TechPROFILES

Making a Difference

The National Law Enforcement and Corrections Technology Center System

Tech Profiles—Street Stories

These are stories from the streets—stories told by law enforcement and corrections officers who have benefited directly from technology assistance and expertise provided by the National Law Enforcement and Corrections Technology Center (NLECTC) system, a program of the National Institute of Justice.

Nobody can tell the NLECTC story better than the people who have benefited from the Centers' resources. These first-person accounts illustrate the range of NLECTC's assistance to the law enforcement, corrections, and forensics communities.

The NLECTC system's regional centers and specialty offices work directly with Federal, State, and local government agencies; community leaders; and scientists to foster technological innovations that result in new products, services, systems, and strategies for the Nation's criminal justice professionals. The NLECTC system stands ready to serve the public safety community with our unique technology expertise and capabilities. We encourage you to read this document in its entirety to see how the law enforcement and corrections community benefits from NLECTC's products and services, to learn more about our history and mission, and to discover other significant accomplishments that may benefit your organization or mission.

Making a Difference

Given Back My Life

Officer Marlene Loos responded to a call about a disturbance at a gas station/convenience store in Suffolk County, New York. Her actions there can be called no less than heroic, and the outcome of her encounter can be called no less than miraculous. The bullet-resistant vest technology that saved the lives of Officer Loos and a clerk in the store was developed by the National Institute of Justice and tested by the National Law Enforcement and Corrections Technology Center.

He fired and I saw the flash from the barrel of the gun and looked down to see a perfect round hole in my uniform. I had just been shot point blank in my chest.

It was my first day back to work after vacation. I dressed in my uniform and headed toward the door. Whoops. Forgot something. I took my shirt off and put on my body armor. I had to hurry—didn't want to be late.

Back on patrol, everything was typical. It was barely 10:30 in the morning and I had already handled three calls. I heard a call regarding a disturbance at a gas station in Bay Shore. A man was assaulting a woman. I headed to the scene.

I pulled up and saw two women in a car in the parking lot; there was no one else around. I got out of my car and approached the women. Had they been involved in or witnessed an altercation? I wouldn't get the chance to find out the answer to my question. As I approached them, I saw a man come around the corner of the convenience store. He was walking toward me. I told him to stop and to stand over by the Jeep some distance away from us. He cupped a hand to his ear indicating or feigning that he didn't hear me. He kept moving toward me.

The next thing I knew he closed the space between us quickly. He punched me in the face, did a leg sweep, and knocked me to the ground. He was on top of me and began smashing my head into the pavement. I looked up and saw a woman. I told her to call 911 and tell the operator it's a "10-1"—police officer needs help.

The man continued to fight with me. He smashed my head into the pavement again. I thought I better turn my head so that the same spot didn't hit each time; I didn't want my skull to fracture. I had gripped him by a very personal part of his body. I squeezed hard, but it had no effect. He was pulling at my gun now. I heard the sickening sound of my holster's snap releasing and my stomach fell. He had gained control of my gun. He crouched over me and said, "I'm going to f—ing kill you!" He fired and I saw the flash from the barrel of the gun and looked down to see a perfect round hole in my uniform. I had just been shot point blank in my chest.

I got up and went into the store with the gunman following me. I took the telephone from the Good Samaritan and told her to lie behind the counter, that I would lie on top of her and that my bullet-resistant vest would protect

us both. I told the 911 operator that the man had my gun and that I needed assistance. I turned around to see the gunman pointing the weapon at my stomach. I thought about macing him, but realized you can't take mace to a gunfight. I was shot a second time, this time in the arm. He continued to shoot at me as I made my way behind the counter. As I lay down on the woman to shield her, I knew if he came at me and aimed at my head, I'd be killed. My thoughts turned to my parents, who are in their 70s. How sad, I thought, that they would have to bury another child (they had lost one many years ago). I also thought that it was a shame that I had never written a book. The shooter walked up to us, but was distracted when my backup began to engage him in gunfire.

Everything fell silent. I got up from behind the counter and I walked out of the store, the bright December sunshine hurting my eyes. I was told that the gunman had entered my car. Good thing I had engaged the switch that prevented anyone from putting the car into gear. He had put the weapon down on the seat and had fled on foot. My fellow officers had pursued him, shot him, and brought him into custody. I looked at my bullet-ridden car and thought, "The commissioner isn't going to like this."

I would confront my assailant one more time, in court. He was convicted and I began to put back the pieces of my life. There was physical and psychological healing to be done and that should not be overlooked. It took a long time to restore body and soul. But, life goes on. And there is not one day that goes by that I don't think about that December morning—and my vest. I am grateful for the precious gift I was given that day. I was given back my life.

—Officer Marlene Loos
Suffolk County, New York, Police Department

In the past three decades, soft body armor has saved the lives of more than 2,500 law enforcement officers nationally. A major player in this achievement has been NIJ's ballistic body armor standards and testing program administered by NLECTC.

Big Help for a Small Jail

Even small corrections facilities perform large tasks. Oregon's Harney County Sheriff's Office houses a small number of inmates in its jail, but officers still needed up-to-date equipment to streamline daily operations. The solution: surplus computer equipment.

We are a small operation. There are six corrections officers and 22 beds in this jail, but we tackle some big tasks in the course of a day. Supervising inmates has to take top priority, so it's important that our deputies don't get bogged down with other time-consuming work. We used to do all our recordkeeping by hand on forms that had been photocopied too many times. When the paperwork started to overwhelm us, the National Law Enforcement and Corrections Technology Center was there to help.

We received a personal computer and some standard business software through NLECTC, which takes advantage of a program offered by one of its technical partners that transfers used equipment to law enforcement and corrections.

The computer we received has been a significant asset to our small correctional facility. Deputies and administrative staff use it regularly for cost accounting and inmate tracking. We also use it to produce legal forms for processing property, bail, and release agreements. As a result, our forms look more professional and are easy to access. This computer has really helped with our jail management system, and we would not have been able to buy and install it ourselves.

Most important, our deputies now have more time to devote to inmate supervision. We are running a more efficient and safer operation as a result.

Most important, our deputies now have more time to devote to inmate supervision. We are running a more efficient and safer operation as a result.

If I hear about another agency that needs assistance or equipment for daily operations like we did, I'd definitely tell them to call the National Law Enforcement and Corrections Technology Center. I am sure NLECTC is involved in a lot of other higher profile activities. But helping the small agency streamline its day-to-day operations is an important service. NLECTC has been a great asset to our office.

—Sgt. Stacey Johnson
Harney County, Oregon, Sheriff's Office

An Answer to a Burning Question

Utica, New York, was burning. The city's arson rate was skyrocketing and fire and police officials needed to develop a plan. With technical assistance and computer equipment from the National Law Enforcement and Corrections Technology Center, the Utica Arson Strike Force attacked the problem. The result: Arsonists were prosecuted and cases were closed.

Bright orange and yellow flames engulfed the outside walls of the apartment building; thick layers of black and gray smoke seeped from the broken window panes. I could hear the crackling of burning debris. Yet another arson in the city of Utica?

As a sergeant of the Utica Police Department and a new member of the Utica Arson Strike Force, I arrived on the scene and began investigating the fire incident as an arson until further evidence ruled it out. I began conducting interviews, taking photographs, and observing the way the structure was burning by using high-tech surveillance equipment. With piles of evidence in hand, officers and I headed to the second floor of a semi-closed firehouse located on Park Avenue, known as 7 Engine House, where the Utica Arson Strike Force met. I worked with members of the Strike Force, spending countless hours consulting with sheriffs, New York State Police officials, district attorneys, and firefighters and marshals. We were divided into teams of three and communicated through a pager system as we analyzed the detailed evidence in the fire. Two weeks later, the intense investigation and follow-through by the Utica Strike Force led to the arrest and conviction of two arsonists. This was one of many cases solved by the Strike Force.

After seeing the dramatic increase in arson cases, it was rewarding to see how the Utica Arson Strike Force came together. In the summer of 1997, facing a rapidly declining economy and a record-low population, individuals in Utica resorted to burning homes in an effort to collect insurance money. Drug dealers began setting up lucrative drug trades and, later, burning the buildings of their competitors. By the fall of 1997, Utica had an arson rate twice the national average and three times the New York State average. Something needed to happen.

NLECTC's rapid response in the midst of an emergency was a great help to us. They supplied good technology and support throughout.

The Utica Police Department, Utica Fire Department, Oneida County Sheriff's Department, New York State Police, New York State Office of Fire Prevention & Control, Bureau of Alcohol, Tobacco, Firearms and Explosives, Oneida County District Attorney's Office and New York State Insurance Fraud Bureau began collaborating on the issue and drafted a memorandum soliciting assistance from various law enforcement entities in their battle against arson. The result was the establishment of the Utica Arson Strike Force, a partnership of law enforcement and

other investigative entities charged with combating the escalating arson rate.

NLECTC offered a helping hand to the Strike Force by performing an extensive needs assessment. They are excellent at what they do. NLECTC provided assistance that helped us gather evidence at the scene of the arson. We used digital cameras and recorders. NLECTC also provided a demonstration site containing a local area network with a color scanner and laser printer. This allowed the Strike Force to develop a website, send and receive information on the Internet, and provide high-quality investigation documents and wanted posters. NLECTC's rapid response in the midst of an emergency was a great help to us. They supplied good technology and support throughout.

Today, the Utica Arson Strike Force prides itself on a 100-percent conviction rate. I believe that we have greatly improved the quality of life here in Utica.

—Sgt. Joe Chevrette
Utica Police Department
Member of Utica Arson Strike Force

Photos copyright © *Observer-Dispatch*, Utica, New York. Reprinted with permission of the *Observer-Dispatch*.

Rapid Radio Recovery

The radio dispatch system in Val Verde County, Texas, was not operating properly. The sheriff's office had to use less-than-desirable mobile radios to keep in touch with personnel in the field because the base station was down. The officers needed immediate help.

We were down. The system wasn't working. Our radio dispatch system wasn't really old, but it was a first-generation model and the manufacturer had stopped making it. It was an impressive piece of equipment, but it wasn't working. It was like having a Cadillac with no wheels or motor.

We couldn't find parts to fix it from the manufacturer or from any other source, and our temporary solution of using mobile radios was really inconvenient and inefficient, considering the county is 3,200 square miles. We needed a dependable system. Our sheriff is very progressive and had attended a lot of conferences sponsored by the National Law Enforcement and Corrections Technology Center. He was confident they could help. So we called.

The staff came down here with their sleeves rolled up, ready to work. They were fantastic. They put out a call to find some compatible upgrades. They were able to find a system like ours that had been dismantled. Parts were being warehoused in Colorado. They could get them for us.

NLECTC made all the arrangements. The parts were shipped to us and they helped us install them. We were back on the air in a matter of weeks. If they hadn't found these parts (and some spares) for us, we would have had to pay a lot to replace our dispatch system and we would have been down for a very long time.

NLECTC made all the arrangements. The parts were shipped to us and they helped us install them. We were back on the air in a matter of weeks.

It's times like these that you're glad you've got a friend. The NLECTC staff are kind of like a part of us now. I can't say enough good things about them. Working with them over the past few years has been a pleasure.

—Chief Deputy Butch Skelton
Val Verde County, Texas,
Sheriff's Office

Cause for Alarm

At Washington Irving High School in New York City, a weapons detection system was able to detect the razor blade hidden inside a student's mouth. Had the blade gone undetected, it might have led to another student slashing incident. The New York City Police Department and the school system teamed up with the National Law Enforcement and Corrections Technology Center to identify the proper equipment to detect razor blades and other small cutting instruments and keep them out of schools.

In 2000, the NYPD began receiving calls weekly reporting slashing incidents with possible connections to gang activities in our school district. My team and I started to investigate the reported incidents. Within the New York City School District, the rate rose to a level of 20 to 30 student slashings a month citywide. Razor blades, knives, and other weapons were being sneaked into schools and causing big safety threats.

Early detection of these types of weapons was of primary importance. We worked with the School Safety Division to evaluate current technologies that were in place that would detect weapons at a safe distance. The standard metal detectors used in the high schools had extremely high sensory levels that resulted in false detections and an increase in man-hours needed to conduct hand searches in each false case. For instance, belt buckles, watches and other jewelry, and coins were being detected instead of razor blades and other weapons. Because razor blades have a small quantity of ferrous metal (any type of metal that is attracted to a magnet), students with razor blades would often bypass the metal detector technology.

… the rate rose to a level of 20 to 30 student slashings a month citywide. Razor blades, knives, and other weapons were being sneaked into schools and causing big safety threats.

To help combat the rise in student slashing, we asked the National Institute of Justice if any of their research and development projects would detect weapons from a safe distance. NLECTC has a Memorandum of Understanding with the New York City Police Department's School Safety Division to facilitate technology transfer of concealed weapons detection technologies to the NYPD School Safety Division. NLECTC came to our aid in more ways than one: They served as our consultants, helped with our concepts, and obtained what we needed—the SecureScan 2000. The SecureScan 2000 is unique in that it only looks for ferrous metals; it

has a computer interface that shows an exact location of the metal weapon. We have used the device for 1 month and it has been extremely beneficial. The device eliminates jewelry, has an increased effectiveness, and does not give false alarms. Since the deployment of the SecureScan 2000, slashings are down dramatically. The possibilities are endless. NLECTC truly came through for us by pushing the device to its full capabilities.

On one occasion, we were sending students through the SecureScan 2000 and suddenly the alarm sounded and the computer screen indicated that there was something in a student's mouth. We conducted a thorough check and found that he had hidden a 4-inch razor blade in the upper palate area of his jaw. This incident showed us what this sophisticated device could really do.

As a result of this newly implemented technology, I hope to protect our students from weaponry in a school environment.

—Osborne Frazier
Administrative Manager
School Safety Division
New York City Police Department

Starting a Riot

Each year a riot breaks out at the former West Virginia Penitentiary in Moundsville, West Virginia. It is not chaos, but a controlled environment where hundreds of officers from around the country participate in role-playing and other activities sponsored by the Office of Law Enforcement Technology Commercialization (OLETC), the West Virginia Division of Corrections, and the Moundsville Economic Development Council.

I looked around and saw smoke coming from the southwest corner of the building. Men were coughing and choking and tears streamed down their faces. They were "inmates" who had taken a hostage. Their efforts were thwarted by correctional officers who had used negotiation and nonlethal technology to end the standoff. The staged incident was over and we had all observed that deadly force was not necessary to bring this situation under control.

You learn all sorts of things at the Mock Prison Riot. I guess what it did for me was show me that there's a lot of technology out there that works. And that helps me do my job.

You learn all sorts of things at the Mock Prison Riot. I guess what it did for me was show me that there's a lot of technology out there that works. And that helps me do my job.

About 40 of us from Ohio attended in 2000 and there was a waiting list for our correctional officers for the following year. We observed other teams doing the same things that we do. That helped me understand that we are all on the same page—using technology and tactics that are tried and true. Over the years, a lot of us have attended the event to learn about tactics and the use of nonlethal products that stop fleeing suspects, safety procedures and equipment, and computerized inmate tracking systems. I don't know where I would have access to these new products and information if it weren't for the Mock Prison Riot. It is an invaluable tool.

My staff and I work hard every day. Part of the challenge of corrections work is creating a safe environment for officers. The Mock Prison Riot allows us to strengthen our prevention muscles in a way that no other program can. It gives us the ability to practice, and practice makes perfect.

—Odell Wood
Special Tactics and
Response Team Commander
Ohio Department of Rehabilitation
and Corrections

Just a "Normal" School Day

A 15-year-old California student kills 2 and wounds 15 at Santana High School in Santee, California, on March 5, 2001. On the last day of class, May 26, 2000, a 13-year-old Florida boy shoots and kills a teacher with a .25-caliber semiautomatic pistol. How do we stop the violence? The Normal, Illinois, Police Department addressed the issue head on with the School-Based Virtual Private Network.

In the aftermath of so many school shootings, communicating in a timely fashion and early detection and intervention seem to be key to heading off violent incidents. The National Law Enforcement and Corrections Technology Center and the National Institute of Justice approached the issue with their sleeves rolled up, ready to develop a communications system to promote safe school technology. They funded the School-Based Virtual Private Network (VPN) and chose our department here in Normal, Illinois, as a test site. The network is a Web-based information-sharing tool for local schools, law enforcement, and other agencies that serve young people.

NLECTC began engineering and designing software and providing advanced technology to help support the system. Working alongside NLECTC with the virtual private network has proved to be a tremendous success. The network provides links from school to school and agency to agency, keeping all necessary parties informed. It ensures a timely and secure sharing of school safety information among designated school and agency staff.

As one example of this system's effectiveness, in September 2000 we had a situation in which a student had access to weapons and made threats to other students. This information became known to one of the VPN participants and was disseminated on the network to the pertinent agencies, which prompted appropriate mitigating action. The School-Based Virtual Private Network enables us to bring all players to the table and do proper intervention. With the help of technical experts, we have been able to link numerous pieces of existing equipment (hardware and software systems), which has allowed for the success of the School-Based Virtual Private Network.

NLECTC and NIJ approached the issue with their sleeves rolled up, ready to develop a communications system to promote safe school technology.

I believe that this type of e-mail system can be used to decrease the escalating amount of school violence because it can be used for early intervention and prevention of incidents.

—Gary G. Speers
(Ret.) Assistant Chief of Police
Normal, Illinois, Police Department

SCHOOL BUS

Picturing Justice for a Little Boy

Christopher Gardner's fourth birthday party was replete with balloons, toys, stuffed animals, and dozens of adoring adults. Unfortunately it was celebrated at Hillside Cemetery in Middletown, New York, on May 18, 1998. He was murdered on April 1, 1 month and 17 days before his birthday. The investigation into his death was aided by the National Law Enforcement and Corrections Technology Center. His killers—Christopher's mother and her boyfriend, who beat him to death for taking a piece of candy—were prosecuted and jailed.

I am convinced that the photos that NLECTC helped enhance and organize made our case. Within hours after our presentation was briefed, the defendants changed their plea from not guilty to guilty.

I was called to the hospital because the victim had been airlifted to my jurisdiction. I was dispatched to take photos of the bite marks the victim had suffered. When I arrived, I didn't expect to see what I saw. The child had been severely beaten, scalded, kicked, punched, bruised, and yes, bitten. I see a lot of bad things in the course of my job. I investigate a lot of violent crimes for the Forensic Identification Unit, Poughkeepsie Barrack, Troop K. In my 20 years on the job, I had rarely seen anything like this.

I was there to take photos, and I took a lot of them. But another investigator from Troop K and I did more. Christopher was alive when we arrived at the hospital. We basically held his hand until he died. We spent hours and hours that night collecting evidence. Then we set out to help the district attorney make his case.

District Attorney Stephen Lungen had an idea. He asked me if it would be possible to use technology to remove all of the injuries from our photos to show Christopher as he would have appeared early in the morning on April 1. Could we then put the injuries back into the photos, one by one, to show the effects of each blow, bite, and burn? I thought the folks at National Law Enforcement and Corrections Technology Center could help. On a Saturday, I called NLECTC to find out what, if any, such technology existed.

I had a lot of meetings with the experts on staff. They looked through all the photos and, using a commercially available image enhancement software program, they were able to show exactly what Stephen Lungen wanted. I went up there a few

times to be trained on how to use the computer and prepared for my testimony.

Prior to trial, I showed each photo and each injury to the accused and their defense council. Christopher had suffered a fractured jaw, a broken left arm, burns to the upper and lower torso, bite marks, a lacerated liver, a collapsed lung, massive bruising, and other injuries. We laid it all out in photos.

I am convinced that the photos that NLECTC helped enhance and organize made our case. Within hours after our presentation was briefed, the defendants changed their plea from not guilty to guilty. Each is serving a life sentence without possibility of parole and an accomplice was convicted for her part in the crime.

The perpetrators were jailed and the case was closed. But I still remember holding that little boy's hand. I'm glad we were able to help.

—Tommy Martin
Forensic Identification Unit
New York State Police
Poughkeepsie Barrack, Troop K

Lending a Robotic Hand

The Los Angeles County Sheriff's Department had purchased high-tech equipment for dealing with bombs and hostage situations. The only trouble was that the equipment didn't always work.

Our job is pretty difficult sometimes. We respond to calls where there is real danger involved—hostage situations, bomb scares, that sort of thing. That's why the department invested in equipment to take some of the danger out of our investigations. Remote-controlled robots are a great aid.

We invested thousands of dollars to ensure the well-being of our officers and the public. The robots could go safely where we could not. We bought two robots and a well-equipped truck to serve as our base station. The robots were operated by control boxes in the truck from a safe distance. But a short time after we started using them, we experienced technical problems. The robots would stop short, in effect losing power, and the control boxes would overheat. We called the manufacturer; they tested them from their facility in another State and couldn't seem to find the problem. Nothing showed up that would explain our problem.

We called the National Law Enforcement and Corrections Technology Center, figuring if anyone could get to the bottom of this, they could. They took our robots and tested and retested them. They discovered that the robots were affected by other radio signals in the area in which they were operated. They also discovered that the video cameras in the robots were draining off the energy supply. They made a few adjustments—redesigned the power supply so operating the video camera (key in hostage situations) would not drain the power and rebuilt the antennas on the robots and the truck.

Now our robots work fine. NLECTC installed adjustable antennas that spin in all directions and showed us how to bounce signals off of buildings to get more power. Their work enabled us to double or triple the distance the robots could travel. We can run all over the place now.

NLECTC took something for us and made it work even better than we had originally imagined. They did such fine work, the manufacturer actually asked, "How did you do that?"

NLECTC took something for us and made it work even better than we had originally imagined. They did such fine work, the manufacturer actually asked, "How did you do that?" Because of NLECTC, our investment in robots is sound, and our officers and the people they serve are safe.

—Sgt. Don Shively
Los Angeles County Sheriff's Department

REMOTEC

When Tragedy Strikes, Technology Responds

I was teaching a course in Texas when I heard the news. As a task force leader with FEMA's Urban Search and Rescue (USAR) Task Force VA–TF2 and a rescue specialist instructor, I was regularly dispatched around the country to assist with search and recovery missions after disasters. I was ready to go where I was needed. It turned out I was needed at Ground Zero.

Of course, like the rest of the country, I was grounded, couldn't get a flight out of Texas. So, I rented a car. It took my travel companions and me 23 hours to drive straight through to New York City. We arrived on Thursday, September 13, and assembled with a lot of other emergency workers from around the country at the Jacob Javits Center. We awaited our assignments from the FDNY.

I met D'Arcy Morgan from NIJ at the Javits Center. He had a variety of specialized equipment provided by NLECTC for search and recovery—things like robots, thermal imagers, through-the-wall sensors, and high-powered cameras.

As battalion chief with the Virginia Beach Fire Department and the former captain of the Virginia Department of Fire Programs Heavy and Tactical Rescue Team, I have responded to many accidents, natural disasters, and hostage situations. I know firsthand that people can live for up to 14 days in the most dismal situations, buried under rocks, rubble, and collapsed buildings. But from the moment I arrived at Ground Zero I knew the 14-day survival profile had gone out the window. The devastation was too complete, the piles of smoldering rubble too hot.

I met the guys from the 10/10 [NYFD Firehouse Ten, Engine number 10]. Their station overlooked the disaster site. They had a couple of guys up on the roof using binoculars to see any signs of people in the piles. They were not having much luck. I brought them some of NIJ's equipment—two high-powered cameras that magnified light and dark areas of objects. These cameras were powerful enough to help us see through the smoke and dust that was hanging in the air. We were soon able to identify pieces of firefighting equipment in the piles. We directed workers to dig in that specific area. They found the bodies of eight firefighters.

September 11, 2001. Thousands of victims. Thousands of emergency responders. Thousands of stories. This is one of them.

Many people were lost that day. Many people will not be found. The fact that we could help eight families find closure meant something. The scope of this tragedy was overwhelming. But the tools provided by NLECTC helped in a very bad situation. I look forward to getting more information, training, and tools through NLECTC for use in my daily work in Virginia Beach. My job would be easier and I'd have more successes using these technologies.

— Battalion Chief Michael G. Brown
Virginia Beach Fire Department

The NLECTC System

The Face of Technological Innovation

Public safety agencies today are faced with challenging and complex decisions regarding the acquisition and implementation of new and emerging technologies. Administrators are frequently expected to make informed decisions about a broad range of technologies with limited access to objective information; insufficient funds to research, evaluate, and purchase technologies; limited information on what works in the field; and a lack of access to technical experts. Their decisions require knowledge in highly diverse areas ranging from computer-aided dispatch and records management systems to less-than-lethal weapons. Although the selection of appropriate technologies can significantly enhance an agency's effectiveness and efficiency and help ensure public safety, bad decisions can cost an agency millions of dollars with little or no return on its investment.

In 1994, the National Institute of Justice's (NIJ's) Office of Science and Technology (OS&T) created the National Law Enforcement and Corrections Technology Center (NLECTC) system to be the "honest broker" for technology information, assistance, and expertise for the Nation's law enforcement, corrections, and criminal justice community. This information and assistance is provided through toll-free information response centers, demonstrations of new technologies, product testing and evaluation, technology training (capacity building), science and engineering advice and support, and technology commercialization.

Because law enforcement and correctional services are provided at the local level, five regional centers and several specialty offices have been established to complement a national center. The regional centers and specialty offices are co-located with or supported by federally funded technology partners so that they can leverage unique science and engineering advice and support on an as-needed basis. Creating the NLECTC system was a relatively modest first step to try to meet the growing technology demands of almost 19,000 independent State and local law enforcement agencies, 50 State correctional systems, and thousands of local jails.

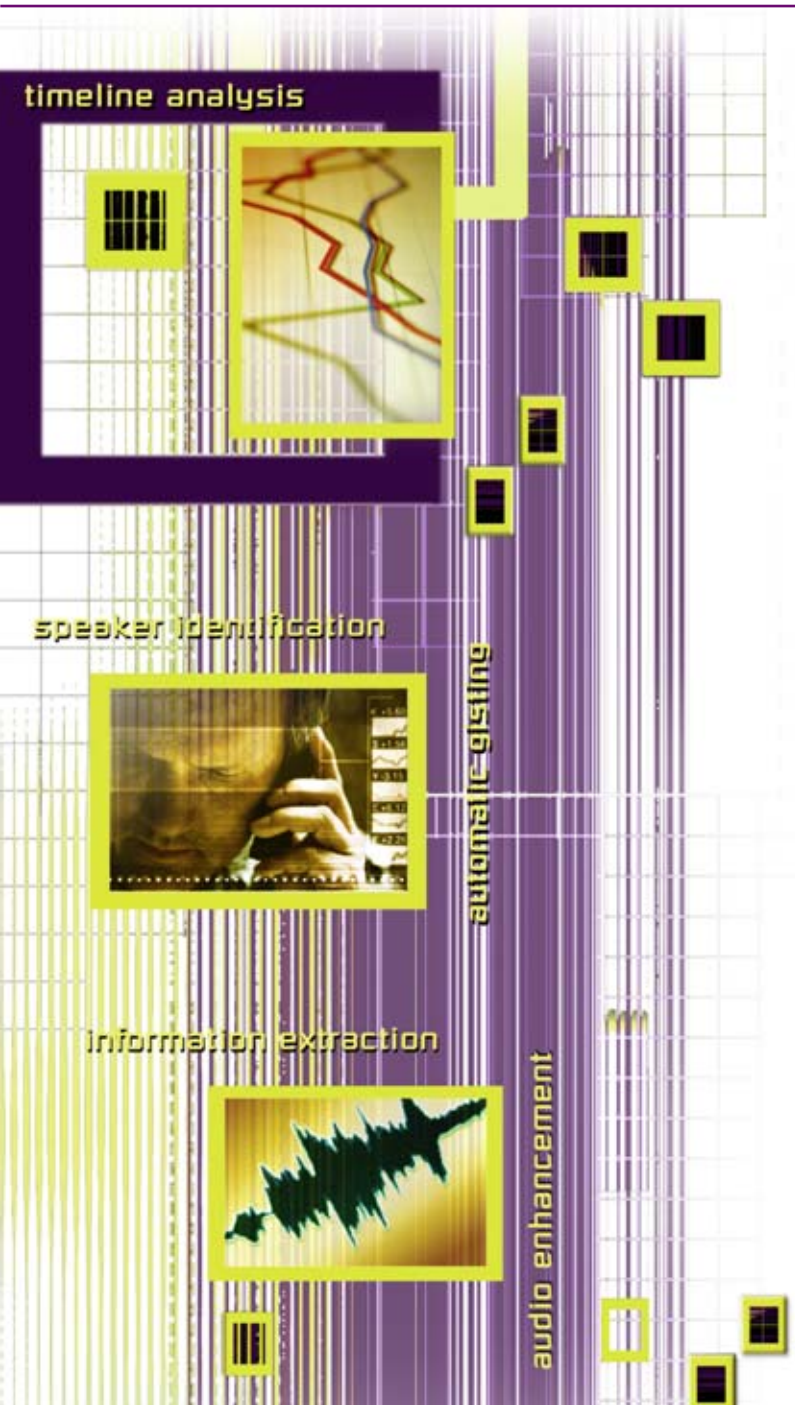
Technology Program Areas

The law enforcement and corrections community has a broad and evolving range of administrative and operational needs. With advice and support from the National Law Enforcement and Corrections Technology Center (NLECTC), those needs may be successfully addressed through thousands of commercially available technologies, many new and emerging technologies, or current research and development efforts. NLECTC receives thousands of requests for assistance from the criminal justice community, with the most requests coming from law enforcement, corrections, and product manufacturers. To meet these needs given limited program resources and the sustained growth in requests for assistance, OS&T and its NLECTC system attempt to focus on six technology program areas identified as critical by the practitioner community:

- Crime prevention.
- Protective system technologies.
- Less-than-lethal technologies.
- Investigative and forensic sciences.
- Communications interoperability/ information sharing.
- Critical incident technologies.
- Learning technology tools.

Crime Prevention. NLECTC identifies, develops, evaluates, and demonstrates technologies to help public safety personnel prevent the commission of crimes. Examples include sensing and surveillance technologies, contraband detection technologies, biometrics, and speech recognition and translation technologies.

Protective Systems Technologies. NLECTC identifies, develops, evaluates, and demonstrates



Law Enforcement Analysis Facility

The Law Enforcement Analysis Facility (LEAF) at the Air Force Research Laboratory (AFRL) in Rome, New York, was established to provide technology support to NLECTC–Northeast. LEAF acts as a liaison between the Air Force and law enforcement and corrections agencies. Its purpose is to evaluate, test, and demonstrate Air Force technologies and to gather data on how these technologies can be applied to law enforcement and corrections. In addition, LEAF provides invaluable exposure to emerging technologies that are not commercially available. AFRL is the leading research and development site for audio and imaging technology. LEAF houses this cutting-edge technology for demonstration purposes. Demonstrating technologies to law enforcement and corrections agencies and collecting real-world data are also beneficial to the Air Force's technology development activities. All LEAF efforts point toward one goal: the eventual transitioning of technology to financially challenged criminal justice agencies.

technologies that enhance the ability of public safety personnel to perform their jobs safely. NLECTC played a crucial role in the development and standardization of soft body armor, which has saved the lives of over 2,500 law enforcement officers. NLECTC continues its commitment to protecting public safety officers as they do their dangerous work through the improvement of standards for stab and ballistic resistant body armor and development of 'smart' handguns, puncture resistant gloves, and better handcuffs. Protective technologies also include those that help secure facilities and public spaces. These technologies include concealed weapon detection and personnel tracking and location technologies.

Less-Than-Lethal Technologies. NLECTC identifies, evaluates, and demonstrates new or improved devices and other technologies that minimize the risk of death and injury to law enforcement officers, suspects, prisoners, and the general public. Although NLECTC's activities focus primarily on identifying needs and existing technologies, less-than-lethal technologies being developed, reviewed, and tested by OS&T include acoustic devices, chemical pepper spray, electrical devices (stun and projectiles), kinetic energy projectiles (shot bags and airfoil projectiles), and fleeing vehicle interdiction (mechanical and electric/electromagnetic) devices.

Investigative and Forensic Sciences. NLECTC works with law enforcement and corrections agencies and crime laboratories to provide unique science and engineering advice and support. The NLECTC system complements rather than duplicates local agency capabilities and focuses on providing unique services. For instance, NLECTC leverages Air Force-developed technology to analyze audio, video, and computer evidence. The Center system also provides OS&T-developed crime scene guides on topics such as arson and bombing crime scenes and electronic crime scenes to enhance crime lab capabilities and processes.

Communications Interoperability/Information Sharing. NLECTC finds solutions to improve interoperability among law enforcement, corrections, and other criminal justice agencies. NLECTC identifies communications interoperability and information sharing technology needs as well as demonstrates and evaluates technology to improve communication and information-sharing capabilities. Providing secure communications and information systems is also a priority for NLECTC.

Critical Incident Technologies. When natural disasters, transportation or industrial accidents, terrorist acts, or other critical incidents occur, criminal justice professionals need reliable advice, equipment, and training. NLECTC focuses on improving the response to these incidents by improving training and information-sharing capabilities and reducing agency vulnerability.

Learning Technology Tools. NLECTC is dedicated to identifying affordable training technology tools for law enforcement and corrections personnel. NLECTC also provides hands-on instruction and demonstrations in the use of the latest technologies to detect and disable explosives, respond to prison riots, investigate electronic crimes, and map crimes.

Facing the Technology Challenge: Matching Services to Needs

The National Law Enforcement and Corrections Technology Center system is committed to providing timely information and assistance that is tailored to the specific needs

of law enforcement and corrections personnel. But whether such assistance may involve creating a guide on selecting bullet-resistant body armor, demonstrating concealed-weapons-detection technology, helping locate surplus Federal property, or analyzing an audio- or videotape from a crime scene, the process starts when you contact an NLECTC representative for help. NLECTC staff provide personalized products, services, and expertise to law enforcement and corrections personnel nationwide. NLECTC also maintains an extensive network of resources available through other Federal, State, and local agencies; industry; and academia.

The technology assistance and support that the NLECTC system provides to the law enforcement and corrections community fall under the following 10 categories.

Technology Identification. Most law enforcement and corrections agencies do not have the time, money, or manpower to keep abreast of new and emerging technologies. A quick look at advertisements in a magazine or catalog, or a stroll along the exhibit floor at a conference, often constitutes product research. Specific questions such as performance, durability, reliability, safety, ease of use, customization capabilities, and interoperability frequently are left to be answered by sales representatives. This is the critical point where NLECTC can step in and be that "honest broker," providing information that agencies need to make informed purchasing decisions. NLECTC representatives frequently help criminal justice agencies assess their current and future needs and constraints and identify technology solutions. Recognizing agency budgetary constraints, they look for low-cost solutions whenever possible.

Technology Assistance. The NLECTC system, through its host organizations and technology partners, can leverage vast scientific and engineering resources to provide technology assistance to State and local law enforcement and corrections agencies that lack their own capabilities. Because most law enforcement and corrections agencies don't have access to technical experts and sophisticated equipment, NLECTC staff serve as their proxy scientists and engineers. Examples of these services include assistance in evidence analysis (e.g., audio, video, computer, trace, and explosives), systems engineering, and communications and information systems support (e.g., interoperability, propagation studies, and vulnerability assessments).

Technology Implementation. "Some assembly required" is one statement most people want to avoid. But introducing a new product or technology to solve a problem is not in itself problem free. In reality, the implementation of technology can bring on a whole new set of concerns and considerations, from hardware/software compatibility to operational procedures and training. NLECTC can help agencies work through the bugs and develop procedures, protocols, and training materials. Generic guides, best practices, and information manuals are often leveraged from these hands-on assistance projects and made available to other agencies.

Standards and Testing/Technology Evaluation. How safe is it? Can I depend on it? These are two of many questions police and corrections officers have about the equipment they use every day. NLECTC oversees a standards-based testing program in which equipment such as ballistic- and stab-resistant body armor, double-locking

metallic handcuffs, and semiautomatic pistols is tested on a pass/fail basis. Staff also conduct comparative evaluations, testing equipment under field conditions. These evaluations allow agencies to select equipment that best suits their needs. This equipment includes patrol vehicles; patrol vehicle tires and replacement brake pads; and cut-, puncture-, and pathogen-resistant gloves. In addition, NLECTC conducts indepth evaluations of new products to verify claims made by their manufacturers. If a product does not perform as stated, a product alert is released.

Technology Demonstration/Evaluation. Working with the technology development divisions of the National Institute of Justice's Office of Science and Technology and their technology partners, NLECTC helps introduce and demonstrate new and emerging technologies to those who can use them through special events, conferences, and demonstrations such as the Mock Prison Riot (technologies for corrections), Operation America (render-safe bomb technologies), and an annual public safety technology conference. On a limited basis, NLECTC also facilitates the deployment of cutting-edge technology to individual law enforcement agencies for operational testing and evaluation. These activities provide feedback to technology developers and help ensure that new technologies are safe, efficient, and affordable.

Technology Information Dissemination. All the information in the world is of no value if those who need it are not receiving it. NLECTC makes a concerted effort to disseminate information to the criminal justice community at no cost. This information is available in the form of educational bulletins, equipment performance reports, guides, consumer product lists, news summaries, and meeting/conference reports. NLECTC also publishes *TechBeat,* an award-winning quarterly newsmagazine. Most publications are available in hardcopy form and in electronic form through the Justice Technology Information Network (JUSTNET) www.justnet.org. Videotapes and CD–ROMs on such subjects as DNA evidence and body armor have also been produced. In addition, a national toll-free number, 800–248–2742, and e-mail address, asknlectc@nlectc.org, make requests for information and assistance just a phone call or a few keystrokes away.

Training Assistance/Capacity Building. Providing hands-on instruction and demonstration in the use of the latest technologies to combat crime is one of the side benefits of the NLECTC system. When a new challenge emerges, the Center system stands ready to provide hands-on instruction in the latest technology solutions. Examples of these services include hands-on instruction in the areas of crime and intelligence analysis, geographic information systems, explosives detection and neutralization, prison riots, and use of forensic tools in the investigation of computer crime. Providing instructions and demonstrations of the latest technologies and tools helps to build capacity among State and local law enforcement and corrections agencies that would not be available otherwise.

Technology Commercialization. Bringing research and private industry together to put affordable, market-driven technologies into the hands of law enforcement and corrections is a major focus of NLECTC. A dedicated staff of law enforcement and corrections professionals, product and commercialization managers, and engineers and technical and market research specialists identify new technologies and product concepts and then work with innovators

and industry to develop, manufacture, and distribute new, innovative products and technologies.

Technology/Property Acquisition. There isn't a police department or corrections agency that doesn't have to watch its bottom line. For most small departments, the acquisition of equipment just to run day-to-day operations or outfit officers is a constant concern; for many, even a fax machine represents a major technology investment. In response, the NLECTC system stands ready to assist departments large and small in taking advantage of the various surplus property programs that make Federal excess and surplus property available to law enforcement and corrections personnel for little or no cost.

Technology Needs Assessment/Prioritization. A national body of criminal justice professionals, the Law Enforcement and Corrections Technology Advisory Council (LECTAC) influences the work

National Law Enforcement CyberScience Laboratory-Northeast

NIJ established the National Law Enforcement CyberScience Laboratory (NLECSL)–Northeast, also known as the CyberScience Lab, to heighten awareness of cybercrime issues among Federal, State, and local law enforcement agencies, identify needs, and provide technology assistance. It is the first lab of its kind in the Northeast and is co-located with the Air Force Research Laboratory/ Information Directorate in Rome, New York, at the Griffiss Business and Technology Park and NLECTC–Northeast. The CyberScience Lab works closely with Utica College's Computer Forensics Research and Development Center and the New York Electronic Crimes Task Force. This coalition of forensics experts serves as a gateway for disseminating tools and technology to the law enforcement community. The CyberScience Lab is dedicated to:

- Encouraging collaboration among government, industry, and academia regarding cybercrime and technical issues.
- Hosting cybercrime training in conjunction with the National Cybercrime Training Partnership.
- Distributing cybercrime technology tools and providing technical assistance.
- Heightening awareness of cybercrime.

In short, the CyberScience Lab focuses on the development and transition of technologies critical to the identification, preservation, collection, and presentation of electronic evidence.

Crime Mapping and Analysis Program

The Crime Mapping and Analysis Program (CMAP), currently based at NLECTC–Rocky Mountain in Denver, Colorado, and NLECTC–Southeast in Charleston, South Carolina, provides technology assistance and capacity building to State and local agencies. CMAP offers assistance in a number of different ways and helps law enforcement and corrections professionals determine how crime mapping technologies can work for them.

Through CMAP, agencies can:

- Receive information on how to determine whether crime mapping can help in a particular situation or circumstance.
- Read success stories from other departments.
- Identify technology assistance and training facilities that can assist them.

CMAP also provides train-the-trainer and capacity-building programs. By working to expand the scope of the program, CMAP increases awareness of new mapping applications. CMAP technology helps law enforcement agencies identify such things as high-crime areas and helps corrections and parole personnel track and analyze such things as violent or gang activities in prisons or parole officer caseloads.

of the Office of Science and Technology and the NLECTC system by identifying technology priorities. Each NLECTC facility has a regional advisory council of law enforcement, corrections, and forensics professionals. Together, LECTAC and the regional advisory councils help keep the NLECTC system attentive to the real-world technological priorities.

Over the years, LECTAC has championed the use of lifesaving body armor for law enforcement and corrections staff and less-than-lethal methods for stopping fleeing criminal suspects. LECTAC members were leading proponents of the forensic sciences and worked to bring laboratory and investigative tools to local agencies, both large and small.

LECTAC and the regional advisory councils analyze present needs and project future technology that would help State and local criminal justice professionals. Together they provide advice on research and development priorities to OS&T. They also advise NLECTC on equipment testing, performance standards, user guidelines, and technical reports. LECTAC links law enforcement and corrections with technology developers and manufacturers to ensure that emerging technologies meet operational needs.

Profiles of Regional Centers

NLECTC–National

The National Center is co-located with its host, Aspen Systems Corporation, in Rockville, Maryland, and serves as the hub of the NLECTC system. This Center provides information and referral services to anyone with questions about law enforcement and corrections equipment or technology. In cooperation with the Office of Law Enforcement Standards (OLES) at the National Institute for Standards and Technology, NLECTC–National oversees the equipment standards and testing program to ensure that law enforcement and corrections equipment is safe and reliable. Through this program, the National Center works with OLES to set minimum performance standards for specific devices, tests commercially available equipment against those standards, and shares the standards and test results with criminal justice agencies nationwide. NLECTC–National supervises the program, but independent laboratories conduct the testing. The Center helps review and analyze data and publishes test results and consumer product reports designed to help justice system officials make informed purchasing decisions.

The National Center also publishes *TechBeat,* the award-winning quarterly newsmagazine that highlights technology breakthroughs and applications. In addition, the Center operates JUSTNET, a website that provides links to the entire NLECTC system and a gateway to other technology sites. JUSTNET assists those seeking information about equipment, technology, or research findings.

NLECTC–Northeast

NLECTC–Northeast is located at the Air Force Research Laboratory Rome Research Site on the grounds of the Griffiss Business and Technology Park in Rome, New York. The Center leverages technologies designed for the military that can be adapted to meet law enforcement and corrections needs. This Center draws on the expertise of Air Force scientists and engineers and focuses on concealed weapons technologies, through-the-wall sensors, audio and image processing, timeline analysis, computer forensics, secure communications, speaker identification, and communications interoperability. NLECTC also operates the Law Enforcement Analysis Facility and the National Institute of Justice's National Law Enforcement CyberScience Laboratory–Northeast.

NLECTC–Southeast

NLECTC–Southeast is co-located with its host, the South Carolina Research Authority in Charleston, South Carolina. The Center's technology focus areas include information technology and technologies for corrections and school safety. NLECTC–Southeast helps law enforcement and corrections agencies acquire and redistribute Federal surplus/excess property. The Center also operates an Incident Mapping and Analysis Program that includes crime mapping training, spatial information management, geographic profiling, and data mining. The Center's technology partners include the Space and Naval Warfare Systems Center

(SPAWAR)–Charleston, Oak Ridge National Laboratories, and the Savannah River Technology Center.

NLECTC–Rocky Mountain

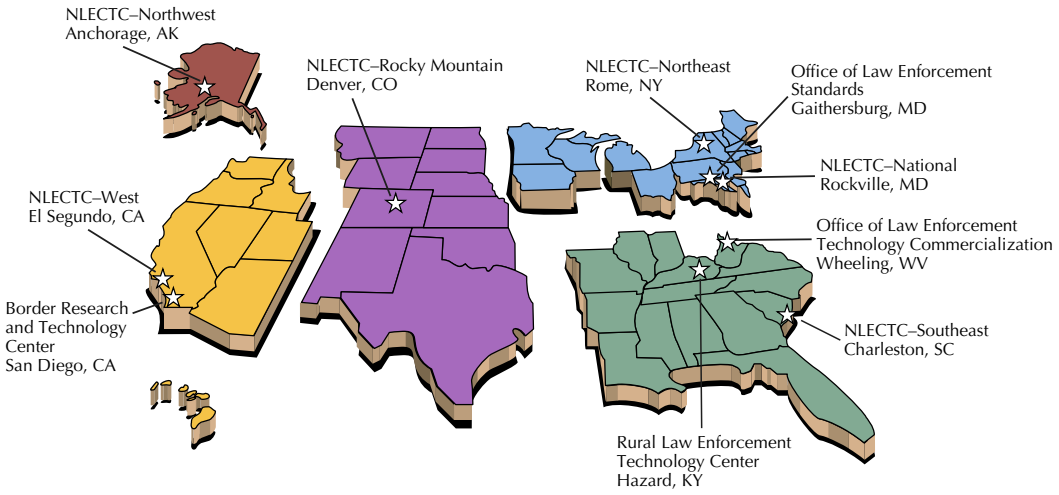
Located at the University of Denver in Colorado, NLECTC–Rocky Mountain focuses on communications interoperability and the difficulties that often occur when different agencies and jurisdictions try to communicate with one another. This facility works with law enforcement agencies, private industry, and national organizations to implement projects that will identify and field test new technologies to help solve the problem of interoperability. In addition, NLECTC–Rocky Mountain houses the Crime Mapping and Analysis Program, which provides technical assistance and capacity building to State and local agencies in the areas of crime and intelligence analysis and geographic information systems. Sandia National Laboratories has been designated as a satellite of NLECTC–Rocky Mountain and works in partnership with NLECTC to focus on technologies for detecting and neutralizing explosive devices.

NLECTC–West

NLECTC–West is co-located with its host, The Aerospace Corporation, in El Segundo, California. The nonprofit corporation provides technical oversight and engineering expertise to the Air Force and the U.S. Government on space technology and space security systems. NLECTC–West draws on The Aerospace Corporation's depth of knowledge and scientific expertise to offer law enforcement and corrections personnel the ability to analyze and enhance audio, video, and photographic evidence. This NLECTC facility also has an extensive array of analytic instrumentation to aid in criminal investigations, such as a scanning electron microscope and a mass spectrometer; these instruments can be used to process trace evidence. The Center's other focus areas include computer forensics, communications systems, and technologies to stop fleeing vehicles.

NLECTC–Northwest

NLECTC–Northwest, located in Anchorage, Alaska, was established to address the special challenges faced by law enforcement and



correctional officers in harsh climates. Sponsored by Chenega Technology Services Corporation, a Native Alaskan corporation, NLECTC–Northwest focuses on various technologies to support law enforcement and corrections under the extreme weather conditions found in remote and rural Alaska and other areas of the United States. Focus areas include:

- Equipment performance in adverse conditions.
- Capacity building for isolated rural agencies.
- Safety equipment and survival equipment performance.
- Communication systems to reduce travel and transport requirements.
- Distance learning and training.
- Data and Internet connectivity for rural agencies.

NLECTC–Northwest helps agencies evaluate emergency communications needs for their communities, providing technology evaluations and assistance to agencies considering enhancing or developing new 911 telephone systems, emergency dispatch systems and facilities, or records management systems. NLECTC–Northwest also serves as a resource to State and local law enforcement for the acquisition and application of information technology.

Border Research and Technology Center. The Border Research and Technology Center (BRTC), operated by Sandia National Laboratories, is located in San Diego, California. BRTC works with the Immigration and Naturalization Service, the U.S. Border Patrol, the U.S. Customs Service, the Office of National Drug Control Policy, the U.S. Attorney's offices, and law enforcement agencies to develop strategies and technologies to strengthen technology capabilities and awareness on the Nation's borders. One of its most recognized accomplishments has been the implementation of SENTRI (the Secured Electronic Network for Travelers' Rapid Inspection). BRTC also works on joint ventures to identify technologies that will stop fleeing vehicles and is currently participating in a project to detect heartbeats of people concealed in vehicles or other containers. BRTC's technology partners include Sandia and the Space and Naval Warfare Systems Center–San Diego.

Rural Law Enforcement Technology Center. The Rural Law Enforcement Technology Center (RULETC) provides technology and technical solutions to the Nation's rural and small criminal justice agencies. RULETC concentrates on information technology, communications interoperability, and training and simulation technologies that will improve the effectiveness and efficiency of rural law enforcement. RULETC provides technology assistance via a nationwide network of criminal justice subject-matter experts, engineers, academics, and scientists. The center is developing capacity-building programs for dissemination nationwide that will provide rural agencies with the information they need to better equip officers to serve their communities. Hosted by Eastern Kentucky University's Justice and Safety Center, RULETC is located in Hazard, Kentucky.

Office of Law Enforcement Technology Commercialization, Inc. The Office of Law Enforcement Technology Commercialization (OLETC) is located in Wheeling, West Virginia. OLETC's mission is to work with industry, manufacturers, and laboratories to facilitate the commercialization of technologies for the law enforcement and corrections marketplace. OLETC provides special services and assistance to innovators,

entrepreneurs, universities, laboratories, and U.S. manufacturers nationwide in commercializing technologies for law enforcement and corrections. OLETC has assisted in bringing to market several innovative products, including the RoadSpike™, a novel vehicle-stopping device; TigerVision®, a low-cost, handheld night vision device; the Explosive Ordnance Disposal Technician Training Kit; the Counter Point™ Stab and Slash Protective Vest; and CruiseCam™, an in-cruiser video camera system. OLETC has identified more than 70 additional emerging technologies and concepts that are currently being evaluated for possible commercialization. In addition, OLETC sponsors the annual Mock Prison Riot in a former West Virginia State penitentiary to showcase new technologies for corrections through realistic scenarios and hands-on training.

Office of Law Enforcement Standards. The Office of Law Enforcement Standards (OLES) is co-located with its host, the National Institute of Standards and Technology in Gaithersburg, Maryland. OLES applies science and technology to the needs of the criminal justice community by developing minimum performance standards for equipment and technology. NIJ promulgates OLES studies as voluntary national standards. Its areas of research include clothing, communications systems, emergency equipment, investigative aids, protective equipment, security systems, vehicles, and weapons. It also develops measurement methods for analytical techniques and standard reference materials for forensic scientists and crime labs. Since the program began in 1971, OLES has developed nearly 200 standards, user guides, and advisory and special reports. In addition, OLES-developed standards can serve as design criteria for manufacturers or as the basis for their own equipment evaluations. Individual jurisdictions may cite OLES standards in procurement specifications or use the standards in their own laboratories to test equipment or have equipment tested on their behalf.

Operation AMERICA

Sponsored by NLECTC–Rocky Mountain and Sandia National Laboratories, Operation America is an advanced technology transfer and demonstration event for bomb technicians. An outgrowth of the earlier Operation Albuquerque and Operation Riverside, Operation America is designed to move about the country and, through practical applications, familiarize bomb technicians with the latest explosive ordnance disposal innovations. The two initial Operation America events were held in San Diego, California, and Warrenton, Oregon.

Profile of the Future

While we do not have a crystal ball to permit us to gaze into the future, recent trends can provide us with some indication of the challenges that the criminal justice community will continue to face well into the 21st century. The introduction of new technology will face institutional and legal challenges and require agencies to re-examine their strategies, policies, procedures, and training. The increased availability and affordability of technology will likely contribute to an increase in the number of high-tech crimes. Criminal justice agencies, financial institutions, utility companies, and others also will need to continue to assess the vulnerability of their own technology to criminal and terrorist attack and take the necessary actions. Development of critical incident response technologies and strategies will be paramount.

With these challenges facing the criminal justice community, it is anticipated that law enforcement and corrections services will continue to be provided at the local level and that the majority of an agency budget will continue to be spent on personnel-related expenses, leaving few funds for technology enhancement. Further development and adoption of technology will continue to help the criminal justice community improve its effectiveness and efficiency and will help contribute to community safety. Technology will help increase cooperation between public safety agencies through enhanced communication equipment, monitor increased numbers of offenders in the community, and enhance crime laboratory capabilities. However, limited resources at State and local levels to research, evaluate, and purchase new products will continue to hamper agency adoption of new technologies. Therefore, it is anticipated that Federal assistance to State and local criminal justice agencies will need to continue.

As the technology needs of the criminal justice community change, NLECTC will continue to evolve to meet these demands. In the years to come, NLECTC will continue to assess the needs of the criminal justice community, monitor and help facilitate the development and commercialization of new technology, demonstrate new advances, evaluate new tools, and make equipment and techniques more widely available to those who dedicate their lives to public safety.

Contact Us

Contact NLECTC using the national toll-free number (800–248–2742) or log on to our website, JUSTNET, at www.justnet.org.

NLECTC–National
2277 Research Boulevard
Rockville, MD 20850
Phone: 800–248–2742
Fax: 301–519–5149
E-mail: *asknlectc@nlectc.org*

NLECTC–Northeast
26 Electronic Parkway
Rome, NY 13441–4514
Phone: 888–338–0584
Fax: 315–330–4315
E-mail: *nlectc_ne@rl.af.mil*

NLECTC–Southeast
5300 International Boulevard
North Charleston, SC 29418
Phone: 800–292–4385
Fax: 843–760–4611
E-mail: *nlectc-se@nlectc-se.org*

NLECTC–Rocky Mountain
2050 East Iliff Avenue
Denver, CO 80208
Phone: 800–416–8086
Fax: 303–871–2500
E-mail: *nlectc@du.edu*

NLECTC–West
c/o The Aerospace Corporation
2350 East El Segundo Boulevard
El Segundo, CA 90245–4691
Phone: 888–548–1618
Fax: 310–336–2227
E-mail: *nlectc@law-west.org*

NLECTC–Northwest
3000 C Street, Suite 304
Anchorage, AK 99503–3975
Phone: 866–569–2969
Fax: 907–569–6939
E-mail: *nlectc_nw@ctsc.net*

Border Research and Technology Center
1010 Second Avenue, Suite 1920
San Diego, CA 92101–4912
Phone: 888–656–2782
Fax: 888–660–2782
E-mail: *info@brtc.nlectc.org*

Rural Law Enforcement Technology Center
101 Bulldog Lane
Hazard, KY 41701
Phone: 866–787–2553
Fax: 606–436–6758
E-mail: *ruletc@aol.com*

Office of Law Enforcement Technology Commercialization, Inc.
2001 Main Street, Suite 500
Wheeling, WV 26003
Phone: 888–306–5382
Fax: 304–230–2310
E-mail: *oletc@oletc.org*

Office of Law Enforcement Standards
100 Bureau Drive, Stop 8102
Gaithersburg, MD 20899–8102
Phone: 301–975–2757
Fax: 301–948—0978
E-mail: *oles@nist.gov*

Profile of NIJ

NIJ is the research, development, and evaluation agency of the U.S. Department of Justice. The Institute provides objective, independent, nonpartisan, evidence-based knowledge and tools to enhance the administration of justice and public safety. NIJ's principal authorities are derived from the Omnibus Crime Control and Safe Streets Act of 1968, as amended (see 42 U.S.C. §§ 3721–3723).

The NIJ Director is appointed by the President and confirmed by the Senate. The Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the U.S. Department of Justice, and the needs of the field. The Institute actively solicits the views of criminal justice and other professionals and researchers to inform its search for the knowledge and tools to guide policy and practice.

NIJ's Strategic Goals

NIJ has seven strategic goals grouped into three categories:

Creating relevant knowledge and tools

1. Partner with State and local practitioners and policymakers to identify social science research and technology needs.
2. Create scientific, relevant, and reliable knowledge—with a particular emphasis on terrorism, violent crime, drugs and crime, cost-effectiveness, and community-based efforts—to enhance the administration of justice and public safety.
3. Develop affordable and effective tools and technologies to enhance the administration of justice and public safety.

Dissemination

1. Disseminate relevant knowledge and information to practitioners and policymakers in an understandable, timely, and concise manner.
2. Act as an honest broker to identify the information, tools, and technologies that respond to the needs of stakeholders.

Agency management

1. Practice fairness and openness in the research and development process.
2. Ensure professionalism, excellence, accountability, cost-effectiveness, and integrity in the management and conduct of NIJ activities and programs.

Program Areas

In addressing these strategic challenges, the Institute is involved in the following program areas: crime control and prevention, including policing; drugs and crime; justice systems and offender behavior, including corrections; violence and victimization; communications and information technologies; critical incident response; investigative and forensic sciences, including DNA; less-than-lethal technologies; officer protection; education and training technologies; testing and standards; technology assistance to law enforcement and corrections agencies; field testing of promising programs; and international crime control.

In addition to sponsoring research and development and technology assistance, NIJ evaluates programs, policies, and technologies. NIJ communicates its research and evaluation findings through conferences and print and electronic media.

To find out more about the National Institute of Justice, please contact:

National Criminal Justice Reference Service
P.O. Box 6000
Rockville, MD 20849–6000
800–851–3420
E-mail: *askncjrs@ncjrs.org*

About the Office of Science and Technology

The mission of the Office of Science and Technology is to provide State and local law enforcement and corrections agencies access to the best technologies available and help them develop capabilities essential to the improvement of efficiency and effectiveness in every aspect of the criminal justice system. It is also to support the development of new technologies to support national needs served by Federal law enforcement and corrections agencies, while avoiding unnecessary duplication of effort.

These science and technology programs cut across the entire range of criminal justice issues and are aimed at the development of tools that will improve the operational efficiency of all aspects of the criminal justice system. These programs have always had a major focus on enhancing the safety of law enforcement officers, correctional officers, and other officers of the courts as they perform their daily duties of policing and maintaining custodial responsibilities for citizens under confinement by the courts. Technologies that can reduce the risks of injury or death to officers, suspects, and the general public during arrest, transport, and confinement are also of great interest.

NLECTC Technology Partners

ACS Defense, Inc.

The Aerospace Corporation

Air Force Research Laboratory, Information Directorate

Aspen Systems Corporation

Chenega Technology Services Corporation

Denver Research Institute

Dolphin Technology, Inc.

Eastern Kentucky University

L–3 Communications, Analytics Corporation

National Institute of Standards and Technology

New York State Technology Enterprise Corporation

Oak Ridge National Laboratory

Office of Law Enforcement Standards

Sandia National Laboratories

Savannah River Technology Center

South Carolina Research Authority

SPAWAR–Charleston

SPAWAR–San Diego

University of Denver

National Law Enforcement and Corrections Technology Center

Acknowledgments

This publication was produced through Aspen Systems Corporation.

C. Denise Collins, Designer
Kate Poindexter, Writer
Rick Neimiller, Project Manager
Laura Mitchell, Editorial Quality Control
Mike Tock, Marketing Manager

Thank you to all those who shared their stories.

The National Law Enforcement and Corrections Technology Center is supported by Cooperative Agreement #96–MU–MU–K011 awarded by the U.S. Department of Justice, National Institute of Justice. Analyses of test results do not represent product approval or endorsement by the National Institute of Justice, U.S. Department of Justice; the National Institute of Standards and Technology, U.S. Department of Commerce; or Aspen Systems Corporation. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, Bureau of Justice Statistics, Office of Juvenile Justice and Delinquency Prevention, and Office for Victims of Crime.