

# TECHBeat

*Dedicated to Reporting Developments in Technology for  
Law Enforcement, Corrections and Forensic Sciences*

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TechBeat is the monthly newsmagazine of the National Law Enforcement and Corrections Technology Center System. Our goal is to keep you up to date on technologies for the public safety community and research efforts in government and private industry.

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# REAL-TIME CRIME CENTER *Serves as* FORCE MULTIPLIER

By Michele Coppola



*Some police departments are using real-time crime centers (RTCC) to quickly harness myriad sources of information in one place to facilitate emergency response and crime solving. The centers can use technology and data analytics to provide responding officers and detectives with timely, comprehensive data that can help crack a case.*

The Houston Police Department was the fourth department in the U.S. to open an RTCC. Operating since 2008, the center, working around the clock, is authorized for 22 officers and 10 civilian criminal intelligence analysts. Officers bring a law enforcement perspective as to what type of information might be useful at an emergency call or investigation. Criminal intelligence analysts use their skills to provide investigative support and can identify patterns of criminal activity.



"We were looking for a better way to use data and technology to provide a force multiplier," says Capt. Milton Martin, the commander of the Crime Analysis and Command Center Division, of which the RTCC is a part. "The inclusion of civilian analysts, who are trained in data gathering and analysis, brought another perspective to the table."

The center can monitor the city's CCTV security surveillance system and has access to a number of centralized databases such as state records on driver's licenses including photos; fugitive information; a CAD system for calls for service; GPS records related to movements of probationers and parolees; license plate reader data; and public open source data such as property tax records which can identify who owns a property. An address or license plate number provided by dispatchers can result in a bounty of information, such as places a suspect vehicle has recently or frequently visited.

Setup cost for the system was \$2.9 million, which was funded through a grant from the state of Texas.





“Initially the primary function was to monitor high-priority 9-1-1 calls for service, gather information, run it through databases and if we come up with information important for the officers, push it out, hopefully before they arrive at the scene,” Martin says. “We still do that of course, but a lot of what we do is requests for service from officers in the field. We have access to databases and information that is not accessible to others in the department. We provide analytical support to the department.

“We have access to information that sometimes the street officers may not always think about as possibly relevant. Analysts are trained and expected to provide more than what is asked for.”

Martin says the center and its advanced technology promotes both officer and citizen safety.

“It provides a safer situation for our officers and the public. It is better for our officers to have as much information as possible and know what they are getting into before they arrive on the scene. If they go forewarned of problems in the past at a certain address, for example, they can be more cautious in their approach.”

The department, with 5,200 sworn officers, serves a city population of approximately 2 million.





## *Houston has fielded questions from and provided advice to other police departments interested in setting up an RTCC.*

Martin notes that the system can save resources as well as help solve crimes.

A witness saw a man being forced into the trunk of a car, so wrote down the license plate and called police. Access to a license plate reader data system allowed police to determine the car had recently passed a camera near the high school. Police officers went to the school and found the car and the student driver, and quickly determined that the incident had been a prank and not a crime, with both students at school and safe.

“We were able to resolve it right then that the individual was safe and that a crime had not been committed and did not have to go on a large scale search,” Martin says.

Examples of other police departments with real-time crime centers include New York, Seattle, Miami-Dade and Hartford.

Houston has fielded questions from and provided advice to other police departments interested in setting up an RTCC. In the three years Martin has been the division commander, he says Houston has had inquiries from half a dozen agencies seeking advice on RTCC set up, operational procedures and lessons learned.

*For more information, contact Houston Police Department public affairs, at (713) 308-3200 or [hpd.pio@houstonpolice.org](mailto:hpd.pio@houstonpolice.org).*






# FEDERAL BUREAU of INVESTIGATION HAZARDOUS DEVICES SCHOOL

## *Expands* Training Program

By Becky Lewis



Law enforcement agencies and officers around the country face problems when it comes to finding time in a schedule and money in a budget for travel to training, and bomb squads and their technicians are no exception. For the latter group, the situation may get a bit easier as the Federal Bureau of Investigation (FBI) Hazardous Devices School (HDS) in Huntsville, Ala., embarks on an expanded program of regional trainings that agencies may find easier to fit into their schedules.




*HDS, the only national entity that trains and certifies bomb technicians in explosive ordnance disposal procedures, plans to use regional mobile training teams to expand the delivery of regional training ....*

HDS, the only national entity that trains and certifies bomb technicians in explosive ordnance disposal procedures, plans to use regional mobile training teams to expand the delivery of regional training in the school's Advanced Electronics, Advanced Manual Techniques, Vehicle-Borne Immediate Action, Tactical Bomb Technician, Maritime Underwater Hazardous Devices Counter-Measures and Maritime Operations for Bomb Technicians courses. The effort is all part of a transition for HDS, as it moves from joint operations management by the FBI and the U.S. Army to management solely by the FBI. Regional mobile training teams are composed of HDS certified instructors, special agent bomb technicians and civilian bomb technicians who have completed the HDS "train-the-trainer" course.

"The regional training is a key point in how we will grow this school," says Jeffrey Warren, HDS director. "Using bomb technicians who have been through the train-the-trainer program to deliver regional classes was something we couldn't do before. It's a big deal for us and for the community to get the training out there. We can only train so many students at a time in the advanced courses we teach here, and we need the regional courses so that all 3,100 certified bomb technicians in the country can complete advanced training in a two- to three-year period."





*Since 1971, HDS has trained more than 35,000 state and local bomb disposal technicians from more than 450 bomb disposal squads.*

Since 1971, HDS has trained more than 35,000 state and local bomb disposal technicians from more than 450 bomb disposal squads, and more than 3,100 of those individuals are actively working. Nearly 1,100 students receive certification or recertification training at the Redstone Arsenal facility on how to handle a wide range of explosive, chemical, biological and nuclear devices annually. Technicians are sponsored by their departments and agencies to receive this expert training at no cost. (Although all training is free, agencies pay travel and per diem for the six-week basic course. The FBI pays for all travel and per diem for recertification and advanced courses.)

Recent trends have increased the need for this type of advanced training, and in 2015, the FBI received \$26 million in congressional funding to expand the HDS facilities, starting with six new structures used to simulate realistic response scenarios in its training village and an additional deployment building. The new training structures are designed to be flexible in supporting various types of classes, including those involving weapons of mass destruction (WMD), low light tactical and render safe procedures and operations, and improvised explosive device (IED) render safe operations.

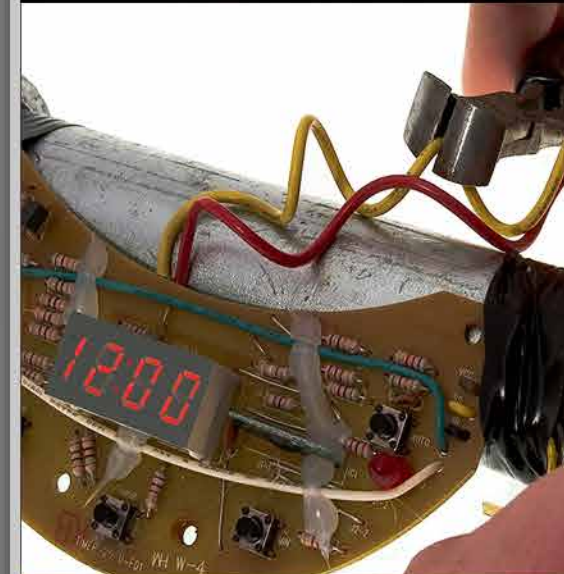
2015 also marked the beginning of the leadership transition, scheduled for completion in September 2016. The FBI will continue to maintain a close working relationship with the Army and other U.S. Department of Defense services that includes integrating civilian and military instructors and exposing students to operational deployment techniques from both perspectives.



“The rich history that the FBI has with the Department of the Army will not be lost, and the transition will allow us to be more flexible and reactive with the curriculum,” Warren says. “For example, we recently added a full-time intelligence analyst whose job is to make sure our curriculum is up-to-date with current intelligence on IED attacks. We are able to make these moves more easily and quickly with one command.”

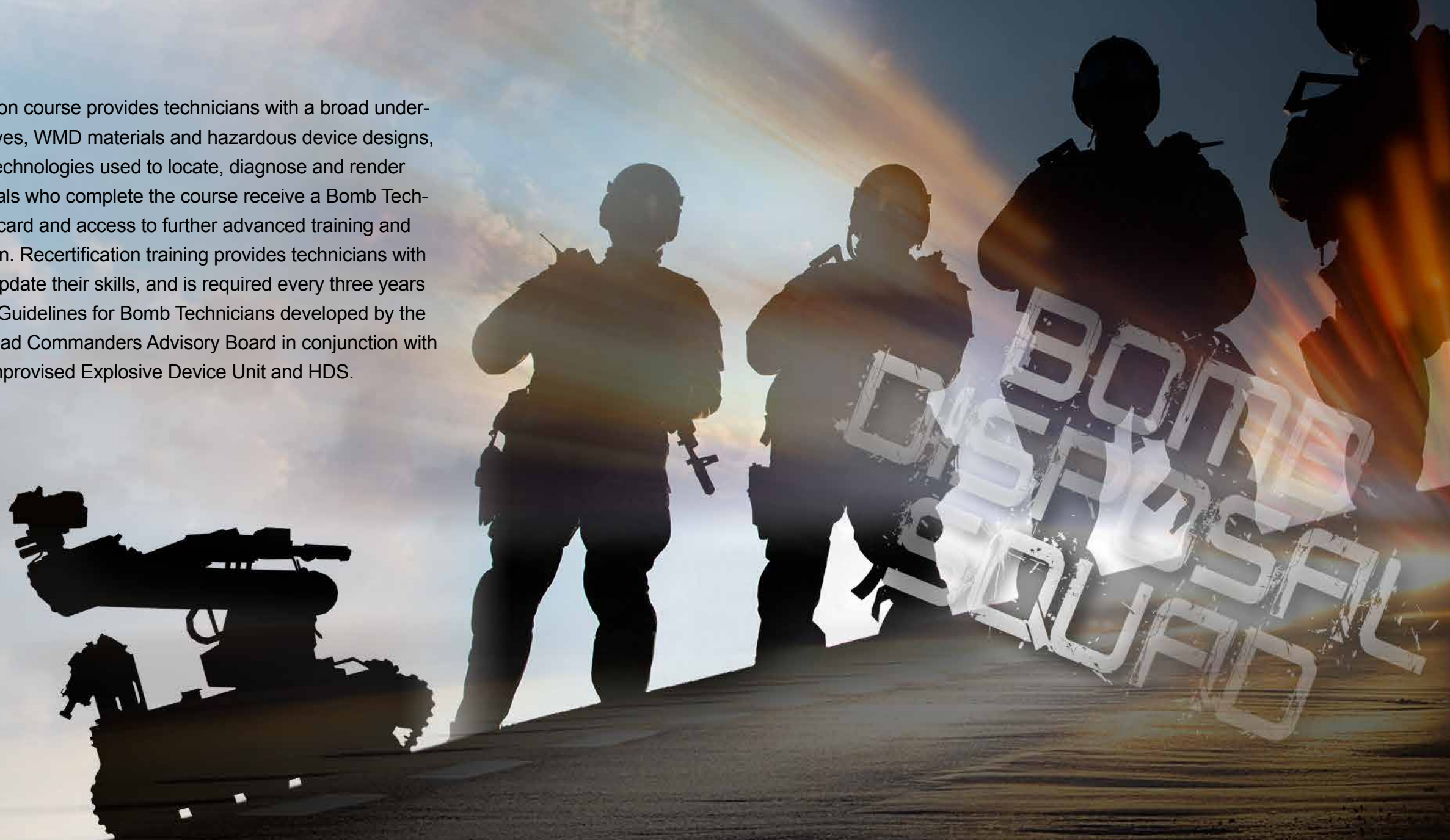
**Changes like the ones mentioned previously will be used to supplement the Hazardous Devices School Core Curriculum, which includes:**

- Identification of and response strategies for suicide bombers, including dialogue, lethal force and bomb removal.
- Range instruction that includes “hands-on” training of secondary homemade explosive blends.
- Identification of explosive devices and neutralization strategies.
- Public safety responses involving a bomb or WMD.
- Use of X-ray systems, robots and bomb-defusing equipment.
- Proper analysis, storage and disposal of defused explosive devices.
- Coordination of police, fire and bomb team personnel during a crisis incident.





The initial certification course provides technicians with a broad understanding of explosives, WMD materials and hazardous device designs, and the tools and technologies used to locate, diagnose and render them safe. Individuals who complete the course receive a Bomb Technician Certification card and access to further advanced training and sensitive information. Recertification training provides technicians with the opportunity to update their skills, and is required every three years under the National Guidelines for Bomb Technicians developed by the National Bomb Squad Commanders Advisory Board in conjunction with the FBI, Counter-Improvised Explosive Device Unit and HDS.



*For more information, visit <https://www.fbi.gov/about-us/cirg/hazardous-devices> or contact Jeffrey Warren, HDS director, at [HQ\\_DIV22\\_HDS\\_Classes@ic.fbi.gov](mailto:HQ_DIV22_HDS_Classes@ic.fbi.gov).*





# Correctional Officers *using* BODYWORN CAMERAS

*By Michele Coppola*

*Some correctional officers in a Maryland county detention center are using body-worn cameras to record interaction with inmates during emergency responses.*

The Prince George's County Department of Corrections purchased 40 of the cameras in 2015 for \$104,939 using grant funds from the State of Maryland and the U.S. Department of Justice. The cameras are used in the county detention center in Upper Marlboro, Md., by members of the facility's emergency-response team.

The facility has a capacity to hold 1,534 inmates. The average daily inmate population is about 1,000, according to Yolonda Evans, a spokeswoman for the department.

The emergency response team previously recorded incidents at the facility using a handheld camera, Evans said. The body cameras provide a more effective technology, and free up a team member to aid other officers during a response, rather than holding a camera. The cameras also help with training.





“The cameras help the department with tactical training,” Evans says. “The video is downloaded and reviewed every day. The lieutenant in charge reviews the footage to ensure officers are responding according to procedure, so it helps with training to see what we did right, what we did wrong and how we can improve on it.”

The emergency response team responds to any emergency in the facility, whether medical, inmate fight or other situation. Implementation of the cameras began gradually in August 2015, with all team members wearing body cameras by November. Members of the team have adjusted to using the cameras.

“There was some resistance on part of the officers at first but they seem to like them now. They had to get used to turning them on because they don’t turn them on unless they are responding to an emergency, so the biggest hurdle was remembering to turn them on,” Evans says. “The team members always wear the cameras adhered to their uniform. They turn it on when they get an emergency call.”

Inmates are a little more compliant since the body cameras appeared, she says, “because they know not just one camera but all members of a response team have them and they will be filmed from multiple angles.”

The detention center also has over 380 surveillance cameras throughout the facility.

Drawbacks of body cameras include that officers have to remember to turn them off when not responding to situation. Users also have to ensure the cameras are positioned correctly on their uniform or stab-resistant vest to provide the best feedback. Most officers place the camera in the center of the chest.

*For more information, contact Yolonda Evans of the Prince George’s County Department of Corrections at [YEEvans@co.pg.md.us](mailto:YEEvans@co.pg.md.us).*



# APP

*Allows Students to Report Concerns*

# ANONYMOUSLY

*By Becky Lewis*

*Speak Up for Your Friends.*

*Speak Up for Yourself.*

*Speak Up for the Voiceless.*

*Speak Up for School Safety.*

*See It. Tip It. Stop It.*

Those are the messages being pushed out to teens in North Carolina encouraging use of the state's new tipline, SPK UP NC: messages created by teens, for teens, to encourage use in the 42 schools that make up the pilot project area, and by the end of the 2016-2017 school year, in schools throughout the state.





A project of the North Carolina Center for Safer Schools, the app development grew out of school and community forums held shortly after the center opened in 2013. A concern consistently raised at those meetings was a need for students to have a truly anonymous, standardized method of reporting concerns to school resource officers, school administrators and teachers. The center invested 18 months in developing SPK UP NC, and students played a key role throughout that development process.

Kym Martin, executive director of the center and a participant in the National Institute of Justice Comprehensive School Safety Initiative Topical Working Group on State School Safety Issues meeting held in February 2016, says center staff realized early in the process that unless students actually used the state's new app, it would prove of little use to the state's schools. In addition to creating a 25-member advisory group made up of students from throughout the state, the center named Kolby Holland, an 18-year-old senior at South Lenoir High School and a governor-appointed member of the Safer Schools Task Force, as its leader. The group's members named the app, had input into product design and came up with their own marketing messages. (To view their testimonial promotional videos, including one from a girl whose classmate brought a gun to school, visit <https://www.ncdps.gov/DPS-Services/Center-for-Safer-Schools/Resources/For-Students/spk-nc>.)

"I have three teenagers, my deputy director has two teenagers, the project manager from our IT company has teenagers, and we all knew, because of what we heard from our families, that we had to be sensitive to what students would like and the ways in which they would use it," Martin says. "We brought the students to Raleigh for the focus group meetings and tried to make it interesting for them with lunch and tours of the governor's mansion





and state government buildings. We really wanted to make the development process and the app itself as student friendly as possible.”

Part of that effort includes emphasizing that the purpose of SPK UP NC is not to get other students into trouble; rather, it is, as the student-created hashtag says, a way of giving a voice to the voiceless.

“Students can use it to help others who can’t speak up for themselves,” Martin says. “They could potentially save a life if someone is considering suicide or self-harm. A lot of students are afraid of saying anything, and we hope that when they see student-driven messages, they will realize SPK UP NC is a safe way to report.”

The app not only provides a safe way to report in English, it also translates Spanish and other languages into English-language messages that school resource officers (SROs) and administrators can understand. (The promotional campaign includes a Spanish-language testimonial video and a special outreach component for Spanish-speaking students and their families.)

Although it’s safe and anonymous, Martin emphasizes that SPK UP NC isn’t meant to replace relationships of trust students may have already developed with their SROs, guidance counselors or teachers: “If you feel comfortable talking with a trusted adult, you should continue to do that. This is just another way you can get information into the right hands.”

Because students can use SPK UP NC anonymously to put information into their hands, some school administrators initially voiced concerns they would be swamped with tips, but so far, the pilot schools have found the load to be manageable. A majority of the tips received through April 2016 focus on bullying, drug use and alcohol abuse, but enough tips have also come in about



inappropriate verbal behavior between faculty and students to cause center staff to consider developing training in that area.

The center also is developing guidelines and procedures for school districts that already have an anonymous reporting tool of their own in place, although those districts are also encouraged to consider switching to SPK UP NC. The North Carolina General Assembly has mandated that all schools must have some type of anonymous reporting in place by the end of the 2016-2017 school year, and for schools that choose to participate, SPK UP NC offers a number of key features:

- ✱ Works on computers, laptops, tablets and smartphones.
- ✱ Capable of including attached photos and videos.
- ✱ Able to understand tips submitted in 32 different languages.
- ✱ By state law, all data collected using SPK UP NC is exempt from the public records law.

“I have grand hopes for this,” Martin says. “I hope it will help students to be good citizens, and when they become adults, they’ll be community changers and world changers because they’ve learned that when you get involved, good things happen.”

*For more information, visit <http://speakupapp.tips/home.php> or contact Kym Martin at (919) 324-6380, email [kym.martin@ncdps.gov](mailto:kym.martin@ncdps.gov).*





TECHshorts is a sampling of the technology projects, programs and initiatives being conducted by the Office of Justice Programs' National Institute of Justice (NIJ) and the National Law Enforcement and Corrections Technology Center (NLECTC) System, as well as other agencies. If you would like additional information concerning any of the following TECHshorts, please refer to the specific point-of-contact information that is included at the end of each entry.

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## Assessing Hot Spot Policing Strategies

### National Institute of Justice

The St. Louis County Hot Spots in Residential Areas project studied how varied strategies — collaborative problem solving, directed patrol and standard policing practices — impact crime in hot spots in St. Louis County, Mo.

Hot spots are high-crime-density areas. The study determined how the strategies affected residents' opinions about police and their neighborhoods and their willingness to exert collective efficacy. The study found that in suburban, residential crime hot spots, hot spot policing is an effective crime prevention strategy, at least in the

short-term. Both problem solving and directed patrol sites had significant crime declines, while the standard policing practices site did not. Both problem solving and directed patrol policing strategies appear to be viable and effective ways to reduce crime in hot spots during the short term without lasting negative effects on public views about police.



To access *St. Louis County Hot Spots in Residential Areas (SCHIRA) Final Report: Assessing the Effects of Hot Spots Policing Strategies on Police Legitimacy, Crime, and Collective Efficacy*, go to <https://www.ncjrs.gov/pdffiles1/nij/grants/249747.pdf>.



## NIJ Releases Bomb Suit Standard

### National Institute of Justice

*Public Safety Bomb Suit Standard, NIJ Standard-0117.01* is a voluntary performance standard for bomb suits for use by certified public safety bomb technicians while performing render safe procedures and disposal activities. It defines both performance requirements and the methods used to test performance.

In order for a manufacturer, supplier or other entity to claim that a particular bomb suit model satisfies this standard, the model must be in compliance with this standard, as determined in accordance with this document and the associated document, *Public Safety Bomb Suit Certification Program Requirements, NIJ CR-0117.00*.

This standard addresses six key areas: fragmentation, impact, flame, some blast overpressure, optics and ergonomics. Fragmentation, impact, flame and blast overpressure are hazards against which a bomb technician needs to be protected when performing render safe procedures. Optics and ergonomics relate to a bomb technician's ability to perform render safe procedures while wearing the bomb suit. The standard balances the protection requirements against the bomb technician's need for mobility, clear vision and dexterity.

This standard was developed by a panel of practitioners, technical experts and others with experience in standards development and conformity assessment. To read the standard, go to <https://www.ncjrs.gov/pdffiles1/nij/249560.pdf>.





# PUBLIC SAFETY TECHNOLOGY

# JUSTNET

## In The News

Following are abstracts on public safety-related articles that have appeared in newspapers, magazines and websites.

### **Dallas Police to Try 'Sponge Guns' to Help Avoid Deadly Shootings**

*KERA, (04/28/2016), Lauren Silverman*

Over the summer, the Dallas Police Department plans to implement use of sponge guns that look like grenade launchers and shoot hard 40 mm sponge-like rounds. With a range of 100 feet and a cost of \$800 per weapon, the sponge guns represent a less lethal alternative that the department hopes may save lives.

<http://keranews.org/post/dallas-police-try-sponge-guns-help-avoid-deadly-shootings>

### **Grand Forks Drone Unit Cleared to Fly Nationwide Missions**

*Bismarck Tribune, (04/29/2016), David Kolpack*

The Northeast Region Unmanned Aircraft System unit in Grand Forks, N.D., recently received clearance from the Federal Aviation Administration to respond, on request, to natural disasters, crime scenes or search-and-rescue missions anywhere in the nation. Grand Forks has four pilots with commercial licenses, allowing the unit to fly drones at night and operate in restricted airspace. It is one of only two state agencies in the country with that capability.

[http://bismarcktribune.com/news/state-and-regional/grand-forks-drone-unit-cleared-to-fly-nationwide-missions/article\\_d2409360-6bca-578a-8c35-4ed5b1fa0d54.html](http://bismarcktribune.com/news/state-and-regional/grand-forks-drone-unit-cleared-to-fly-nationwide-missions/article_d2409360-6bca-578a-8c35-4ed5b1fa0d54.html)

### **Video Hearings Improving Court Security**

*Sioux City Journal, (05/01/2016), Nick Hytrek*

Woodbury County is one of at least six Iowa counties now conducting initial court appearances through a closed-circuit network. Using video cameras, television monitors and microphones, judges seated in courtrooms communicate with inmates who remain in the jail's booking area. An initial hearing must take place within 24 hours of an arrest and usually takes less than five minutes.

[http://siouxcityjournal.com/news/local/video-hearings-improving-court-security/article\\_17f62718-91a9-5f84-bdd7-26d7af96b38d.html](http://siouxcityjournal.com/news/local/video-hearings-improving-court-security/article_17f62718-91a9-5f84-bdd7-26d7af96b38d.html)

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### **Give Us Your Tech Ideas**

We are actively seeking ideas to help us identify technology needs and requirements as part of the National Institute of Justice's Research, Development, Testing, and Evaluation process.

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