

Frontline

U.S. Customs and Border Protection ★ Vol 4, Issue 2



Finishing the Job

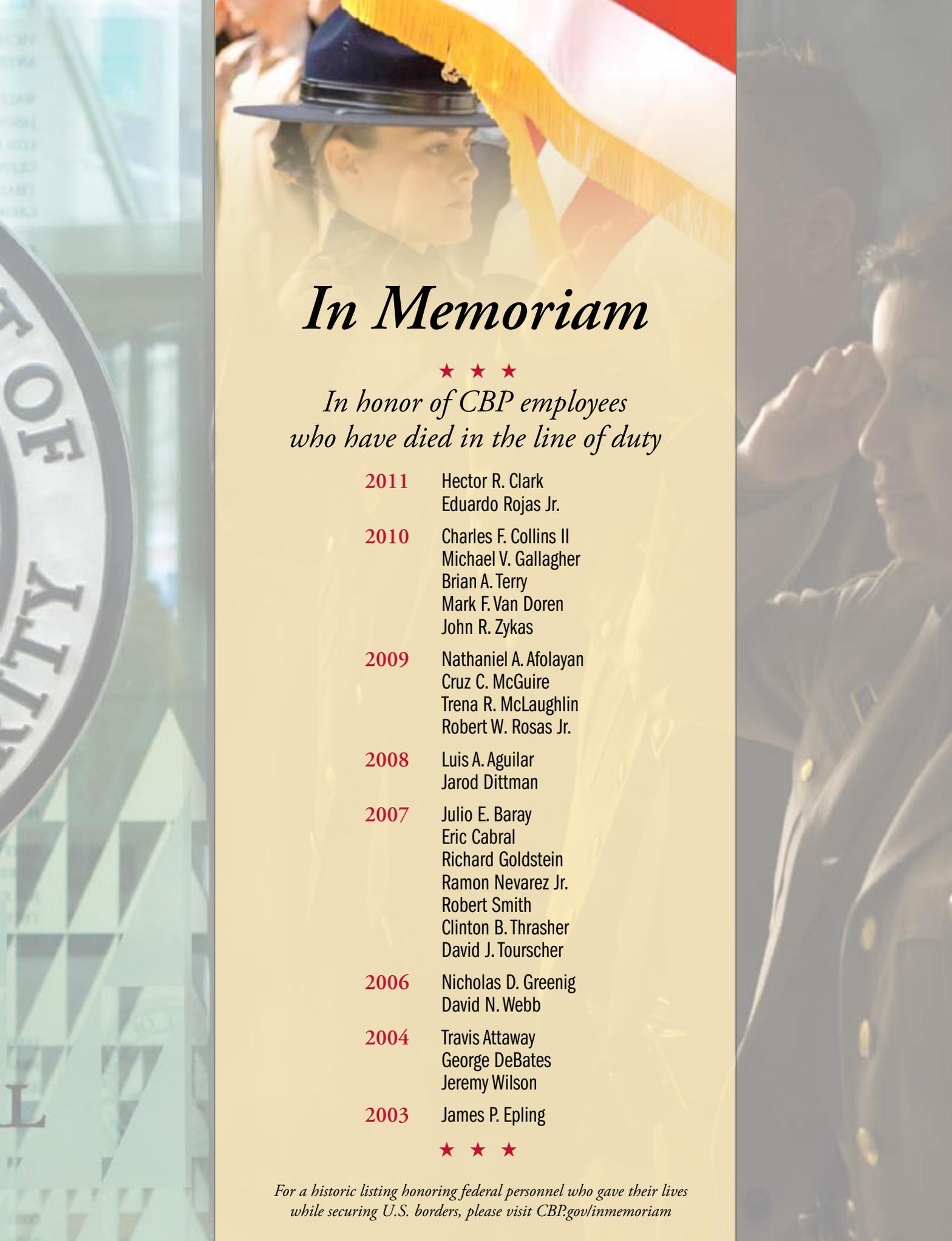
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CBP officer not slowing down after 65 years – page 26





In Memoriam



*In honor of CBP employees
who have died in the line of duty*

- 2011** Hector R. Clark
Eduardo Rojas Jr.
- 2010** Charles F. Collins II
Michael V. Gallagher
Brian A. Terry
Mark F. Van Doren
John R. Zykas
- 2009** Nathaniel A. Afolayan
Cruz C. McGuire
Trena R. McLaughlin
Robert W. Rosas Jr.
- 2008** Luis A. Aguilar
Jarod Dittman
- 2007** Julio E. Baray
Eric Cabral
Richard Goldstein
Ramon Nevarez Jr.
Robert Smith
Clinton B. Thrasher
David J. Tourscher
- 2006** Nicholas D. Greenig
David N. Webb
- 2004** Travis Attaway
George DeBates
Jeremy Wilson
- 2003** James P. Epling



*For a historic listing honoring federal personnel who gave their lives
while securing U.S. borders, please visit CBP.gov/inmemoriam*

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★ ON THE COVER

CBP's efforts in Arizona include combining resources in the air and on the ground to more effectively counter the efforts of criminal organizations.
Photo by Alexander Zamora



COMMISSIONER BERSIN FORGES

This spring Customs and Border Protection marked three firsts in the international affairs arena, lighting the path ahead for future cooperation with other nations.

CBP Commissioner Alan D. Bersin and New Zealand Ambassador to the U.S. Mike Moore signed bilateral arrangements on March 25 to advance trade and security between their nations. The leaders formalized elevated status in CBP's Customs-Trade Partnership Against Terrorism, known as C-TPAT, for New Zealand Secure Export Scheme members—making it the first time that another government's secure-supply-chain program merited that level of recognition.

At the ceremony at CBP's Washington, D.C., headquarters, Bersin described the arrangements as “path-breaking” and voiced his hope that they would set a precedent for similar efforts with other countries.

The granting of tier 2 C-TPAT status translates into generally greater certainty about the movement of members' goods to U.S. markets. “We're true believers and true partners in this,” said Moore, stating that the documents can serve as a model for other countries “to facilitate business at the least possible cost.”

The Abu Dhabi General Administration of Customs became the first customs administration from the Middle East to participate in CBP's International Cargo Targeting Fellowship Program as part of an arrangement signed April 20 by the two agencies.

Bersin hosted Abu Dhabi General Administration of Customs Director General Saeed Al Muhairi at CBP headquarters to formalize the accord, which allows for the assignment of an Abu Dhabi customs liaison officer to the CBP National Targeting Center-Cargo and a CBP liaison officer to Abu Dhabi General Administration of Customs. These officers will facilitate the exchange of information between the two customs agencies to benefit law enforcement and expedite lawful commerce.

In his comments prior to the signing, Bersin commended the Abu Dhabi officials for “your foresight, your vision in recognizing the potential in this.” The bombs discovered in cargo originating in Yemen last October “demonstrated why it is so important for your nation and our nation to begin to cooperate in this way,” added Bersin.



photo by James Tourlehdte

★ Agreeing to work together on cargo customs enforcement—front row from left: CBP Commissioner Alan D. Bersin; Abu Dhabi General Administration of Customs Director General Saeed Al Muhairi. Back row from left: Abu Dhabi Customs Liaison Officer Abdulla Al Mehiari; Bryant McCray, acting director, Middle East Division, CBP Office of International Affairs.



photo by Donna Burton

★ Advancing international trade: left to right, Acting CBP Assistant Commissioner for International Affairs Charles Stallworth; CBP Commissioner Alan D. Bersin; New Zealand Ambassador to the U.S. Mike Moore; New Zealand Customs Service Attache Roger Smith.



Photo by James Tourtellotte

★ **CBP Commissioner Alan D. Bersin and Korea Immigration Service Commissioner Dong-hyeon Seok agree to cooperate on Global Entry.**

The NTC-C first welcomed foreign customs participants to the fellowship program in 2007. Representatives from Japan, the European Union and Mexico have since served as liaisons in the program.

Taking another stride to facilitate lawful international travel, CBP and the Korea Immigration Service signed a joint statement on April 21 agreeing to work toward mutually recognized, expedited international travel initiatives, making Korea the first Asian country to commit to a trusted traveler arrangement.

Bersin welcomed Korea Immigration Service Commissioner Dong-hyeon Seok and a delegation from the Korean agency to CBP's headquarters for the signing. "By declaring our joint intention to enter into a trusted traveler program that is mutually recognized," said Bersin, "we not only extend courtesies to our respective peoples, but we signal a commitment to a shared approach to immigration and border security."

CBP's Global Entry expedites CBP clearance for participating pre-approved, low-risk travelers arriving in the U.S. CBP now has more than 630,000 participants with Global Entry benefits. The Korea Immigration Smart Service, that country's trusted traveler program, has 300,000 members, according to Dong-hyeon Seok.

Expedited clearance systems mutually recognized by the two countries "will further help improve bilateral relations between Korea and the United States," said Dong-hyeon Seok via an interpreter.

Korea is the sixth country to sign a joint statement with CBP regarding trusted travel, joining Canada, the Netherlands, the United Kingdom, Germany, and Mexico. CBP is also in discussions with Singapore and Japan to develop trusted traveler arrangements.

—Susan Holliday

Frontline

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Healthier CBP: Building a Fitter, More Effective Work Force

In an effort to better equip employees to more effectively accomplish the mission of securing America's borders, the Healthier CBP Program offers an array of activities and information to help all personnel meet the demands of both work and home.

"As the nation's largest law enforcement agency, CBP is committed to safeguarding America and its people," said Christine E. Gaugler, CBP's assistant commissioner for human resources, who oversees the program. "By providing and promoting effective work life programs, policies and practices, we are creating a more engaged workforce. It is about taking care of our people, and it makes good business sense."

This focus on balance is achieved through the agency's health and wellness programs that provide tools and encourage employees to take charge of their physical and mental health with events such as physical fitness challenges, walking programs and self-screening programs.

The Healthier U/Healthier CBP video series, available via the agency internal website, teaches employees about heart disease, diabetes, smoking cessation, nutrition, elder care, Alzheimer's disease, and more. Other Healthier CBP work life programs, such as the Employee Assistance Program; WorkLife4You; Lactation Support Program; Telework Program; Child Care Subsidy Program;



These individuals
logged 52,234
miles walking, more
than twice the
circumference
of Earth.



and the President's Volunteer Service Award Program offer employees information and opportunities to better manage and balance health, family and work demands.

"Research shows that the typical American spends more time at work than at home; helping to improve employee health and reduce stress can save employers significant dollars," Gaugler said. "Well-designed

health and wellness programs serve to increase employee productivity and retention; reduce rates of illness, injuries and absenteeism; and lower employees' and their families' health care costs."

The agency wants to offer programs that employees will use to assist them in changing potentially unhealthy behaviors, Gaugler said.

Current CBP employees clearly are more active in maintaining better physical and mental fitness. For instance, in one of the first CBP physical fitness challenges conducted, there were approximately 1,100 participants. These individuals logged 52,234 miles walking, "more than twice the circumference of Earth.

"We have many success stories," Gaugler said. "For example, through the walking challenges, participants have reported losses of 10 to 30 pounds, and more. Focusing on the mental health aspect of fitness, more than 2,500 employees and their families have utilized counseling services since December 2009." ■

Want To Take A Wild Ride?



Let us know you're coming

Did you know Visa Waiver Programme travellers are required to have an ESTA travel authorization to travel to the United States? Before you head to the U.S., be sure to register with ESTA first. It's fast and easy to get a pre-authorization. Visit www.cbp.gov/esta for more information about the travel requirement.

Apply online at <https://esta.cbp.dhs.gov>.



The Easy Way to the USA



CBP

★ Hundreds of miles of fencing and other infrastructure have been built in recent years along the border in Arizona.



photo by Donna Burton

Finishing the

CBP's evolving efforts in Arizona strike at the heart of transnational criminal organizations

BY JAY MAYFIELD

It's a place of challenge born from success — where those who seek to defend our nation's borders face down some of the world's most hardened criminals in an environment that stretches humans to their limits. Desperation, in a thousand different forms, comes face to face with resolve every day.



photo by James Tourtellote

Job

★ The success of CBP's efforts along the Southwest border can be seen in the decreasing number of apprehensions of illegal crossers made over the course of the last decade.

From a distance, it's a huge undertaking. But for the personnel of U.S. Customs and Border Protection on the ground in Arizona, it's just another day at the office, and thanks to innovative new approaches, the struggle is increasingly tilting in the favor of those who risk their lives to keep America safe.

Increased resources and partnerships, new technology and infrastructure and an innovative command approach are all playing roles in helping turn back a tide of illicit cross-border traffic that in recent years has been pushed to the central Arizona desert.

"We first increased the pressure in Texas and in California, and as we succeeded in driving down illegal activity there, it steadily moved toward the middle—toward Arizona," said CBP Commissioner Alan D. Bersin. "As we adapt our operations there, we do so knowing that it's time to clamp down on this corridor. It's time to finish the job."

like San Diego and El Paso, where urbanized borders meant a shorter trip on foot, and where weather conditions were rarely so oppressive as to cost lives.

However, as CBP and other agencies stepped up enforcement efforts in these areas, it created a funnel toward an area that, while not without issues, was not a main thoroughfare for smugglers. The Arizona deserts don't discriminate in their brutal conditions, and they are the last places anyone with an option would want to attempt an illegal crossing.

There's the heat, of course, which is some of the most brutal in the U.S., but the terrain is an equally formidable foe. Thick underbrush makes the flatland a challenge to navigate, but the high ground is even less hospitable, with sharp cliffs and long drops making the mountain ranges especially treacherous.

From one end to the other, **Arizona is filled with challenges for CBP,** but it also is rich in opportunities for innovation.

The worst option

How the desolate and inhospitable corridor between Arizona and the Mexican state of Sonora became the border's last frontier for traffickers is a story of dramatic decreases in the path of least resistance.

In the early part of the last decade and reaching back into the 1990s, much of the cross-border traffic entering the U.S. came in areas



In recent years, though, stepped up enforcement efforts along the border have pushed more and more illegal crossings—whether for drug smuggling or illegal immigration—into this entry point of last resort. In fact, apprehensions of illegal immigrants in Arizona now account for more than 40 percent of all CBP apprehensions across the Southwest border.

The challenge isn't just about the desert, however.



The evolving challenges in Arizona
make one thing clear: no one agency
and no one component of CBP can
find success by going it alone.

★ The Border Patrol checkpoint located on Interstate 19 north of Nogales is now staffed both by Border Patrol agents and CBP officers under the Joint Field Command.



At the ports of entry along the Arizona border, 24 million people crossed the border in 2010, when CBP officers processed 7.4 million passenger vehicles and 6.4 million pedestrians. In addition, nearly 400,000 commercial trucks and nearly 1,200 trains crossed the border, representing \$19 billion in trade.

The legitimate parts of this traffic represent an economic engine that feeds the nation's financial system both in trade and in direct spending by visitors, but the increase in focus from criminal organizations in Arizona also means more attempts to use the ports as an avenue to bring drugs and illegal immigrants into the country.

With Arizona sitting directly north of some of the areas most affected by the ongoing situation in Mexico, it's only natural that cartels would seek out the shortest route into the U.S. As criminals' methods of concealment advance, the challenge mounts for CBP personnel, who are tasked with finding the proverbial needle in a haystack without letting the process disrupt the legitimate traffic between the U.S. and Mexico.

"In Arizona, our agency is bringing together unprecedented resources and broad partnerships with a unique command approach," said Bersin. "The challenges are great, but this agency and its people are fully committed to our mission and will not rest in our efforts to keep the Southwest border safe and secure."

From one end to the other, Arizona is filled with challenges for CBP, but it also is rich in opportunities for innovation.

A joint approach

The evolving challenges in Arizona make one thing clear: no one agency and no one component of CBP can find success by going it alone.

In light of that reality, two approaches were born that are changing the face of border law enforcement while having a very real impact on the level of criminal activity along the line: the CBP Arizona Joint Field Command and the Alliance to Combat Transnational Threats.

The Joint Field Command represents a very new approach in CBP's short life

as an agency, but to Joint Field Commander Jeffrey D. Self, it's fundamental to CBP achieving success in Arizona.

"It's widely recognized that the challenges we face in the current environment in Arizona are unique within the nation," said Self. "The field command is designed to ensure that we take a joint, integrated approach to border security as an agency, and it's a necessity that we do so."

The command oversees the work of the Office of Air and Marine's Tucson and Yuma air branches, the Tucson and Yuma Border Patrol sectors and the Tucson Field Office that oversees operations at ports of entry. All report directly to the command, which reports directly to the CBP commissioner.

What this means in practice is that Self and the Joint Field Command are able to focus on CBP's operational needs—and available resources—across the entire Arizona border in a way that has not been possible.

"What's been problematic for many years is that while the level of resources here has been huge, there's never been an entity that could stand on the hillside, oversee the battle and direct these resources," said Self. "The field command brings a level of oversight without having to do the daily battles and tactical implementation of doing operations."

A big part of that effort is looking past the divisions of CBP operational offices to understand how best to place personnel based on their particular skills, and one key example can be found at the Border Patrol's Interstate 19 checkpoint between Nogales and Tucson.

When a need arose for additional staffing at the checkpoint, Self realized that CBP officers who work at the ports have a skill set that translates well to the vehicle inspection process that takes place at the checkpoint, so now travelers heading north from the border will see Border Patrol agents and CBP officers working side-by-side at the checkpoint. The move also allows Border Patrol agents who otherwise might have been assigned to the checkpoint to put their skills to use in the deserts and mountains.

The other new partnership in place in Arizona, ACTT, is built on a simple idea: create a strong alliance between members of the law enforcement community at the federal, state, local and tribal level, including



★ CBP officers perform outbound inspections at the Morley pedestrian port of entry in Nogales. These inspections have helped divert millions of dollars and thousands of weapons away from transnational criminal organizations.

photo by Donna Burton

Deterrence: A Measure of Success

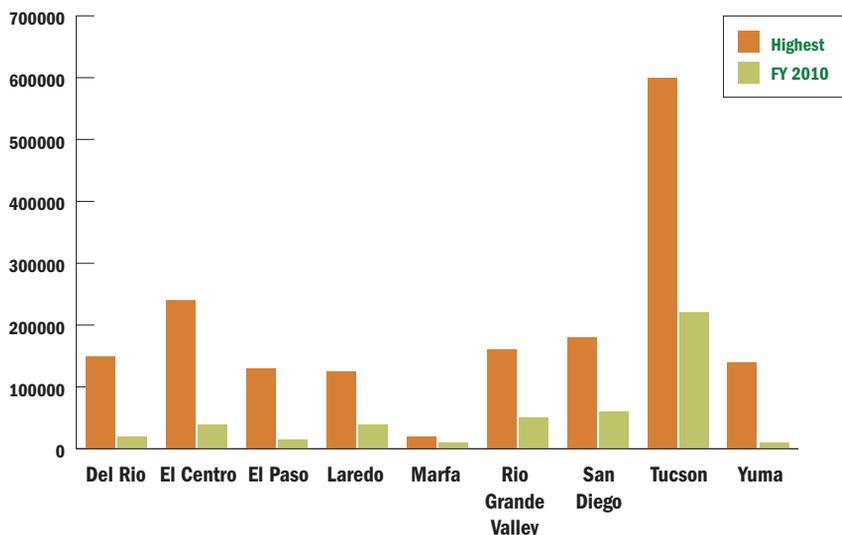
While it is not possible to know the exact number of illegal crossings attempted, CBP uses the number of apprehensions as a key indicator of success at the border. The measure is a bit counterintuitive: As infrastructure and manpower rises, the hope is a deterrence effect will kick in, fewer illegal crossing attempts will be made and thus fewer apprehensions will occur.

The past decade has seen a steady and dramatic drop in the number of apprehensions of illegal crossers across the entire Southwest border. Overall, apprehensions in the four states are down more than 73 percent since their peak in fiscal year 2000, and down nearly 50 percent during the past three years.

But while illegal crossings seem to have been greatly deterred, drug smuggling has not. Border Patrol has seen a 33 percent increase in drug seizures during the past three years.

This graph shows the decline in apprehensions across each of the Border Patrol's Southwest border sectors.

Total Illegal Alien Apprehensions in Southwest Border Sector



partners from Mexico. By coordinating tactics, sharing resources and information, the combined group has proved to be particularly effective.

From the CBP perspective, it allows Border Patrol agents to concentrate their efforts on the border itself, knowing that they have backup in the form of local, tribal and state resources.

It's an idea known as "defense-in-depth"—in essence, while smugglers may beat one layer of defense, it's increasingly unlikely they will make it through all of the obstacles ACTT members set in front of them. That applies on the way out of the U.S., too.

Outbound action

Transnational criminal organizations are inherently two-way. They supply narcotics to the U.S., and increasingly control the business of moving illegal immigrants across the Southwest border. But once their goods are sold, the second

half of the cycle comes into play: currency and weapons move back into Mexico that directly fuel the operation of these organizations.

Put simply: if you cut off the cash, you can help choke off the criminal organizations, and if you cut their supply of guns, you reduce their main tool of violence.

With that goal in mind, CBP now inspects much of the traffic moving outbound from the U.S. into Mexico, both in vehicles and on foot. While outbound inspections are not a new concept, they have never been undertaken on this scale. It has required the deployment of additional resources to assist CBP officers in conducting the inspections at the ports, and that's where programs like ACTT help.

Department of Homeland Security grant programs have allocated more than \$123 million in funds to local law enforcement across the Southwest border and more than \$34 million directly to

Arizona law enforcement. Those funds include a project called Operation Stonegarden that, among other functions, has helped place local and state law enforcement alongside CBP officers to conduct more outbound inspections of people and vehicles.

The outbound inspections are working. At the Dennis DeConcini port of entry in Nogales, currency seizures are increasing at an astounding pace. Just two years ago in fiscal year 2009, the port seized about \$1 million in outbound bulk currency. In fiscal 2010, the number jumped to \$6 million, and in just the first five months of fiscal 2011, the port has already seized \$5 million.

"We've started to make a dent here in Arizona because we were given the resources we need to succeed and have applied them effectively," said Nogales Area Port Director Lupe Ramirez.

One significant enhancement to the outbound inspection process has been the

★ A Border Patrol agent drives along the fenceline in southern Arizona. Additional fencing and related infrastructure is helping restrict cross-border traffic.



*“Technology provides a level of knowledge that gives you a whole host of different information to be able to make decisions on how to **confront a threat** that is coming at you,” said Self.*

deployment of technology that makes it substantially easier for officers to check the identity of people they interact with. It’s part of a suite of technologies that CBP is deploying in Arizona that supports and enhances the work of its personnel.

Full menu of technology, infrastructure

In most instances, U.S. ports of entry do not offer the same infrastructure in the form of booths, passenger lanes and secondary inspection areas for outbound traffic that are available for screening inbound vehicles. Most notably, officers working outbound inspections rarely are standing at a CBP computer. In the past, that meant calling in a subject’s ID information over the radio—a situation that meant fewer outbound searches and a less efficient process.

A new handheld device, known as a “Grabba,” has quite literally changed the way outbound operations work. The devices allow officers to scan any of the documents they would be able to scan at a primary inspection lane, and instantly receive any information available to CBP about the subject. Perhaps most powerfully, the Grabba does not require any additional specialized equipment—it’s an efficient device that officers on the frontline say is having an impact.

The Arizona border is the first area where CBP’s new Office of Technology Innovation and Acquisition is breaking away from a one-size-fits-all model and moving toward putting a variety of technology to use that is tailored to an area’s specific needs.

“Deciding where and how to deploy technology comes down to fundamentals,” said Mark Borkowski, CBP assistant commissioner for technology innovation.

“We are looking at the border, zone by zone, and making a reasoned determination about what is the best fit for each.”

It’s a process that started with going directly to CBP personnel—both frontline officers and agents as well as leadership in the field—to find out their specific needs. Then, the office reached out to manufacturers of technology and found out what technology is available today, without the need for a long-term research and development process.

“Our technology plan is not a developmental effort,” said Borkowski. “The technology we use needs to be more tailored to a particular area’s needs and be able to be deployed quickly. We’re combining what’s available with what’s effective.”

The technology being deployed in Arizona now runs the gamut from new handheld tools like the Grabba to remote video surveillance systems and mobile camera platforms that can be easily deployed in the rugged desert terrain. By increasing the amount of space along the border that CBP personnel can see from a distance, agents can be strategically deployed to respond where the need is greatest.

In addition, new and updated infrastructure is making a difference. Fencing that runs through the city of Nogales is being upgraded and enhanced from 1960s era materials to a more modern and secure design. The Mariposa port of entry, which serves all the commercial traffic in the region, is



photo by Donna Burton

★ Technological enhancements like this remote video system make it easier for CBP personnel to respond quickly to areas where illegal activity is taking place.

undergoing a massive multiyear upgrade that will feature new facilities designed to increase both efficiency and security.

“Technology provides a level of knowledge that gives you a whole host of different information to be able to make decisions on how to confront a threat that is coming at you,” said Self. “Once you detect it, identify it and classify it, you can call upon a whole host of other resources, including other technology, to confront it.”



Eyes in the sky, boots on the ground

That's where another innovation being put to use in Arizona comes into play. The technology used to observe the border and detect threats is powerful, but without the ability to respond quickly, it's of little use.

In many cases the drive from a Border Patrol station in Tucson or Yuma sector to the area an agent will patrol can be two or more hours—time that the agent is not able to do their job effectively. That has led to the increased development and deployment of forward operating bases.

These desert outposts, located closer to the border than the permanent stations, house agents for one to two weeks at a time, during which they are able to patrol the immediate area without need for a long commute. It's hard duty, to be sure, but also greatly enhances the agents' ability to be on the scene quickly.

In addition, a new integrated air model is helping bring the multi layered approach to the skies, where CBP's assets provide a major advantage in the battle with smugglers. Technology can provide an early warning of activity on the border, but the ability to understand the situation quickly is vital.

The top layer is made up of unmanned aerial systems—remotely piloted surveillance aircraft—flying at high altitudes. They can be moved to observe an area where activity is detected, and they can quickly distinguish between a herd of cattle or a group of smugglers crossing the border. Once the operators of the systems establish what is happening, they can call in lower-altitude aircraft, usually helicopters, to either keep watch from a closer range or transport agents directly to the site where illegal activity is taking place.

"We can see farther and move faster over this terrain at altitude," said Air

Interdiction Agent Jacob Linde. "That lets us gather information and deliver resources, which means we are better able to make apprehensions."

The face of desperation

For CBP personnel in Arizona, the situations they face reveal an increasingly desperate adversary. The transnational criminal organizations that rely on illegal cross-border traffic are finding that their pathway of last resort is disappearing.

As the path grows more difficult, the criminals grow more violent, and the risks to officers and agents on the frontline become ever higher. The death of Border Patrol Agent Brian A. Terry last year puts in clear focus the challenges they face. Terry lost his life while pursuing members of a "rip crew," a gang of criminals who prey on groups of illegal immigrants or smugglers from rival gangs. As CBP efforts have grown more effective, the criminals are turning on themselves.

The loss of Terry and other agents in the line of duty shows that these organizations will stop at nothing to continue their efforts. Indeed, CBP employees in Arizona noted that for many of the criminals who smuggle drugs and people across the border, the price for failure can mean death at the hands of their gang bosses.

"For these smugglers, success has to come at whatever cost," said Border Patrol Agent Mario Escalante. "It is very much a life-or-death situation for them."

But even in the face of daunting challenges, CBP leaders say there is cause for optimism in Arizona and ultimately along the Southwest border.

"Programs like the Joint Field Command are testing and proving grounds for a new way of approaching our mission," said Self. "We will become a more agile and more nimble agency, and while some things we learn here will be unique to this environment, others will apply more broadly."

Ultimately, the hope is that the lessons learned—and the victories earned—for CBP along Arizona's busy ports, barren deserts and craggy mountains will provide a blueprint for how innovations in staffing, technology and management can make all of America's borders more secure. ■

★ CBP officers attempt to pry open a metal box containing marijuana that was hidden inside a vehicle at the DeConcini port of entry at Nogales, Ariz.



Super Sleuths

Pioneering the depths of digital forensics for law enforcement

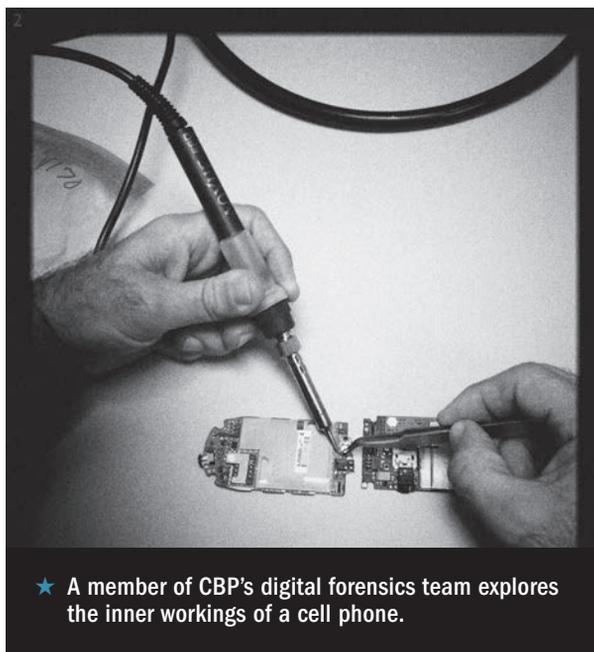
BY MARCY MASON

In 2007, only a few months after Sam Brothers joined U.S. Customs and Border Protection's newly formed Digital Forensics Unit, he realized the importance of the work that he was doing. Brothers, a computer scientist, had traveled out to a U.S. port on the southern border to test a few of the tools that he had been using to extract data from cell phones at the CBP Springfield, Va., research laboratory.

"At that time, there weren't a lot of tools, only five," said Brothers. "And there were no cell phone forensic analysts to really speak of. There were very few people doing this kind of work."

But the agency's chief technology officer, Wolf Tombe, had read news reports about people who were crossing the border with potentially dangerous data in their cell phones. Tombe wanted to ensure that the information wouldn't jeopardize U.S. security.

So when Brothers headed out into the field, he had a couple of objectives. He wanted to see what kind of data was entering the country on cell phones and he wanted to determine which tools would best meet the agency's needs. "The unfortunate thing about cell phones," said Brothers, "is that no one tool can retrieve all of the data that's stored in a phone."



★ A member of CBP's digital forensics team explores the inner workings of a cell phone.

Brothers set up a makeshift workstation in one of the offices at the port. He placed his tools and a few laptop computers needed to perform the testing on a table and waited for the port's CBP officers to bring him randomly selected cell phones from incoming travelers who were crossing the border. Similar checks with paper documents had been conducted by CBP for years as a way of protecting the country.

Much to Brothers surprise it didn't take long before something surfaced. The second

phone he analyzed contained suspicious material. There was a video stored on the phone in a foreign language that Brothers didn't understand. He shared the video with a special agent from the FBI who was at the port. After briefly listening to the audio recording, the agent asked Brothers if he realized that it was an al-Qaida training video.

"I told him that I had no idea," said Brothers, who was amazed by what he had found. "This was the second phone that I was given to analyze and already I had found highly sensitive information. It was at this point that we started realizing that we had hit upon something here."

Not long after Brothers returned from his trip, he acquired a partner. William Abaunza, known to most as "Will," was also a computer scientist who was tapped from CBP's local area network engineering group just as Brothers had been. The two had worked on building the agency's computer operating system. Now together, they would pioneer the field of digital forensics, earning a reputation for CBP that is second to none. For the last four years, the two have helped many of the top federal law enforcement agencies solve cases by recovering data from computers, cell

phones, GPS units, and other digital devices when all seemed hopeless. “We want to assist all types of law enforcement,” said Abaunza. “We want to provide this capability to those who need it.”

Burgeoning field

Until a few years ago, the field of digital forensics didn’t exist. “There wasn’t a real need for it,” said Brothers. “Everything was communicated on paper.” But that all started to change with the transmission of data through digital technology and the push toward becoming a paperless society.

Digital forensics is the extraction of data in a manner that keeps the original as pristine as possible. “Sometimes there’s no way to retrieve data perfectly,” explained Brothers. “But regardless of whether it’s a cell phone, a computer, or a GPS unit, we try to extract information without doing anything to the original data, and then present that information as we find it.”

“It’s a reputable process that can be repeated,” said Abaunza. “We’re not inserting data onto the machine or changing the information. It’s an accurate presentation of what was in that machine to begin with. The person whose device we’re looking at deserves that respect,” he said.

Moreover, Brothers added, “it’s important for us to not only do what we do, but to document what we’re doing.” Oftentimes, the digital forensic team’s findings are used as courtroom evidence. “If a prosecutor needs to present our findings as part of his or her case, he or she should be able to repeat the same process and get the same results out of the same device,” he said.

At first, Brothers and Abaunza worked exclusively on CBP cases. Brothers primarily focused on cell phones; Abaunza tackled GPS units, an uncharted territory that few, if any, had ever dabbled with; and collectively they explored computers and other digital devices. They soon realized that, even between the two of them, they couldn’t work on all of the agency’s cases, so they decided to expand their reach and train officers and agents out in the field how to do a basic

analysis. The more complex cases were still sent to Brothers and Abaunza at the CBP laboratory in Springfield, Va., where the two of them are based.

“We started deploying specific tools out to the ports so that the CBP officers could do what’s called a ‘triage analysis,’” said Brothers. “Based on the results of that triage, it allows them to make an intelligent decision within a matter of minutes on whether or not to do further analysis on a seized device.” In short, he explained, “it helps them as officers to do their jobs better.”

The training had other benefits, too.



★ CBP’s digital forensics team can extract deleted, hidden and not easily recoverable data from cell phones.

In one instance, shortly after attending one of Brothers’ training classes, a CBP officer realized that something was amiss as he saw a gray object thrown from the passenger window of a vehicle attempting to enter the U.S. Then he saw one of the individuals inside the car chewing something.

Upon closer inspection, the officer noticed tiny gold flecks outside of the man’s mouth. He recalled seeing something similar in Brothers’ presentation. The pieces of gold looked like the gold-colored contacts that are used to make an electrical connection on a cell phone’s SIM card, or subscriber identity module. The SIM card stores all kinds of information including a listing of the cell phone’s incoming and outgoing calls.

The officer held out his gloved hand and asked the man to spit out the chewed pieces. The pieces and the discarded cell phone were sent to Brothers and Abaunza. “We reconstructed the SIM card and pulled the data out of the phone,” said Brothers. “There was information of very high value.” The data revealed the inner network of a narcotics ring. “We were able to identify the individual’s boss’s boss and three or four levels within the organization’s hierarchy,” said Brothers.

To date, Brothers and Abaunza have trained more than 500 CBP officers and Border Patrol agents nationwide. They also have trained personnel at each of the seven CBP field laboratories in San Francisco, Los Angeles, Houston, Chicago, New York City, Savannah, and San Juan. “We train them on phones, computers, and a little bit on GPS units, so when cases come into those regions, they are sent to the labs first. If they can’t be handled there, then the lab will send it to us for advanced analysis,” said Brothers.

Crucial evidence

Word spread within the law enforcement community, and before long, the expertise of the digital forensics team became known. A number of federal, state, and local law enforcement agencies began sending Brothers and Abaunza their most challenging cases.

One of the first cases came from the Department of Justice. In June 2007, the U.S. attorney’s office for the southern district of New York received information about a man who was accused of molesting a five-year old girl and taking pornographic pictures of her with his cell phone camera. “We obtained a search warrant and we seized the cell phone,” said Adam Hickey, an assistant U.S. attorney from the southern district of New York. “There were pornographic pictures on the phone, but the defendant said that the pictures had been emailed to him, and that he hadn’t actually taken any sexually explicit photos.”

The man was arrested, but Hickey still had two basic questions he needed to resolve. He wanted to find out the identity

of the victim and to see if there was a way to disprove that the pictures had been emailed to the defendant. “We wanted to prove that the pictures that were on his phone were taken by the phone’s camera,” explained Hickey.

The prosecutor turned to Brothers for help. He had heard about CBP’s digital forensics team from the Immigration and Customs Enforcement agent who was investigating the case. “My case agent knew about the lab because of the affiliation between ICE and CBP and sent the phone there,” said Hickey. “At the time, it was pretty cutting edge and novel to do this kind of stuff?”

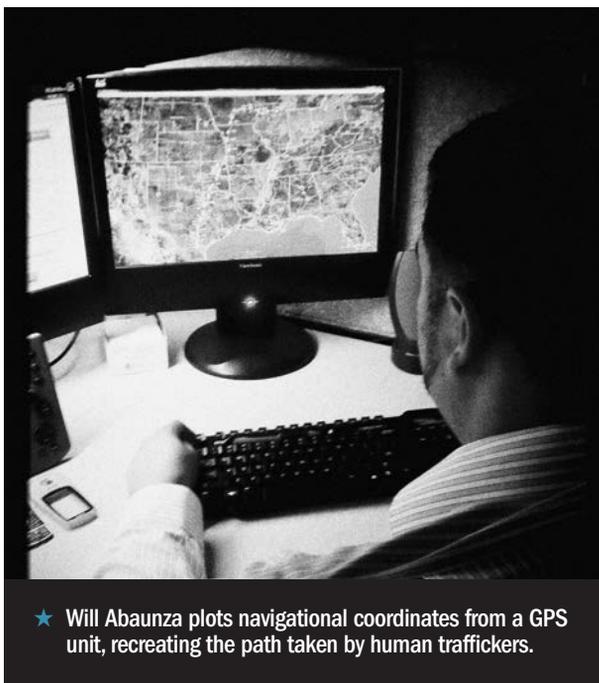
At first, Brothers was asked only to extract data out of the phone. “That was the easy part,” said Brothers. But then, nearly a year later, before the case went to trial, Hickey asked Brothers to take things a step further to see if the images were taken with the cell phone’s camera. To do this second investigation, Brothers’ work was groundbreaking. Using a process called digital image ballistics, he was able to determine where the images came from.

“Sam came up with about 12 different ways of testing whether the phone had taken these pictures or if they had been emailed,” said Hickey. For example, “he found emails carrying the pictures from the phone to an outside email address, but no emails going into the phone.” Brothers also analyzed aspects of the photos including the resolution and naming conventions. “They all matched up with other pictures in the phone,” said Hickey.

Brothers was thorough, too. “As he was processing the phone, he took pictures of the screen of the cell phone so that it would be very, very clear how the cell phone worked and where the pictures were stored,” explained the prosecutor. “He was meticulous about all these little details, even something as simple as being careful to track the serial number of the phones so that our chain of custody was clean,” proving that this was the evidence that was seized from the defendant, said Hickey. “From beginning to end, he handled this as perfectly as you could ever hope a law enforcement agency would handle a piece of evidence. I mean, it was textbook.”

In Brothers’ testimony, “he was able to render an expert opinion about whether the phone took the pictures or whether the pictures were emailed. That was critical,” said Hickey. “When the time came for trial and the defense had Sam’s opinion, they changed their defense. Based on his work, it was clear that the defendant lied when he was arrested.”

After a two-week trial in September 2008, the defendant was convicted and sentenced to 30 years in prison. Hickey noted that Brothers’ contributions to his case were crucial. “There certainly was



★ Will Abaunza plots navigational coordinates from a GPS unit, recreating the path taken by human traffickers.

other evidence in the case, but this directly answered questions in a way that no other evidence could ever do,” he said.

Coast Guard curriculum

The Coast Guard was another agency that sought the digital forensic team’s help. For years, the Coast Guard had been extracting data from GPS receivers for criminal prosecution and trend analysis purposes, but the agency didn’t have a program to train new analysts. “One of the first things they ask when you take the stand as an expert witness is ‘What kind of training have you received?’” said Robert Wood, a senior chief operations specialist at the Coast Guard’s Intelligence and Criminal

Investigation Team in Miami. “We needed a program to train and certify GPS forensic analysts so they could be deployed to the field where the capabilities were desperately needed. The training and certification had to be topnotch to ensure that the analysis was precise and could withstand any scrutiny the defense might have.”

Wood searched for a course, but came up dry. “There were all kinds of courses for computers and cell phones,” he said, “but there was nothing that was geared directly toward GPS receivers.”

After checking around, “we heard about the Digital Forensics Unit and how they had a superb reputation for technical ability and professionalism,” said Wood. “So we asked if they could leverage what we were doing with what they were doing.”

The result was that Abaunza agreed to design a curriculum specifically for the Coast Guard. “Will created digital forensics certification courses for different levels of complexity,” said Wood. “He then provided the training to multiple Coast Guard sectors and districts throughout the nation. This allowed the field units to conduct more timely and effective digital forensics on the majority of criminal investigation requests in our area of responsibility.” The more extensive cases that required accredited laboratory support would be sent to Abaunza in Virginia.

The Coast Guard’s first digital forensics certification training was given in January 2009. Four other similar courses were offered throughout the year. “It’s been a huge step forward for us,” said Wood. “The Coast Guard’s ability to gather intelligence and provide support to operational partners has grown tremendously. In the past, we had one person extracting data for the entire agency. We had no program to certify or train additional analysts to meet the intelligence and criminal investigation demands,” said Wood. “Now, there’s a mixture of more than 22 people from CBP and the Coast Guard performing our digital forensics work. We have a certification process with three different levels and we have policies, procedures, and guidance in place.”

Shortly after Wood received his digital forensics training and certification, he put his new skills to work. In June 2009, the Coast Guard intercepted a speeding vessel that was traveling from the Bahamas toward the southeastern U.S. The vessel had two suspected smugglers and three Haitian migrants onboard. The suspected smugglers claimed that they came across the Haitians while on a fishing trip and had acted as good Samaritans. “They said that they had saved the Haitians who were lost at sea,” said Wood. “They said they had never been in the Bahamas and that they came across the Haitians in international waters.”

But after Wood did an analysis of the vessel’s GPS unit, he discovered that the boat had, indeed, been in the Bahamas. “When we presented them with the facts that we planned to share with the jury, they pled guilty,” said Wood. “This was a huge win because we didn’t have to go to trial, which is a very lengthy process. Our digital forensic capability has given us a real powerful tool. Without the training and certification I received from CBP’s Digital Forensics Unit, the Coast Guard would not have had the capability to deliver such rapid and effective results.”

Assisting law enforcement

Abaunza and Brothers have assisted law enforcement on hundreds of other cases. The two have used their expertise to track the movements of suspects, find hidden files, recover deleted data, and search for criminally linked information among other pursuits. The cases pertain to everything from murders, suicides, and accidents to human trafficking, drug smuggling, terrorist plots, and stalking victims.

In one recent case, Abaunza helped local police identify the whereabouts of potential suspects in a murder investigation. The police had located a GPS unit that was linked to the victim’s stolen car and brought it to Abaunza to do an analysis. “After the homicide occurred, the victim’s vehicle was stolen with the GPS unit inside the car,” said Abaunza. “We were able to determine the locations of where the unit had been, which gave the

police additional evidence, leading them to the suspects.” Last November, the suspected gunman in the murder was convicted and sentenced to 40 years in prison.

In another case, the digital forensics team was able to determine that a government employee had been using his computer at work for unauthorized purposes and had been stalking a colleague. “He was using his credentials to research information about another employee. He found her address, her license, and the exact location where she lived,” said Abaunza. “He stored the data that he was accumulating on a server at work.”



★ SIM cards used in cell phones store all kinds of information including incoming and outgoing calls, text messages, and phone directory contacts.

Abaunza was able to recover pictures, videos, contact information, and personal documents including the woman’s passport and citizenship information. “He had his entire phone bill itemized on the computer, showing when he had called her,” said Abaunza, who also recovered videos of the victim while she was at a local shopping mall. “He would follow her at the mall and stalk her—even going so far as to dress up like a mall security guard to steal video tapes from the property. He took stalking to the next level,” said Abaunza. “Our findings confirmed that the employee had misused his computer and that the victim had a valid complaint.”

Complex case

One of the most complex cases the digital forensics team has worked on involved a diver who lost both of his legs in a boating accident. The diver had been swimming near several ships and it wasn’t clear which ship was responsible for his injury. The Florida Fish and Wildlife Conservation Commission, the agency investigating the accident, asked Abaunza for help. The commission sent Abaunza GPS units from each of the ships in question to clarify which one was at fault. “It was an accident reconstruction case,” said Abaunza.

“They gave me the navigational coordinates and I extracted all of the information from each unit.”

Abaunza then plotted out his findings so that he could see where the vessels had been located. The case became extremely complex because Abaunza needed to retrieve data from so many different GPS models. “I needed to use different tools and create new methods to acquire the data because there aren’t any tools designed for this purpose,” Abaunza explained. “GPS units are intended to have data programmed into them, not extracted out.” Ultimately, Abaunza was able to determine which of the GPS units had come closest to the diver and severed his legs.

The digital forensics team also is frequently involved in tampering cases. “Somebody from CBP or another agency will travel to a foreign country, and while they’re in that country something ‘funny’ happens to his or her laptop computer or another device,” said Brothers. “So they bring it to us and we check to see if the software code has been modified or the device has been tampered with in other ways.”

Unidentified electronics is another area that Brothers and Abaunza often tackle. “Law enforcement agencies will send us electronic devices they’ve seized and ask us to tell them what’s stored on the device or what it does,” said Brothers. “We can’t find the device in a store or call a manufacturer.” Instead, the duo relies on their experience and ingenuity. “Many times when we have a new device sent to us, there is no tool

to get the data out of that specific device,” said Abaunza. “So we’ll develop a tool or a process and then document it in a white paper that we’ll publish for the law enforcement community.”

In one instance, Brothers and Abaunza were told that the unidentified electronic device that they were given was a “distance finder.” “We were told that the device was a graduate level science project that would calculate the distance between the device and a wall,” said Brothers. The law enforcement agency that seized the device wanted Brothers and Abaunza to find out if that’s what the device really did and if they could verify their findings. “We didn’t have all the components necessary to do the testing, so we had to improvise and develop the tools that we needed,” said Abaunza. As it turned out, the two discovered that the device did, in fact, calculate distance, but it also was an information gathering tool that could pose a problem for the national security of the U.S.

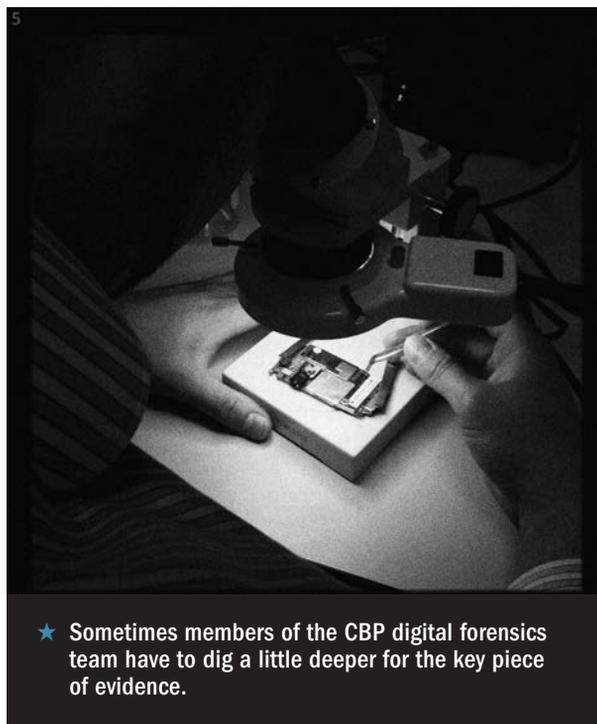
“Most people don’t have the opportunity to see as much as Sam and Will do,” said Ira Reese, executive director of CBP’s Laboratories and Scientific Services division, who also chairs the World Customs Organization’s scientific subcommittee. “CBP is the biggest law enforcement agency in the country. We have millions of people crossing the border every day, so they’re going to see a lot more media than digital evidence people at other law enforcement agencies. These two have pioneered the field. Very few people have their breadth of knowledge and expertise.”

Creative backgrounds

Interestingly enough, neither Brothers nor Abaunza planned to go into the field of digital forensics. Both discovered that they had an aptitude for computers quite by chance. In Brothers case, he had been singing since the age of three and thought he would study music. “I was supposed to be a music major. I was classically trained in voice and piano for six years,” he said. But then, during his sophomore year in college, Brothers changed his mind. “I decided that it was not going to pay the bills. Some of

my friends, who were the best singers and guitarists I’d ever heard, were graduating and pumping gas in their hometowns. I’m not a money hungry type of person, but that’s not how I wanted to live,” he said.

Brothers became interested in computers during college when his computer started to break down. His father, a computer savvy retired Air Force major, sent him the parts and Brothers did the repair work. “I figured out how to replace everything all by myself,” said Brothers, who over time rebuilt the entire machine. “The only thing that I didn’t replace was the case,” he said.



★ Sometimes members of the CBP digital forensics team have to dig a little deeper for the key piece of evidence.

Word spread and Brothers talent for fixing computers became known. “This pretty girl from up the street called me and said, ‘My computer is dead. My paper is due in six hours. I heard you’re a computer guy.’ So I went over to her apartment and had her computer back up and running within 15 minutes,” said Brothers. Much to his delight, he landed a date with the girl. “That’s when I realized this was cool,” he said. “But it wasn’t just the pretty girl. I liked the rush of being able to help that person and knowing that I could do this.”

Abaunza also had creative leanings. “I used to be a graphic designer. I can draw anything I look at, but I always wanted to

be an engineer,” he said. Abaunza’s interest in computers was sparked when he was 15 years old and he accidentally infected the family computer with a virus. “I knew I had to fix it before my mom came home,” said Abaunza. “It took me about an hour to figure it out, and then I reinstalled the operating system,” he said. “It was pretty cool. That’s when I started building my own computers.”

Brothers, now 42, graduated with a bachelor’s degree in computer science. Abaunza, 32, earned a bachelor’s in information technology and last year, he completed his master’s degree in

information assurance. Between the two of them, Brothers and Abaunza hold 40 certifications in digital forensics.

Among their numerous achievements, Brothers and Abaunza have written several best-practice documents for the Scientific Working Group for Digital Evidence, one of the country’s most respected digital forensics organizations. Both are active members of the Digital Forensics Steering Committee, which is part of the National Institute of Standards and Technology, an agency within the U.S. Department of Commerce. Together, Brothers and Abaunza have developed the standards that are used by the CBP digital forensics laboratories, which have been shared with other federal government agencies.

Additionally, Brothers and Abaunza created a system to determine levels of digital forensics analysis used by universities and colleges nationwide. The two also have published dozens of articles and white papers in addition to regularly speaking at conferences.

“There’s a lot of satisfaction in knowing that we did something that nobody on this planet has ever done before,” said Abaunza. “What makes us feel even better though is being able to share this knowledge with others and inspire them to help as well.” ■

CBP photographer James Tourtellotte snapped all images in this story with his smartphone.

As Border Security Tightens,

Drug Cartels Move Underground

BY JASON MCCAMMACK

A visitor wouldn't be awed by a quick look into the Marconi drug tunnel. The exit point is just a small opening in the corner of a nondescript warehouse suite in an Otay Mesa, Calif., industrial park—one of many small industrial spaces that make up the larger warehouse. However, when you

put on a flashlight-bearing hard hat and descend into the earth, the scope of the tunnel is shocking.

First, you descend down a spiraling stairway that takes you more than 75 feet below the surface. Once you make it to the bottom of the stairway and to the main tunnel chamber the level of engineering before you is striking. There is ventilation, electrical power, lights, shoring and even a makeshift railway to move drugs into the U.S. more efficiently. The tunnel's complexity reflects clearly the great lengths drug cartels will go to get their drugs across—or beneath—the border.

It's called the Marconi tunnel because that was the name of the fictitious business listed at the warehouse.

There have been more than 135 identified tunnel attempts since the first cross-border tunnel was documented in Arizona on May 17, 1990; however, the number of tunnel discoveries was fairly modest until the mid-2000s. Beginning in 2005, the number of tunnel discoveries escalated quickly. In 2008, 24 tunnels were discovered. In 2009, 25 more were discovered and 23 were discovered in 2010. Illegal tunneling is happening at a historically high level.

The reason for the growth in illegal tunneling is likely because Mexican drug cartels are finding it much more difficult to get drugs into the U.S. using traditional methods. Beginning in 2006, CBP began hiring and training 6,000 new Border Patrol agents. New border fencing also was constructed.

"The smuggling organizations are very fluid," said Border Patrol Agent Justin Kourt, of the Western Corridor Tunnel Interdiction Group. "Once they come upon significant resistance, they find a way to flow around it, the same way a stream of water would."

Border Patrol launches team approach

"The Border Patrol's primary mission is border security" said Border Patrol Chief Michael J. Fisher. "In that endeavor, we are responsible for protecting nearly 7,000 miles of U.S. land border. As CBP enhances security in the surface, air and maritime environments, criminals have turned to subterranean means to smuggle people and contraband across our borders."



★ Supervisory Border Patrol Agent Jason Viau rappels beneath the surface to inspect for anomalies in underground tunnels that may indicate illegal activity.

The Western Corridor Tunnel Interdiction Group is one of four CBP teams dedicated to finding and closing illicit tunnels. This group of trained agents covers the territory of both the Chula Vista and Imperial Beach Border Patrol stations in the southern tip of California. Team members have adopted specific practices to counter the threat of illegal cross-border tunnels. Each of the team members is a confined-space certified Border Patrol agent with a specific mission of tunnel detection, interdiction and remediation.

The team, made up of one supervisor and four agents, was launched in July 2010 to combat illegal tunneling. Chula Vista and Imperial Beach are inviting targets for illegal tunneling because of the large volume of commercial traffic, numerous structures located close to the border, border fencing that blocks free movement and the high level of U.S. border security in the area.

The "tunnel team" members are not afraid to get their hands dirty. They spend several hours each day exploring the maze of the area's underground infrastructure, including storm drains, searching for possible breaches made by drug smugglers. Before the agents can get down into the drainage systems though, many of them need to be located and properly mapped.

"In May of 2010, there were two tunnels discovered around Imperial Beach. Both of

the tunnels involved storm drain lines or abandoned lines," said Kourt. "The problem was, with one of these tunnels, no one knew that it even existed. So the first question we asked ourselves was, 'What part of the existing infrastructure is a threat to us and why isn't it mapped out currently?'"

The underground infrastructure along the Southwest border was installed by many different entities, including the local communities, the Army Corps of Engineers and private businesses. There was no comprehensive mapping, and the little information that was available was fragmented and couldn't be found in any single location.

"Just driving, popping up some [manhole] covers and getting in there is one of the main ways we're identifying unknown storm drains," said Kourt. "Exploring in the field and taking notes is the best way to verify the information, because a lot of the information we got from the city turned out to be incorrect."

For CBP, the work doesn't stop below ground. The Border Patrol's Community Liaison Program identifies and reaches out to businesses that have the potential for exploitation as a viable cross border tunneling location. Owners and employees are educated on things to be on the look out for and provided with contact numbers to report any suspicious activity or contact by a transnational criminal organization.

★ Beneath the Marconi Tunnel's exit point is a stairway that descends 75 feet below the surface.



★ The Marconi Tunnel featured electrical power, shoring and even a rail to move illegal drugs in the U.S.

Different Types, Same Goal: Undermine the U.S. Border

Tunnels have been found both on the northern and southern borders by diligent law enforcement work, human intelligence and even by accident in cases where roads have caved in due to vehicle weight. Since the first tunnel was discovered, cross-border tunnels have increased both in sophistication and construct.

There are three basic types of illegal tunnels being used to circumvent the U.S. border:

RUDIMENTARY: This type of tunnel is crudely constructed and travels a short distance, less than 20 feet. These tunnels do not use shoring, machinery, electrical power or ventilation. The entrance to a rudimentary tunnel is usually open air or concealed by something as simple as a piece of plywood.

INTERCONNECTING: This type uses at least one purpose-built section to connect existing underground infrastructure in order to evade border security. This includes tunnels that use roads or sidewalks as one or more of the walls for the tunnel. The purpose-built section is often crudely constructed. One specific type of interconnecting tunnel is known as a corrugated cut-out. This occurs when a tunnel builder cuts a hole into a corrugated drain pipe. The exit of these tunnels is usually into underground infrastructure in the U.S. Once in the U.S., users of interconnecting tunnels can navigate through infrastructure (like storm drains) and have access to multiple exit points as far as a mile from the border.

SOPHISTICATED: A sophisticated tunnel is elaborately constructed and may use shoring, ventilation, electricity, rail or water pumps. These tunnels usually span a long distance. The entrance and exit points of sophisticated tunnels are often located within homes or warehouses.

“All these suites and warehouses have truck-bay doors where a semi-trailer can just be backed in and you can’t see inside the factory or inside the truck,” said Viau, of the Western Corridor Tunnel Interdiction Group. “They load the truck. They close it up, drive it off and then it blends in with the thousands of other semi-trucks in our area.”

Mapping out the problem

The Border Patrol’s tunnel team, in response to the increase in subterranean threats, is mapping and providing a single reference source for all subterranean infrastructure and historical activity. They fused all of the source intelligence to support the disruption, dismantling and ultimately the defeating of tunnel threats in the western corridor of San Diego Sector.

“Through exhaustive research and field reconnaissance, we have developed one of, if not the most inclusive underground map of relevant border areas in San Diego County,” said Supervisory Border Patrol Agent Jason Viau. “Features, such as sewer lines, storm water drainage and previous smuggling tunnels are now available at a single source. [Now we have] the most up-to-date and descriptive representation of subterranean features from the Otay Mesa point of entry west to the Pacific Ocean.”

The tunnel team spends a significant amount of time doing research in the storm drains of Chula Vista and Imperial Beach. The drains come in all shapes and sizes. Some of the drains are large enough to walk through while others require the team to crawl on their hands and knees through all kinds of sludge and debris. The drains are full of cobwebs and cockroaches.

The team is looking for damage to the structural integrity of the underground infrastructure. “Diggers” make rudimentary tunnels and then use simple, blunt tools to crack holes in the walls of the storm drains or other underground infrastructure. Once in the U.S. underground infrastructure, they can travel through the entire system and smuggle drugs, humans or even support terrorist activities.

Filling the breach

Remediation is the process of rendering a tunnel unusable following interdiction. The type of remediation used depends on the tunnel type. For example, a hand-dug tunnel may be filled with concrete, while a corrugated cut-out (in a storm drain, for instance) requires welding a metal patch over the breach.

CBP's finance, facilities management and engineering teams are responsible for tunnel remediation. The general practice is to plug tunnels as quickly as possible.

"Illegal cross-border tunnel remediation is an extensive internal and external interagency effort to impede passage of humans and/or contraband with the intent of avoiding inspection," said Virginia Quiambao of CBP's facilities department. "CBP works with business partners to manage and execute rights of entry agreements, and environmental and real estate activities. Consistent interagency coordination and communication is necessary to ensure a streamlined tunnel remediation effort is executed."

Tunnel detection technology offers a promising long-term strategy for reducing the threat of illegal cross-border tunnels, but the technologies that are currently available are a mixed bag of imperfect systems. It is inherently difficult to detect tunnels of varying diameters at different depths in different types of sediment. These variations hamper detection

and practically rule out the possibility of applying a single strategy for detection.

CBP's Tunnel Detection Program is working diligently to identify, acquire and procure suitable tunnel detection technology. By conducting market research and extensive academic studies, they have identified some viable technology options that give them the ability to detect tunnel construction activity. Additionally, CBP has partnered with the Department of Defense to test and evaluate tunnel detection technology developed by the Army Corps of Engineers and private industry.

Current detection technologies fall into two categories: physics-based systems and motion detecting system. The technologies were developed primarily for other purposes including mining and the oil drilling business.

The threat that tunneling poses is real and the men and women in the frontline effort to end the activity know the importance of their mission.

"Regardless of whether a tunnel is simply a crude hand dug passage or a sophisticated reinforced passage with lights, all tunnels create a viable means for smugglers to enter the United States and pose a potential threat to national security," said Fisher. ■



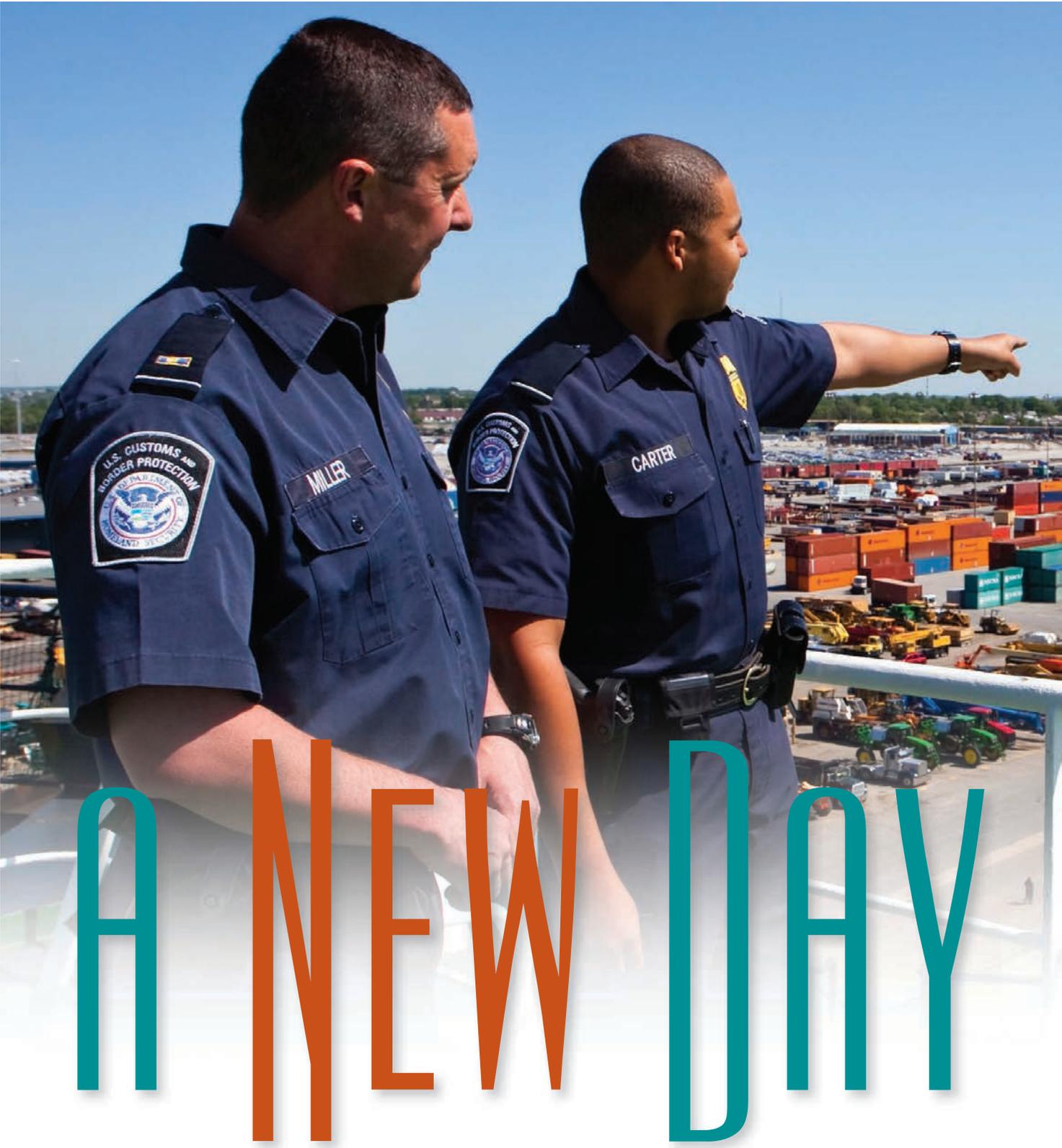
★ The entry and exit points of sophisticated tunnels are often located within homes or warehouses.

'The smuggling organizations are very fluid. Once they come upon significant resistance, they find a way to flow around it, the same way a stream of water would.'

—Border Patrol Agent Justin Kourt

★ Drug tunnel team members stand by as their colleagues inspect a storm drain.





CBP aims to help strengthen U.S. economy by modernizing trade approach



★ CBP officers watch as cargo is prepared for off-loading at the Port of Baltimore.

BY MARCY MASON

Shortly after Alan Bersin was appointed the commissioner of U.S. Customs and Border Protection, he promised the trade community that the agency would shift its approach to trade. After years of focusing on regulatory and enforcement

issues, CBP was going to expand its outlook. The commissioner recognized that the agency plays a critical role in promoting America's economic competitiveness. By ensuring the free flow of legitimate trade coming in and out of the country, CBP could help make the U.S. economy stronger.

From a trade perspective, this is a significant shift for CBP. "This is a new day for this agency," said Bersin. "This is a new way of perceiving our mission. Our role as an agency has been to enforce the law and administer regulations. Promoting economic interests has not been our focus," he said.

"That does not mean that we don't have to apply security measures to ensure



photo by James Fourtelle

'We will need to understand all of the issues that the company faces in regards to security, trade, logistics and finances.'

—Allen Gina, assistant commissioner,
CBP's international trade office

★ Allen Gina, assistant commissioner for international trade, addresses attendees at CBP's 2011 Trade Symposium held in Washington, D.C., in mid-April.

our nation is safe from threats," said Bersin. "But as we move forward on trade and security issues, we need to understand the broad impact that we have on American economic interests."

But what does this mean in practical terms? What will CBP be doing differently to improve trade facilitation? According to Bersin, one of the greatest keys to facilitating trade is moving beyond the agency's current "transaction-by-transaction" processing approach. "While we don't need to look at every single entry or shipment that comes into the country, each entry has a finite legal status," said Bersin. "But sometimes we miss the forest for the trees. To fully embrace the facilitation of legitimate trade and help promote American economic competitiveness, we need to start treating companies in a much more holistic manner using an account-based approach."

Evaluating risk

In short, CBP will soon be looking at how companies manage their overall operations as opposed to focusing on one transaction at a time. For the agency, this will mean gaining a better understanding of how to work with companies that import and export products in and out of the U.S. It will mean working within corporate structures and control systems as well as understanding non-revenue producing cost centers and the issues that companies deal with in the importing and exporting process.

"In the future, when we make decisions on how to evaluate risk, compliance, and enforcement, we will need a big-picture view of a company," said Allen Gina, CBP's new assistant commissioner of international trade. "We will need to understand all of the issues that the company faces in regards to security, trade, logistics and finances."

In many ways, the shift in approach is similar to the way CBP currently deals with partnership programs. Companies would be expected to demonstrate their ability to manage the import-export process with a high degree of compliance, thereby building the agency's trust in their operations. This, in turn, would give companies a better insight into CBP's dynamics. "We need to provide these companies with the greatest incentives possible," explained Gina. "If companies can foster the growth of their import-export operations, it helps build the American economy. It also helps generate trust in CBP's ability to promote the companies' trade interests and, at the same time, ensures compliance."

Although the shift in approach might seem sudden for CBP, it's not. In 1993, the Customs Modernization Act granted the U.S. Customs Service, one of CBP's legacy agencies, the statutory authority to work with the trade community on an account-managed basis. For several years the agency experimented on how to develop the concept, but progress has been slow. "Over the years, the trade community has tried to engage us to help promote a program, but we just didn't move very far on it," said Bersin.

Integrating security and trade

Instead, over the last few years, many have felt that CBP has concentrated its efforts primarily on security. "It would be fair to say that a large part of the trade community believes that CBP has focused too intently on the country's security needs without giving due consideration to the impact on the trade community and the American economy as a whole," said Bersin. "We can go a long way by integrating the security and trade aspects of the import-export process. Security and trade go hand-in-hand. Neither should be exclusive of the other."

But integrating the security and trade aspects is difficult. "As an agency, when we enforce security measures, we want to make sure that we're not unduly burdening industry by delaying containers or unnecessarily holding them up," said Thomas Winkowski, CBP's assistant commissioner of field operations. "However, protecting the nation is a critical part of our mission."

For a number of years, CBP has used a layered approach to secure corporate supply chains. These layers, which mitigate the risk of cargo shipments coming into the country, consist of advanced information on shipments, partnership programs with the trade community and foreign governments, and non-intrusive inspection technology that scans containers to detect radiation and identify anomalies.

Shrinking the haystack

“The more we know about a specific shipment and the entities that are handling that shipment, the better assessment we can make upfront before the shipment comes into the country,” said Winkowski. “Essentially, we’re looking for a needle in a haystack, and we need to do everything that we can to make that haystack as small as possible.”

CBP’s shift to an account-based approach should help bridge the gap between security and the facilitation of trade.

“Anytime we have the ability to partner with a company in new and innovative ways, it can’t help but make our processes more efficient,” said Winkowski. “An account-based approach will not only provide us with better information, it will produce a partnership that has the potential to enhance the layers of security that already exist. As a result, as the partnership grows, our focus on security will absolutely become intertwined with our focus on trade enforcement.”

Of course, the success of CBP’s new approach to trade hinges on a number

of factors. One of the most important pertains to CBP’s relationships with other government agencies. “We’re the face at the border,” said Winkowski. “We’re the ones who have the capability and the law enforcement assets to effectively carry out the missions of other government agencies,” he said. “That’s the job that we have and the role that we play. But when we’re making our process more efficient and our abilities more enhanced, we have to make sure that we’re taking these agencies along with us.” ■

photo by James Tourtellotte



★ CBP is working to treat incoming cargo in a more holistic manner by using an account-based approach that provides key information long before products reach U.S. soil.

‘Hey, You Ever Think About Working for Customs?’

During his 65 years of federal service, CBP officer sees his career, and his nation, mature

BY SUSAN HOLLIDAY



CBP Officer Albert Hose pops the trunk of a sedan, a recent import at the port of Brunswick, Ga. He yanks open a cardboard box to inspect for contraband. After working the rows of vehicles in the lot, he clammers into the agency truck to drive to the next dock.

Hose fulfills the same mission in the same way as thousands of other CBP officers in ports worldwide, except he's 84 years old, has been on the job for the federal government continuously for more than 65 years, and at the same port of entry since 1963.

Hose said that he doesn't see the need to retire "if you've got a job, the pay is good, you enjoy your work and the people around you."

Bucking the stereotype

Hose belies any label some may assign to older employees. He pulls his weight as one of four CBP officers at the port of Brunswick, nearly 80 miles south of Savannah in coastal Georgia. He boards and inspects cargo and recreational vessels at several area docks, private aircraft at two airports, and submarines at the naval base 40 miles south. On the office computer he manipulates spreadsheets and databases like a wiz.

"I've been using a computer since I was 6-years-old, but he's just amazing," said CBP Officer Mark Spence, a 35-year-old colleague of Hose. "He is the man—he's the guy you've got to go to for trade, all the customs-related stuff. Bam, bam, bam, he'll figure out where it is."

His co-workers remark on his stamina when inspecting car-carrying ships with as many as 11 decks. "These big car ships, when all the young guys like me are taking the elevators, he's walking up the stairs," marveled Spence.

"It's good exercise," Hose called from the next room.

Spence chuckled. "He's one of the very few people to do that," he said.

Back in the day

Hose doesn't see himself as an embodiment of local institutional knowledge

★ CBP Officer Albert Hose oversees a car demolition in Brunswick, Ga.

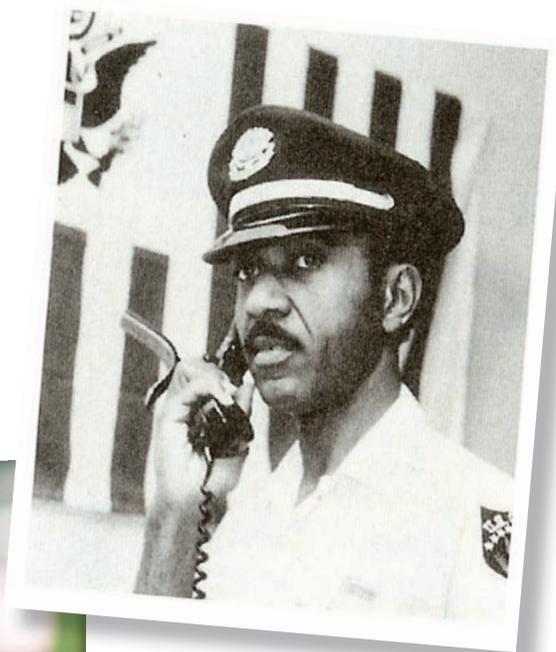


of the U.S. government. Driving with him around Brunswick, it's clear that he is.

Here's the old federal office building where, before Hose began with the U.S. Customs Service in 1963, inspectors would climb the clock tower to spot incoming ships. That's where he first reported for duty as a letter carrier, a job he performed for 16 years prior to joining Customs. Gone is the bus station where he shipped out as a Marine, the first of his federal positions, in 1945.

After leaving the military, Hose took the civil service exam (a passing grade was required for many federal positions) and landed his mail carrier job. Delivering mail for years in a small town, people got to know him.

The U.S. Customs Service at that time maintained a one-man port in Brunswick. The port director performed every task, and if he was away Customs



★ Hose, in his U.S. Customs Service uniform, as he appeared in a 1995 awards ceremony program. He was honored that year for his 50 years of service.

staff had to travel from Savannah to clear incoming vessels or planes. When the district office gave the green light for a new Customs aide position in Brunswick, the port director was encouraged to seek African American applicants for the job. The federal government in the 1960s led national efforts to integrate the workplace.

"I came by the port director's house to deliver the mail one day," explained Hose, "and he was sitting on the doorstep. He asked me, 'Hey, you ever think about working for Customs?'"

"I said, 'Customs?'"

"He said, 'Yeah. Did you go to college?'"

"I said, 'No.'"

"He said, 'That doesn't make any difference, I didn't either.'"

The port director singled out Hose because he'd been reliably delivering the mail for years and had already passed the civil service exam, speeding the hiring process considerably. An aide's salary was comparable to his Post Office position, but offered more room for advancement, said Hose.

When Hose joined Customs, the Federal Law Enforcement Training Center



photo by Randy Ashurst

in Glynco, Ga., didn't exist. "It was a naval base then," said Hose. His training was on the job—whatever the port director did, Hose learned to do. Though just a Customs aide, Hose proved himself—eventually he was permitted to inspect, collect duties and make bank deposits in the port director's absence. "Here I could do the same thing the port director did because, what if he got sick one day?" said Hose. "So they had to give me authority to do that stuff."



photo by Susan Holliday

★ Hose sorts through Brunswick news clippings and Customs artifacts dating to the 1930s.

When asked if he received firearms training, Hose said Customs inspectors didn't have to carry firearms in the early 1960s.

"We had a gun," said Hose. "It was in the safe and whenever we needed it we'd go get it."

Hose received formal training in firearms and other responsibilities after his promotion to Customs inspector in the early 1970s. He traveled to the Bureau of Customs National Training Center on the campus of Hofstra University on Long Island, N.Y., though the trainees bunked in a hotel off campus. Hose said that arriving in uniform each day would provoke the college's anti-Vietnam War demonstrators. "The hippies didn't like law enforcement people," said Hose, "and they'd throw rocks and stuff at our bus." Hose

said he and his fellow trainees therefore were the first that didn't have to wear uniforms to class, enabling them to travel incognito to and from training each day.

Before the formation of CBP in 2003, cargo and people arriving in the U.S. were met by personnel from Customs, the Immigration and Naturalization Service, and the Department of Agriculture. In the port of Brunswick in the 1960s, when a plane or vessel arrived, Hose said that an agriculture officer traveled from Savannah and an immigration inspector came from Jacksonville, Fla., to clear it. None were stationed locally. They were joined by what Hose termed "a quarantine doctor," a local physician authorized to board and examine arriving passengers and crew. "If you went aboard with the doctor and somebody was ill, nobody could come off," explained Hose. Ships flew a yellow flag until the doctor cleared the ship, a practice in every port that stopped in the early 1970s, Hose said.

Of all the federal personnel, "everybody was white except me," said Hose. "Customs had command; they couldn't do anything without asking Customs. But 99 percent of the time if anybody came up and wanted to do something about a ship, they never would come to me. They'd always go to a white person, who'd point to me and say, 'You have to see him.'"

Painful memories

Hose wasn't entirely comfortable talking about his experience as a black uniformed federal employee in the Jim Crow South. "Some of these things I don't like to say because it's kind of like you're playing the race card," he said, but he has stories.

For many years he was the only black man in each of his Customs training classes. When he was hired, he was one of two black Customs employees in Savannah. "I never had any problems working with any of my co-workers," Hose emphasized, but dealing with the public was different.

"This was right during the civil rights thing, and a lot of people didn't like that I was there," said Hose. At that time, Hose said that Customs licensed

the fishing and shrimp boats that sailed from Brunswick, a job now handled by others. One white shrimp-boat captain who had to deal with Hose regularly would "never say, 'Hey,' or 'Good morning,' Hose remembered. "He'd never hand me the documents. He would throw them on the counter." After years of this, "He told me, 'You know what? When I saw you in here, I didn't like it. I didn't like it worth a damn,'" recounted Hose, "and I didn't think you



*'The trade will call
and ask for him
because they know
he knows the answer.'*

—CBP Port Director Yvette Powell,
Brunswick, Ga.

photo by Susan Holliday



were smart enough to be here long. But you know what? You're a damn nice guy."

Another time, in the early 1980s, Hose recalled leaving the submarine base after an inspection. At the guard checkpoint, "there were two cars in front of me," said Hose. "He let that one go. He let the next one go. When I got there, he said, 'Pull over.' So I pulled over.

"He said, 'Open your trunk, I want to search your car.' I said, 'I'm supposed to be searching yours, you're not searching mine,'" said Hose. "He happened to look at my uniform, I guess, and he said, 'Oh, I'm sorry!'"

"All he saw was this," Hose said, showing the skin of his bare hand. "He didn't see the uniform, the badge, nothing."

Hose changed the topic. "I have a lot of things like that, but I don't like to talk about them," he said. "I guess I had a different outlook," he added, because of his upbringing.

'This was home'

Hose's father followed his foreman job at a packaging factory that moved to Brunswick before Hose was born in 1927. "Where I lived, the white kids were in and out of my house, I was in and out of their houses. We had no problem," said Hose. They were Portuguese, Greeks and other immigrants. "Of course, I couldn't go to their school," he said. "I had to walk to school—the black school didn't have any buses."

Except for his stint in the Marines, Hose has lived the whole of his life in Brunswick—marrying, raising a family. He and his wife, Bettye Hardee Hose, took in his two eldest grandchildren when they were tiny. He's been raising them on his own since his wife died in 1998. Hose beamed as he described the job his granddaughter, A-Sjanay, holds and the athletic skills of Tobiasz, his grandson still in high-school. "Those kids!" he said, shaking his head and smiling. They keep him young.

When asked why he didn't try to move up the Customs or CBP career ladder, Hose was matter of fact. "Most of the time that meant that I'd have to leave here, and I didn't want to leave," he said. "This was home."

People who wanted to move up couldn't stay in Brunswick, said Hose. They needed more people to supervise and wider management responsibility. Hose has

photo by Randy Ashurst



★ Hose on a foreign vessel, reviewing crew member's documents.

photo by Susan Holliday



★ Hose inspects a used-car import. The port of Brunswick processes thousands of vehicle imports each month.

served with five or six port directors—he's lost count. The longest time was with Jim Royal, who retired in 2002 after working with Hose for 31 years. For 20 of those years, just the two men worked the port. Though Royal is white and was Hose's supervisor, "we were just like two brothers," said Hose.

Royal, contacted by telephone, agreed. "We covered each other's back," he said.

Hose was an avid golfer and Royal loved to hunt. "So his time to be off was in the wintertime, my time to be off was in the summertime," said Hose. One of their favorite jokes: after jointly counseling a customer on rules or regulations, "We'd tell them, 'now you got it in black and white,'" he said with a laugh.

Almost 48 years later

In 1963, 12-15 cargo ships landed at Brunswick each month. Now the port

processes about 50 per month, said Hose.

They still clear a lot of bulk cargo like gypsum and chicken feed, but now thousands of vehicles unload each month at the huge car-carrier docks. According to Royal, from 1970 to the mid-1980s Brunswick averaged \$150,000 to \$200,000 per year in customs revenues. In 2002, the year Royal left Customs, he said the port brought in about \$100 million. With the advent of vehicle imports, "entries went through the roof," said Royal.

As the port of Brunswick grew and Customs inspectors changed into CBP officers, Hose changed, too. "In 2003, he had to learn a whole other process," said Brunswick's current Port Director Yvette Powell, who has worked with Hose for two years. "He's accepted the change just fine."

Powell described Hose as "our go-to person" for digital photography and "our trade guru."

"He goes to the CFR [Code of Federal Regulations], and can get the harmonized tariff numbers, and knows the exact person to go to for information," said Powell. "The trade will call and ask for him because they know he knows the answer. He's very well respected by the trade and maritime community."

"You couldn't find a better, more conscientious and loyal employee," stated Royal.

"I'm happy doing what I'm doing," said Hose, but when he decides to retire, "I'm going to say, 'I'm retiring tomorrow.' I don't want a great big party."

"It's like when people die. People come out and say, 'he was a good fellow,'" said Hose. Laughing, he added, "I say, 'tell me that while I'm here!'" ■

Avoid the dead end
of narcotics smuggling...



...or you may end
up here sooner
rather than later.

U.S Customs and Border Protection's Operation Detour is aimed at preventing a trend by drug trafficking organizations of luring high school kids into engaging in criminal activity to include the smuggling of narcotics and humans. The consequences of being involved with narcotics and narcotics smuggling can lead to prosecution and in many cases...DEATH.

CBP Commissioner Urges Future Joint Vetting, Targeting by Asia-Pacific Partners

To address the worldwide customs challenges of the next 50 years and beyond, U.S. Customs and Border Protection Commissioner Alan D. Bersin called on the economies of the Asia-Pacific region to consider the creation of common vetting and validation procedures for trusted traffic and a joint targeting center, to share information “without jeopardizing our national security or our trade secrets.”

“We need to develop a regime and a set of standards for mutual recognition,” said Bersin in his opening comments to representatives at an Asia-Pacific Economic Cooperation Sub-Committee on Customs Procedures meeting in Washington, D.C., in March.

To integrate the customs inspection and security functions, Bersin said that APEC needs to expand its authorized economic operator program, or AEO, which secures the supply chain of international shippers. APEC would benefit by creating “a set of common standards for AEOs, then recognizing each others’ programs and vetting processes.”

Bersin acknowledged that the idea is “ahead of its time,” but urged the APEC customs subcommittee to move toward “a common vetting procedure with an APEC vetting and validation group.”

His second far-seeing idea for “joint targeting of dangerous cargos” would involve sharing data about shippers and cargo. “I’m not talking about classified information or intelligence information,” said Bersin. “Much of the information about cargo and shippers and importers is actually not secret, but can be shared among many parties in a way that would leverage the power of one customs service off another.”

In doing so, “We could deal with many of the problems that afflict us individually,”



★ Commissioner Bersin addresses the first joint meeting of the APEC Sub-Committee on Customs Procedures and the APEC Business Mobility Group.

said Bersin. “Counterfeit pharmaceuticals, unsafe products—matters that affect all of our peoples.”

For the short term, the Pacific region will benefit from “robust free trade” and expanded free trade areas, said Bersin, in large part due to the good work of APEC and the fact that the 21 APEC countries produce 60 percent of the world’s gross domestic product and account for 44 percent of global trade.

APEC firsts

The speech followed the commissioner’s address a day earlier to the first-ever joint meeting of the APEC Business Mobility Group, known as the BMG, and the APEC Sub-Committee on Customs Procedures or SCCP.

As the 2011 SCCP chair, CBP led this first joint meeting with the Australia Department of Immigration and Citizenship, the BMG chair. The goal of the BMG is to enhance the mobility of business people to facilitate trade and investment in the APEC region. The SCCP works to simplify and harmonize regional customs procedures to ensure the safe, efficient movement of

goods and services through the region and to facilitate border control. Delegates of both groups addressed coordinated border management and the solutions to operational and cultural challenges.

CBP presided over another APEC first—an AEO roundtable meeting of invited private sector, public sector and APEC community representatives. Co-chaired by the Japan Customs and Tariff Bureau, the discussion focused on increasing private and public sector engagement in AEO initiatives in the Asia-Pacific region, particularly mutual recognition of those programs.

During the SCCP meeting, the U.S. also proposed an unprecedented joint intellectual property rights border enforcement operation for counterfeit pharmaceuticals in the postal and express consignment environments.

The two-week Washington meeting of representatives from the APEC economies was the second meeting during the U.S. tenure as the 2011 APEC host country. The third was held in Big Sky, Mont., in mid-May, and the remaining meetings will be in San Francisco Sept. 6-17 and Honolulu Nov. 12-20. ■

—Susan Holliday

Working the Rails

Dedicated officers, specialized technology secure trains at U.S. border

A resonating train whistle in the distance can conjure visions of travel and adventure for many, but for the officers on the rail team at the Port of Nogales, Ariz., it signals that it is time to go to work.

The five experienced CBP officers on the team spend their days and nights clearing both northbound and southbound trains. They routinely view manifests, operate scanning equipment and conduct detailed physical inspections of rail cars.

According to Joyce Jarvis, the chief of trade operations in Nogales, the south-central Arizona rail team is the most active in CBP. During fiscal year 2010 the team seized 30 loads of marijuana, totaling more than 6 tons. Team members also apprehended 292 undocumented aliens on or near the trains they inspected.

CBP Officer John Holman, the Nogales rail team leader, emphasizes that working on the rail team is not easy. Team members perform duties in all kinds of weather, including rain and snow, and in temperatures ranging from 30 to 120

degrees. Holman attributes the team's success to its high levels of motivation and dedication.

Two-way traffic

The team's typical day starts at 7 a.m. with pre-operational checks of data systems and manifests. Usually they will run early morning outbound trains through the rail vehicle and cargo inspection system, a high-tech scanner similar to the ones used to scan trucks and shipping containers at other ports. They stop and search a majority of the southbound trains before they are allowed to continue into Mexico.

By mid-morning, the team usually sees its first northbound train. These trains typically transport automobiles, auto parts, beer, copper, iron ore and metal products, but may also have cars that contain bulk items such as fishmeal, graphite or fertilizer.

As a train approaches the border, team members open the rail gates. The train stops at the international boundary and American locomotive engineers climb on board to take over the train's operation from their Mexican counterparts. Then engineers slowly power up the locomotive's diesel engines to guide the train through the gates into the U.S. Rail team members monitor the train's movement



photo by Jan Morin

★ A member of the rail team watches as a train enters the U.S. from Mexico at the port of Nogales, Ariz.

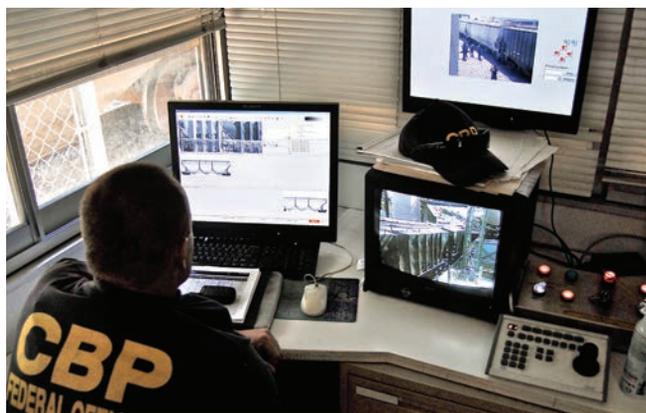
from different vantage points to watch for abnormal activities, such as individuals attempting to enter the U.S. illegally.

Inbound trains will move at between 4 and 5 mph as they pass the inspection and scanning booth. Here the sensors instantly record X-ray images of each car and its contents. A combination of training and experience helps team members quickly single out cars that need enhanced inspection.

Scans end free rides

It is not unusual for the officers working in the booth to radio the train engineer to stop when the scan shows the outline of a person hiding in a rail car. Over the years, people have been found hiding in a variety of train car locations—inside engine compartments, in rail car floors and inside double stacked rail containers. All people attempting to evade proper inspection are turned over to CBP passport control for processing.

To conduct secondary inspections on rail cars, CBP officers escort the trains 10 miles north to the Rio Rico rail yard. This yard provides the closest available space for inspecting rail cars without blocking and impeding traffic.



★ Rail team leader John Holman reviews rail car images from inside the scanning booth at the port of Nogales, Ariz.

photo by Jan Morin

On more than one occasion the rail team has apprehended undocumented aliens who have tried to illegally board a train stopped at Rio Rico. This can be harrowing. The Rio Rico rail yard is located in a remote area and it can take 15 minutes or more for backup to arrive.

Officers from the Alliance to Combat Transnational Threats have aided response in recent months, augmenting the rail team to provide additional security and assisting in everyday operations. According to Holman, these officers have adapted to the unique rail inspection environment to add to the team's effectiveness.

No hesitation

In Holman's eyes, the job is all about team work. He looks for team members who are not afraid to work hard and "get dirty," who can respond quickly and without hesitation to a situation. He wants self-starters who, when necessary, can work without supervision and make timely decisions. Above all, Holman said he needs officers who are safety conscious because the rail environment is inherently a dangerous one.

The dangers faced by these CBP officers run the gamut from tripping hazards and loose rocks to the sheer size and power of the trains they work around. The Nogales team has had very few injuries that led to lost time on the job, a statistic that Jarvis attributes directly to how well the team works together.

While communication is a key aspect of the team's success, team members also emphasize open communication with other CBP components, the wider area law enforcement community, and the many stakeholders interested in rail operations.

Union Pacific partnership

Perhaps the biggest of these stakeholders is the railroad company itself, Union Pacific. CBP in Nogales and Union Pacific have an excellent long-term working relationship, coordinating operations and cooperating on a variety of matters. Union Pacific special agents share information with CBP and even lend a hand by walking the trains with their canines when CBP canine assets are unavailable.

The partnership is at its best when officers discover suspected contraband in a rail car.

Oftentimes, contraband will be detected buried inside a hopper car—essentially a large container of raw material. Because it is too dangerous to dig into bulk substances such as fishmeal or graphite, the rail team relies on Union Pacific to seal the car and move it to a secure CBP area where it remains under surveillance. As soon as possible, the suspect car is transported under guard nearly 80 miles to the Tucson rail yard for unloading.

Throughout the process, CBP and Union Pacific work together. "We work very well as a team," said Holman. "They are part of our team, so to speak. After all, we are both trying to accomplish the same thing."

Both Holman and Jarvis are optimistic about the future of rail security. "We see more emphasis on rail, not only here in Nogales but nationwide," said Jarvis. "I have some great people working for me. They are hard-working, motivated and safety conscious. The team is phenomenal, it really is." ■

—Jan Morin

Team members perform duties in all kinds of weather, including rain and snow, and in temperatures ranging from 30 to 120 degrees.



★ Port of Nogales rail team members and officers from the Alliance to Combat Transnational Threats apprehend two undocumented immigrants who were hiding aboard a Union Pacific train as it entered the U.S.

photo by Jan Morin

Transforming **Wild Mustangs** into Border Security Assets



★ Horse patrol agents from Tucson sector guide illegal immigrants out of hills after their apprehension.

CBP and the Bureau of Land Management have partnered to help expand the Border Patrol's horse patrol program, mixing wild mustangs and special training from an unlikely source to serve needs in both agencies—and save taxpayers money.

Border Patrol sectors in seven states are working with the U.S. Bureau of Land Management's wild horse and burro program and the Colorado Correctional Institute's wild horse inmate program. The program will bolster their horse patrol and provide new homes for wild horses that, once trained, serve as valuable partners in securing U.S. borders in some of the most remote areas on both the northern and southern borders.

The "Noble Mustang" program, instituted in Spokane, Wash., three years ago, begins with the Bureau of Land Management gathering excess wild horses and burros from range areas that are unable to support their needs. From there the animals go to one of several holding facilities for examination and inoculations.

One of the largest facilities is at the Colorado Correctional Institute in Canon City, Colo. While there, the inmate rehabilitation program managers evaluate the horses and determine which would be suited for training. Then the horses are referred to an inmate to begin the first phase of training. Once the horses have successfully received a minimum of 90 days of training, the Border Patrol pays an adoption fee to the Bureau of Land Management and pays the Colorado Correctional Institute for training the horse.

Horse Patrol Coordinator Bobbi Schad and Horse Patrol Instructor Jeff Collup traveled to the site in Colorado last June to select animals for relocation to a Border Patrol station in southern Arizona.

"Going in, we were somewhat apprehensive about the program," Schad said. "But now we are very excited about the potential of mixing these very durable horses into our stables. We received five mustangs in August and received 15 more by the end of 2010."

These powerful and majestic horses come at about half the price of horses that



★ Securing remote areas nationwide, the Border Patrol has 317 horses, 75 of which are mustangs, and 381 riders.

These powerful and majestic horses come at about half the price of horses that were previously purchased by CBP from vendors across the nation.

were previously purchased by CBP from vendors across the nation. Each horse comes with health records, including the capture date, a one-year guarantee, and additional inmate training, if necessary. A contracted veterinarian cares for the animals, while resources at the U.S. Army's Fort Huachuca provide preventive care.

Nationwide, the Border Patrol has 317 horses, 75 of which are mustangs, and 381 riders. Each of the riders is an agent who was selected for the assignment. Most had little to no experience on horseback. The agents go through a three-week training at their duty location.

"All of our training is in a safety-based environment," said Shad.

The Border Patrol's Tucson sector, in central and eastern Arizona, has 91 riders assigned to seven stations and 124 horses assigned to southeast Arizona. The sector is retiring 25 horses due to age and health and replacing them with the mustangs. These four-legged retirees are adopted by agents or referred to long-term retirement facilities. ■

—Rob Daniels



★ Tomohiro Yamasaki leads a canine through vehicle inspection paces at CBP Canine Center Front Royal.

New Tricks

Japan Customs officers visit CBP to refine canine handling techniques to defeat drug smuggling back home.

This wasn't Tsuyoshi Nakajima's first visit to Customs and Border Protection's Canine Center in Front Royal, Va. As an assistant supervisory canine instructor with Japan Customs and Tariff Bureau's Tokyo Customs Canine Training Center, he'd traveled to Virginia on several occasions, three to be exact.

This past February, he and another inspector, Tomohiro Yamasaki, arrived with the intent to "correct something—to improve something" that "something" being their canine training methods for detecting the synthetically made narcotic methamphetamine.

The smuggling of narcotics is nothing new to Japan Customs, but popular use, and subsequent smuggling, has shifted from marijuana and MDMA, informally known as Ecstasy, to methamphetamine.

Over the years methamphetamine has become a highly lucrative drug for smugglers in Japan. Even small amounts of

the drug are worth large sums of money. One gram of methamphetamine sells for approximately 100,000 yen, which is equivalent to about \$1,200, according to Nakajima. The United Nations Office on Drugs and Crime in a 2008 report placed the potential retail price even higher, at up to \$1,493 per gram. This amount is staggering compared to the U.S., in which one gram of meth is worth only about \$130 on the street.

In addition to being very profitable, the scent of methamphetamine is more difficult to detect than marijuana, which poses new challenges for both the canines and the officers.

Fortunately, the canines are born with a sensitive sense of smell that doesn't need to be trained; instead, it simply needs to be shaped.

"We're not really training a dog to do anything it doesn't already do. It's simply about shaping," said Michael Maroney, deputy director of the CBP Canine Center

Front Royal. "He can already use his nose or he doesn't survive."

Through observation and training Nakajima and Yamasaki were able to gain a greater knowledge of a vital concept known as sensory threshold.

The narcotics smugglers from Nigeria and European countries were gaining awareness of the Japanese canines' sensory threshold and using it to their advantage. Small amounts of the drug were passing through Japan Customs undetected, but they added up.

"Every individual dog has a sensory threshold. We need to train the dog's sense of smell based on the small amounts of drugs that the smugglers are bringing in," said Nakajima. During their visit Nakajima and Yamasaki learned how to shape a dog's senses to detect these amounts.

Throughout the years CBP's Canine Program has grown and its best practices have advanced to meet new demands and issues. Likewise, new challenges have emerged within Japan, thus leading to a need to update Japan Customs' canine training program.

On each visit, the Japanese officers have arrived with key objectives. In 1993, Nakajima intended to learn how to transform their dogs' alert signal. As a result, Nakajima "changed their indication system," said Maroney. "Their dogs were all aggressive-indication scratch dogs. He returned [to Japan] and turned all the dogs to sit [passive] indication dogs."

This change was essential to not only protect the handlers and the public, but also to prevent possible evidence destruction. In 2001, Nakajima returned to learn more



photo by James Bourdellotte

★ Discussing their mutual learning experiences, from left to right: Michael Maroney, deputy director, CBP Canine Center Front Royal; Tsuyoshi Nakajima and Tomohiro Yamasaki, Japan Customs and Tariff Bureau; Robert Lawler, assistant director, training, CBP Canine Center Front Royal.

‘We’re not really training a dog to do anything it doesn’t already do. It’s simply about shaping.’

—Michael Maroney, deputy director,
CBP Canine Center Front Royal

about CBP’s canine training for explosives’ detection. As a result, Japan’s canine program currently has nine dogs trained to detect explosives.

Each visit has been an opportunity for both CBP and Japan Customs to share knowledge and strengthen their

relationship. Nakajima and Yamasaki modestly spoke of their own contributions to the training program, but CBP’s Maroney didn’t hesitate when discussing the Japanese officer’s contributions.

“We are going to get [their] opinion regarding whether we are going in the right direction,” said Maroney. “Is there something that they saw here that they disagree with? Do they have a tool that can replace a certain tool that we currently use?”

Moreover the CBP instructors were eager to reveal what they had learned from Nakajima and Yamasaki’s time in Front Royal.

“Patience, definitely patience,” said Wade Smith, course developer/instructor at the Front Royal Canine Center.

Smith’s experiences with the two Japanese officers taught him that steady perseverance was key to being an instructor. He noticed that their cultural respect of others and humble nature made them less likely to immediately jump into certain activities, even if they were experts at the task.

This mutual respect led the CBP officers to openly express their condolences for the Japanese officers in the wake of the tragedy that occurred in their nation. Although, neither of the officers’ families was harmed by the March earthquake and tsunami, their homeland has forever been affected, and they expressed their thanks to CBP for showing great kindness and understanding.

Both the Americans and Japanese agreed that the continuance of the relationship between their two agencies can only aid in creating a stronger, safer world. In fact, Japan Customs and Tariff Bureau has close ties to other customs training programs around the world, and Nakajima has helped train 26 other countries.

“What we learn at the Front Royal center can be used to train the countries that come to Japan for knowledge,” said Nakajima.

“Any way that we can assist globally, we are providing a service for the American people. [It is] an investment in our own future and our countries’ future,” said Maroney. ■

—Dorie Chassin

★ Tsuyoshi Nakajima works with a canine in drug detection training at CBP Canine Center Front Royal.

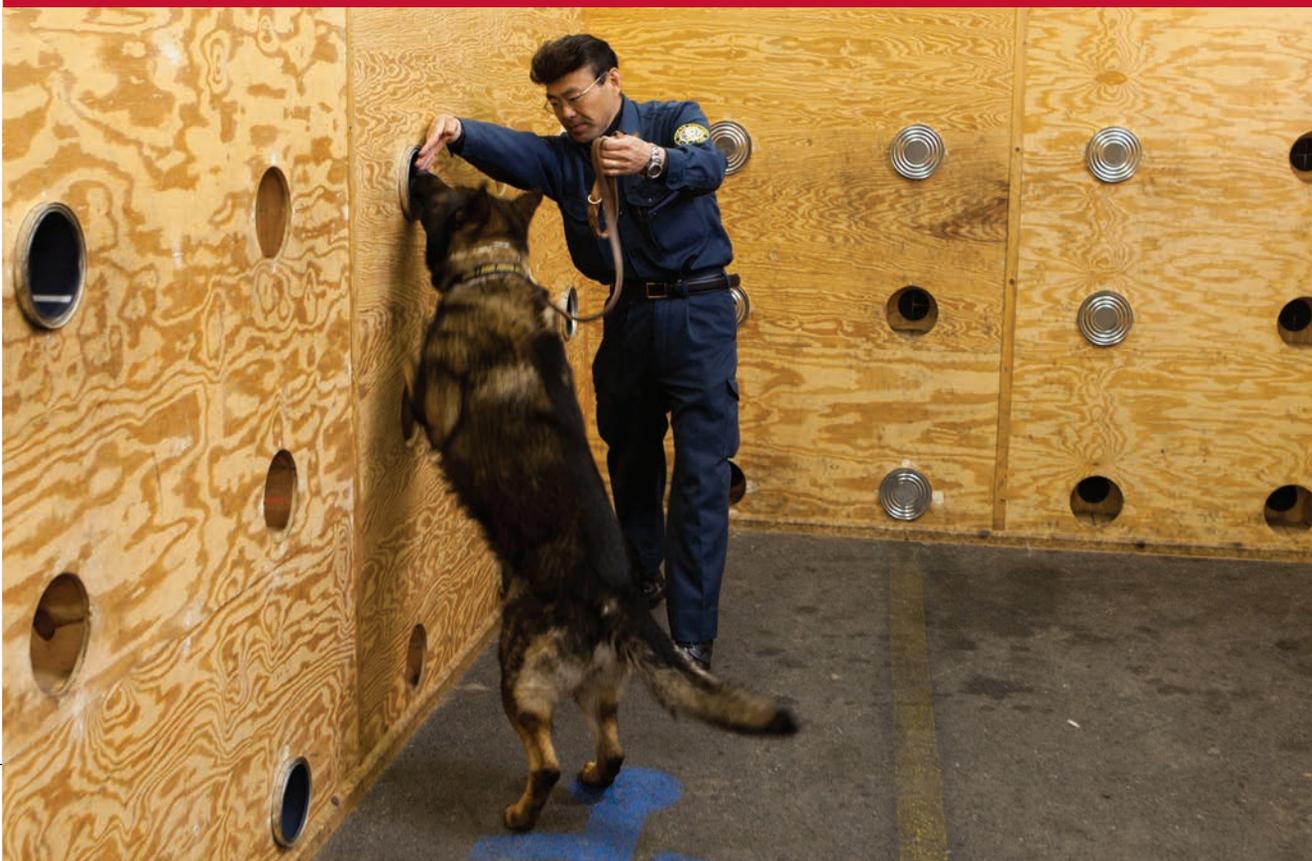


photo by James Bourdette

Trade Symposium Promotes **Open Dialogue** with Trade Community

After years of focusing heavily on security issues, the 11th Customs and Border Protection Trade Symposium, held in Washington, D.C., on April 13-14, emerged with a new twist. The event, Working Together to Strengthen Economic Competitiveness, which drew more than 700 attendees plus hundreds of others who participated through the Internet, emphasized strengthening America's economic growth and competitiveness.

"This Trade Symposium is definitely different," said Michael Ford, vice president of regulatory compliance and quality for BDP International, a customs house brokerage and freight forwarding firm. "CBP is listening to the trade community to find out what is important and what some of the pain points and issues are. I see them really trying to reach out."

The two-day event at the Ronald Reagan Building and International Trade Center prompted open dialogue between CBP and the trade community. The agenda featured notable speakers such as U.S. Trade Representative Ron Kirk, panel discussions, breakout sessions, and a town hall meeting where audience members posed questions to CBP Commissioner Alan D. Bersin and other senior CBP officials.

"I make no apologies for the monomaniacal focus that we have had on security since 9/11," said Bersin in his opening remarks to the sold-out crowd. "But as we move forward, it is time to adjust our notion and to take into account the fact that economic security, economic prosperity, economic strength are absolutely key to the national security mission. We cannot be strong without being economically strong.

And the key to economic prosperity is our competitiveness as a nation."

Bersin further explained that it is only by expediting legitimate commerce that the U.S. can heighten its security profile. "It is clear to us, at CBP, that we cannot, nor should we, think about doing this independent of the private sector," he said. "We enlist your help in reconceiving our mission. Help us reinvent this mission in a way that does not sacrifice either our prosperity or our security, but understand them as being one and the same. Help us turn that insight into programs that create a customs approach that is customer friendly—that actually functions efficiently."

Interactive problem solving

Attendees took the message to heart. For example, Ford noted that two people during the first general session asked questions about potential fees associated with chemical residue. "This wasn't something that was on the agenda. It was an open question presented to the commissioner," said Ford. "In the past, there would always be written questions that would be read and presented. It was a safer, controlled environment. But this year," said Ford, "they really wanted to hear from the community and they've been open to any question. There's been no reading from scripts."

Others agreed. "I honestly found this Trade Symposium to be much more interactive than in the past," said Ted Sherman, director of global trade services for Target, one of the largest importers in the U.S. "You could see that CBP was actively soliciting ideas from the trade community as part of the sessions. It was obvious that those ideas will go into shaping the programs that they're working on."



photo by James Fourtelle

★ Commissioner Bersin invited attendees at CBP's 11th Trade Symposium to share their ideas.

Involving the trade has benefits, Sherman explained. "The more open CBP is to input and feedback, the more we can actually come up with workable solutions. It will be something we've actually all worked with," he said, "rather than just having the new regulation promulgated without input, and then we don't understand it or we can't do it."

"I think it dramatically increases the chances for success with something like ACE [the Automated Commercial Environment] or the broker project if we're all providing input from the beginning," added Sherman.

CBP officials also recognized that the dialogue was more open. "People are more willing to offer candid ideas and suggestions," said Allen Gina, assistant commissioner of CBP's Office of International Trade. "In the past, there was a reluctance by some individuals to speak so honestly."

What prompted the change? The reason is twofold, said Gina. "Throughout the event, Commissioner Bersin extended a constant invitation to people to share their ideas. He showed a willingness to listen and was committed to responding to their suggestions."

Economics was also a factor. "As an agency, we have grown by a billion dollars each year for the past five years, so we believed we had ample resources to put forth initiatives and projects without input from the trade," said Gina. "Those resources and that money is no longer going to be available in the way that it was and it's forcing us to be much more creative. As the commissioner said, a lot of that creativity and expertise lies within the trade community. We realize that we can be much more creative in our thought process by including the trade in our discussion."

A top priority

Among the many sessions that the symposium featured was a panel discussion, U.S. Trade: A Top Priority, led by Ambassador Carla Hills, who served as the U.S. trade representative from 1989 to 1993. The panel included Bersin and Jean-Guy Carrier, secretary general of the International Chamber of Commerce; Department of Commerce Undersecretary for International Trade Francisco Sánchez; and Jayson Myers, president and CEO of the Canadian Manufacturers and Exporters. Following the discussion of trade facilitation topics, Hills shared her concern “for the American public to understand how deeply important trade is to jobs and to the economy and to our future,” she said. “It worries me that when we take polls that the majority of Americans don’t appreciate that fact. It is something that simply we have fallen short on.”

For many attendees, the breakout sessions provided the most practical information. “I was able to get a fuller picture of what the benefits of ACE will be for importers, when CBP is looking at rolling out some of the functionality, and how that will potentially change our business processes,” said Target’s Ted Sherman. “Now I can take that information back to my team.”

One of the most popular sessions was on CBP’s trade strategy. “We’re three years into a five-year strategy so this is a point when we want to look at our strategic plans to see if

any adjustments need to be made,” said Steve Hilsen, CBP’s director of trade policy and agreements, who moderated the panel. The session’s primary goal was to receive feedback from the trade community “on what’s working well in the CBP strategy,” said Hilsen, “and more importantly, what isn’t working as well as they think it should be.”

Another panel discussion focused on border issues and initiatives. The panelists, who had all worked on the border, shared their insights on the daily challenges faced by CBP and the private sector in processing cargo at the nation’s busiest border crossings. They also presented some of their initiatives in areas such as wait times, infrastructure, staffing, technology, communication outreach to border communities and cross-border partnerships. Additionally, attendees received an update on Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness, the Feb. 4, 2011, joint declaration by the U.S. and Canada.

“The discussion was a very open and frank one,” said Alfonso Martinez-Fonts Jr., executive vice president of the U.S. forum for policy innovation at the U.S. Chamber of Commerce, who moderated the panel. “It’s very easy to conceive a theory of what we’re trying to do, but then it becomes very hard to implement when you’re on the border,” he said. Describing CBP’s “huge challenge as the implementer of the rules and regulations,” while wanting to keep Americans safe,

Martinez-Fonts asked, “How do we make sure that we can continue to expedite shipments across our border, but do so in the way that assures our security best? That continues to be an ongoing debate.”

The 21st century broker

In the well-attended Role of the Broker session, panelists discussed how the role of the customs broker may change in the next five to 10 years. They considered new responsibilities for customs brokers and suggested ways brokers could expand their services to better assist small-, medium-, and large-sized importers.

Panel moderator Cynthia Whittenburg, CBP’s director of trade facilitation and administration, explained that CBP’s efforts are a work in progress. The agency has been studying what the role of the broker would look like in the 21st century with input from the National Customs Brokers & Forwarders Association of America.

CBP is considering “leveraging brokers to reach those small- and medium-sized importers that would not otherwise be accessible to programs like Importer Self-Assessment,” a voluntary approach to trade compliance, said Whittenburg. “Small- and medium-sized importers have heard about the program, they know there are benefits, but they may not have the bandwidth within their companies to engage in putting the controls or practices in place.”

Many of those who attended the symposium said they found it worthwhile. In a post-event survey, 95 percent of respondents were very satisfied with the value of the information provided during the 2011 Trade Symposium. “There’s all kinds of information that is important to me, being a licensed broker,” said Laurie Arnold, the regulatory compliance officer at JAS Forwarding Worldwide, a brokerage freight forwarding firm in Atlanta. “I want to see where CBP is going and what they are doing, and then give my input as well because it affects my livelihood,” she said. “I need to keep all of the knowledge in front of me to stay ahead of the game so that I can tell my clients. They expect that from me.” ■

—Marcy Mason

★ CBP’s Trade Symposium, held at the Ronald Reagan Building in Washington, D.C., on April 13-14, emphasized U.S. economic growth and competitiveness.



Photo by James Touchette

Coming Up Roses

CBP agriculture specialists make sure cut flower imports pass more than the smell test



One company's well-known slogan is "Say it with flowers," but if those flowers could talk, they'd probably have quite a story to tell. Most of them—whether destined for a dinner-table centerpiece, a wedding, funeral or a Mother's Day bouquet — have traveled thousands of miles in a cargo plane.

Although the ultimate recipients typically handle the stems and blooms with care, CBP agriculture specialists have already tapped, rapped and shaken them vigorously before they even get to the wholesaler.

But "spanking flowers" is serious business. Agriculture specialists conduct careful frontline inspections of commercial loads of cut flowers.

"Tapping the flowers loosens the pests clinging to the stems, foliate and buds," said Michael DiBlasi, chief CBP agriculture specialist at Miami International Airport. "On a daily basis, we find an average of between 80 and 100 pests on about 2,500 units inspected."

If any of these exotic tropical or semi-tropical pests get past CBP, they can thrive in Florida's climate, DiBlasi pointed out. "There's rarely any frost here, so these non-native insects can easily survive, reproduce and spread."

Some pests are new to the U.S. In January, Miami CBP intercepted a long-horned beetle that had hitched a ride in a shipment of asters from Ecuador. The agriculture department identified the pest as *Alcathousites* sp. Monne & Martins (Cerambycidae). *Alcathousites* belongs to the largest subfamily of long-horned beetles, one of the subfamilies with the most agriculturally significant pests.

Flowers over Miami

Other pests have been seen before in other areas of the country, but are new to the state or the port. "Recently, we intercepted a leaf hopper in a shipment from South Africa. It was the first time this leaf-hopper had ever been seized in Florida, and only the second time in the nation," said Linda Cullen, station chief, agriculture, Miami International Airport, Cargo.

The Miami airport is the nation's major hub for cut flower imports. Approximately two-thirds of the cut flowers that are sold in the U.S. enter the country through Miami. Every day, an estimated 40,000 boxes of flowers arrive at the Miami airport. Small wonder, then, that there are about 75 fresh-cut flower import companies near the Miami airport, occupying more than 1.4 million square feet of office, warehouse and cooler space. CBP conducts inspections at 24 warehouses within a five-mile radius of the airport.

Heading up Miami's agricultural inspection process is Gerard J. Russo, CBP's first assistant port director specifically assigned to agriculture. Like many other specialists, including Cullen and DiBlasi, Russo's roots are in the U.S. Department

of Agriculture, where he began his federal career 33 years ago after earning a degree in plant sciences from Rutgers University.

Global commerce means that pests and plant pathogens can travel more widely and more rapidly. In the past three decades, many U.S. cut flower growers have been supplanted by foreign suppliers.

"In 1979, we inspected, maybe, three boxes of flowers a week, because most were grown in California, Florida, Mexico and the Netherlands," said Russo.

Today, hundreds of boxes of flowers arrive daily, testing the mettle of even the most experienced specialists. "We have better interception skills than ever before and that's why interceptions are up," Russo says. "They know where to look, how to look and what to look for."

Mixed bouquets are the number one cut flower import entering through Miami, according to the Association of Floral Importers of Florida. Rose bouquets are next and in third place are loose stem cut roses. Colombia and Ecuador are the top cut flower exporters. Nationwide, the U.S. imports roughly 1.4 billion rose stems every year. In second place are carnations (approximately 640 million), and chrysanthemums are third (about 475 million).

From grower to grocer

Between the grower and the grocer or the local florist, the boxes of flowers are kept as cool as possible to maintain freshness and to keep buds from opening too soon. Flowers are trucked or flown from the growers to the departure airport, then carried



★ Miami Chief CBP Agriculture Specialist Michael DiBlasi supervises cut flower inspection.

photo by Meredith Travis

via cargo plane to Miami's airport where they are unloaded and warehoused for CBP inspection. The cargo planes don't require refrigerated containers on board, because they fly at night (when temperatures are cooler) and it is generally cold at flying altitudes.

But once the flowers land in the U.S., time is their enemy—even though they are refrigerated. Agriculture specialists know they have to work quickly and efficiently to safeguard the borders from pests and plant pathogens while facilitating the flow of commerce.

Of course, the specialists cannot look at every stem in every box. "That's where sampling is important," explains Station Chief Cullen. Each flower variety has different risk levels. Based on the contents, CBP decides how many boxes to pull from the shipment for examination.

Once the airline has samples ready, they call the command center, which is controlled by two supervisors, and based on the quantity and contents, they determine how many inspectors to send out. Everything is carefully reviewed, including invoices, airway bill numbers and even wood packaging material such as crates, which might also harbor unwanted pests.

Another mechanism for accelerating the process is the National Cut Flower Release Program. This program lets CBP use pest-risk analysis procedures to process cut flower imports more effectively and efficiently by expediting the release of high-volume, low-risk cut flowers. Seven airports participate in the program: Atlanta; Houston; Los Angeles; Miami; New York (JFK); San Juan; and St. Louis.

The release program, updated annually by USDA, recognizes that certain flowers from certain countries pose a low risk of pest infestation and/or disease contamination. Eligibility continually shifts; if a flower/country combination is selected as "flower of the day," then the specialist must inspect the entire contents of one box of each flower/country combination from each grower. If the flower/country combination is not selected as flower of the day, the commodity can be released without inspection.

Chewers, suckers and borers, oh my

The most common insect pests typically fall into one of four broad categories: "chewers," "suckers," "miners," or "borers." Chewers feed on all plant parts, chewing leaves and flowers. Chewers include caterpillars, grasshoppers and beetles. Suckers, such as thrips, aphids and mites, have mouthparts that pierce leaves, flowers or stems and then pump the liquid into their stomachs. Miners feed within the leaves of the plant and they leave trails that are clearly visible on the leaf. Borers are generally the larval stage of some moths and beetles that bore into stems and leaves.

Agriculture specialists are also on the lookout for diseases—mainly fungal diseases such as powdery mildew, bacterial leaf spots, plant rusts and various wilt diseases. One particularly worrisome disease is chrysanthemum white rust, caused by *Puccinia horiana* Henn, a fungal parasite that grows and reproduces on 12 species of chrysanthemums.

Chrysanthemum is one of the most popular and common cut flowers, first cultivated in China more than 16,000 years ago. Chrysanthemum white rust remained confined to Japan and China until 1963, when it began spreading rapidly on infected shipments of cut flowers.

Treatment of cut flower shipments infected with chrysanthemum white rust is typically fungicide. If the importer/consignee opts to have the shipment destroyed, the flowers are usually incinerated or steam-sterilized followed by burial in a landfill.

If a shipment requires fumigation, that two-hour process is overseen by the USDA. The most common fumigant for perishable products (such as fruits, vegetables and cut flowers) is methyl bromide, a colorless, odorless, nonflammable gas manufactured from naturally occurring bromide salts. Nevertheless, methyl bromide is highly toxic and USDA fumigators wear protective clothing whenever they handle methyl bromide.

Russo and his team know what's at stake when they inspect cut flowers. Besides tourism, agriculture is one of Florida's most important industries. A single, hungry pest or an undetected plant pathogen can jeopardize whole orchards, affecting the livelihoods and possibly the health of hundreds and even thousands of people. Under Russo's watch, dedicated agriculture specialists in Miami are facing down this growing concern. ■

—Kathleen Franklin



photo by Margalita Travis

★ The Miami airport is the nation's major hub for cut flower imports. Approximately two-thirds of the cut flowers that are sold in the U.S. enter the country through Miami.

Autogiros over the Border!

'Flying windmills' protect America during World War II

On a Sunday morning in August 1940, Delaware residents some 1,800 miles away from the Southwest border were greeted with a newspaper headline that read, "Autogiros over the Border." This sensational headline was not meant to incite mass hysteria, but to reassure readers that the U.S. government was deploying leading-edge technology to ensure border security. The subheadline read, "... war intensifies the alien problem so Uncle Sam is adopting a new aerial patrol."

This article and others like it were published in newspapers across the country. They introduced a modern Border Patrol that was adopting a different type of aircraft known as the autogiro to prevent illegal border crossings.

The growing global conflict and America's possible entry into war were redefining the nation's "alien problem." The Delaware Sunday Morning Star article noted that the Border Patrol was no longer just concerned with "desperate, even criminal men—Mexicans, Chinese, Russians, Hindus" because the patrol had recently intercepted a "suspected horde of Nazi fifth column borers." The "fifth column borers" referred to individuals who attempted to enter America clandestinely to infiltrate and destroy the nation from within.

Threats of espionage and sabotage gave additional reasons for securing the borders. And in the minds of Congress and the nation, extraordinary circumstances called



photo provided by the Library of Congress

★ An autogiro piloted by James Ray takes off on July 9, 1931, with Senator Hiram Bingham as a passenger.

Because the horizontal blades moved in response to air flows and were not driven by an engine, autogiros were dubbed 'flying windmills.'

for extraordinary resources. The deployment of the autogiro was in equal parts an advance in border policing and a deterrent that alerted friend and foe of the futuristic equipment employed to secure the nation.

A different type of aircraft

In aircraft development, the autogiro was between an airplane and a helicopter. It featured a fuselage with a single propeller at its nose like a conventional airplane and horizontal blades overhead, similar to a helicopter. Unlike a helicopter, the autogiro's horizontal blades were not motorized. Instead the propeller pulled the plane into motion, which caused the horizontal blades to spin. Because the horizontal blades moved in response to air flows and were not driven by an engine, autogiros were dubbed "flying windmills."

The autogiro was developed in the 1920s by Juan de la Cierva, a Spanish engineer. By the 1930s, American companies were experimenting with the technology and seeking government support for research and development. Demonstrations of autogiros occurred at the White House, the U.S. Capitol plaza, and even on the streets of Washington,

D.C. Members of Congress took test rides. The autogiro also captured the popular imagination, and some predicted that autogiros would soon rival automobiles as a mode for personal travel.

The proposed use of this emerging aerial technology for defense met with mixed response from the military. The Army began a research program in 1936 and subsequently developed an autogiro pilot training school while Assistant Navy Secretary Charles Edison informed Congress in 1938 that the "Navy was not

photo courtesy of Roger O'Connor



★ The autogiro fleet of Kellett autogiros owned by the U.S. Army. The crafts were declared surplus in 1940, and three autogiros were transferred to the Border Patrol for use in securing the Southwest border.

interested in experimenting with autogiros, but would be pleased if someone else were to develop them to a point suitable.”

Proponents of autogiros also investigated other uses. On Nov. 27, 1934, W.W. Kellett, president of the Kellett Autogiro Company, wrote Daniel MacCormack, commissioner of the U.S. Immigration and Naturalization Service, about the autogiro’s “useful purposes in the field operations” for the Border Patrol, then a part of INS. An internal investigation of possible uses followed, led by Border Patrol Chief W.F. Kelly, who was “himself an aviator,” according to the El Paso Herald Post. In 1934, he handwrote and initialed a comment on a memo to file stating, “I should like to see one of these [autogiros] tried out on the southern border.”

Kelly contacted Border Patrol district directors to solicit their opinions on the use of the autogiro. On May 20, 1935, Los Angeles District Director Walter E. Carr responded and noted that its use could reduce the need for personnel at the border fence. He stated that the “autogiro could prove invaluable both in actual patrol work . . . and in the actual pursuit and arrest of smugglers and aliens . . .” He also noted that the use of the autogiro “would reduce the personnel

estimated for the fence by about 25 men.” Four days later, the Border Patrol wrote Kellett Autogiro to inquire about the cost of purchase.

Despite Kelly’s ongoing interest, securing an autogiro was tabled for lack of funding until 1938 when border security became a front line against espionage. INS renewed lobbying to obtain the aircraft. In 1939, Congress held hearings on “urgent deficiencies” in the defense of the nation. A portion of the testimony from INS officials outlined the need for “three autogiros at \$15,000 each . . . for observation along the Mexican border . . .”

Problems airborne limit autogiro use

According to the 1941 Aircraft Yearbook, both the Border Patrol and the National Park Service received Kellett YG-1B autogiros “for aerial sentry duty along the Mexican border.” These aircrafts were not new. They transferred from the Army on Dec. 31, 1940, and in tests and operation, the surplus autogiros proved less than satisfactory. The Border Patrol put its three autogiros into service in early May 1941, and they were flown by Ned D. Henderson, J.E. Parker, and Greg Hathaway, all of whom had

completed the Army’s autogiro flight school. By May 25, two of the autogiros had been forced down: one from rotor blade trouble and the other from engine failure. Both remained out of service for months.

The program was in trouble, and on June 7, Ned Henderson wrote to Chief Kelly, “I regret very much the bad luck with the autogiro and trust it will not cause them to be discontinued.” Months later, problems with the aircraft persisted, and the deployment of the autogiro was now questioned. In November 1941, Kelly reported that “our one undamaged autogiro, which was flown to El Paso, has never gotten into regular successful operation . . .”

This led to a comprehensive series of autogiro test flights by Gregory Hathaway and J. E. Parker. Hathaway reported that “my original impression . . . that the autogiro would be the perfect solution to the problem of patrolling the border in remote areas and from the air . . . [was] incorrect.” Both Hathaway and Parker noted that the autogiro was not well suited for the terrain or the climate on the Southwest border. Despite these findings, Hathaway reported that he was “willing to fly the autogiro anytime and anywhere . . .”

Parker concluded in his report, “. . . it must be remembered that the plane is over five years old, was designed and accepted by the Army some seven years . . .” But Parker recommended restricting the autogiro use to primarily the early mornings and in limited geographical areas. With the aircraft “limited to short-range patrol, in favorable weather,” Parker said, “it may be possible to use it successfully for some time.”

National press promotes autogiros

Little of the autogiros’ shortcomings was reported by the press. Instead, newspapers and magazines touted the autogiro’s deployment as part of a comprehensive modernization of border enforcement, largely because the autogiro’s purported ability to land without an airstrip and hover in one spot had captured the imagination of the national press even before the Border Patrol had received the aircraft. In a Dallas News article, distributed nationally and carried in

★ A Kellett YG1B autogiro employed by the Border Patrol on the southwest border during World War II. Its use captured the popular imagination and was the subject of numerous newspaper articles published across the United States.





★ Border Patrol Pilot Ned D. Henderson was injured in a second crash of an autogiro on November 16, 1945, near Sullivan City, Texas. He died from his injuries two days later.

the Milwaukee Journal on Aug. 4, 1940, reporter Tom Simmons wrote, “. . . border patrol has put to use inventions and instruments that most folks figure are still laboratory playthings. The latest is the autogiro.” Simmons’ view of the autogiro as experimental was not accurate since the craft had been in commercial production since the early 1930s.

Columnist and editor Oren Arnold, whose nationally-syndicated news features announced the forthcoming deployment of autogiros, further sensationalized the autogiro in a fictional, serialized story that appeared in newspapers across the country. The hero of the story was “Border Patrol Inspector Sheridan Starr.” Starr shared his valiant role with an autogiro, which he used to foil an espionage plot. Throughout much of the narrative, the autogiro frequently upstaged the daring feats of Starr.

This fictional story also called on the government to deploy more autogiros to the border. In the chapter published Nov. 23, 1940, Oren used the fictional Starr to voice “the need for autogiro planes in the border service. With only three autogiros now, more should be added. . . .” This serialized story ended with people watching in awe as “the autogiro soar[s] off like the weird mechanical bird it was. . . .” while expressing their gratitude for its guardianship of the border.

An article in the *Christian Science Monitor* juxtaposed the use of the autogiro with fencing the entire Southwest border. While the article did not explicitly favor the autogiro, it presented its deployment as economical as opposed to the great expense of constructing “one section [of fence] from

the mouth of the Rio Grande River to Del Rio.” According to the *Christian Science Monitor*, the estimate was “\$658,000 or \$581,000, depending on whether it follow[ed] the meandering Rio Grande for 440 miles or parallels highways near the river to give it a length of only 415 miles.”

Nationwide publicity for the autogiro continued as the U.S. entered World War II. In November 1942, *Popular Mechanics* magazine chronicled the “armed men in autogiros” as part of a comprehensive effort to prevent “spies and saboteurs from crossing our borders and to keep information of interest from being carried out of the country.” A year later, the *Chicago Daily Tribune* published an entire section titled “Meet the Border Patrol.” It highlighted the autogiro as part of the “modern methods of the modern Border Patrol.” The section ended with a request of readers to “save this section and send it to a man in the service.”

At the end of World War II, the Border Patrol purchased an additional autogiro from the Army for Southwest border use. The chief of the INS Alien Control Division, B.H. Carter, explained that the autogiro was “the best for our purposes—observation, radio work and hovering over a locality to guide officers in cars to places where smuggling activity is taking place.” An earlier newspaper account detailed how autogiros allowed the Border Patrol to apprehend smugglers and illegal border crossers on terrain that was inaccessible to cars and traditional planes.

Despite these benefits, the Border Patrol’s use of the autogiro was soon

discontinued. In November 1945, Border Patrol autogiro pilot Ned Henderson died in a crash while returning to his home base in McAllen, Texas. Henderson’s death highlighted the inherent dangers of operating the craft although the accident was not caused by craft malfunction. The emerging advances in helicopter design also were making the autogiro obsolete. By the early 1950s, the Border Patrol had discontinued the use of autogiros in favor of light airplanes. A 1958 INS report provided a final postscript, stating that autogiros were replaced because they lacked “range and reliability.”

While autogiros have been relinquished to a footnote in aviation history, their impact on border security remains sizeable. During their short deployment, autogiros transformed border air patrol from surveillance to direct involvement in policing and enforcement activities. In the words of autogiro pilot J.E. Parker, autogiros demonstrated that coordination “between the scouting aircraft, the ground crews, and sector headquarters was a must.” ■

—David D. McKinney, Ph.D.,
Chief Historian



★ Crash site of autogiro in May 1941. This crash and another incident involving a second autogiro led the Border Patrol to evaluate the use of the craft. As a result, the autogiro was restricted to certain terrain and was flown during the early morning when environmental conditions were optimum.

Border Busts



CBP Agents Retrieve Nearly 3 Tons of Marijuana from Texas Brush

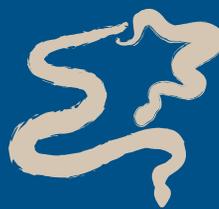
Edinburg, Texas — Over the weekend of March 11-13, CBP agents from the Office of Air and Marine and

U.S. Border Patrol worked in collaboration to confiscate nearly 3 tons of marijuana in southeast Texas.

The largest seizure occurred Friday, March 11, when an agent from the Rio Grande Valley sector located 1,900 pounds of marijuana hidden among the brush. Agents from the CBP Office of Air and Marine were called to helicopter the confiscated bundles of marijuana to other agencies for further investigation.

Another seizure of almost 1,000 pounds of marijuana occurred that following Sunday, March 13, near Escobares after Border Patrol agents detected questionable activity near an abandoned mobile home. Agents noted a strong odor of marijuana and upon further investigation of the home seized bundles of marijuana at an estimated value of \$790,000.

Other incidents throughout the sector brought the total value of marijuana seized over that weekend to an estimated \$4.6 million.



Shipment of Live Snakes, Lizards Intercepted by CBP Officers

Brownsville, Texas — CBP officers uncovered a shipment of live snakes and lizards at the Brownsville

and Matamoros International Bridge in south Texas.

In early March, a traveler from Mexico carried a shipment of 52 live snakes and lizards that lacked the commercial entry documentation, required by the U.S. Fish and Wildlife Service.

Wildlife, including pets, imported into the U.S. must be declared and cleared for import by the U.S. Fish and Wildlife Service prior to release by CBP.

The port director, Michael T. Freeman, commented on the rarity of this seizure stating, “The shipment of live snakes and lizards is one of the strangest seizures at the B&M Bridge in a long while. CBP enforces hundreds of laws and we work together with federal, state, and local agencies in a continuing effort to protect our country.”

On behalf of the U.S. Fish and Wildlife Service, the agents seized the animals and transferred them to the Brownsville Gladys Porter Zoo.



CBP Officers Intercept 21 Pounds of Ecstasy

Buffalo, N.Y. — CBP officers at the Peace Bridge port of entry seized nearly 21 pounds

of the drug Ecstasy from a 25-year-old female citizen.

The young woman was apprehended as she applied for U.S. admission. Upon making a negative declaration, she was referred for a secondary examination. During an authorized pat down CBP officers identified that the apparently pregnant woman was wearing a body suit with a modified stomach area. Upon removal of the suit, the agents discovered approximately 34,000 pills with a total weight of 21 pounds. The young woman was arrested on federal charges of importation and possession with the intent to distribute a controlled substance and turned over to agents of U.S. Homeland Security Investigations for further review.



Destructive Beetle Larvae Intercepted at Dulles Airport

Sterling, Va. — CBP agriculture specialists found two khapra beetle larvae while inspecting parcels imported from Saudi Arabia. After thorough investigation of the parcels, the agents noticed two khapra beetle larvae in a rice-filled burlap bag.

The U.S. Department of Agriculture regards khapra beetles as one of the most destructive insect species worldwide. It is classified as a “dirty feeder” because it damages more grain than it consumes and contaminates grain with body parts and hairs. In addition to damaging grain, consumption of infected grain can lead to gastrointestinal irritation in adults and greatly sicken infants.

“An interception of a highly-invasive and destructive insect pest such as the khapra beetle is a significant discovery for Customs and Border Protection agriculture specialists,” stated Christopher Hess, CBP director for the port of Washington.

The parcels were declared as clothes, dry dates, spices, coffee, dry food, noodles, tea and sugar and were headed to Rhode Island.

RESOURCES

NEED ANSWERS?

CBP has over 600 answers to your most frequently asked questions, as well as a few that aren't so common. Please use this page to research the information you need. If you do not find it, or have additional questions, you will then be given an opportunity to send us a question.

<https://help.cbp.gov>

or call (877) 227-5511 or (703) 526-4200

U.S. PORTS OF ENTRY

Locate a Port of Entry – Air, Land, or Sea.

www.cbp.gov/xp/cgov/toolbox/contacts/ports/

TRAVEL INFORMATION

CBP provides helpful information about the entry process, travel program and more for U.S. citizens and international visitors.

www.cbp.gov/travel

Trusted Traveler Programs

For expedited travel for air and land border crossing enroll in one of the following programs.

- Air travel – www.globalentry.gov
- Northern land border crossing – www.nexus.gc.ca
- Southern land border crossing – www.senti/gov

For international Visa Waiver Travelers

Electronic System for Travel Authorization

<https://esta.cbp.dhs.gov>

TRADE INFORMATION

CBP provides information and resources to the trade community about basic importing and exporting, cargo security and more.

www.cbp.gov/trade

CAREERS WITH CBP

If you are interested in a career with CBP, check out the “Careers” website for more information.

www.cbp.gov/careers

HELPFUL WEBSITES:

U.S. Department of Homeland Security – www.dhs.gov

DHS TRIP – www.dhs.gov/trip

U.S. Customs and Border Protection – www.cbp.gov

Transportation Security Administration – www.tsa.gov

DHS Social Network – www.ourborder.ning.com

Federal Emergency Management Agency – www.fema.gov

U.S. Citizenship and Immigration Services

- I-551, Permanent Resident Card (“Green Card”) www.uscis.gov

U.S. Immigration and Customs Enforcement – www.ice.gov

United States Coast Guard – www.uscg.mil

U.S. State Department

- Passports – www.travel.state.gov/passport
- Visas – www.travel.state.gov/visa
- Visa Waiver Program – www.travel.state.gov/visa
- Cultural property – www.exchanges.state.gov/culprop

United States Department of Agriculture/APHIS

- Birds – www.aphis.usda.gov/subjects/animal_health
- Plants and seeds – www.aphis.usda.gov/plant_health

TAKE THE MEMORIES, **LEAVE THE REST**

We understand why you would want to bring a bit of Mexico home with you, but be aware of the regulations.

So take memories of Mexico home with you – not restricted items!



PROHIBITED:

**MEATS, FRUITS, VEGETABLES, PLANTS, SOIL OR ANIMAL
OR PLANT MATERIAL PRODUCTS**



CBP

For more information visit the CBP website at www.cbp.gov or the
APHIS Plant Protection and Quarantine website at www.aphis.usda.gov/ppq.



NTAS: National Terrorism Advisory System
www.DHS.gov/alerts

Report suspicious activity
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