety Group, also sits on the committee as an advisor.

#### *Work of the Committee*

The committee has regular meetings to discuss how criticality safety is being implemented at TA-55. Members are particularly interested in any new plans, such as changes in operations, new or modified equipment, and new programs. They also discuss issues that have an impact on more than one group, such as packaging of material for storage or the design of tanks for storing solution. Each officer communicates group concerns to the committee and carries back the global Facility view to the group. The committee has other jobs, such as revising the Criticality Safety Procedure (522-GEN) annually and making sure the safety manual and training programs are consistent with this procedure.

#### *Chair of the Committee*

Joel Williams, group leader of NMT-3, is the current chair of the CSOC. He is working to establish a system for rotating this position. A vice chair will be selected soon who will serve on the committee with Joel and rotate to chair at the end of the year. In the future, a vice chair will serve under the chair and then rotate to the chair position. This rotation will ensure continuity in the

committee. Joel pointed out this should also prevent chairs from serving a "life sentence if they do a good job."

Joel served on the Laboratory Criticality Safety Committee for seven years. He was the chair of that committee for two and a half years, including the time of the Tiger Team visit. Because of this experience, he feels strongly that at TA-55 it is imperative that groups get the big picture of how their activities mesh with the activities of others.



#### *CSOC Committee Members*

*left to right: Joel Williams, Gene Walter, Mark DeVolder, Trent Latimer, Tom Mills, Allan Hoff, Amy Jaramillo, Greg Kelley, Stuart Vessard, and Jerry Schreiber not pictured: Wayne Punjak, Ming Moy, Bill Schueler, Mike Stevens, Bart Woodruff, and John Schlessler.*

#### *What you should know about criticality and TA-55*

TA-55 has very large safety margins when it comes to the probability of a criticality incident. The reason for criticality limits is to maintain this large safety margin, which allows for some human error or unusual circumstances without endangering workers, the Facility, or the public.

The potential for a criticality event is always present at TA-55 because of the material we work with, but the probability is minuscule because of (1) the design of our equipment, (2) the training and quality of workers, and (3) constant vigilance, with the help of the CSOC, to identify and evaluate any changes at the Facility.

The fact that the Facility has never had a criticality occur is a tribute to this ongoing attention to quality, and Joel encourages everyone to continue on this path. ♦

## QUESTIONS ABOUT PSAP

*by Rita Bieri, PSAP administrator for TA-55*

**Q:** What happens if a PSAP employee takes another person's prescribed drug?

**A:** There are two bad things that might happen if you are a PSAP employee and you take another person's prescribed drug. First, it may cause you to have a drug reaction. And second, if you are tested while this



drug is in your system, you can't justify the results to the Medical Review Officer at HS-2. If you begin taking a prescribed drug, it is wise to fill out an HS-2 notification form. You can get a copy of this form at the TA-55 Nurse's Station or my office. This form is not complicated and is easy to fill out. Return it according to the instructions on the form. If you do this, HS-2 will have the form on file when you are called for your next urine test.

If you have a question about PSAP, call Rita Bieri, the TA-55 PSAP administrator, or Paula Dransfield, the Laboratory PSAP administrator. Questions can also be placed in Del Harbur's box in the main entrance of PF-1. Questions of general concern will be answered in future issues of this bulletin. ♦

**NEWS FROM ERT**

**LOS ALAMOS NAT'L LAB.  
IS-4 REPORT SECTION**

RECEIVED

**ERT Drill Includes Multiple Victims and Injuries That Look Real**

'93 OCT 7 AM 10 26

In its last drill, the ERT staged an accident that challenged the skills of the team. In the simulation, two people were preparing to do some oxyacetylene welding when a gas cylinders started to fall. One of the victims reached out to catch the cylinder, but had two fingers severed when they came between the cylinder and a piece of angle iron. The valve on the cylinder was sheared off when it fell, which caused the cylinder to become a projectile, killing one person and injuring two others.

The accident victims were **Lorenzo Trujillo (the "deceased")**, NMT-2; **Pete Valdez, JCI**; **Pat Pyburn (who is pictured at right)**, JCI; and **Tom Pyburn, JCI**. Lorenzo, Pat, and Tom are still in training to become ERT members. Participating as victims gave them the opportunity to view an accident from the victim's point of view, except for the actual pain.



**Laura Jarvinen** "found" the accident and called the Operations Center. The Center then called the ERT. Those responding included **Wilma Garcia, Doris Harvey, Yvonne Rivera, Louis Jaramillo, Rudy Maez, Larry Reese, Mike Lopez, Amy Jaramillo, and Billy Martinez**. Also participating from Facility management were **Ron Stafford and Tim Fife of NMT-8** and **Jeff Whicker and Julio Castro of HS-1**.

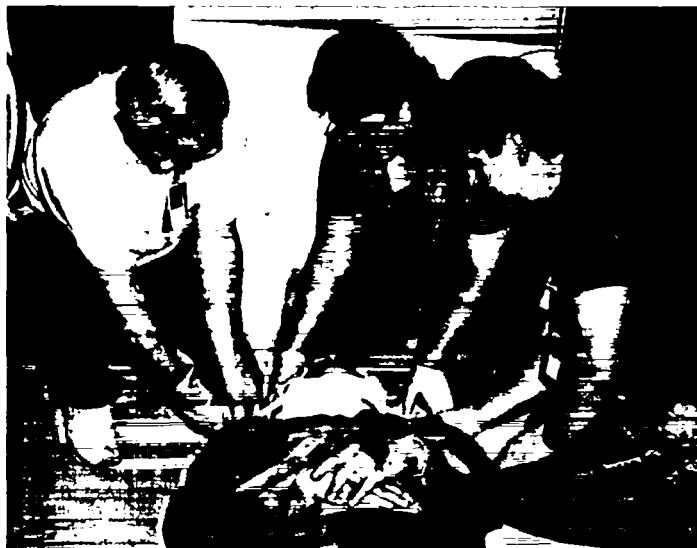
This was the most complicated accident that the ERT has staged because it involved multiple victims. They had done so well in single-victim scenarios, both simulated and real, that they were ready for something more challenging. Multiple victims gave them practice in prioritizing their actions. Several lessons were learned from the accident, including what should be done in case of a death. The evaluators for the drill were several subject matter experts and members of the TA-55 Facility Safety Committee.

**Moulage used to make wounds look real**

The injuries looked very real through the use of moulage — a technique of constructing simulated injuries by using plastics and cosmetics. These realistic-looking injuries make the accident seem very real and give the responders an opportunity to practice their skills in evaluating injuries. Several ERT members have taken a course in moulage and have practiced it at several on-site drills as well as at the Los Alamos airport exercise.



**Jan Croasdell, Marvin Maestas, Rusty Guillen, Dave Huerta, Doug Tuggle, and Patty Trupp** are among those who took the class. Through continued contact and interaction with the course instructor, several ERT members were invited to observe at the FAA certification at the Reno Nevada airport. This allowed an opportunity to watch moulage for the 119 "victims" as well as an opportunity to watch the overall emergency response. ♦



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