

Sandia works with water association, EPA to develop program to assess vulnerabilities of water systems in US

Utilities learn how to identify potential problems and develop measures to reduce risks

By Chris Burroughs

For Jeffrey Danneels (5862) the last three weeks have been a flurry of phone calls and e-mails from congressional staff members, water utilities, various associations and governmental agencies, and others. All are asking how they can ensure that the water distribution systems in this country remain secure.

Jeffrey, who is leading Sandia's efforts to protect the US water infrastructure, has some answers.

Over the past year and a half he has worked with the Environmental Protection Agency (EPA) and the American Water Works Association Research Foundation (AwwaRF) developing a program to train water utilities to assess the vulnerabilities of their systems and develop measures to reduce the risks and mitigate the consequences of terrorist or other criminal attacks.

"We started exploring the possibility of working together to enhance the security of America's water infrastructure — supply, treatment, and distribution — well before the Sept. 11 attacks on the World Trade Center and the Pentagon," says Jeffrey, Manager of Civilian Surety Programs Dept. 5862. "We are putting a program in place that involves on-site assessments of utilities and training sessions for utility personnel."

The initiative comes at a time of heightened concern about the security of water supplies nationwide. Threats range from vandalism to terrorism to intentional contamination.

The program stems from a performance-based vulnerability assessment methodology ini-

tially developed by Sandia to support the national nuclear security mission. It has since been modified to evaluate the vulnerability to terrorist attack of government buildings, air force bases, nuclear power plants, nuclear processing facilities, prisons, and federal dams.

In the late 1990s the vulnerability assessment work on federal dams caught the attention of the AwwaRF and led the organization to Jeffrey, hoping Sandia could provide the same help to water utilities as it did for dams.

About the same time, then-President Clinton issued Presidential Decision Directive (PDD) 62, Combating Terrorism, and PDD 63, Critical Infrastructure Protection, to create an integrated structure for combating terrorist attacks that involve explosives, chemical or biological agents, or sabotage against infrastructure. In PDD 63, the Critical Infrastructure Assurance Office was created to coordinate critical infrastructure assurance initiatives and create a well-directed national plan.

The EPA, the agency responsible for protecting the water supply, turned to Sandia to conduct a workshop for utilities on how to assess the vulnerabilities of their systems and reduce the risks of attacks.

The November 2000 workshop was attended by a national audience made up

(Continued on page 4)



SANDIA RESEARCHER JEFFREY DANNEELS has developed a program to study the vulnerabilities of water systems. (Photo by Randy Montoya)

Benefits pullout

A suite of changes to Sandia's benefits packages is explained in a special pullout section following page 4 in this issue of *Lab News*. The changes reflect enhancements to some benefits, adjustments to the design of some plans to better meet participants' needs, and adjustments to cost-sharing.

NNSA Administrator Gordon visits Labs, says 'thanks' to Sandians for their vigilance, dedication

By Bill Murphy

As the state of heightened security in the wake of the Sept. 11 terrorist attack on the US extended into its second week, NNSA Administrator John Gordon visited Sandia to express his appreciation to the staff, particularly those who worked long hours to keep the Labs secure.

His trip to Sandia was part of a two-day tour of NNSA laboratory and plant facilities in five states to assess the status of the nuclear weapons complex.

Gordon made the trip to review the current security posture at each site and identify any additional requirements needed. He met with local NNSA and facility managers and members of the protective forces. He discussed unique security issues at each site and the financial and

(Continued on page 4)

Sandia LabNews

Vol. 53, No. 20

October 5, 2001

Managed by Lockheed Martin for the National Nuclear Security Administration



Sandia security pulling extra duty to keep Labs functioning in time of nation's need

By Bill Murphy

Sandia's Protective Force personnel, working shoulder to shoulder with US Air Force military personnel to keep Kirtland Air Force Base safe and secure, have added a new chapter to their proud history of protecting the nation's most sensitive and vital national security R&D assets.

The Labs' Security Police Officers (SPOs) have pulled extra duty and been called on to take on new tasks in the weeks following the terrorist attacks in New York, Washington, and Pennsylvania. John Gordon, administrator of the National Nuclear Security Administration, made a point of personally thanking SPOs for their efforts when he visited Sandia on Sept. 20 (see story at left).

Wes Martin, Protective Force Chief of Operations, says Sandia's Security Police Officers are ready to do whatever it takes to ensure that all Labs employees can work in a safe environment.

"In there," says Wes, gesturing toward the Labs, "is where we're developing the technology that can help us win this thing, just like we did in Desert Storm. Our job is to get those folks into

their labs and offices as quickly as possible and make sure they have a safe place to do the work this nation needs right now."

Wes has the highest praise for his people. He says they have adjusted quickly to the new demands of working with the Air Force to maintain base security in a heightened threat environment. Echoing comments from Base Commander Col. Denny Eakle to NNSA administrator Gordon, Wes asserted that the working relationship between Sandia's SPOs and Air Force personnel has been "extraordinary."

"The only way to tell the difference between the Air Force airmen and Sandians is the color of the uniform," he says.

Wes notes that the early snags — "Thursday [Sept. 13, the day Sandians returned to work] was

(Continued on page 5)



SANDIA Security Police Officer Mike Patton checks identification as a car enters the Eubank Gate. (Photo by Randy Montoya)

Second Weapon Intern Program class graduates 2

Sandia terrorism expert gives blunt appraisal of bin Laden 3

Sandians share thoughts, feelings on Sept. 11 tragedy 6

This & That

Hard on everyone – Is some semblance of normalcy returning? I think so. I hope so. Sandia, the base, the entire country remain on alert. Nothing is quite the same. Nor ever will be. But there seems to be a little less tension than marked those first two horrible weeks after Sept. 11. People are allowing themselves to emerge a bit from what, after all, has been an intense period of communal national mourning.

Planes are flying. Sporting events have returned. Concerts have resumed. People can allow themselves a few gentle indulgences, some occasional shared laughter, without necessarily feeling guilty. In fact, there is a need, as many have said, to return to living life as a way of reaffirming life. A colleague told me of the immense joy of being able to see and hold a new baby, her nephew, born in Santa Fe that second weekend after the tragedy.

That same weekend my wife and I flew, yes a bit nervously, to Los Angeles on a long-scheduled three-day trip. On Friday we visited the Getty Museum, a hill-top island of beauty, grace, and solitude in the center of that teeming metropolitan area. At a ceremony at Dodger Stadium on his 74th birthday we heard former Dodger manager Tommy Lasorda launch into an impromptu inspirational speech not only on our determination to fight the terrorists who threaten our way of life but our patriotic duty to get the economy out of its sudden plunge by getting back on airplanes, spending money, and living life again. Then we came back to hear, along with 9,000 others, the great Luciano Pavarotti sing at The Pit (UNM). Like everything else for us that weekend, it was rejuvenating. Pavarotti even said afterward that the warm response of the Albuquerque audience had helped revive his spirits.

The past weeks have been hard on everyone, emotionally, and we all need such things. I've seen the effect of the stress on some of my colleagues here in our office. It has been difficult, still is. Multiply that by the hundreds of Sandia organizations our size, some with far more serious responsibilities, and the problem mounts.

* * *

Sorrow and hope – That's one reason we decided to invite Sandians to share some of their personal feelings and thoughts in the wake of the tragedies. Excerpts begin on page 6 (after the special four-page pullout section about Benefits changes). I hope it helps us all to read some of our colleagues' very personal expressions of sorrow and hope.

– Ken Frazier, Editor (844-6210, kcfrazi@sandia.gov)

A colleague told me of the immense joy of being able to see and hold a new baby, her nephew, born in Santa Fe that second weekend after the tragedy.

Second Weapon Intern class graduates

Twenty-one students who participated in the Sandia-sponsored Weapon Intern Program graduated Sept. 26 in ceremonies at the New Mexico Natural History Museum.

The students — all with advanced degrees and working in the nuclear weapons arena — are the second class to graduate in the two-year program that trains the next generation of nuclear weapons experts. Sandia initiated the program three years ago to give young scientists and engineers a broad and in-depth understanding of the nuclear weapons complex.

John Gordon, NNSA administrator who addressed the graduates via a video, says the program is helping NNSA meet its goal of ensuring the vitality and readiness of NNSA's scientific and technical enterprise for the next decade and beyond.

"In speeches and congressional testimony since I have been NNSA administrator, I have been reminding everyone that within a decade, most of



GATHERED for the graduation of Sandia's second Weapon Intern Program class are, from left, Rick Cameron (DOE/AL intern), Brad Altman (2113 intern), Rick Glass (DOE/AL Manager), Shawn Burns (9231 intern), Tom Hunter (Sr. VP 9000), John Hogan (2907), and Andy Rogulich (2911).

our weapons designers with nuclear testing experience will be eligible for retirement and may have left our workforce," Gordon says. "So I am very gratified that the next generation of stockpile stewards are getting one-on-one time with senior weaponeers and nuclear weapons pioneers. They are learning to use not only the new supercomputer and weapons effects tools, but also the data and lessons learned from the previous generation of weaponeers."

This year's graduates include two from DOE/Albuquerque, one from the Honeywell Kansas City Plant, and three from the US Air Force. The rest are Sandia employees.

The Sandia graduates are Brad Altman (2113), Brett Bedeaux (2109), Jason Bowie (2254), Edward Bujewski (14408), Shawn Burns (9231), Douglas Deming (2341), Robert Koss (2564), Larry Luna (2112), Mark Martin (12335), Arnoldo Muyschondt (2331), Michael Rimbart (2113), Heather Schriener (12333), Bradley Smith (1746), Jeffrey Whitlow (2912), and Joel Wirth (2131).

DOE/AL graduates are Richard Cameron and John Myers. USAF graduates are Capt. Brian Gaude, Maj. Charles Howell, and Maj. Allen Tate. The Honeywell, Kansas City Plant graduate is Carl Ross.

One member of the Class of 2001, John Myers, was unable to make the ceremony. He is a commander in the US Naval Reserve and was called to active duty following the Sept. 11 terrorist attacks.

John Hogan, a senior Sandia weapons scientist who started the program in 1998, says the location of the graduation was changed at the last minute from a site on Kirtland Air Force Base to the Natural History Museum due to security restrictions on the base.

"We thank the museum for allowing us to use it for the graduation on such short notice," Hogan says. "We really appreciate their support of Sandia."

Dignitaries present who provided perspective, advice, and inspiration were Sandia President C. Paul Robinson, Sr. VP 9000 Tom Hunter, Director of Albuquerque DOE Operations Rick Glass, and Director of Nuclear Weapons Product Support Center Col. Jock Trafton.

During the first year of the two-year program, the interns take classes, attend seminars, do individual research, and go on site visits throughout Sandia's New Mexico and California operations and the national nuclear weapons complex. They spend their second year completing research projects and doing job rotations, which are four-month assignments in different organizations.

Sandia LabNews

Sandia National Laboratories

<http://www.sandia.gov/LabNews>

Albuquerque, New Mexico 87185-0165
Livermore, California 94550-0969
Tonopah, Nevada • Nevada Test Site • Amarillo, Texas •
Carlsbad, New Mexico • Washington, D.C.

Sandia National Laboratories is a multiprogram laboratory operated by Sandia Corporation, a subsidiary of Lockheed Martin Corporation and a prime contractor to the US Department of Energy.

Ken Frazier, Editor505/844-6210
Bill Murphy, Writer.....505/845-0845
Chris Burroughs, Writer.....505/844-0948
Randy Montoya, Photographer.....505/844-5605
Nancy Garcia, California site contact.....925/294-2932

Contributors: Janet Carpenter (844-7841), John German (844-5199), Neal Singer (845-7078), Larry Perrine (columnist, 845-8511), Howard Kercheval (844-7842), Iris Aboytas (Milepost photos, 844-2282), Rod Geer (844-6601), Janet Carpenter (Ads, 844-7841).

Lab News fax505/844-0645
Classified ads505/844-7841

Published on alternate Fridays by Media Relations and Communications Dept. 12640, MS 0165

LOCKHEED MARTIN

University Day helps Labs boost relations with key schools



UNIVERSITY DAY VISITORS Billy Sanders, left, Assistant Dean of Academic Affairs at the University of California-Davis, and Reggie Mitchell, Associate Professor of Mechanical Engineering at Stanford University, meet with Karen Scott, Manager of Recruiting and University Partnerships Dept. 8524. Among others schools represented at University Day were University of New Mexico, Purdue, Columbia University, University of Arizona, University of Colorado, University of Texas at Austin, and Yale. The relationships cultivated during University Day are a vital tool in Sandia's recruiting efforts. (Photo by Bill Doty)

Attacks: Sandia terrorism analyst gives his perspective

Gary Richter says plots are fueled by resentment at US overseas military presence, secular practices

By Nancy Garcia

"Basically, they turned a dozen knives into four huge guided cruise missiles."

— Sandia systems analyst Gary Richter (8114) the week following the terrorist attacks

Sandia's in-house expert Gary Richter is respected for bringing a richer picture of "means and motivation" to the analysis of terrorist groups, says 8000 VP Mim John. In sessions for managers and staff after the attacks on New York and Washington, Gary shared his thoughts and perspectives.

Gary is a systems analyst who has spent his days evaluating the goals and capabilities of terrorist groups (*Lab News*, Feb. 25, 2000).

He shares the US government's view that Osama bin Laden's organization, al-Qaeda, was "probably a significant player" in the Sept. 11 attacks by four airliners that leveled the World

and flight-deck know-how, which is "just a matter of money," costing perhaps \$50,000 for flight school. Navigation, Gary added, could be as simple as using a global positioning system like small craft pilots do. Once in eyeshot of a target, "it's just dead reckoning."

A few key features stand out. Gary said bin Laden, a native of Saudi Arabia who has been harbored by Afghanistan and Sudan, has been a "motivational genius" who got thousands of Muslims to leave their countries for Afghanistan, take up AK-47 automatic rifles, and face Soviet tanks — eventually driving the Soviets from the country. "One of the things bin Laden learned during that war," Gary said, "is how 'ineffective' a superpower is."

Gary cautioned that the acts are not motivated by a cult of personality, simply that "he's viewed as an effective mouth-piece for God — you do not need bin Laden, I guarantee it."

The other key feature was the communications security. "These people have learned a lot," he said, allowing the planners to keep a terrible secret from us for some time, Gary says.

In other ways, the attack was not a novel plot. Hijacking "is almost as old as terrorism itself," Gary points out. Using a vehicle as a "bomb" is an unfortunately attractive method, especially for a group extreme enough to consider everyday civilians — men, women, and children — legitimate targets.

Driving out the infidels

Another factor is the leverage that can be attained in an attack on modern society, in which cities are commercial hubs where we "cram 50,000 people into a tall vulnerable box."

On the other hand, "We were busy planning for yesterday's attacks," Gary said, and had grown lax to the threat of hijackings, since the last major scare was a sarin attack in Tokyo.

"We seem to think this is some sort of Pearl Harbor, some opening act in a war. It's not, it's

been going on for at least a decade. They view the instigation as the arrival of US troops on Saudi soil — who are still there [since the Gulf War]. They view this as a shocking development — they are fighting to drive out the infidels soiling holy land, because Saudi Arabia has the two most holy mosques of Islam, Mecca and Medina."

Bin Laden, Gary said, has roused disaffected Muslims by telling them they can serve God by fighting the Great Satan. He does not participate in attacks, but inspires, trains, and supports them with a money-making apparatus that raises hundreds of millions of dollars a year, supplying money and explosives to the militants. In earlier published comments, bin Laden has expressed not feeling responsible for attacks against US targets overseas, but has praised such actions.

Sponsoring terrorism now unacceptable

Bin Laden believes the governments of Egypt and Saudi Arabia are propped up by the presence of US troops, but violence ascribed to his organization is a symptom of even deeper resentment, Gary said, driven by disparities in wealth and power, plus irreducible religious differences. "They want a number of governments overthrown and replaced with religious fundamentalists who have very different ideas about how people should live, and they see us as getting in the way of that. There's no way to conceive of a way to reweave the social fabric of the world to satisfy these people."

On the other hand, he said, without sponsorship of sheltering or supporting states, the organization's effectiveness would be vastly diminished. At the end of the Afghanistan war, al-Qaeda was built up, Gary said, in Sudanese training camps, while other countries also "bear major responsibility" for fostering the group's aims. "It is not acceptable anymore," he said. "Having let that continue has gotten us into this mess. . . . This is not the end. It's going to be ongoing — we'll definitely suffer additional casualties."

Although Gary's work identified the possibility of this type of attack, Gary said parrying the threat is not simple. The element of surprise lies with the attackers, and even if a tip had been received directly, potential warnings are so common that embassies receive 30,000 threats annually. Averting danger is difficult — an informant alerted the US embassy in Kenya of a planned attack and suspected terrorist cells were disrupted in advance, but the bombing was still carried out.

Infiltrating al-Qaeda's inner sanctum, based on long-standing relationships between war veterans, would not be easy for any newcomer. International cooperation helps, but exchange of sensitive intelligence can be challenging to develop.

Social shifts the only answer?

It would also be hard to expect influential people close to bin Laden to offer up their war hero. As an analogy, Gary said, asking Afghanistan's ruling Taliban to relinquish their guest would be like asking us to turn Colin Powell over to Vietnam for trial for American atrocities committed during the Vietnam war in which he was a commander.

In a final analogy, he compared the motivation of the attackers to aspects of the Crusades: There was a religious fervor and call to arms, downtrodden people were amassed into armies, and there was state sponsorship in an attempt to "kick the infidels out."

Gary agreed with listeners who observed that the Crusades ended through social shifts in Europe, saying there is hope a long-term solution may lie with cultural shifts within mainstream Islam. At the end of his talk, Gary pointed out the wide range of options available to terrorists for future attacks, and pointed out that a suspected accomplice is still at large who had studied ship-building while his cohorts studied aircraft design. Gary concluded by quoting another counterterrorism expert who compares our efforts to a soccer goalie who strives to block balls and not lose the game by permitting any scoring shot. "We have to be concerned with a lot more than just defending against yesterday's hijacking."

Sandia CaliforniaNews

Trade Center, damaged the Pentagon, and crashed into the Pennsylvania countryside, leaving more than 6,000 citizens and foreigners dead or missing. Gary traces the emergence of this particular group back at least a couple of decades, to the assassination of Egyptian president Anwar Sadat, who had made conciliatory moves toward the West and Israel, in 1981 — carried out by associates of bin Laden. Furthermore, attempts to target the World Trade Center are not new; in the less disastrous 1993 bombing, ringleader Ramzi Yousef had intended to topple the two towers into each other.

In fact, Gary said, New York landmarks have been the target of other plots that were stopped. "Clearly we were lucky" during previous attempts, he remarked. "They just happened to have got through with this one . . . you can hijack a plane with a knife nowadays."

Dozens of people would have worked for years to bring this to pass, he said. The means to do so requires perhaps 10 to 20 active participants (out of some 10,000 people who follow bin Laden to some degree). It also requires suicidal determination, but fanaticism is not rare in that organization, he said;

Remembering our POWs and MIAs



SENIOR AIRMAN William Rogan displays the colors at Hardin Field on Kirtland Air Force Base in Albuquerque during National POW/MIA Recognition Day ceremonies on Sept. 21. The POW/MIA day is observed nationally to honor and commemorate the sacrifices of former POWs, missing-in-action service personnel, and their families. The Kirtland ceremony paid special tribute to seven US servicemen who died in April 2001 in a helicopter crash in Vietnam while on a quest to recover remains of US servicemen from the Vietnam War.

(Photo by Randy Montoya)

Gordon Visit

(Continued from page 1)

human impacts of heightened security levels.

After receiving status reports and updates from the Sandia senior management, Gordon dropped in on the Emergency Operations Center to meet personally with Sandians who staffed the EOC during the early days of the crisis. He was accompanied by Labs Executive VP Joan Woodard and Div. 14000 VP Lenny Martinez. (Lenny had served as Sandia Emergency Director from the early hours of the crisis.)

"I wanted to hear first-hand from security and management about what the issues were and are," Gordon said. "This [situation] is going to be with us for a while, unfortunately, so I want to learn as much as I can about the resources we'll need . . . and I [also] wanted to say thank you to everyone who's worked so hard to protect our people, our mission, and our assets."

In response to a "What next?" question from an EOC staff member, Gordon offered his views on the status of the US response to the attack. He expressed concern that not all the terrorists suspected to have been primed to strike on Sept. 11 had yet been "captured, caught, or dead. They're still on the loose in this country."



NNSA ADMINISTRATOR John Gordon (right) dropped in on the Emergency Operations Center to meet personally with Sandians who staffed the EOC during the early days of the crisis. He was accompanied by Labs Executive VP Joan Woodard and Div. 14000 VP Lenny Martinez. (Photo by Randy Montoya)

He said the terror attack will require "changing the way we [the NNSA] do business a

little," adding that the nation's protective forces

(Continued on page 5)

Vulnerabilities

(Continued from page 1)

of members of the AwwaRF, the American Water Works Association (AWWA), the Association of Metropolitan Water Agencies (AMWA), water utilities, Centers for Disease Control, Federal Bureau of Investigation, and others.

Also, as part of the effort, Jeffrey conducted assessments of two water utilities, going onsite for the analyses.

Now, as a result of the Washington and New York City terrorist attacks, he is designing additional workshops for AwwaRF and AWWA. The workshops are scheduled to begin in November.

EPA's primary concerns center around water distribution systems that serve the nation's 340 cities with 100,000 or more residents. Many are more than 60 years old and were built without particular concern for security.

In looking at different utilities around the country Jeffrey has found a few with shared common security issues — using potentially dangerous chemicals, for example. However, because most systems are quite old, few are configured alike, resulting in different security concerns for each utility.

He offers utilities three steps for assessing the vulnerability of their water infrastructure — detect, delay, and respond.

The first, he says, is to determine how well the system detects a problem, which involves surveying all security and monitoring features. For example, how quickly could the system discover an undesired chemical being pumped into the water supply? (Sandia is developing detection devices — such as the real-time soil and groundwater chemical sensor reported in Sept. 21 *Lab News* — that will be able to detect events as they occur.)

The second is to measure delay capabilities to determine how well the system can stop undesired events. This involves looking at barriers,

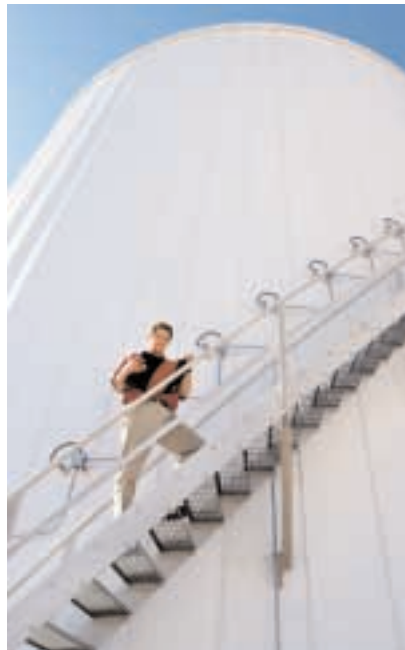
such as fences and walls, or how long treated water is stored before it is distributed into the water supply.

The third is to measure response capabilities — determining the capacity of private guard forces and local, state, and federal authorities to respond.

"It is important that utilities be able to detect the problem and delay it long enough for the response to arrive and defeat it," Jeffrey says.

This could mean preventing an undesirable chemical that was released from spreading in the water distribution system before it could be cleaned up. Or it could involve stopping an intruder in a pump station from doing physical harm to critical assets before guards or police can arrive at the scene.

Jeffrey says another important aspect of a vulnerability assessment is to fully characterize the system to develop a complete understanding of the site, including its overall mission and operations. Only once this is understood can the undesired events and possible consequences be determined. At the highest level, typical undesired events for water supply, treatment,



JEFFREY DANNEELS climbs a water tower behind the Microelectronics Development Laboratory (Photo by Randy Montoya)

Cooperating agencies

Agencies working with Sandia in developing methods for improving water infrastructure security include the Environmental Protection Agency, American Water Works Association Research Foundation, Association of Metropolitan Water Agencies, Federal Bureau of Investigation, American Water Works Association, and metropolitan water utilities. AWWA is the largest international organization for drinking water utilities, AwwaRF has a mission "to advance the science of water to improve the quality of life," and AMWA represents the interests of large municipal water utilities.

and distribution may include loss of power and system control, water supply contamination, and distribution loss.

"It's only after you figure out the undesired events that you can determine the critical assets to protect," Jeffrey says.

The monetary cost of security, Jeffrey says, depends on the level of protection a utility wants and can afford.

"A low security level might mean hiring a security guard and installing some detection features around critical assets, and that won't cost a lot," he says. "But to stop a fairly organized group from committing a terrorist act could be extremely expensive."

The water infrastructure security program is part of the Water Safety, Security, and Sustainability initiative undertaken by Sandia in the past couple of years. Water has been identified as a national security concern, and teams throughout the Labs are integrating years of work into the effort. Future *Lab News* articles will feature other parts of the program.

Team members

Team members working on the water infrastructure security project include Jeffrey Danneels (5862), Basil Steele (5830), Doug Adams (5838), Martin Sandoval (5849), Betty Biringer (5845), Bill Paulus (5845), Pauline Dobranich (5845), Rick Ramirez (7864), Chuck Rhykerd (5848), Ivan Waddoups (5845), J. Tim George (6117), and Denny Pedrotty (5832).

Security system basics

Here are some of the basic building blocks that should be in place to help reduce the risks of terrorist or other criminal attacks to utility systems:

- A written security plan that is understood, enforced, and followed by all on-site personnel.
- Background checks on all on-site personnel.

- Relationships or agreements with local law enforcement to lower the response time in case of an emergency.
- Written, enforced plans to control access of visitors and contractors.
- Separation policies to ensure employees return all keys and drawings and that computer passwords are canceled before leaving employment.



SANDIA SECURITY POLICE OFFICERS pulled extra duty and were called on to take on new tasks in the weeks following the terrorist attacks in New York, Washington, and Pennsylvania. John Gordon, administrator of the National Nuclear Security Adminis-

tration, made a point of personally thanking them for their efforts when he visited Sandia on Sept. 20. The officers are ready to do whatever it takes to ensure that all Labs employees can work in a safe environment. (Photo by Randy Montoya)

Security

(Continued from page 1)

a mess” — had largely sorted themselves out as drivers learned to have IDs ready.

Both motorists and security staff have gone through a steep and accelerated learning curve, Wes says. “Drivers are coming in smartly now,” he says. “They’re ready to help us do our jobs. And we [Protective Force staff] have learned to maintain a high level of base security wisely.”

A broad range of responsibilities

Although in recent weeks Sandia’s Security Police Officers have taken on additional, highly visible duties staffing gates at Eubank and Wyoming, Protective Force personnel have broad responsibilities in the entire spectrum of physical security activities. Among other responsibilities: physical patrol inside and outside tech areas; emergency response; drug/bomb searches; key service; building access and securing; escort support/after hours escort; safe/vault monitoring; and prohibited articles enforcement.

Gordon Visit

(Continued from preceding page)

— including those charged with protecting NNSA facilities — will have to do some “thinking outside of the box” to figure out and counter future attacks. Gordon’s stop at Sandia came several hours before President Bush’s address to a joint session of Congress and the American people.



NNSA ADMINISTRATOR John Gordon greets Sandia Security Police Officer Donnie Green, left, and Lt. Ron Baker at the Wyoming Gate. (Photo by Randy Montoya)

After leaving the EOC, Gordon greeted a team of Sandia Security Police Officers in front of Bldg. 800 before proceeding to meet and greet US Air Force security personnel at the KAFB Wyoming Gate. A retired Air Force general, Gordon appeared right at home talking to airmen and receiving a briefing on gate security measures.

Base Commander Col. Denny Eakle praised the cooperation between Sandia and Air Force security personnel. The two forces have worked together to facilitate access to the base for several thousand civilian Sandia employees.

“We have an amazing partnership here,” Eakle told Gordon. “It’s remarkable to see how well we work together and talk together to make sure our [joint] resources are used in the most effective way possible. I’m thoroughly convinced that what we have here is a one-of-a-kind model — a model for other installations with military and civilian-gov-



COOPERATION — Kirtland Air Force Base Commander Col. Denny Eakle (right) talks to NNSA Administrator John Gordon (left), praising the cooperation between Sandia and Air Force security personnel. In the background are, from left, VP 14000 Lenny Martinez; Wes Martin, Protective Force Chief of Operations; and Executive VP Joan Woodard.

(Photo by Randy Montoya)

ernment elements.”

In addition to his stop at Sandia, Gordon also visited the Savannah River Site in South Carolina, the Y-12 National Security Site in Oak Ridge, Tenn., the Pantex Plant in Amarillo, Texas, the Kansas City Plant in Missouri, and Los Alamos National Laboratory.

September 11, 2001

In the aftermath of the attacks on the World Trade Center and the Pentagon, the Lab News last week invited Sandians to share in these pages their personal feelings, thoughts, or reactions about the tragedy. These horrible events have affected us all in powerful, but differing ways, and we thought it might be useful to encourage those who wished to express how the tragedy has affected them and their families. Space prevents our publishing all the responses, and many have been condensed. Thank you to all who responded, and also to Bruce Hawkinson, whose Sandia Daily News electronic newsletter was our medium for issuing the invitation.

Like most Americans, I am devastated by the horrors of Sept. 11. I could not tear my eyes away from the television, despite the tears that flowed each time the terrible images were shown. Nightmares fill my sleep as I imagine what those aboard the four doomed aircraft must have felt when realizing their fate. I am equally distraught by thoughts of those who occupied the targeted landmarks. As the country stands together, I am troubled by the anti-war protesting occurring around the country, and wonder why these people aren't protesting the treatment of America's innocent civilians? However sad a reality, sometimes war is the only means to peace, and isn't peace what we all want?

Tina Driggers (1707)

My thoughts (random though they may be): 1. Would computer simulation or modeling have identified that people would jump from 100 stories high to their death to escape the flames? 2. Are "nations" a vestige of the past and being replaced with "tribes" — those associations without geographic cohesiveness — and isn't that paradigm in some ways the promise of the "internet age" — "e-association" rather than geographic limits? 3. Did we (Sandia) fail in our mission to provide national security? 4. Why am I unable to imagine the horror from within the plane or within the building? When I try, my imagination immediately diverts to some other topic and won't permit me to "image" this scene. Why? Does my "imagination" know better than I do and prevent me from consideration of this horrid scene? If so, thank you, imagination.

Mike Cassidy (10005)

Here is some e-mail correspondence from my brother Greg, who works in a small high-rise (<15 floors) west of the Pentagon:

Ted: Are you guys OK? Anything happening?

Greg: We're fine . . . except that I was in someone else's office facing east arguing about the NY episode when the building rattled. We looked out the window to see the tail end of a plane at eye level heading away from us. If the landing gear had been down there would have been tire tracks across the roof. The one guy said, "Hey, there's another one!" I said, "Don't be silly." He said, "Oh yeah? What's over where he's heading?" And seven seconds later we saw the fireball at the Pentagon. Some of the people I work with work with people who sat on the west side of the Pentagon.

Ted Borek (1822)

I have a sister, the youngest of six children, and she is still an airline attendant for Continental. On Sept. 11, when we realized what had happened, there was a report in the *Daily News* that stated, "An unconfirmed report says one CNN observer said the first was a Continental Airlines jet, and another such report said it might have been hijacked." By the grace of God, I did not see

'Nightmares fill my sleep,' 'I feel guilty,' 'snapshot of human grace and dignity': Sandians share their thoughts, feelings about the tragedy

this until four days later, after we had learned it was not Continental. If I had seen this on the day it happened, I would not be here because I would have LOST IT! Because both our parents are deceased, we are very, very close and I am sure many can understand why. I would make it



Photo from back cover of TIME magazine special issue produced in the first 24 hours after the Sept. 11 attack.

through life, but I sure would miss any of them just as do the thousands who lost loved ones on that despicable day. Even though it has been two weeks, the pictures are vivid in our minds. If in the past you have had a falling-out with any member of your family, a close friend, etc., rethink your situation and resolve any differences you might have. This person can be taken from you in a split second, perhaps not as tragically as occurred on Sept. 11, but it can happen! God bless America!

Alma Sage (9334)

I am awestruck by the recent events, but what is more compelling to me is the reaction of people around the world. Do you also see it? Something is different than before. I am amazed by what I see. I am in the presence of a once-in-a-lifetime

moment in time that captures a snapshot of human grace and dignity that I have never seen before. Have you seen the reaction of people around the world mourning with us at what we have lost? I don't mean just the strangers on the other side of this sphere that we call our home, although their participation makes me realize that this event is much bigger than my everyday world. I am also talking about the strangers on the other side of the fence, or street, or hallway, or this city, or this state, or the states that make up this amazing union. The strangers that I used to see everyday are not near as strange to me as they seemed before Sept. 11. Maybe we should choose to take in this extraordinary time when people who know nothing of us (except for cartoon-like stereotypes) have chosen to show exceptional compassion toward us. I find this incredibly wonderful to know that someone just like you and me realizes that they are exactly that — just like you, and just like me. Don't miss this beauty in the world in our haste to see justice done. We may never see something like this again.

John McKenney (1670)

I still feel guilty having a good time when there are so many people suffering terribly ... those who have lost loved ones, those who are still searching for remains of loved ones ... all the people who have been directly and indirectly affected ... I feel their sadness and their anger. Let's go find Osama bin Laden.

Name withheld by request (from Sandia/California)

On Sept. 11 my husband had to have a second surgery, in as many weeks, due to an accident he had on his Harley. The whole day changed the priorities in my life. I thank God now, often, for whatever time He gives me to spend with my family and friends. I pray my time is used for His glory.

Carla D. Sanchez (1700)

To defeat the terrorists, we must learn to think like a terrorist, but NOT act like a terrorist. That is the challenge for the US. As parents we need to teach our children that evil can be defeated without our becoming evil, because then evil has won.

Kathleen Byle (9519)

I was stunned as I watched both twin towers collapse. UNBELIEVABLE. So very, very sad. The loss of so many lives is tragic and depressing. The one bright light from this is to see the nation come together as one united nation. To hear the survival stories and to see the diligence of the search teams is so inspiring. It has been wonderful to see all the charity concerts that have been given to supply much-needed cash to the Red Cross. The week that all sports didn't play, the players went and gave blood. All the little ways people are pulling together is marvelous! I believe God is blessing America!

Connie Cooper (3031)

In response to your request for our comments on our national tragedy, I am submitting the "song" my granddaughter wrote in school last week.

Charlene's song: On a sunny day in September, they looked upon the sky. Millions did see that plane fly by. It hit the World Trade Center, and everybody screamed, as another hit the second tower leaving just debris. The Pentagon was hit, no one thought it would be, the fire spread, the people screamed, then not another word. The last plane targeted for one destination but with

(Continued on page 8)

Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads

MISCELLANEOUS

SECTIONAL SOFA, 5-piece, 2 recliners, sectional sleeper, light beige colors, great condition, \$450. Vigil, 798-0332 or 296-3590.

OAK CRIB, w/mattress, \$70 OBO; 2 back child-carriers, \$10 ea. Muguira, 286-2393.

CAR STEREO/CD PLAYER, Clarion RDB365D, \$150. Beaver, 323-2748.

SOUTHWEST ROUNDTRIP TICKET, expires 01/02, good anywhere Southwest flies, \$280. Wilcoxon, 296-8295.

TICKETS, Backstreet Boys concert, reserved seating. Vonderheide, 842-9568, ask for Leslie.

HALF OF SILVER METAL GATE, 8' x 5', slightly bent when someone backed into it. Crane, 286-1230.

HAM STATION, complete, HW-101, vertical antenna, manuals, key, mike, & all accessories, ready to run, \$150. Woods, 884-4224.

SOFT SIDE WATERBED, queen-size, semi-waveless, uses standard queen-size sheets, excellent condition, \$100 OBO. Wells, 323-8623.

PENTIUM 75MHZ, 16MB RAM, 1.0GB HD, Win3.1 & Microsoft Office, includes 15-in. monitor, mouse, keyboard, \$150. Giunta, 286-2860.

CORDLESS ANGLE DRILL, Mikita, 9.6V, metal carrying case, new, \$189 retail price, asking \$100. Barnard, 856-1952.

DINING ROOM TABLE, w/6 chairs, black contemporary from TEMA, \$650. Sala, 323-9571.

PANEL RACK, 19-in., 6' tall, 30" deep, \$20; old 2400 MC thermotherapy unit, \$20. Williams, 298-2624.

MEDELA PUMP-IN-STYLE, \$100. Muguira, 286-2393.

RASCAL R230 SCOOTER, short 3-wheel, includes motor lift for car, \$3,800 OBO. Hay, 836-4173, ask for James.

KITCHEN APPLIANCES, GE Profile, white, gas cooktop, double oven, dishwasher, microwave, trim plates, w/owner's manuals, 2 yrs. old, like new, \$1,350. Guyton, 898-4541.

TROYBILT ROTOTILLER, '85, excellent condition, \$800; boy's mountain bike, Trek, 24-in., 18-spd., \$60. Smith, 891-2098.

FIVE TIRE RIMS, 6-hole, 15-in., white. Arning, 256-9229.

PALM VIIx, new in the box, includes HotSync cradle & leather cover, \$200. Herrera, 890-4304.

WASHER, large-capacity, \$75; gas dryer, super-capacity, \$100; both in good shape, both for \$150. Jacobs, 266-5698.

CAMERA, Polaroid SX-70 SLR, leather case, excellent condition, \$25; film available. Bass, 856-2407.

GODIN WOOD STOVE, free-standing, fire-brick-lined, burns wood or coal, unique, round, w/claw feet, works great. \$500 firm; Braswell dual-tank water softener, \$400 firm. Bronkema, 286-0423.

SPARE TIRE, Goodyear Wrangler RT/S M&S LT245/75R16, load range E, never used, make offer. Pryor, 294-6980.

NEW CHINA, Lenox "Hartwell House" pattern, many serving pieces included. Marder, 291-8140.

FURNITURE, quality sofa, floral, \$250; 2 chairs, cane sides, \$50 ea.; oak end tables, \$30 ea. Mulkern, 296-4050.

U-HAUL TRAILER, for '98 Dodge van, ball-weight limit 5,000 lbs, trailer-weight-limit 74,000 lbs. Zamora, 864-4647, ask for Richard.

GALVANIZED PIPE, 2-in., 3-hp submersible, 100 ft., 225-gal. water tank, \$500. Morales, 898-1477.

MEDIUM MESSENGER BAG, Dooney & Bourke, cabriolet cloth, never used, tan w/tan leather trim, \$125. Wells, 292-0179.

ELLIPTICAL EXERCISE MACHINE, Orbitrek, great condition, \$90. Schiner, 866-1612.

ANTIQUE TABLE, round, 48-in., \$125; soft tub, \$800. Campbell, 856-9195.

PLASTIC BUCKETS, 5-gal., w/lids, empty; slide carousels for Sawyer/Vivitar/Sears slide projectors. Mead, 323-2253.

'96 FLATBED TRAILER, 16-ft., w/1-ft. pipe sides, trailer brakes, & built in ramps, \$1,700. Chavez, 833-3082.

REGISTERED PYGMY GOATS, 2-yr.-old doe, 2 baby does, \$200 ea.; rabbits, French lops (jr. doe & jr. buck), \$30 ea.; mini lop (jr. buck), \$30. Kaufmann, 861-1080.

DINING FURNITURE, natural solid-oak, w/leaf, 6 upholstered chairs, china cabinet, \$950. Pappas, 856-7055.

DUALLY CONVERSION KIT for a Dodge Ram 2500, includes 2 adaptors, 4 steel wheels, & 2 fenders, \$750 OBO. Bonnville, 294-6715.

SHEPHERD MIX, 6 yrs. old, healthy, neutered, w/current shots. Schuster, 293-4792.

PING-PONG TABLE, Harvard professional model, folds easily for storage or single-person play, has wheels, \$80. Ruby, 821-0982.

SOFA, 92-in., \$200; queen sofa sleeper, 82-in., \$200; recliner chair, \$80; all great condition, recently cleaned. Case, 293-5466.

MACINTOSH QUADRA 700, Apple monitor, LaserWriter NTR printer, extra disk drive, very good condition, \$200. Pryor, 275-7780.

SOUTHWEST ROUNDTRIP TICKET, expires 11/02/01, good anywhere Southwest flies, \$200. Arris, 842-8709.

NAVAJO RUG, 28" x 48", New Lands, certificate of authenticity & appraisal (\$800), \$425. Norwood, 292-0072.

YAMAHA UPRIGHT PIANO, 48-in., ebony, excellent condition, \$4,500; Canon Rebel EOS 35mm camera, \$200; 80-200mm Sigma lens, \$100. Scharrer, 865-0960.

ENTERTAINMENT CENTER, oak, w/glass doors, 2 drawers, & shelf storage areas, \$225 OBO. Oborny, 299-8509.

SOFTWARE, Microsoft Office XP Professional, full office suite, unopened box, retails for \$529, first \$200 takes it. Cocain, 281-2282.

NINTENDO 64, w/7 games, memory card, 2 player controls, \$100 OBO. Patterson, 822-1196.

NINTENDO 64, expansion pack, 2 controls, Arcade Shark, Rumble Pack, memory card, 6 games, \$75. Wallace, 256-1643.

SMITHSONIAN MAGAZINE, from year 1 to present, free. Smith, 244-8346, ask for Marilyn or Carl.

SENSOR MICROWAVE, GE Profile Spacemaker XL, needs cleaning but fully functional, many features, \$100 OBO. Elliott, 792-1002.

MOVING BOXES, free. Luna, 872-0193.

ENTERTAINMENT CENTER, w/6 open shelves, 1 drawer, cabinet w/2 shelves, up to 27-in. TV space, 47"W x 70"H x 14"D, good condition, paid \$120 asking \$75. Fong, 822-1367.

YARD SALE, tools, books, typewriter w/stand, appliances, luggage, fabrics, Sat. & Sun., Oct. 6-7, 8 a.m.-2 p.m., 3600 Holiday Ave NE (Juan Tabo & Comanche). Foster, 299-2778.

BABY ITEMS: deluxe Exersaucer, 6-sided play yard, backpack carrier, folding infant bathtub, bath seat, good prices. Ludwig, 856-5111.

KNIGHT UPRIGHT PIANO, made in England, wonderful tone & action, a few nicks, \$800. Hudson, 821-3968.

GARAGE SALE, Fri. & Sat., Oct. 5-6, 8 a.m.-3 p.m., Indian School & Antonio Dr. (east of Tramway); misc items, no junk & no baby stuff. Hill, 299-9416.

GIANT LOG CRIB, steel, 4' x 8', \$55; girls 1-spd., \$65; 3-piece. luggage set, \$50; fireplace tools/holder, \$35; Nordictack back & stomach, \$25. Hagerman, 280-1696.

OAK BEDROOM SET, beautiful low-profile Henredon, king-size, storage headboard, nightstands, mattress, box spring, & frame, \$450. Barnes, 296-0462.

REFRIGERATOR, approx. 19 cu. ft., w/icemaker, white, almost new, \$250 OBO. Barnard, 256-7772.

TRAILER, 18' x 6-1/2', tandem-axle car-hauler, w/ramps, 12,000 lbs. GVWR, \$1,600. Kallenbach, 869-5237.

How to submit classified ads

DEADLINE: Friday noon before week of publication unless changed by holiday. Submit by one of these methods:

- E-MAIL: Janet Carpenter (jacarpe@sandia.gov)
- FAX: 844-0645
- MAIL: MS 0165 (Dept. 12640)
- DELIVER: Bldg. 811 Lobby
- INTERNAL WEB: On Internal Web homepage, click on News Center, then on Lab News frame, and then on the very top of Lab News homepage "Submit a Classified Ad." If you have questions, call Janet at 844-7841. Because of space constraints, ads will be printed on a first-come basis.

Ad rules

1. Limit 18 words, including last name and home phone (We will edit longer ads).
2. Include organization and full name with the ad submission.
3. Submit the ad in writing. No phone-ins.
4. Type or print ad legibly; use accepted abbreviations.
5. One ad per issue.
6. We will not run the same ad more than twice.
7. No "for rent" ads except for employees on temporary assignment.
8. No commercial ads.
9. For active and retired Sandians and DOE employees.
10. Housing listed for sale is available without regard to race, creed, color, or national origin.
11. Work Wanted ads limited to student-aged children of employees.
12. We reserve the right not to publish an ad.

HALLICRAFTER SX62 SHORTWAVE, w/speaker, \$150; good casement windows/screens, free: fireplace insert, \$495, stereo equipment, make offer. Alexander, 291-8028.

DREMEL SCROLL SAW, 15-in., 1-5/8-in. max cut, 3450 spm., flexible-shaft rotary accessory set included, \$75. Rivera, 323-8508.

SOFA, w/matching chair & ottoman, off-white, paid \$1,000 at American Furniture, asking \$400. Sala, 323-9571.

BOOKCASE, 29" x 67", dark-oak laminated, \$30; trundle bed, steel frame, w/2 mattresses, \$125 OBO. Getz, 299-4865.

TWO ROUND-TRIP COUPONS, good anywhere Southwest flies, through Sept. 2002, \$300 ea. Krukar, 292-3917.

TRANSPORTATION

'99 VW BEETLE GLS, silver, manual, leatherette seats, alloy wheels, CD changer, 16K miles, \$13,500. Herbeck, 255-7338.

'97 GMC 3/4-TON TRUCK, V8, AT, extended cab, LB, 4x4, AC, PW, PL, CD/cassette, 32K miles, like new, \$18,500. Guyton, 898-4541.

'95 JEEP WRANGLER, 4x4, hardtop/bikini top, 4-cyl., 5-spd., AM/FM/CD, PS, 5 mud/snow tires, like new, \$8,250 OBO. Avila, 281-1200.

'90 PLYMOUTH GRAND VOYAGER, AC, good condition, runs well, \$2,550 OBO. Ruby, 294-4834.

'98 CHEVY LUMINA, blue, AT, PW, PL, 6 cyl., excellent condition, \$7,500 firm. Trezza, 293-3097.

'88 CHEVROLET PICKUP, heavy 1/2-ton, 4x4, extended cab, 350 engine, full bed liner, towing pkg., camper shell, new tires, \$5,000. Zerwek, 293-4618.

'92 MAZDA MPV MINIVAN, original owner, good condition, V6, 113K miles, dual air, all power, tilt, \$4,000. Lee, 294-3483.

'00 GMC YUKON, 4x4, white/gray interior, sunroof, fully loaded, warranty, 18K miles, \$32,000 OBO. Moore, 259-6537.

'97 TOYOTA LANDCRUISER, AWD, 96K miles, sunroof, CD, leather, every option, \$27,100 retail (including high mile deduction), asking \$21,000. Lindgren, 271-1328.

'96 FORD E-150 CONVERSION VAN, fully loaded, TV/VCR, excellent condition, \$9,000 OBO. Courtney, 869-4664.

'88 JEEP CHEROKEE, 2-dr., 4WD, 5-spd., new paint, tires, brakes, lifted, runs well, AC inoperative, \$3,000. Shaw, 857-9236.

'96 MERCURY MYSTIQUE, 4-dr. sedan, loaded, excellent condition, runs great, must see, 52K miles, \$6,500 OBO. Bowles, 265-9273.

'79 PORSCHE 911 TARGA, 94K miles, dark-gray metallic, cork full-leather interior, 16-in. Fuchs, 2nd owner since '84, \$16,000. Sansone, 296-7945.

'91 DODGE STEALTH, beautiful sports car, clutch & brakes in good condition, runs great, 125K miles, \$6,000 OBO. Krein, 296-7446 or 385-0258, ask for Jason.

'94 GMC 2500 SLE, 4x4, extra cab, AT, AC, PW, light blue/silver, 105K miles, \$14,000. Vigil, 323-4387.

'93 FORD RANGER XLT, supercab, 4WD, 5-spd., V6, 4.0L, 1-yr.-old transmission/clutch, camper shell, \$4,000. Pieniazek, 286-4567.

'95 OLDS CUTLASS CIERRA, sedan, runs well, owner needs a truck, \$3,000 OBO. Wyss, 286-2451.

'97 FORD RANGER, supercab, 5-spd., AC, ABS, AM/FM cassette, bed liner, 68K miles, \$7,000 OBO. Thompson, 291-1618.

'95 MITSUBISHI 3000GT sports car, loaded & drives great, \$14,700 book value, asking \$9,700 firm. Heise, 823-6355, 573-6355, or umnlobo1@aol.com.

'99 CHEVROLET TAHOE LT, 4x4, 4-dr., loaded, towing pkg., all power, must sell, \$20,500 OBO. Wray, 350-8907.

'95 TOYOTA CELICA, 60K miles, new tires, \$8,500. Marder, 291-8140.

'92 VW PASSAT, white GL sedan, 5-spd., power moonroof, PW, PL, AC, AM/FM/CD, new tires, \$2,900 OBO. Mooney, 294-5161.

'90 DODGE DYNASTY, V6, 4-dr., PW, PL, AC, AM/FM cassette, new tires, good condition, \$2,100 OBO. Puissant, 821-2447.

'76 TRIUMPH SPITFIRE, convertible, w/hardtop, new leather interior, runs great, \$2,500 OBO. Knoll, 299-1181.

'98 CHEVY 1/2-TON, 4x4, ext. cab, short bed, AT, CD, cassette, locking rear differential, towing, 3rd door, heavy-duty transmission cooler & air filter, 20,100 miles, \$19,450. Comiskey, 271-1328.

'89 TOYOTA 4RUNNER, great condition, AT, big tires, \$6,500. Adams, 281-6767.

RECREATIONAL

ROAD BIKE, Cannondale, aluminum frame, 21-spd., Shimano components, Mavic Open Pro wheels, excellent condition, \$550. Montano, 821-1235.

ALUMINUM CANOE, Grumman, 17-1/2 ft., \$250. Chorley, 296-1454.

'97 MINNIE WINNIE, Class C, 31', Fort Triton V10, queen island bed, dinette, entertainment center, 23K miles, recent full service, vacation-ready, \$33,500. Stein, 250-1120.

'86 HONDA SHADOW, 1100cc, w/windshield, helmets, bag, recently rebuilt engine, runs great, \$2,500 OBO. Kolb, 299-3403.

MOTORCYCLE TRAILER, Cox, 3-rail, \$350. Eldred, 281-0224.

'87 TRAVEL TRAILER, Wilderness Yukon, 22', bunkhouse model, 6 beds, self-contained, AC, awning, hitch \$4,500 OBO. Imbert, 294-8176.

HARLEYS: '97 Harley Road King, '96 Fat Boy, & '92 Low Rider. Gutierrez, 873-7544.

MOUNTAIN BIKE, Diamondback Racing, Vertex model, aluminum 17-in. frame, Ti spokes, XT components, Grip Shift shifters, White Industries hubs, new tires, \$325. Dwyer, 271-1328.

MOUNTAIN BIKE FRAME, Mongoose Pro, titanium, never used, won in raffle, make reasonable offer. Mulhall, 892-2131.

'00 JAYCO KIWI TRAILER 21C, AC, heater, refrigerator, bath, awning, brakes, equalizer hitch, fold-out end-beds, like new, \$12,000. Matthews, 881-7368.

'99 HARLEY-DAVIDSON, Heritage Softtail Classic, Aztec orange/silver, excellent condition, 8K miles, \$16,500. Crine, 292-5321.

MITCHELL SLIDE-IN CAMPER, fits long wide-bed pickup, 2-burner butane stove, sink, icebox, electric pump, good shape. Marquez, 344-8455.

REAL ESTATE

BEAUTIFUL PERALTA HOME, on 1 acre, 2,400 sq. ft., 3-car garage, hardwood floors, tile, 9-ft. ceilings, \$225,000; additional irrigated acre, \$40,000. Fleming, 865-3545.

1-BDR. CONDO, off Juan Tabo on Mountain Rd., fully loaded, next to Summer Hills Park, quiet neighborhood, hacienda-look, \$38,500. Shahinpoor, 228-7077, ask for Mo.

3-4-BDR. HOME, 1-3/4 baths, new carpet, tile, remodeled bathrooms, nice backyard w/fruit trees, near Sandia High School. Thai, 450-8567.

2-BDR. TOWNHOME, 2-1/4 baths, 1,120 sq. ft., FP, security iron, covered carport, recent updates, Comanche/San Mateo, \$76,000. Morgan, 872-9113.

TIJERAS HOME, on 1 acre, 2,000 sq. ft., 10 min. to Albuq., near national forest. Filuk, 281-0078.

WANTED

VERSAPAK BATTERIES, Black & Decker, good or bad, can use 4, need only the housings. Hughes, 299-6674.

DISHWASHER (working please), donation for Madison Middle School's program for severely disabled students. Klamer, 299-4735, ext. 3238, ask for Ted.

INDIAN ARTIFACTS PAINTINGS, by Gayla, on barn wood, horizontal orientation preferred. Blackledge, 294-6030.

SPANISH-SPEAKING BABYSITTER, wanted to play & teach preschool girl, 1 afternoon per wk., 4-6 p.m., Tramway/Lomas. Meigs, 296-0601.

POOL TABLE, good/excellent condition. Figiel, 856-0042.

A FEW TENORS to sing with The Enchanters, a mixed choral group, this season, rehearsals on Tuesdays at 7:30 p.m. at Sandia High School. Piscotty, 296-2518, ask for Rochelle, or 299-6506, ask for Pat.

COMPUTER HELP, someone to work with disadvantaged kids through ACT/ON Society. Whalen, 822-0413.

WORK WANTED

STUDENT SELLING FIREWOOD, fresh-cut oak, pine, cedar, juniper at great prices. O'Rourke, 453-8177.

LOST & FOUND

RING FOUND in men's restroom, Bldg. 836, 2nd floor, please call & identify. Burgess, 286-0606.

SHARE-A-RIDE

EAST MOUNTAIN VANPOOL, \$35/mo. max, no need to drive, Frost Rd., N-14, Tijeras. Burns, 281-3922 or Brocato, 286-8031.

Horrors of Sept. 11 hit close to home for Sandia's Charlie Thomas

The horrors of Sept. 11 hit a little too close for Charlie Thomas, who experienced first-hand the terrorist attack on the Pentagon.

The 10-year Sandian, now on special assignment to DOE/Albuquerque, was in the Pentagon when the hijacked plane commandeered by terrorists slammed into the building, killing nearly 200 people.

Charlie, a retired Air Force colonel and former commander of Kirtland Air Force Base, and fellow members of the Kirtland Partnership Committee were making rounds in Washington Sept. 10 and 11 in an effort to promote the base. They'd arrived Sunday, had a full day of meetings on Monday, and were into their fourth meeting of the morning at the Pentagon on Tuesday when the tragedy struck.

"Before going into the meeting, we heard about the two planes hitting the World Trade Center," he said. "We didn't know about the damage. After a few minutes we started getting into business, talking about the installation and base realignment process."

Suddenly they felt a jolt and heard a huge bang.

"We felt a tremor go through the building," he said. "We didn't know what had happened, but figured it had to be something similar to what occurred at the World Trade Center."

A man in a Navy uniform came into the meeting room and said he would check it out, followed by a second person who said the building was being evacuated. They didn't know it then, but an airliner — hijacked American Airlines Flight 77 — had hit a nearby section of the Pentagon.

The group left the room and went to an exit. The doors were locked. They found another door, making their way outside to a parking lot. Looking back, they saw tremendous plumes of black smoke. Their view of the plane and devastated building was blocked by a wall.

Moving farther away from the building, they tried to use cell phones to call loved ones to say they were OK, but couldn't get through. That's when they saw people streaming away from the burning building and emergency personnel pouring in with sirens blaring and lights flashing.

As they walked, they heard people talking on a two-way radio saying that another airplane was coming, which never happened.

They crowded around a car where the radio was on and listened in disbelief to the news about the terrorist attacks.

Charlie says people were calm and orderly throughout the whole event, not panicking. Eventually Charlie obtained the help of

two Army enlisted men who drove him and one of the Kirtland Partnership Committee members, Ret. Gen. Leo Marquez of Albuquerque, to a hotel where they once again tried making phone calls. They got through to one member's wife who was to contact others to let them know that the Albuquerque men were safe.

Eventually he and Marquez arrived at their hotel, where they met up with the other committee members. He called his wife who said that Larry Ahrens, KOB-AM talk show host, had called the house looking for him to get his thoughts on the attack. She informed him that Charlie was in the Pentagon.

He called Ahrens and was interviewed live on-air from his hotel room. Later Charlie, who serves as a military analyst for KOAT-TV, Channel 7, did an interview with that station.

By Wednesday the New Mexico group were ready to go home but realized the only way to Albuquerque was to drive. The six men rented two cars and drove back to New Mexico in 29 hours, leaving Washington Thursday at noon and arriving about 3 p.m. Friday.

"It was a long trip, but we wanted to get home and away from Washington," Charlie says. "Those few days provided me more excitement that I ever wanted." — *Chris Burroughs*

Lockheed Martin's TVC hosts annual Equity Capital Symposium pre-application seminar

Thinking of starting a high-tech company? This seminar's for you

Technology Ventures Corporation (TVC), in preparation for its May 2002 Equity Capital Symposium, will hold an entrepreneur's pre-application seminar on Oct. 9 for technology-based companies seeking equity funding. The seminar is free of charge.

Each year since 1994 the symposium has been presented as part of TVC's efforts to contribute to economic development in New Mexico.

A nonprofit organization established in 1993 by Lockheed Martin, TVC serves as a bridge between the public and private sectors for the commercialization of technologies developed at the national laboratories and regional research universities. TVC identifies technologies with commercial potential, coordinates the development of business capabilities, and seeks sources of risk capital.

Companies requesting consideration as TVC client companies and presenters at the May

2002 Symposium must submit a business plan by Jan. 7. At the seminar, TVC staff will outline what they look for in a business plan and offer guidance on how to become a presenter. Guest speaker Bob Pothier of Wasatch Venture Partners will discuss the venture capital community in New Mexico, and a panel of successful entrepreneurs will discuss how they raised equity capital. TVC will also review what resources and advisors are available to assist technology-based enterprises.

Symposium presenters will be selected in January. TVC will work closely with each presenter providing necessary assistance in preparation of funding proposals for investors attending the symposium.

The seminar will be held at the Marriott Hotel, at 2101 Louisiana Blvd. NE, on Tuesday, Oct. 9, 7:30-11 a.m. For reservations call 505-843-4284.

Thoughts, feelings

(Continued from page 6)

the hearts and souls of four men, the terrorists were downed, and the plane fell many innocent lives, and that will be the same thing that made the US cry. But it was the decision, and all we can do is pray, as the President ended his speech, the last thing he could say was . . . God bless America today.

**Charlene Martinez (12 years old)
Submitted by Joanne Paulos (7826)**

A few days after the terrorist attacks I went on a bike ride and noticed something a little different. I've probably ridden my bike over 100,000 miles in the last 15 years, and I noticed a definite change in people and our surroundings. There of course were the many cars and homes that had some sort of American flag pasted in the window or dangling off the antenna or hanging outside. Albuquerque has never been known to be particularly "bike-friendly," but I was given wide berths by almost all cars, I had people waving me through four-way stops, and more people wav-

ing at me than I could ever remember. The next night I went out for a ride again and I decided I would be patriotic as well. I wore a "stars and stripes" cycling jersey that signifies a US Olympian or National Champion. I had won the 1997 National Time Trial Championships and was awarded one of these jerseys. It was something I am proud of accomplishing, but I never felt like showing it off and had never worn it since then. This time I decided to wear it. Immediately on my ride I heard car horns and people yelling stuff. They were not yelling because they hated cyclists, but rather because they thought it was cool. As the ride went on, I had dozens of people say something patriotic along the bike path or in a car at a stop sign. Several people on the bike path asked where they could get a jersey like this. It was really something. The funniest episode was the last one as I headed home, a group of four men with skullcaps and bandanas rolled down their window and one of them raised their fist and yelled, "God Bless America, homey." The great part about that was I looked into the guy's eyes and could see that he meant it. It was one of my most memorable rides I'd ever had.

John Larson (9519)

Recent Patents

Paul Dodd (1762), Bruce Draper (1748), James Schwank, and Marty Shaneyfelt (both 1762): A Silicon-On-Insulator Field Effect Transistor with Improved Body Ties for Rad-hard Applications.

Paul Eichel (5912), Gerard Sleafie (2614), K. Terry Stalker, and Amy Yee (both 15351): Sequential Detection of Web Defects.

Thurlow Caffey (6116): A Radar Back-Scatter Probe to Detect External Cracks from within a Metal Tube.

Thomas Weber (15212), Barry Spletzer (15211), Jon Bryan (15212), Fred Dickey (2612), Richard Shagram, and Luc Gooris: Method and Apparatus for Determining Fat Content of Tissue.

Congratulations

To Lucy (6115) and Andrew Meigs, a daughter, Charlotte Heidenham Chambers Meigs, Aug. 6.

United Way of Central NM



It's all about people

Sandia's ECP/LEAP general campaign begins October 22