

[109 Senate Hearings]
[From the U.S. Government Printing Office via GPO Access]
[DOCID: f:21922.wais]

S. Hrg. 109-51

STRENGTHENING BORDER SECURITY BETWEEN THE PORTS OF ENTRY: THE USE OF
TECHNOLOGY TO PROTECT THE BORDERS

=====

JOINT HEARING

before the

SUBCOMMITTEE ON IMMIGRATION, BORDER SECURITY AND CITIZENSHIP

and the

SUBCOMMITTEE ON TERRORISM, TECHNOLOGY AND HOMELAND SECURITY

of the

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

APRIL 28, 2005

Serial No. J-109-18

Printed for the use of the Committee on the Judiciary

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 2006

For Sale by the Superintendent of Documents, U.S. Government Printing Office
 Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; (202)
 512-091800
 Fax: (202) 512-092250 Mail: Stop SSOP, Washington, DC 20402-090001

COMMITTEE ON THE JUDICIARY

ARLEN SPECTER, Pennsylvania, Chairman

ORRIN G. HATCH, Utah	PATRICK J. LEAHY, Vermont
CHARLES E. GRASSLEY, Iowa	EDWARD M. KENNEDY, Massachusetts
JON KYL, Arizona	JOSEPH R. BIDEN, Jr., Delaware
MIKE DeWINE, Ohio	HERBERT KOHL, Wisconsin
JEFF SESSIONS, Alabama	DIANNE FEINSTEIN, California
LINDSEY O. GRAHAM, South Carolina	RUSSELL D. FEINGOLD, Wisconsin
JOHN CORNYN, Texas	CHARLES E. SCHUMER, New York
SAM BROWNBACK, Kansas	RICHARD J. DURBIN, Illinois
TOM COBURN, Oklahoma	

David Brog, Staff Director

Michael O'Neill, Chief Counsel

Bruce A. Cohen, Democratic Chief Counsel and Staff Director

Subcommittee on Immigration, Border Security and Citizenship

JOHN CORNYN, Texas, Chairman

CHARLES E. GRASSLEY, Iowa	EDWARD M. KENNEDY, Massachusetts
JON KYL, Arizona	JOSEPH R. BIDEN, Jr., Delaware
MIKE DeWINE, Ohio	DIANNE FEINSTEIN, California
JEFF SESSIONS, Alabama	RUSSELL D. FEINGOLD, Wisconsin
SAM BROWNBACK, Kansas	CHARLES E. SCHUMER, New York
TOM COBURN, Oklahoma	RICHARD J. DURBIN, Illinois

James Ho, Majority Chief Counsel

Jim Flug, Democratic Chief Counsel

Subcommittee on Terrorism, Technology and Homeland Security

JON KYL, Arizona, Chairman

ORRIN G. HATCH, Utah	DIANNE FEINSTEIN, California
CHARLES E. GRASSLEY, Iowa	EDWARD M. KENNEDY, Massachusetts
JOHN CORNYN, Texas	JOSEPH R. BIDEN, Jr., Delaware
MIKE DeWINE, Ohio	HERBERT KOHL, Wisconsin
JEFF SESSIONS, Alabama	RUSSELL D. FEINGOLD, Wisconsin
LINDSEY O. GRAHAM, South Carolina	RICHARD J. DURBIN, Illinois

Stephen Higgins, Majority Chief Counsel

Steven Cash, Democratic Chief Counsel

C O N T E N T S

STATEMENTS OF COMMITTEE MEMBERS

	Page
Coburn, Hon. Tom, a U.S. Senator from the State of Oklahoma.....	5
Cornyn, Hon. John, a U.S. Senator from the State of Texas.....	1
prepared statement.....	66
Kyl, Hon. Jon, a U.S. Senator from the State of Arizona.....	3
Leahy, Hon. Patrick J., a U.S. Senator from the State of Vermont, prepared statement.....	78

WITNESSES

Aguilar, David, Chief, Office of Border Patrol, Customs and Border Protection, Department of Homeland Security, Washington, D.C.....	7
Evans, Kirk, Director, Mission Support Office, Homeland Security Advanced Research Projects Agency, Science and Technology Directorate, Department of Homeland Security, Washington, D.C..	9

QUESTIONS AND ANSWERS

Responses of Mr. Aguilar and Mr. Evans to questions submitted by Senator Grassley.....	37
---	----

SUBMISSIONS FOR THE RECORD

Aguilar, David, Chief, Office of Border Patrol, Customs and Border Protection, Department of Homeland Security, Washington, D.C., prepared statement.....	40
American Immigration Lawyers Association, Kathleen Campbell Walker, National Second Vice President, Washington, D.C., statement.....	50
Evans, Kirk, Director, Mission Support Office, Homeland Security Advanced Research Projects Agency, Science and Technology Directorate, Department of Homeland Security, Washington, D.C., prepared statement.....	69
Pew Hispanic Center, Jeffrey S. Passel, Senior Research Associate, Washington, D.C., report.....	79
Taylor, Henry F., Distinguished Professor of Electrical Engineering, Texas A & M University, College Station, Texas,	

statement.....

STRENGTHENING BORDER SECURITY BETWEEN THE PORTS OF ENTRY: THE USE OF
TECHNOLOGY TO PROTECT THE BORDERS

THURSDAY, APRIL 28, 2005

United States Senate,
Subcommittee on Immigration, Border Security and
Citizenship and the Subcommittee on Terrorism, Technology
and Homeland Security, Committee on the Judiciary,
Washington, D.C.

The Subcommittees met, pursuant to notice, at 3:00 p.m., in
room SD-138, Dirksen Senate Office Building, Hon. John Cornyn,
Chairman of the Subcommittee on Immigration, Border Security
and Citizenship, presiding.

Present: Senators Cornyn, Kyl, and Coburn.

OPENING STATEMENT OF HON. JOHN CORNYN, A U.S. SENATOR FROM THE
STATE OF TEXAS

Chairman Cornyn. This joint hearing of the Senate
Subcommittee on Immigration, Border Security and Citizenship
and the Subcommittee on Terrorism, Technology and Homeland
Security will come to order.

I first want to express my gratitude to Chairman Specter
for scheduling this hearing. This hearing is the third in a
series of joint hearings that Senator Kyl and I and our
Subcommittees have had together to examine our immigration
system from top to bottom. And I want to express my gratitude
here publicly to Senator Kyl for his hard work and his
partnership in working with me and our staff on these issues.

As Senator Kyl and I announced a few weeks ago, we are
working closely together and will continue to work with other
Senators as well to identify and develop solutions to the
critical problems that affect our immigration system. I want to
express my gratitude as well to the Ranking Member of my
Subcommittee, Senator Kennedy, as well as Senator Feinstein,
the Ranking Member on the Terrorism Subcommittee, as well as
their staffs, for working with us to make these hearings
possible. To be successful, any effort to reform and to
strengthen our immigration system in the United States Senate
must be a bipartisan effort, and we look forward to continuing

to work with our colleagues to that end.

A few weeks ago, the Senate approved a broad, bipartisan sense of the Senate resolution, a resolution introduced by Senator Feinstein and myself. That resolution demonstrated to my mind that there is a growing consensus across the partisan and ideological spectrum that our immigration system is badly broken and fails to serve the national interests of our national security and our national economy and undermines respect for the rule of law, and that in a post-9/11 world, national security demands comprehensive reform of our immigration system.

President Bush has articulated a vision for the comprehensive reform of our Nation's immigration laws. I am personally sympathetic to the President's vision, and I look forward to the critical role that our Subcommittees will play in the coming congressional debate.

No serious discussion of comprehensive immigration reform is possible, however, without an overall review of our Nation's ability and will to secure our borders and enforce our immigration laws. We must provide sufficient tools and resources to those whose job it is to protect our borders and maintain our homeland security and identify those in our country who should be apprehended and removed, including those who should be deported.

Accordingly, today's hearing is the third in a series of hearings focusing on identifying holes in our immigration enforcement system, places where enforcement has been badly deficient. Unfortunately, there are too many of those holes. Our immigration laws have been poorly enforced for far too long. That is because, in my view, the Federal Government has simply not lived up to its obligation to provide the resources and manpower in order to do just that. That must end and that will end.

For example, at our last hearing, we examined challenges to enforcement in the interior of our country. We respect the hard work and efforts of our immigration investigators, detention officials, and other professionals responsible for locating, detaining, and removing those who remain in this country in violation of our laws. Yet as that hearing made clear, our deportation system is overlitigated and underresourced, overlawyered and underequipped.

That hearing identified a number of specific problems, including the extra layers of appeals granted specifically to aliens who are deportable due to criminal activity and the judicially mandated release onto our streets of potentially dangerous individuals. Over one million aliens face deportation proceedings this year, yet we only have approximately 19,000

detention beds to hold them. As a result, as many as 80 percent of those ordered to leave the country never show up to be removed.

At our first hearing, we examined the challenges to enforcement along the border at the ports of entry. As that hearing made clear, we need better training opportunities and information provided to our front-line personnel, and we need to improve the reliability of documents used for entry into our country. National security demands we strengthen border inspection, ensure document integrity, and combat document fraud.

Today's hearing will focus on securing our borders in between the authorized ports of entry. We will examine what tools and resources are currently being employed and what resources and tools may be needed to fill in the gaps along the perimeter of our country. To put it simply, we must shut down all of the routes used to enter our country outside of authorized ports of entry.

Unfortunately, this is easier said than done. The U.S. Border with Mexico runs almost 2,000 miles, while our border with Canada runs roughly 5,000 miles. My home State of Texas alone accounts for a majority of the Southern border, sharing about 1,285 miles, or 65 percent of the Southern border.

In Fiscal Year 2004, the total number of arrests along the Southern border totaled more than 1 million with approximately 330,000 of those apprehended entering Texas illegally. And, the numbers are only increasing. Indeed, we have already surpassed last year's number in the current fiscal year.

These numbers demonstrate the hard work and dedication of our Border Patrol under the most difficult of circumstances, but also indicate the tremendous challenges that they face given the current staffing and resources that they have been provided by the Government.

According to the Pew Hispanic Center, the U.S. averages 700,000 to 800,000 new undocumented aliens every year. We simply must and can do better. We must explore the better use of technology. The effective use of technology between the ports of entry can serve as a force multiplier for our Border Patrol agents and officers charged with securing our border. And as we have heard time and time again, the same means of entry that can be used for someone who wants to come to the United States to work can likewise be used just as easily by those who want to come here to commit crimes or perhaps acts of terrorism.

Technology allows our agents, though, to conserve manpower and efficiently respond when we identify breaches in our border. But it is by itself no panacea. There will inevitably

be glitches in deployment and use of technology, and clearly, technology is only as good as the men and women we have on the ground who we must teach to utilize it and take advantage of it to the maximum degree.

Accordingly, today we examine the existing technology used along our border and used to secure it and learn a little bit more about how it is actually deployed on the ground. We will hear what problems have been experienced and what Congress might be able to do to provide more support in this area. And I hope that today's witnesses will give our Subcommittees a better idea of what else this Subcommittee and the Judiciary Committee and the United States Congress as a whole can do to fully secure our borders in between the ports of entry through the most effective use of technology.

[The prepared statement of Senator Cornyn appears as a submission for the record.]

With that, I will turn the floor over to Senator Kyl, my colleague and the Chair of the Terrorism Subcommittee.

OPENING STATEMENT OF HON. JON KYL, A U.S. SENATOR FROM THE
STATE OF ARIZONA

Chairman Kyl. Thank you, Chairman Cornyn. I join you in welcoming everyone to this hearing today. We will be examining today the use of technology to help secure the borders of the United States between our ports of entry, as you noted, and our two witnesses here today are obviously both very capable to provide us information in that regard.

This hearing today is part of a larger commitment, as Senator Cornyn noted, that his Subcommittee and mine will use to help to educate our colleagues as well as put on the public record the need to enforce the immigration laws of the United States, how we can better do that in order to protect ourselves from terrorist and criminal threats and to restore integrity in the rule of law.

The name of my Subcommittee is Terrorism, Technology and Homeland Security, so this hearing today is directly related to the activities that we have been engaged in, and I am very much looking forward to hearing from our witnesses today so that we can better make the point to our colleague that the Federal Government cannot continue to overlook its distinct and singular obligation to maintain law and order on the border and that we have got to fully commit ourselves to funding the agencies that make up our immigration system so that these agencies can effectively perform the work that we call upon them to do as well as provide them direction and oversight.

We count on DHS, as always, to be very frank in discussing

the challenges it faces in enforcing our immigration laws. We are always interested in learning about progress that you have made, but also problems and needs that you have, what we can do to help you secure the tools that you need in carrying out your mission.

I just want to add to the formal statement that I have just made this personal comment. In the sector that is the highest use of illegal immigrant smuggling, the Tucson Sector on the Arizona border that used to be the responsibility of the Chief of the Border Patrol, David Aguilar, got a great deal of national attention focused because of a group of private citizens who chose to draw attention to the problems in that part of the border by going there themselves and staking out some territory along the 9- or 10-mile area, calling themselves ``the Minutemen'' and, as I have said, demonstrating that a little bit more manpower in an area can help to control the border.

Now, as to whether or not it was their presence that had the effect, there are differences of opinion. But there are a couple of things I think that are unassailable. One of them is that the fact that the Mexican Government knew that they were there and apparently had some concerns about them, about what these people would do, concerns that have proven to be unfounded in terms of any violence or harm brought to the illegal immigrants. But because there were concerns, the Grupa Beta, which is the police force south of the border responsible for would-be immigrant safety, as it were, and perhaps other Mexican agencies, attempted to dissuade people from crossing the border. And it appears to have worked. The immigration in the Tucson Sector appears to have dwindled to a trickle.

This was not due to any great technology application. It was simply the threat that there were a bunch of Americans on the north side of the border that might cause harm to these immigrants, as a result of which the Mexican Government was able all by itself to bring the immigration in that area to a trickle, according to the statistics we have, which suggests something else, and that is that better cooperation with the Mexican Government in thwarting the illegal immigration would be another force multiplier, that it should not be all the United States playing defense, and that we ought to seek more agreements with our friends to the South, the Government of Mexico.

Chief Aguilar, I will be especially interested in your testimony in this regard. You identify a great many different agreements and partnerships and so on, all of which may have some discrete and limited benefit, but which added together amount to a drop in the bucket and, frankly, focus more on the

tougher cases, the drug smuggling and some of the higher-priority cases that may potentially involve terrorism, for example, but have very little effect on the run-of-the-day normal illegal immigration problem that exists.

I will be very curious not only to focus on the kind of technology that we could employ, but because of your experience, anything you might add about ways in which we could encourage the Mexican Government to stop encouraging illegal immigration and start helping us by discouraging illegal immigration. Again, slightly outside the burden of our hearing today, but since your written testimony contains so many pages of reference to how we have worked with the Mexican Government, I thought it was an appropriate question to sort of preliminarily ask you.

I am looking forward to the testimony that both of you have to offer today, and I suspect that we can keep the record open for either questions from our colleagues or additional comments from the witnesses, if they would like.

Chairman Cornyn. Senator Coburn? I want to recognize our colleague from Oklahoma who has been conscientious about attending these Subcommittee hearings as well. We would be glad to recognize you for a few brief opening remarks.

STATEMENT OF HON. TOM COBURN, A U.S. SENATOR FROM THE STATE OF
OKLAHOMA

Senator Coburn. Well, thank you both, Chairmen.

First of all, we had a discussion, and I think it is important that you all hear this and take it back. The rules of the Senate, although we do not have the rules formalized in the Committee, is your testimony is to be here 48 hours before we have this meeting. And there is a real good reason for that, and that is so we can read what you have to say, think about what you have to say, and formulate great questions so that we can do the business of the people of this country. And I understand it is not either of your fault that your testimony did not get here because it goes through a filtering process. And so I do not hold either of you accountable. But I do want the Committee to know and I want it to go up the line that when we do get our rules in the future, I will be making a point of order and a formal objection to the continuation of any Committee meeting where my staff or I are not able to be prepared. We had one testimony arrive at 1:40 p.m. today for this hearing. And, again, it is not of your fault. I know it is not of your fault. But that message needs to be taken home.

The second point I want to make is to Chief Aguilar. Thank you for your service and thank you for your leadership. You all

are not recognized right now. You are seen sometimes as the problem, and you are not the problem. The fact is you just do not have enough help and resources. And I want to publicly thank you for putting your life on the line for the rest of the people in this country. And the rest of the people in the country get it. You all are important and vital to our national security as well as our way of life. And this is a country of immigrants, and we do not want that to stop, but we do want the law. And what you do to enforce the law every day I want you to know we appreciate from the bottom of our heart, and we recognize that you put yourself and your own families at sacrifice when you do that.

Finally, a comment that was made to me in private, and I will not relate who it is, but it concerns me a great deal with people within the administration are not allowed to give us what they really think, that it has to be filtered. In other words, a lot of people in this administration know what we need to do, but it does not fit with what the plan is. And so, therefore, the true thought and the true personal testimony does not come to the Members of Congress.

And I just want to encourage you, when that happens, to be bold enough to make sure Members of Congress know how you really feel, even if it is in private, because we cannot make decisions--and I think in the homeland security areas more than anywhere else, I am picking up from individuals within the administration that they are not allowed to tell us what they really think, that they have to toe the line. And that is good. You should be loyal. But the other thing is we really need the information to make the best decisions.

So I would encourage you, if that happens, members of this body, I guarantee you, you will be protected, but we need to have all of the information, not just what they want us to have.

With that, thank you for your testimony. I thank you for holding this hearing, and I look forward to asking questions. Thank you.

Chairman Cornyn. Thank you, Senator Coburn.

We are pleased today to have a distinguished panel from the Department of Homeland Security, and I will introduce the panel and then ask each of you to provide us with an opening statement for about 5 minutes each, and then we will proceed to some questions and answers.

David V. Aguilar has served as the Chief of the Office of Border Patrol since May of 2004. As the Nation's highest-ranking Border Patrol officer, Chief Aguilar directs the enforcement efforts of more than 12,000 Border Patrol agents nationwide. He brings us the knowledge and expertise gained

from more than 26 years of service in the Border Patrol.

Dr. Kirk Evans is the Office Director of the Homeland Security Advanced Research Projects Agency. Dr. Evans has more than 27 years of experience in program management and acquisition of systems for surveillance and command, control, and communications.

Gentlemen, we welcome both of you, and we would be pleased to hear your opening statements. Let's begin, if we may, Chief, with you. If you would provide us your opening statement for about 5 minutes, then we will turn to Dr. Evans, and then we will engage in hopefully some good conversation back and forth.

STATEMENT OF DAVID AGUILAR, CHIEF, OFFICE OF BORDER PATROL,
CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY,
WASHINGTON, D.C.

Mr. Aguilar. Yes, sir, thank you, Chairman. Chairman Cornyn, Chairman Kyl, Senator Coburn, thank you for your kind statements, and we appreciate that.

It is my honor to have the opportunity to appear before this panel today and discuss the successes, the achievements, and some of the remaining challenges that we have had in the United States Border Patrol in securing our Nation's borders. It is a challenge. Challenges remain. Our job is not done, but I can assure this panel that the men and women of the United States Border Patrol are continuing to do everything they can within the resources that we have to make this Nation more secure.

My name is David Aguilar, and I am the Chief of the Border Patrol. I would like to begin this morning by giving you a snapshot, a brief overview of the agency and how we operate out there.

One of the very obvious things but I don't think it is stated often enough is the following: that our primary mission is, in fact, to detect, deter, and apprehend terrorists and their weapons as they attempt to enter into the United States. It is very critical to also point out that our traditional missions that have come with us from our legacy organizations remain and are still very important, and I will point out why I think that is still very important today as we speak a little later on. But those traditional missions of keeping out narcotics, aliens, smugglers of any other contraband also continue to be a very important and integral part of our everyday job out in the field, out in the border, South, North, and on some of the coastal waterways that we patrol.

We have spoken a little bit about the Southern border. The Southern border is over 2,000 miles of border, the Northern

border is over 4,000, and we patrol over 2,000 miles of the coastal or maritime sector that are taken up by our Miami, New Orleans, and Puerto Rico Sector. Within that area of operation along our Nation's borders, last year, during the fiscal year, the United States Border Patrol agents apprehended over 1.1 million apprehensions last year. Of those 1.1 million apprehensions, approximately 52 percent of those were apprehended within the State of Arizona. Today as we speak, this chart up here depicts that the heaviest flow is into, in fact, Arizona and the New Mexico of operation. Approximately 61 percent of our apprehensions are occurring today as we speak year to date in that part of the country.

Last year, fiscal year 2004, we apprehended over 1.3 million pounds of marijuana as it attempted to enter into this country. Today as we speak, alien apprehensions are up by about 3 percent. We are down in apprehensions by about 10 percent in the area of narcotics. Last year, we apprehended a total of 75,000 other than Mexicans crossing our Nation's borders. Today as we speak, year to date we are at approximately 71,000 OTMs. We are up by approximately 124 percent in the area of OTMs.

Now, we did this with about 12,000 agents, as the Senator pointed out. We have, of course, remote video surveillance systems strewn throughout the border, especially on the Southern border, a total of about 246 camera sites as we speak today. We have approximately 112 aircraft along our Nation's borders out there, but the challenges continue to be there, the challenges such as the urban-to-rural dynamics that I speak of.

When we started operations along the Nation's borders, especially in El Paso, in 1993, it was a very urban-type operation that we conducted out there. We moved from El Paso in 1993-94 to San Diego. The shift shifted over towards South Texas. We went to South Texas, and then we ended up in Arizona. Those were urban-type operations. They were easier than what we are faced with today.

Today we are faced with very rural-type operations where the dissipation of the criminal organization is out in the very rural areas. Technology is absolutely critical in these rural environments, and that is one of the reasons that I am very glad that we are holding these hearings today.

The vastness, the remoteness. One of the other challenges that we face that Senator Kyl knows very well is that of environmental concerns out there. Just to give you an idea, approximately 40 percent of our Southern border lands that we are responsible for patrolling are federally managed, environmentally protected, or environmentally sensitive; the Northern border, approximately 27 percent. Again, this is important to us because it requires us to be able to access and

be mobile laterally along our Nation's borders in order to conduct national security efforts.

We have come a long way. We worked very closely with the Department of the Interior, with the Department of Agriculture to gain the latitude that we need in order to operate out there, but, again, this is an area where technology is going to help us tremendously.

The manner in which we deploy basically is based on the criminal organizations. The Southern border is the infrastructure that is south of us. The Northern border, Canadian population, approximately 90 percent of the Canadian population lives within 100 miles of our borders there. The density of population is such that the potential metropolitan targets, such as Boston, Philadelphia, Washington, D.C., New York City, are the areas we concentrate on. On the Northwest, also we have our Blaine Sector where the potential targets are Los Angeles.

One of the things that is absolutely critical that I would like this Committee to hear is that we have implemented a revised National Border Patrol Strategy that has now been in place for about 6 or 8 months. Key objectives: establish substantial probability of apprehending terrorists as they enter into this country; deter illegal entries between the ports of entry; detect, deter, and apprehend aliens, narcotics, and other contraband smugglers; leverage smart border technology as a force multiplier for our personnel out there; and reduce crime in border communities, reinvigorate the economic vitality, and improve the quality of life of those communities.

My time is out, I know, but I just want to make a statement that I thank the Subcommittee for this opportunity to present this testimony. I assure you that the men and women of the United States Border Patrol are doing everything that they can, and we will continue to be assertive and aggressive in protecting and increasing this Nation's security.

Thank you.

[The prepared statement of Mr. Aguilar appears as a submission for the record.]

Chairman Cornyn. Thank you, Chief.

Dr. Evans, we would be glad to hear an opening statement from you.

STATEMENT OF KIRK EVANS, DIRECTOR, MISSION SUPPORT OFFICE,
HOMELAND SECURITY ADVANCED RESEARCH PROJECTS AGENCY, SCIENCE
AND TECHNOLOGY DIRECTORATE, DEPARTMENT OF HOMELAND SECURITY,
WASHINGTON, D.C.

Mr. Evans. Good afternoon, Chairman Cornyn, Chairman Kyl, Senator Coburn. It is my pleasure and honor also to come before you today to share our vision and progress in developing sensor and information systems in support of the Border Patrol's mission. The Chief has been far more capable in describing to you the challenges and missions that the Border Patrol undertakes. In discussions with the Border Patrol, it is clear to us that the primary and the highest priority area they would like us to work on in terms of technology is in the surveillance or cueing mission.

To do this, we have two primary and large challenges. The first is the magnitude of the area involved. Consider the Southern border. It is 2,000 miles long. To develop an electronic fence along that border, it is insufficient just to have a magic line along the border. You have to have some depth to that line. Consider the Southern border with a one-half-mile zone in which we detect both vehicles and people crossing that. If we were to use the kinds of ground sensors we have today with, on the average, let's say, a 10-meter detection range and we want to have a probability of detection of anything crossing that border of 50 percent, that would require 3 million sensors, 3 million sets of systems. That number goes to about 1,300 for 450-meter detection ranges. It goes to 375 for a 1-mile type of detection range. So, clearly, in our sensors and whatever we put on the border, sensor detection range is a major, major factor.

Second is the false alarm rate. Assume that the Border Patrol manpower along the Southern border--and that is a big assumption on my part--allowed them to respond to four false alarms a day along the Southern border. If we had those 10-meter sensors, all 3 million of them, that amounts to a false alarm rate for each sense of 1 in 2,000 years. That is just not technologically achievable. For the 1-mile sensor, that gets down to about a 90-day false alarm rate per sensor. That is perhaps achievable.

If one were to think of a series of sensors along the border, arguably we could think about a sensor capability of detecting a person crossing the border at 1 mile with a false alarm rate of 1 per 90 days, a field lifetime of a year, and a per unit cost much less than the tens of thousands of dollars--or \$30,000. Today, that sensor does not exist.

In order to get that capability, that surveillance capability, there are a number of technologies that we can look at. This list I am going to give you is by no means exhaustive, but it is a starting point.

Radars. The present radars that have been tried and tested are principally mono-static--that is, it is the typical radar

you have seen in the World War II movies where you have got the transmitter and receiver antenna are the same. We are interested in looking at bi-static and multi-static radars that use separate transmitters and receivers. They could have some advantages along the border, a spread-out border such as we have on the Southern border. One form is called passive coherent localization. It uses ambient signals such as TV, cell phone, direct broadcast satellite, and radio signals, with a lot of multiple receivers to detect moving targets. This technology has been developed for air defense by the military over the last few decades. It has never been used in a ground sense, although there have been some initial looks at it. However, a technology testing and development effort is required to fully understand the phenomenology for surface targets and the required system parameters. Today we do not know it will work, but it is worth looking at.

Fiber optics. There have been a number of fiber optic concepts proposed, some with sensors attached to the fiber every few meters, some which use the fiber itself as the sensor. Although for most border applications that means burying the fiber, that technology also has some intriguing advantages.

Unattended ground sensors is one of the systems the Border Patrol uses today. They are planning on doing upgrades to their unattended ground sensors in the America's Shield Initiative, and DHS Science and Technology looks to assist them in looking at new sensors, alternative power sources, covertness, signal processing, connectivity, power

Airborne sensors have an advantage of height of eye, can look out over a long range, thus give excellent range. The Border Patrol has successfully used UAVs in the Arizona Border Control Initiative and shown that that has a definite force multiplier. We would like to look at a combined sensor system that has synthetic aperture radar, an EO/IR sensor suite, and develop a payload in a manned aircraft, and that could then be downsized for UAVs.

We are also interested in high-altitude or space-based sensor systems, and a key piece of the technology is automated scene understanding, that is, having machines do the detection, at least the alerting to operators, thus saving a lot of manpower.

Finally, we have a test and demonstration program ongoing in the Arizona area starting up called BTSNet in which we are trying to get connectivity and scene awareness to the agent in the field.

In conclusion, there is not one silver bullet solution to maintaining complete awareness and control of who and what

approaches our borders. What is required is a system of systems approach that integrates multiple sensor and surveillance and tactical systems and response systems into an information network. America's Shield Initiative provides that overall system of systems framework.

We will be providing key technology capabilities that can be incorporated both at the beginning of ASI and over time as technology matures. We are looking at the sensor types of technologies I just described and scene awareness and information processing.

That concludes my prepared statement. With the Committee's permission, I request that my formal statement be submitted for the record.

Chairman Cornyn. Certainly. Both of your formal statements will be made part of the record, without objection.

[The prepared statement of Mr. Evans appears as a submission for the record.]

Chairman Cornyn. Chief Aguilar, I think you just explained the discrepancy we had on the numbers of apprehensions. The numbers, I believe, that we were given indicate that year to date for fiscal year 2005 it has been about 653,000 apprehensions. You mentioned that it is 1.1 million for the last complete year of statistics, correct?

Mr. Aguilar. Fiscal year 2004, yes, sir.

Chairman Cornyn. And so far this year you have seen about a 3-percent increase.

Mr. Aguilar. Overall, yes, sir.

Chairman Cornyn. Do you have any idea or guesstimate of how many people who come across our border we are unable to apprehend because of lack of equipment, technology, or manpower to do that?

Mr. Aguilar. We have been asked that question numerous times, Senator, and the only manner that we have found to be responsive to that is in the following: In those areas where we are fully deployed, where we have the technology, the number of personnel, the mix of resources that is appropriate to bring operational control to the border, we can gauge it pretty closely. We have areas where we feel very confident that we are getting over 80, 90 percent of the attempted entries. We have other areas where we just do not have the resources, the manpower, or the technology out there to start even gauging.

We use what we refer to as a loose manner of intelligence, if you will. I do not know if you are familiar with the term ``sign-cutting,' ' but we go out and actually ride the line and track any kind of incursion that has occurred--of course, that is after the fact--and we try and count that. In areas where we do have the technology, RVS systems, remote video surveillance

systems, or we use third-party indicators, community call-ins, law enforcement call-ins, things of that nature, we have a better feel for it. But, unfortunately, we cannot give you that overall for the Nation.

Chairman Cornyn. I am curious. Why do you think it is that your number of OTM apprehensions, other-than-Mexican apprehensions, is up 124 percent over last year?

Mr. Aguilar. Senator, as you probably know, one of the issues that we have, one of the concerns that we have is our ability to detain those other than Mexicans that we do apprehend, that the Border Patrol apprehends. Our sister agency, ICE, is trying very hard to manage the bed spaces that they have out there. But, unfortunately, it is not a good system that we have in place in some locations, and by that I mean the following:

We have one sector in particular, McAllen, which is in South Texas, that has an OR rate, order of recognizance rate, where we release these people on their own recognizance, that goes upwards of 85 to 90 percent of the apprehensions that we do make.

The one very good thing--and I can assure this Committee of the following--is that before we release these people on a notice to appear, order of recognizance, through technology and the full integration of IAFIS and IDENT, we make sure through every possible database that we are not releasing a person that is going to be a problem to this certainly or, in particular, has a nexus to terrorism.

Chairman Cornyn. When we get a chance, maybe in other rounds, or maybe other Senators will get a chance to ask you about IDENT and IAFIS and how that helps. But as far as the reason we have seen such an uptick in other-than-Mexican incursions, is there a specific reason why you think that is the case?

Mr. Aguilar. One of the reasons we feel is because of the fact that we are not able to detain as organizations under DHS the amount of people that we are seeing coming into this country.

Chairman Cornyn. Well, of course, the IAFIS and IDENT systems are only as good as the data you have in those systems, correct?

Mr. Aguilar. Yes, sir.

Chairman Cornyn. In other words, if you don't get a hit based on the identity of the person who comes across, obviously you are not going to detain them then for a criminal record or for other reasons. Is that right?

Mr. Aguilar. That is correct, Senator. IDENT basically is a legacy INS system that is a recidivist information-capturing

system. IAFIS goes into the master FBI criminal file. The one thing that we have instituted as a matter of standard operating procedures, if you will, is that our officers on the line, even as much as the old law enforcement gut feeling that there is something that needs to be investigated, we work very closely with JTTF, FBI, and all the other associated law enforcement agencies to ensure to the degree possible that we are not cutting anybody loose that is going to be a threat to this country.

Chairman Cornyn. I understand and appreciate the great job you are doing considering the resources you have, but I just want the record to be clear that just because somebody's name does not appear in the IDENT or IAFIS database, it does not mean that they are safe, that their presence in America is necessarily something we ought to feel comfortable about. Would you agree with that?

Mr. Aguilar. That is correct, sir.

Chairman Cornyn. And just so the record is clear, when we say other than Mexicans, we are talking about people who come up through the Southern border of Mexico from Central America, maybe South America, but we are also talking about people who fly from other continents to Central or South America and then use those known routes of ingress into the United States as well. Correct?

Mr. Aguilar. That is correct, sir.

Chairman Cornyn. For example, Chinese immigrants, Russian immigrants, we are talking about people from the Middle East, literally almost any country in the world, right?

Mr. Aguilar. Yes, sir. The highest rate of OTMs that we apprehend right now along our Nation's borders are in the following order: Hondurans, El Salvadorans, Brazilians, Guatemalans, and Nicaraguans. But there is a whole array of other countries that we do interdict along our Nation's borders. That is correct.

Chairman Cornyn. And I will just ask one last question before I turn you over to Senator Kyl. We have heard during the post-9/11 debates about our state of national readiness and preparation that we have to be right 100 percent of the times, the bad guys only have to be right once. And given that fact, given the difficulties that we have controlling our borders, identifying who is coming in and why they are coming in, do you have serious concerns today that, given the nature of our borders and our inability to control them because of lack of resources, America is in danger?

Mr. Aguilar. I would answer that question in the following manner, Senator, and that is that we have done a lot since 9/11, resources have been added. Could we use more? Absolutely.

We are continuing to add, we are continuing to become more efficient by adding technology, by adding infrastructure, tactical infrastructure and things of this nature. We are now up and running, for example, on IDENT/IAFIS. But, yes, the concerns are there. That is why we continue to work very hard to ensure that to the degree possible, within the resources constraints that we have, we move forward and ensure the best we can in the area of national security.

Chairman Cornyn. Thank you.

Senator Kyl?

Chairman Kyl. Thank you. I have some questions, Dr. Evans, for you, but just to follow up with one final question, Chief Aguilar. You have a category, in addition to the other-than-Mexican designation, there is a category of countries of special interest, I believe is the correct phrase. What does that mean, and what is the problem there?

Mr. Aguilar. Special interest countries, Senator, are basically countries designated by our intelligence community as countries that could export individuals that could bring harm to our country in the way of terrorism. And what that means is that anytime that we encounter an individual from those special interest countries, we pay particular attention to the individual, his or her background, where they come from, where they have transited to get to our country, and things of this nature. We have an SOP on things that we ensure we do: JTTF notification, FBI notification, run all the databases and everything that we can.

As an example, the United States Border Patrol last year apprehended about 400 aliens from special interest countries.

Chairman Kyl. And my understanding is that part of the concern is that those numbers are going up. Is that correct?

Mr. Aguilar. At the present time, we have about a 10-percent, approximately about a 10-percent increase at this present time. Yes, sir.

Chairman Kyl. Thank you.

Dr. Evans, let me get right to the bottom line, and I mean that literally, with respect to the budget for the kind of technology innovations that your folks are working on, the testing and acquiring of new technologies.

Chief Aguilar says we can always use more. That is evident, I guess. The question is: Do you have enough money to aggressively pursue the operational goals in the area of technology? And do you think you can do an adequate job? And by adequate, I mean to get the job done. Or could you use additional resources? And if so, what particular areas and in what quantities?

Mr. Evans. Senator, I usually answer that question, which

is sometimes a little loaded, with the fact that under way we have this fiscal year the BTSNet, which is the information networking efforts. We really start seriously looking at some of the sensor technology in fiscal year 2006 with some early first-cut looks this fiscal year. I just brought on board a program manager for sensor systems.

We can always use--we will be funding-limited in what we do. You know, sometimes you have programs which are just technology-limited. No matter how much money you threw at us, we could not do it any faster. In this case, the funding limits the number of different kinds of things we can look at. But it has got to be traded off against all the other priorities that science and technology has and some very large threats.

We will start looking at some of the technology programs in things like passive coherent localization this year and next year. We have already done some in UAVs, but we do not have a very large effort. We are looking to support it and to support the ASI.

Chairman Kyl. And that is true both with respect to the research as well as the actual application in the field. Is that correct?

Mr. Evans. That is true with respect to the research and what I would call the test and evaluation in the field. The actual application and deploying in the field is the Chief's, and he has that under the ASI initiative. So two separate parts of our budget.

Chairman Kyl. Is that right?

Mr. Evans. Yes, there are two different appropriations: one is RDT&E and one is procurement.

Chairman Kyl. Now, you mentioned the unmanned aerial vehicles, and I will just--in fact, let me relate this anecdote. I don't think he would mind. The successor to Chief Aguilar in the Tucson Sector said that he really appreciated the use of the unmanned aerial vehicle while it was flying in the Tucson Sector. It was very helpful to them. And I think everybody there wishes that we could have it redeployed.

There are also all of the usual resources of manpower, vehicles, airplanes, sensors, cameras, radars, all of the things that are in the arsenal or the toolkit, in effect, of the Border Patrol. And there is a sense that if you have a certain amount of money to spend and you have to engage in the tradeoffs, as you mentioned, then you are better off going with those lower-tech but proven capabilities as opposed to putting all your money into the unmanned aerial vehicle.

I would like to ask both of you to speak to that, but, in particular, Dr. Evans, if you could relate to what the costs are, what is the value of it, and what would the decision

matrix be to decide whether or not to put the money into a full-scale use of the UAVs rather than the pilot projects that has now come to an end versus other kinds of capabilities.

Mr. Evans. We see the UAV, the unmanned aerial vehicles, especially the class of vehicles that we have employed in ABCI, as what I would principally call a tactical vehicle. It is not something that is going to give you wide area surveillance coverage across the entire border. It does significantly enhance the Border Patrol's tactical operations. With that, they are able to--keeping agents out of harm's way, they are able to track aircraft, track people, come in, if you have some other indication that there is something occurring, they can get to it fairly quickly and get eyeballs on the situation.

There are any number of light-weight and medium-weight UAV programs and airframe systems around. We in S&T and DHS do not necessarily need to get into that development. The development that we really need is both in ops concepts, but also in the sensors. I believe the sensors that have been used so far in UAVs in the border have been optical IR sensors. We need to combine that with other types of sensors and put together a sensor package. And I think the road to doing that in reducing the risk in the sensor package is in doing that in aircraft first and then downsizing the package. That is where the cost comes in.

In the meantime, for the Chief to be able to UAVs and operate them--whenever you introduce a new technology such as the UAV, it has an impact on their concept of operations and how they learn to use and operate it. And it will take them time to learn how to most effectively operate it. So any experience that they get using that type of vehicle will be most helpful to them. In the meantime, we want to work principally on the sensor sweeping package.

Chairman Kyl. Let me restate the question, even though the time has expired. I would like to get a really specific answer. You have a given amount of money--and this is for both of you. I am told that the UAV was very good in the pilot project, that they would really like to have it back. I am also led to believe that there is not enough money, and so, in effect, we put the question to him: Well, which would you rather have, a lot more agents, some helicopters, some more horses and ATVs and a few more cameras and radars and so on, or--or, not and--the UAVs? And what I am trying to get at is your assessment of whether we really need both, because we will not appropriate the money unless our colleagues are convinced that the problem is such that we do not gain by making that choice, we only gain by providing the resources for both. But if we cannot tell them that you have said, yes, you really need both, then we cannot

make the case.

So can you provide us a little more specific information there, is what I was trying to get at.

Mr. Aguilar. Let me go ahead and take at least part of that question, Senator, and I will answer in the following manner:

As I stated earlier, part of our new revised national strategy speaks to obtaining the right combination of resources. Those have been primarily identified as personnel, infrastructure, and technology. It is that mix of resources that we apply to the border that will ensure that we bring the operational control that we need to bring there.

Now, having said that, CBP, Border Patrol, was, in fact, the first law enforcement agency that applied UAVs in an enforcement posture. It was a pilot program in order to learn, to see what it could do for us. It proved to be very effective, especially in the area of officer safety, cueing, and bringing to resolution in some of these very remote places some of the sensor hits that in the past it would have taken an officer to respond 100, 120, 200 miles sometimes, to go check on that sensor. Utilizing the UAV, we could send it remotely and bring to resolution that hit out there, if you will.

Now, that being the case, we are evaluating that pilot program that we had, and in addition to that, at minimal to no cost to CBP, we are also doing everything that we can to continue testing that type of equipment. Today as we speak, commencing on the 20th, which is, I guess, about 8 days ago, we are flying a Hunter UAV provided to us by the military in Arizona to continue the testing process. It will be with us until the 15th of May.

Now, one of the things that is critical here is that we continue testing the technology attached to that, what is referred to as the EO/IR sweep, the electric optical sweep that is attached to them.

Do we need both? Would both help us? Absolutely. The Border Patrol agent on the ground is key, but that force multiplier, especially in some of these challenged areas that we talk about, very vast, very remote, that combination of resources. Do we need it across the Northern and Southern borders? I would have to say a qualified probably not. But would it come in handy in Arizona and some portions out there? Yes, as it has in the past.

Now, as to how many, how many agents, that right mix of resources, the technical sweep that is going to be applied to it, that is what we are trying to identify right now.

I don't think that gives you the answer of yes or no, but that is where we are at right now.

Chairman Cornyn. A vote was just called at 3:45, and,

Senator Coburn, why don't you proceed. And then what I will do is I will go vote, and I will come right back and hopefully we will all--

Senator Coburn. Fine. Thank you.

First of all, I would like to introduce into the record the Pew Hispanic Center report, March 21, 2005, on the size and characteristics of the undocumented population. They also estimate that you stopped 1.2 million but 3 million came. So the net increase of those that came and went home, the net increase of our population, about 2 million people this year in terms of illegal population.

I want to ask just a couple of questions. I know what your answer is going to be, but I want it on the record. Is it illegal to come here without a visa?

Mr. Aguilar. Yes, sir.

Senator Coburn. All right. Do the American people have the right to expect that that law is enforced?

Mr. Aguilar. Absolutely.

Senator Coburn. All right. Is that law being enforced?

Mr. Aguilar. Within the resource capabilities that we have, I believe it is, sir.

Senator Coburn. All right. Let's don't qualify it as to resources. Are people coming here illegally because we do not have the resources with which to control the border?

Mr. Aguilar. I think that is a correct statement, yes, sir.

Senator Coburn. So the question is--and you cannot believe the number of times people in Oklahoma come up to me and say, ``When are we going to control the border? When are we going to do it? Are we going to control the border?''

My question is somewhat along the same lines as Senator Kyl. What do you need? Tell us what you need. You know, we have 19,000 retention beds. They need 50,000 retention beds. That is another \$1 billion to add those retention beds. It seems to me if we put \$1 billion on the border, we might need fewer retention beds. And that is the same question the American public is asking.

I know that the CBP--what they have to do, and I know what ICE has to do. My question is: What do you need? Because the people from Oklahoma and I think most of the country is willing to make some sacrifices internally to give you what you need. I want to know what you need. How many billions do you need?

I want an answer.

Mr. Aguilar. Okay. Let me answer in the following manner, sir. Two years ago, a little over two years ago, when DHS came into being, we were all brought together under Customs and Border Protection, at least for us. That is one of the things that we brought to the table. Commissioner Bonner has basically

asked us and we have put together a national strategy and an implementation plan to address that national strategy.

One of the basic components to it is identifying the right mix or the right combination of resources. Again, the resources that we are looking at are personnel, technology, and infrastructure, tactical infrastructure. Does this mean that we need 2,000 miles of border along that Southern border? No. But we need to be able to place it to where we believe it is going to make the most good to stem that flow, to bring operational control to the border. That has been prepared.

As you know, our Secretary is brand new. We are in the process of briefing this to that level of Government, and that is where we are at right now.

Senator Coburn. I would just tell you the American people are dissatisfied with that, and you know it as well as I do.

Mr. Aguilar. Yes, sir.

Senator Coburn. You know, we had what I call undocumented Border Patrol agents last month in Arizona working, helping you, and I don't know if that was a good idea or not, but I think that we should pay very close attention to what that means. That means there is a level of frustration out there where we are not effectively carrying--we are not funding you, we are not doing the oversight, we are not doing the direction so that you can carry out what the American people know they should have and expect.

And, you know, it is really not about illegal immigration. It is really about the risk of terrorism.

Mr. Aguilar. Yes, sir.

Senator Coburn. And the rhetoric is going to get way too hot in this subject if, in fact, there is not a better response from the administration. I can just tell you that. And then it will not be on the basis of what we all want it to be, a planned ascent to control the border. Then it is going to be on ethnicity and things other than what it should be.

I would just hope that you would take back that we will have the time that you want to make. We do not have the time to wait 2 or 3 years for you to get the sensors that you want or to add the people that you want. They need to be added now, and we need an honest discussion of what it is going to take in this country to give you the resources. We know you know how to do it and we know you know how to create a layered and multi-faceted approach to do this. The question is: Let's have it and let's start responding to it so that the American people can perceive it.

Let me tell you how personal this is. You know, our ERs in the South are overrun with illegals for health care. Our public schools are now overrun with illegals. We have this chain

migration where you come in pregnant and deliver and establish residency because you now have a citizen of the United States. That cannot continue to happen because the communities cannot afford it anymore. So this is building.

I cannot impress--Dr. Evans, I would love to hear your response to this. There is a level of frustration throughout my entire State that says we are not doing what is supposed to be done to enforce the law. And that does not mean you are not trying. I am not saying that. But I want to send home to you the importance of timeliness of response on this, because I think this is not a good thing for the American people to be this frustrated with the Federal Government. There are a lot of other things they should be more frustrated about.

Dr. Evans?

Mr. Evans. I understand the frustration. In some of these areas that I have talked about, we are talking about inventing on schedule. That does not necessarily easily happen. We are admittedly funding-limited not technology-limited in a lot of the things we do to support Border Patrol and some of our other BTS customers. That is a matter of priorities within the administration, and that is above my labor grade.

Senator Coburn. But what was the request for increase for Border Patrol and ICE this year? If that is one of the priorities of the administration, what was the level of request of the administration from Congress in the budget for an increase for both the CBP and the Customs Border Enforcement?

Mr. Evans. Well, in the R&D that comes into a line which is support of conventional missions for Science and Technology, and that includes all of CBP, that includes emergency preparedness response--

Senator Coburn. I understand. What is the percentage increase that they asked for?

Mr. Evans. I think it was about 10 percent, but I would have to go back--

Senator Coburn. Ten percent, and we know that you intercepted 1.1 million, and we know another 2 million came in. And I am just telling you, that is not acceptable. It is not a policy of this administration to address that; otherwise, the request would have been higher. What do we need?

Mr. Evans. I think in technology development, there are a couple of key areas that we need. We need to look at things that are--first of all, there are a number of fairly mature products and mature technologies that are already out there. For example, you know, I talked about radars. In the types of scanning radars that are out there that we tested in Arizona Border Control--

Senator Coburn. Let me interrupt you for a minute because I

am going to have to go vote. You said just a moment ago you are not technology-limited, you are budget-limited.

Mr. Evans. Yes, I am--

Senator Coburn. Okay. So my point is--

Mr. Evans. I am not limited in the choices of technology we can try to bring to bear to this.

Senator Coburn. That is right. And so if we have a layered approach, multi-tactical approach, the question comes: What would it take for us to do to control the border to allow Chief Aguilar to have the resources so that he could tell the American people, look, this is just a dribble now? Because that is what they are looking for. This is a very compassionate Nation. We will deal with the people that are here in a proper way, and we will then have a national assessment about how many people should come in. But we need to know from this administration what is really needed to do it.

Mr. Evans. I do not have a number. I am not--

Senator Coburn. Okay. Would you commit to give to this Committee from the administration, from DHS and from the administration, the dollars required to achieve the goal? That is what the American people want to know.

Mr. Evans. There are two parts to that, to answering that question. The first is in the Chief's and he does and the Border Patrol does what they are going to do for the major systems procurements. That is ASI, and that is the number of sensors and the number of people, the overall system. But for developing the technologies for that, yes, we can answer that. I cannot commit to the second part.

Mr. Aguilar. Senator, you asked at the very beginning that we answer your questions, and I think I can do that in the following manner very succinctly, and that is that illegal immigration is a phenomenon that needs to be approached, I believe, from several component aspects. We deal with the enforcement aspect of it. We, I think, do a fairly good job of identifying the type of technology that we need. We are in the process of identifying the level of that technology, personnel, infrastructure that we need.

I think there are other components that would also be brought to bear, which I will not go into for obvious reasons--that is not my expertise--that would absolutely help us also bring control to the border by stemming the illegal immigration flow.

Senator Coburn. Absolutely, and I understand that. I will not put that as part of this. We understand the incentives that need to be on the other side of the border, the economic investment that needs to be done. I understand all those other things. And the American people do, too. But what they know is

it is against the law, and we are charged to uphold the law, and we are charged to give you the resources to do that. So it seems obvious to me that the administration has to tell us what is it going to take to get the job done. And we cannot wait 10 years to get the job done.

Mr. Aguilar. I would agree.

Senator Coburn. Because every day you cannot intercept who you need to intercept that puts us at risk is a day that we put our country and our children at risk. And it is not acceptable. And if we are going to waste money in this country, the American people are willing to waste it trying to control it on the border. So we are willing to let you make some mistakes. We just want to know what you want. And a 10-percent increase is not enough if it is going to say we are going to intercept 1.4 million out of 3 instead of 1.1. It is not enough. We have to know what it is.

I am going to recess this until Senator Kyl and Senator Cornyn come back, and thank you so much for being here and offering your testimony.

[Recess.]

Chairman Cornyn. We will go ahead and reconvene. Sorry about the interruption, but Senator Kyl is planning on coming back after he votes as well.

Chief Aguilar, let me start my questioning again with you. I had the experience not too long ago of flying with a Border Patrol agent in a helicopter in Webb County along the Rio Grande River. And although I am very familiar with that part of my State and that part of the United States, I was struck by the huge expanse of area that our Border Patrol has to monitor. And what I learned was that as a result of some of the build-up of Border Patrol and the use of equipment in the Arizona area because of the reasons that you have already discussed with us, the large influx of immigrants across that border, we have had to take some men and women and some equipment from other parts of the border. Is that a fairly common phenomenon that you try to move men and women and equipment around in order to meet what you view as a more urgent or more overwhelming concern?

Mr. Aguilar. Yes, sir. Yes, that is fairly common. That has been historically common within the United States Border Patrol. And let me just preface that with Webb County, Laredo, Texas, is where I started my career, so I am very familiar with that vast area.

But, Senator, one of the things that we do is we do take our resources and try and apply them where they are more needed, but not at the expense of the enforcement capacity from the sending location, if that makes sense, and by that I mean the following: that we ensure that when we take those

resources, when we draw down, when we detail into another part of the country, there are enough resources in place to control or maintain the level of operational control that we have.

Laredo, for example, in the last 7, 8 years has received remote video surveillance systems, in fact, is building tactical infrastructure right now, has gained greater accessibility and mobility to the river, the Rio Grande. So these are the things that basically make the sitting resources more efficient that allows us to take some of those drawdown and apply them on a temporary basis.

Chairman Cornyn. Has it been your experience, Chief, that your adversaries, so to speak, the human smugglers and others who try to penetrate our border, that they are pretty smart, they know where you have moved your people and your resources and they may try to exploit the weakness in our line?

Mr. Aguilar. Absolutely, sir. Very cagey, very smart, and they have a very good counterintelligence system.

Chairman Cornyn. And I do not want you to misunderstand my comments as being critical. What I am critical of is the Federal Government's inability and unwillingness over the past couple of decades, at least, to deal with this problem in a comprehensive fashion. In an ideal world, you would have all the people on the ground and all the equipment necessary in order to secure our border as much as humanly possible. So please understand where I am coming from on that.

The other thing I heard when I was last in Laredo was that these human smugglers, the coyotes, the others who are bringing people across, they learn how to use diversionary tactics perhaps to get Border Patrol agents as a result of the tripping of a sensor, maybe cameras going off and the like, to move in to try to detain, let's say, a handful or one or two people coming across the border. And just as the Border Patrol moves to that location, then others break across at another location and perhaps make a run for it, so to speak. Is that another common or routine sort of tactic used to try to get people across?

Mr. Aguilar. Very much so. Senator, what you just described in the field is what we used to call sacrificial loads, where the smuggling organizations would send a load out in one direction while the real load was being put out in another location, while our resources were being diverted out here. It is very taxing on our agents out there. That is one of the reasons why technology, I think, is so important to us to bring to resolution as quickly as possible any kind of diversion of resources, any kind of sensor alarm that goes off, things of this nature, as quickly as possible.

I would like to touch on that just a little more because a

question was posed a few minutes ago about the Minutemen situation in Arizona, and that is the following: that anything that taxes our resources takes away from our capability to secure our Nation's borders. In that area of the country, that effort, if you will, was taxing on our resources because sensors were being set off, technology was picking up movement and things of this nature that we had to bring to resolution. So that was indirectly--not meant to be, but it was taxing on our resources also down there.

Chairman Cornyn. Well, ideally, we would not have to have a situation where civilians felt obligated to move in and fill a void that has been left in our border security enforcement. But I appreciate what you are saying because when your sensors go off, you do not really know who is setting it off, so you have to deploy men or forces there to find out what is going on and to deal with it, whatever the case may be.

One other thing I would like to explore with you. You know, we talk about people breaching our border and coming into the country, and we know that a given number of those are people who have no hope and no opportunity where they live, and so naturally, living next to the wealthiest Nation in the world, they are going to go where they believe that they can get a job and provide for their families. And I think every one of us as human beings can understand that natural human impulse.

The danger really lies from my perspective in the fact that the same means of breaching the border and coming across is available to someone who wants to work in a restaurant or a hotel or a construction site as somebody who wants to come across to do us harm or somebody who is bringing illegal drugs or engaging in other illicit activity.

Has it been your experience that some of the people engaged in human smuggling are essentially just in it for the money? In other words, what I have wondered about is whether the same element that will bring people across the border are just as happy to bring weapons, drugs, traffic in human beings, and engage in other criminal activity for profit? Do you agree with that generally, or what has been your experience? Maybe I will just let you state it in your own words.

Mr. Aguilar. I do agree with that statement, Senator, and our experience has been that we have seen a melding, if you will, of these organizations in order to smuggle people, narcotics, weapons, anything for money. That is the bottom line. But that is why it is so critical that we continue our partnership and partnership building with the FBI, JTTF, our ICE agents. ICE, our sister agency, is concentrating its efforts on the organizations, which is really where one of our main problems is and where we should be concentrating our

efforts out there.

Chairman Cornyn. Dr. Evans, the organization that you are the head of at the Department of Homeland Security, the Homeland Security Advanced Research Projects Agency, as I understand it, that is the Homeland Security equivalent of DARPA at the Defense Department. Is that correct or is that a fair comparison?

Mr. Evans. First of all, Senator, I would like to thank you for the promotion, but I am the mission support office of HSARPA and--

Chairman Cornyn. You are welcome.

[Laughter.]

Chairman Cornyn. Thanks for the correction.

Mr. Evans. It shares it in name. It has some fundamental differences. And I at one point in my misspent youth was a DARPA program manager.

In DARPA, we were not anywhere near as driven as we are in HSARPA by requirements. I have requirements set by the Border Patrol, by the other agencies through portfolio managers, so we are much more requirements-driven. In DARPA, DARPA was essentially and is essentially sort of on top of the DOD structure that was a special agency set to just go do high-risk, high-payoff things, and there is no real boundary on what you want to look at and do, other than DDR&E sort of sets some general guidelines, do space this year, you know, do something else. So that is the major difference.

The things that are common is we are a very program management-oriented structure. We have a turnover of people coming in and out so that we get technical refresh of people. We tend to think of things in terms of programs of 2-, 3-, 4-year time frames, and the program managers are both technically capable as well as managerially capable. Those are the similarities.

There is a similarity in the law in setting up HSARPA. It referred back to DARPA in a number of ways, one of which was some of the personnel ways. So there is some special category of personnel that we hire.

Chairman Cornyn. Well, I appreciate that explanation. I guess what I was really getting to is this: I serve also on the Armed Services Committee, and I am familiar--actually on the subcommittee that has oversight over DARPA, so I am familiar somewhat with what they do in terms of research and development, come up with new and creative technical, technological solutions to some of our challenges in the area of our defense requirements.

How much communication and cooperation across Government agencies is there when it comes to some of the technology? We

have heard testimony today about the deployment of UAVs, unmanned aerial vehicles, which became a matter of common knowledge as a result of the war in Afghanistan and Iraq and the technology being deployed there. We have talked some about sensors, which, of course, are used commonly in a military context.

Are there any restrictions or limitations or impediments on the transfer of technology and science between Government agencies like the Department of Defense and the Department of Homeland Security? Is that something we ought to be concerned about or ought to look into? Or is it working just the way it should?

Mr. Evans. As far as I know, there are no limitations. In fact, we rely on DOD, and most of us have come from DOD program management R&D background, and so we tend to rely on DOD as both a source of both ideas and also some technical agents. We use technical agents, and we use, for instance, night vision lab, the Army labs in some of the sensor areas that we are starting to look at. We will look at the Air Force for passive coherent localization. They have done a lot of work there, and I use the Navy lab out in San Diego for container security, and we are using them also in some of the BTSNet efforts.

Also, probably half of my program managers have come from DARPA, so they bring along a head full of great ideas as they walk in.

It is almost as a joke, but when someone comes on board, one of the people when I have a staff meeting, you know, asks two questions: Did you used to work in the Navy? And do you own a dog? And we do not understand the one about the dog, but we understand the one about did you work in the Navy.

Chairman Cornyn. Chief Aguilar, let me ask one last question, and then I will turn it back over to Senator Kyl. I have read some news reports recently that indicate that there is some problem with the cameras that are being used along the border, that they are frequently broken, that we do not have the manpower to monitor the video feed, and other concerns.

Could you give us the straight story on that? Where do we stand? Do you have concerns?

Mr. Aguilar. I can give you an answer on that by saying that at the current time 90 percent of the cameras that are deployed out there physically are, in fact, in working order. There have been some problems in the past. We looked at--let me begin again, Senator.

The cameras that are actually on site in the ground, approximately 90 percent of them are fully operational as we speak. Now, that was not the case as recently as a year ago, but we have worked very hard to get these up and running.

As you are aware also, probably, the old ISIS legacy INS system is being assimilated into the ASI program that we are very much looking forward to. As a part of the ASI program, that assimilation will be bringing up to speed those cameras that are on the ground right now to ensure that they will be able to be integrated into that ASI program. So we are now the beneficiaries of money that has allowed us to bring these cameras up to speed at a rate of about 90 percent.

Chairman Cornyn. ASI stands for what?

Mr. Aguilar. I am sorry, sir. That is the America's Shield Initiative, the America's Shield Initiative that will be basically an all-encompassing means by which to bring electronic monitoring to the border. It is something that we are looking forward to, going through a process right now. It is a comprehensive integration and application of technology as a means of bringing operational control to the border. And what it is going to do is maximize and ensure that detection, intelligence-building capabilities, identification, deterrence, interdiction, investigation of illegal border incursions occurs.

Chairman Cornyn. And when will that be stood up?

Mr. Aguilar. At the present time, we are going to through the process of actually standing it up. Our next main point, if you will, is what is known as key decision point two, which will occur this May. And then subsequent to that will be an RFP for an integrator. Once the integrator to integrate all of these systems, both off the shelf and developing, will take place, within 30 days of selection of that then the ASI procurement will start taking place.

Third quarter of 2006 is when we anticipate at the present time that this will commence.

Chairman Cornyn. Senator Kyl?

Chairman Kyl. Thank you. Let me just continue to follow that ISIS matter. GSA was the agency that reported on the deficiencies in the contract. Am I correct? That was not an Inspector General or some other agency.

Mr. Aguilar. I believe--and I will have to check on this, Senator, but I believe it was the GSA IG--

Chairman Kyl. It was the IG, Okay.

Mr. Aguilar. Yes, sir.

Chairman Kyl. And my understanding is that they found significant irregularities in the contract performance of the supplier that resulted in an inadequate system being deployed that was frequently down in many of its components, and that it has taken some time and effort to get it back up to where it should have been. Is that correct?

Mr. Aguilar. That is correct, yes.

Chairman Kyl. So there may be some repercussions for the contractor that allegedly failed to perform properly, but in terms of the system's capabilities today, it is now as capable as you would expect it to be. Is that correct?

Mr. Aguilar. Yes. We are constantly trying to upgrade it even from 90 percent, but one of the things that we became beneficiaries of when we melded with CBP is that we also got additional support from the existing technicians that were over in CBP. So we have been able to augment our support capability to that existing system.

Chairman Kyl. Okay. Now, what is it that has to be done to ``bring them up to speed?'' Do you have to develop some communications links that enable you to transmit the visual images to some other location than the monitoring station? Or what is it?

Mr. Aguilar. Senator I am afraid I cannot give you a lot of detail, but a lot of it was not the right equipment being placed in the right place, obsolescence in some cases, communications linkage in others. So it was a variety of things that we needed to bring up to speed.

Chairman Kyl. Well, what do we need? I presume that because this is such force multiplier that we are anticipating continuing to deploy these cameras in as many locations as we can. What is the plan, basically? Are we continuing to deploy cameras in additional sites to put more cameras in the same site, to build better monitors? What are we doing generally with the video camera? And, by the way, some of these are IR, some are video, optical, daytime. What is the mix and what is the plan on deployment?

Mr. Aguilar. The mix in each one of these sites, Senator, is such that it will give us day and night-time capabilities 24/7. Of course, our wishes are 365 a year.

Currently we have 246 operational camera sites. In addition to that, for example, in California we are getting ready to go up with another 11 sites, I believe. Arizona was the recipient--and I am going from memory here, and if I am wrong, I will get you the right information--I believe was the recipient of another nine this past year. We have a total of about 18 in the Douglas-Naco area of operation, another 15 in Nogales, and we are getting ready to go into what we know as the west desert area out there also.

Chairman Kyl. Now, that first number you gave us, a very large number, are those mobile units? In other words, your first number was a hundred and some? What did you say the numbers were?

Mr. Aguilar. There are 246 camera sites.

Chairman Kyl. Okay, 246 sites?

Mr. Aguilar. Yes, sir. A pole in the ground that has a combination of cameras that will give us a day-night capability, thermal--

Chairman Kyl. Okay, but there were 18 in the Douglas-Naco area?

Mr. Aguilar. I believe that is correct.

Chairman Kyl. And you have another couple dozen in the Nogales area?

Mr. Aguilar. I believe so. I will have to check on that, but I believe--

Chairman Kyl. That is not nearly enough in those areas.

Mr. Aguilar. We continue to build up on these, Senator. One of the things--

Chairman Kyl. Where are the 246? Are they in California and Texas?

Mr. Aguilar. No, sir. Tucson Sector, for example, has 39, Yuma has 18, Swanton has 6, El Centro Sector has 41, El Paso has 27, 20 in Laredo, 29 in McAllen. I think what is critical here, Senator, is for me to--I failed to explain, but each one of these camera sites, each one of these poles has the capability of looking in either direction about 6 miles.

Chairman Kyl. Right, but 18 in Douglas and another 20--some in Nogales is not nearly sufficient there, so you need more cameras in the Tucson Sector.

Mr. Aguilar. I would agree with that, yes, sir.

Chairman Kyl. So that is an area of deficiency that we need to satisfy. What is being done to ask for the money to get the cameras in those areas?

Mr. Aguilar. That is actually a part of the America's Shield Initiative that we just described a few minutes ago.

Chairman Kyl. Is that in the 2006 budget request?

Mr. Aguilar. I am looking at my staff, \$64 million? There is \$64 million in the America's Shield Initiative for 2006, yes, sir.

Chairman Kyl. Okay. So part of that would be for upgrades and additional cameras?

Mr. Aguilar. Yes, both.

Chairman Kyl. Okay. One of the things that--and this has almost become mythology, but I think it is true. In the early years, a lot more resources were put into Texas, and especially fencing, but additional resources in California, with the result that a degree of control was obtained in both the Texas and California areas, and that immigration began then being funneled into Arizona, first in the Nogales area and then into the Douglas area, and then to some extent now over in the Yuma area, but it is still heaviest in the Douglas area, roughly, part of the Tucson corridor.

Now, first of all, is that observation generally an accurate observation?

Mr. Aguilar. I am sorry. Is that--

Chairman Kyl. What I just told you, everybody always says that. Is that generally true?

Mr. Aguilar. That is generally true, yes, sir.

Chairman Kyl. Okay. Now, what was it that helped us to gain relative control--and that is a term that I appreciate does not mean total control, by any means--in Texas and California but has not permitted us to gain that degree of control in Arizona yet?

Mr. Aguilar. One of the things that I will point back to, Senator, is what I talked about earlier, going from urban operations to rural. When we dealt with urban operations, infrastructure that was directly south of us, we were able to bring it to quick control. There was a shift over to the rural areas. This dissipated the criminal organizations on a much wider array, if you will. Application was the same--personnel, technology, and tactical infrastructure. The problem here is that when we are dealing with the rural environment, rural dynamic, it is a much broader scope of operations that we go into.

Chairman Kyl. So, for example--do you mind if I just continue with this for just a minute?

Chairman Cornyn. No. Please go ahead.

Chairman Kyl. For example, between San Diego and Tijuana, first of all--you have got the ocean, which is one border--a lot of fencing was put in, triple fencing. To my knowledge, no one has ever gotten through the triple fencing. There have been crossings through the port and around Otay Mesa, but not actually over the fence itself. So because you had urban areas there and you were able to fence that, and then, of course, put monitors and Border Patrol there as well, the illegal immigration except through the port itself has slowed to a trickle in that particular area. Is that correct?

Mr. Aguilar. It has fallen dramatically, yes, sir.

Chairman Kyl. Whereas, in the Arizona desert, let's say on the Tohono O'odham Reservation or the gunnery range or one of the other Department of Interior jurisdictions along the border, there are no communities, there are no towns, very few roads, and it is some flat terrain, but a lot of mountainous terrain as well. Is that an accurate description?

Mr. Aguilar. That is correct.

Chairman Kyl. Two or three hundred miles there, and that dispersed area is a much more difficult area for the Border Patrol to have the same kind of control that I described in the California, San Diego area. Right?

Mr. Aguilar. Absolutely, yes.

Chairman Kyl. Okay. Now, Texas is a big place, and one thing I have not understood is that certainly Texas is not all San Diego. I know El Paso and Juarez and so on is, but you have got a lot of area of Texas that is ranch land with the river in between. That is not quite as remote and desolate as the Arizona desert, but it certainly is big country, a lot of space. How is relative control obtained there? And why can't that be applied to the Arizona desert?

Mr. Aguilar. I think two major things come into play, Senator, and one is that most of Texas is privately owned land. We have easy accessibility to the border. We can also work with the independent private landowners to gain accessibility and build the tactical infrastructure, build the roadways, things of this nature.

If my memory serves me correct, the border in Arizona, approximately 92 percent of it is environmentally sensitive, so we have to go through a multi-year process to even plant a pole in the ground, for example, for an RVS camera, to build the tactical infrastructure, to build the roadways and things of this nature.

Second, one of the things--and I know that you and I have spoken about this before, Senator--is the ability--or the inability, I should say, for us to control the means of egress out of the Arizona border by way of checkpoints. If we would look at a map of the Southwest border and pinpoint the checkpoints, we would have them throughout Texas, especially on all the major roadways, 281, 77, 59, 359, 83, all of those major roadways. We do not have that kind of capability in Arizona, and controlling the means of egress out away from our border is essential to bringing control to the immediate border.

Chairman Kyl. Okay. I want to follow up on those direct points, but--

Chairman Cornyn. Go ahead.

Chairman Kyl. Okay. And what are the key reasons why we don't have those checkpoints in Arizona?

Mr. Aguilar. One of them, sir, is appropriations language, wording constraints.

Chairman Kyl. Which says what?

Mr. Aguilar. Which says that we cannot build permanent checkpoints anywhere within the Tucson Sector of the United States Border Patrol.

Chairman Kyl. So in the Tucson Sector, is that any more? You cannot build any more with appropriation funds, right?

Mr. Aguilar. We do not have any. We do not have permanent checkpoints.

Chairman Kyl. So you are relegated to the use of temporary checkpoints or mobile checkpoints?

Mr. Aguilar. Yes, sir, mobile checkpoints that we move around. Yes, sir.

Chairman Kyl. And ideally, what would the disposition be? Would you have both or one or the other?

Mr. Aguilar. It would be a combination, but the majority of the time we would have the permanency of the checkpoints in order not only to man them but have the proper equipment to do the job that is required at our checkpoints, to control those means of egress.

Chairman Kyl. In contrast, what do you have in Texas?

Mr. Aguilar. Let me give you an example. Highway 35 coming out of Laredo, one of the biggest ports of entry out there in Texas, Highway 35 has an approximate 19,000 to 21,000 vehicle flow through that. It is similar to our 19 checkpoint in Nogales, Arizona. During that 24-hour period, people going through the checkpoint in Laredo on 35 will have a four-lane checkpoint approach, will have a separate bus approach, the agents will have the use of forklifts, for example, to offload a semitrailer if a canine hits for human or narcotics. We have ability to cut into vehicles if the need is there if the canine hits and we do not see anything obvious. All of these come together.

We also have what we refer to as peripheral infrastructure on either side of the checkpoints, permanent checkpoints. That gives us the ability to basically get an idea as to what is going around us by means of remote video surveillance systems, sensors, fencing, tactical infrastructure, things of that nature.

The 19 checkpoint coming out of Nogales, very similar traffic flow and type of traffic; as you know, a lot of produce semitrailers coming out of there. We do not have the--we have got one lane to check the traffic coming out of there. Now we have two because we are on the main line. We do not have a means to run, in fact, sometimes even IDENT/IAFIS check. We have to take the apprehended people back to the station to do it out there.

Chairman Kyl. In other words, in the mobile unit, you don't have any infrastructure associated with that?

Mr. Aguilar. Exactly.

Chairman Kyl. You have got to have battery-powered whatever that runs on electricity. You do not have any holding areas and so on. Right?

Mr. Aguilar. Exactly. Staging areas, detention centers, things of that nature.

Chairman Kyl. Okay. So that is one of the impediments that

you have there.

Mr. Aguilar. Yes.

Chairman Kyl. And another impediment is the environmental constraints because of the Federal ownership of the land. Any action that you take out there becomes a major Federal action subject to NEPA review.

Mr. Aguilar. Yes, sir.

Chairman Kyl. An action such as putting in bollards to prevent vehicles from crossing the border, adding fencing, putting in a pole for a camera, et cetera. Is that correct?

Mr. Aguilar. Yes, sir.

Chairman Kyl. What kind of a delay do you end up with? And how much impediment really is all of that?

Mr. Aguilar. In my own personal experience, Senator, when I was a chief down there in Tucson, I immediately identified a need for a specific type of technology out there. From the point of identifying the need to getting a pole in the ground, for example, for a remote video surveillance system was upwards of 2, 2-1/2 years. We have been working on the Tohono O'odham Nation now for vehicle barriers since about 3 years ago when I was still down there. We have gotten the approvals, but we are now working with the Tohono O'odham Nation. We are working with the Department of the Interior, things of this nature.

On the Buenos Aires Refuge down there, we have established a need to access and get mobility to the immediate border. We have been doing that for at least 2-1/2, 3 years ago, and we have not been able to get the requirements just to blade the existing road and maintain it to get easier accessibility to the border.

Chairman Kyl. In other words, there is no road along the border, no regular road.

Mr. Aguilar. No regular road, no, sir.

Chairman Kyl. And so you have had to blade an area where your vehicles can travel along there.

Mr. Aguilar. That is what we would like to do, yes.

Chairman Kyl. But you do not have permission to do it for the entire area there.

Mr. Aguilar. That is correct.

Chairman Kyl. Do you have access to the hilltops or mountaintops for your surveillance equipment, or are you limited there as well?

Mr. Aguilar. Not on the Tohono O'odham Nation, sir. Every elevated site is considered a sacred site, so we do not have--

Chairman Kyl. Do the smugglers or coyotes or others abide by that same determination?

Mr. Aguilar. No, sir. They have access to them on a daily basis, 24 hours a day.

Chairman Kyl. So these are some additional problems for controlling those more areas?

Mr. Aguilar. Yes, sir.

Chairman Kyl. Now, another concern is simply being able to go after the bad guys. I am going to take just 20 seconds, Senator Cornyn. If you look at this from the air, it is just honeycombed with little trails, and as you get closer down to the ground, you see it is also honeycombed with trash, just tons and tons and tons of trash. But here you have got a very fragile desert environment where you run a track across there, and it can be decades before it rejuvenates, the growth, because it is very arid and only certain plants survive there. So you have this honeycomb of trails used by illegal immigrants both for vehicles and individuals and a great deal of trash. So they clearly have access to the entire area here.

Does the Border Patrol have unfettered access as well to all of these areas, to, in effect, if you see a group of smugglers, drug smugglers or illegal immigrants going through the desert, can the Border Patrol simply go after them, let's say, with an ATV or a four-wheel vehicle?

Mr. Aguilar. No, sir. We are restricted against going across open territory like that, especially in those areas. Probably one of the most telling examples that I think I have shared with you, Senator, is the area in Ajo that we know as the Sweetwater Pass area. The Sweetwater Pass area, when I was the Chief down there--this was about 3 years ago. We had a beautiful canyon area, and the smugglers were utilizing it to traverse because they knew we could not follow. We worked with the other Federal agencies out there. We determined that we could use--we could not use motorized vehicles. We could not use bicycles because we would rut, even though the smugglers were. So we ended up with horses. We deployed on horses. But the only way that we could deploy on horses is that for a period of 2 weeks we had to give them special feed so that the droppings left by the horses would not bring in nonindigenous plants.

Chairman Kyl. Now, please repeat that.

Mr. Aguilar. We had to feed the horses feed that would ensure that the droppings would not bring nonindigenous plants into the Sweetwater Pass area. And that was the only means that we could deploy in there.

Chairman Kyl. Senator Cornyn, I have some more questions along this line, but I think I will defer to you for 5 more minutes.

Chairman Cornyn. Well, this has been fascinating.

Chairman Kyl. There is more. These guys have a tough job.

Chairman Cornyn. I know they have a tough job. This has

been very informative, and Senator Kyl and I have discussed the geographic and other differences between Texas and Arizona that make the challenges greater, and I have new appreciation, particularly coming across Arizona, of the challenges that you have. And I guess it also confirms the wisdom of people from my State in 1845 when we were annexed to the United States, we reserved the right to maintain that land as non-Federal but State-owned land. And who knew it would turn out to provide us a better means of securing our borders. But it has been very, very informative.

Chief, you talked a little bit about the checkpoints and how that has been helpful. But what I would like to explore with you is what we are doing, to your knowledge, beyond the checkpoints. How far are the checkpoints typically inland? Twenty-five miles or so?

Mr. Aguilar. It varies. It varies, Senator. Under our statutory authority, we can operate within 100 air miles of any border of the United States. We have checkpoints that are within 4 or 5 miles. The checkpoint in Laredo, for example--we just built a new one--is going to be 32 miles north of the border out there.

One of the critical aspects that you have hit on, sir, is part of our new strategy, and that is a defense in depth of which the checkpoints are absolutely critical to control the means of egress away from the border. But this also means that we will address the transportation hubs that are below and above the checkpoint issues also, to keep those away from the smugglers and utilizing them to impact upon migration into the United States.

As a quick example, if you do not mind, sir, we now deploy Border Patrol agents at Sky Harbor Airport in Phoenix. We have also deployed agents at Las Vegas Airport and Los Angeles Airport because we have found that when we take away smugglers' ability to cross in certain parts of the border, what they do is they try to get around us and make their way to these transportation hubs. So, again, that defense in depth is absolutely critical. Part of that is also working in conjunction with ICE investigations to ensure that we do everything possible to disrupt and dismantle the smuggling organizations that are trying to continue to get around this on a constant basis.

Chairman Cornyn. Did I understand you correct that you have a statutory limit of 100 miles that you can operate in?

Mr. Aguilar. For checkpoints.

Chairman Cornyn. Just for checkpoints.

Mr. Aguilar. Yes, sir. We can operate anywhere in the country.

Chairman Cornyn. Well, let me ask you a little bit about that. My experience has been or my observation has been that when people come across the border and if they are successful in making the break through the border, then they typically will go to safe houses.

Mr. Aguilar. Yes, sir.

Chairman Cornyn. Where they are instructed to go, and they will gather until someone comes to pick them up and drive them just south of the checkpoint, somewhere south of the checkpoint, let them out, give them water and provisions and they will be instructed to meet up with other transportation north of the checkpoint that will take them somewhere into the interior of the United States. Is that a fairly common pattern, to your knowledge?

Mr. Aguilar. Yes, it is.

Chairman Cornyn. And so my point really gets to once people get past the border, and particularly past the checkpoint, as effective as they are, the smugglers take that into account in arranging to get people out and around the checkpoints, if possible. Once they get north of the checkpoint, that is, into the interior, what sort of resources are deployed to actually identify, detain, and deport people who come illegally into our country?

Mr. Aguilar. As far as the Border Patrol goes, Senator, we deploy beyond the checkpoints, if you will, into the interior of the country whenever there is a nexus to border control operations. As an example, Sky Harbor Airport, that is way north of our checkpoints, but we feel it critical to take away that facilitation of the smugglers.

Now, in addition to what the Border Patrol does specific to border nexus operations, ICE has a tremendous responsibility of working the stash houses, working the employed aliens, working the criminal aliens and things of that nature. So we work in conjunction with them, especially in the area of intelligence.

Chairman Cornyn. Is it a fair characterization to say that once the immigrants make it into the country past the checkpoint and are headed north, our chances of identifying them, detaining them, and deporting them drops dramatically?

Mr. Aguilar. It does drop, yes, sir.

Chairman Cornyn. And that is simply because you are outmanned in part, is it not? We do not have in the interior of our country sufficient people or resources deployed to be able to do that. Would you agree with that statement?

Mr. Aguilar. Senator, with all due respect, I think I would leave that answer to my ICE counterparts that would have a better idea of what their needs are in the interior of the country. Do they need help? I would agree that they do,

yes, sir.

Chairman Cornyn. Well, we had our second hearing in this series that dealt with interior enforcement. I understand your wanting to defer to them, but my impression was that we do a reasonably good job considering the resources that we have committed at the border. But once someone makes it past the border into the interior of the country, we virtually are helpless in terms of our ability to identify, detain, and deport illegal aliens. Thus, some of the programs that have been put in place, a memorandum of understanding, I believe, with the State of Florida, the State of Alabama, and I think one other State. I read somewhere that California was contemplating a similar MOU to provide local law enforcement and State law enforcement with additional training and resources in exchange for their agreement to serve as a force multiplier in terms of interior enforcement. But it should, I guess, come as a surprise to no one that one reason why we have estimates in excess of 10 million people who are in this country living outside of our laws is because once people make it through the border, if they are detained, we do not have adequate means to keep them until their deportation hearing occurs. Once ordered deported, we do not have adequate means to make sure that that actually happens. And once they get past the checkpoint, they can literally just melt into the landscape and become part of that 10 million-plus population.

Dr. Evans, let me ask you, if you had unlimited funds made available to you by the United States Congress, what sorts of things would you do with that money to further enhance our homeland security and particularly our border security that you are not able to do now because of limited funds?

Mr. Evans. Well, if I had unlimited funds, I outlined some of the technology areas that we would be very interested in, and let me preface this--this is in developing technology, not deploying it. The Chief has by far the bigger problem. If we come up with the magical camera, he is the guy that has to put 800 or however many of them out that are going to do it. But developing the technology, unlimited funds, the areas I talked about which included radars, looking at novel radar systems. The problems that we have radars today are getting them up high enough, getting towers for them. In the Coast Guard, looking at similar things for the Coast Guard, we deployed some radars on the coast, and the radar cost us \$90,000; the tower cost us \$1 million, plus the environmental issues, et cetera.

So we would look to try to really research and look at some very novel types of radar approaches that had a fairly limited footprint on the ground. That might be things such as distributed multi-static radars we talked about, phased arrays,

smaller size multi-static types. So we would push a technology program there, with in mind the fact that you are going to have to go into very different environments, Northern border, mountainous, desert, et cetera. Not one type of system will work for all.

We talked about the UAVs, and so I would develop a combined radar and EO/IR UAV package small enough to put into--light enough and small enough but long enough endurance UAV. That is something that the Border Patrol could afford in significant numbers. There is a lot of technology out there both from--principally from DOD that we can apply to that. DOD, however, uses UAVs but they are pricey. They are a lot pricier than the homeland security area, and one of the reasons for that, they have a very different tactical mission in mind.

And I would go about doing that by looking at a series of sensors, and as I talked about, I would put that on a manned platform first in a test bed, see what works, you know, and along with both the sensors themselves, just as important is the signal processing that goes into that.

I would take a serious look at fiber optic sensors that are buried. There may be long stretches that that could do fairly well. My first look at it, I was very skeptical, but there have been some pieces there that might work in particular areas. That is not only the sensors themselves, the coupling into the ground, how a sensor is actually coupled into the ground, and both the sensing technology but also the signal processing technology to really determine a footstep at a longer and longer distance or determine a vehicle at a longer distance and be able to track it. I think, you know, today we use fairly unsophisticated methods for doing that, sort of see the thing go along. In my former life, we did a lot of very sophisticated signal processing to detect submarines, et cetera. So to look at what signal processing can we get to bear to bring the signal out of the noise.

We would look at novel sensors, at least, you know, things such as acoustic things and other types of seismic sensors. Added to that, start looking at automatic tracking, automatic alertment in the visual sensor area, look at bolometers and new technologies that are occurring in cameras and bolometers, plus coupling that tightly with enhanced and better and better signal and image and automatic scene understanding of the camera itself. It could envision a fairly small set of cameras on a tower, but on a smaller footprint tower than the Chief has today, fairly autonomous. Today people have to watch the cameras, but fairly autonomous that would just alert to something occurring and see how far you could push that in terms of--and then, lastly, I would start looking at more

airborne--we talked about the UAV, but look at sensors that are even higher that would allow you to get a wider view and particularly focal plane EO/IR types of sensors. Some of that technology is classified in the national technical means, but there are things we could do there.

That is sort of my list. I will think of something else later.

Chairman Cornyn. I trust you will let us know.

And, Chief, finally from me, if you had unlimited resources, what would you do with them that you cannot do now because of limited resources that you think are important to accomplishing your mission?

Mr. Aguilar. I think one of the most important things that we would look at doing, Senator, is make sure that we integrate the technology available as a systems package, as a systems package to be able to integrate with the personnel resources that we have out there; and then, in addition to that, take the tactical infrastructure that we have now and that we want to build out there to ensure that we deploy it in those areas that will impact upon the smuggling organization's capability of operating along our Nation's borders.

Chairman Cornyn. Thank you very much.

Senator Kyl?

Chairman Kyl. To follow up on that last point, my understanding is that the use of the UAV, a very expensive piece of equipment, was best achieved when it did not simply fly along the border at a high altitude with people waving at it but, rather, when it was relatively low so they could hear it, and as soon as it flew over, somebody from Border Patrol was right there. In other words, where the smugglers knew that if they heard or saw the UAV, the Border Patrol was in the area, integration of technology and the manpower. But if the Border Patrol was not in the area, they figured, So what? Is that, in fact--I mean, that is what your successor in the Tucson Sector related to me about a month ago. Is that your understanding of one of the utilizations and integrations of the technology?

Mr. Aguilar. Absolutely, yes, sir. One of the things that we actually took a look at when we flew the UAV out there was removing the muffler system on it in order to make that noise so that they could hear that it was in the area out there.

Chairman Kyl. But how much good would it do if they came to appreciate there was not anybody around to stop them or to pick them up, even if the UAV saw them?

Mr. Aguilar. It would depend on the area, Senator, and I think you have asked a very critical question here, because to create deterrence, the way that we explain it is that we create

a high-profile not necessarily a high-visibility presence on that border, to the degree that when a person crosses that border, makes an illegal incursion, he or she recognizes that there is going to be an apprehension, interdiction, or resolution of that illegal incursion, either right at the border, which is preferable, or within a reasonable distance of the border, which in some cases could be 25, 30 miles from the border.

So that is the perception that we try to create. If the UAV flies, the person sees it, he or she keeps on walking because an agent is not around, but they keep being apprehended 20, 25 miles down the road, then we have created that high-profile presence that will bring deterrence to that entire area.

Chairman Kyl. Right. I guess it could be anywhere from a mile to 25 miles, but the bottom line is if it flies and nothing ever happens to the people who are seen, then they realize it is just for show.

Mr. Aguilar. Absolutely. The agents are key on the ground, yes, sir.

Chairman Kyl. And both for Dr. Evans and you, I talked about the fact that some of these hilltops were not available, or actually Chief Aguilar talked about the fact that some of the hilltops were not available. With respect to cameras, lights, and radars and other--well, those three items, is it much preferable to have a higher elevation from which to site the particular piece of technology?

Mr. Evans. I can answer that. It is about 80 percent of the problem.

Chairman Kyl. Is to get elevation.

Mr. Evans. Right. Topography, you know, ask an infantry officer, topography is it. It really gets very, very--most sensors or any kind of line-of-sight type of system or ground clutter type of system are made ineffectual if you are going to put them down in the middle of a valley. There are some exceptions to that, but by and large, it is, you know, sort of 80 percent of the problem. I think you would agree.

Mr. Aguilar. Yes, sir.

Mr. Evans. Go to high ground and you can see.

Chairman Kyl. Now, finally, let me just conclude with Chief Aguilar. I had mentioned the fact that your written testimony refers to a lot of very interesting references to various partnerships and agreements with different entities in Mexico that have enabled you to go after the MS-13 group, for example, and other potential terrorist organizations, sharing of intelligence and a whole variety of cooperative agreements with different entities in Mexico. But I said those were fairly targeted kinds of agreements, and my perception was that with

respect to the typical kind of illegal immigration that occurs at the border, there is very little cooperation from the Mexican Government, and, in fact, the proof in the pudding that such cooperation would actually bear fruit was the effort by Grupa Beta--at least we have been informed it was Grupa Beta, but it could be other entities as well that informed immigrants that they really should not risk crossing in the area where these Minutemen were because something bad might happen to them. And my understanding is that the immigration dried up to a trickle in that particular area for that reason.

So the question naturally arises: Why wouldn't similar Mexican governmental warnings or admonitions to Mexican citizens or other would-be immigrants not to cross the border have a similar effect and what your experience has been in trying to get the Mexican Government to work on that broader type of illegal immigration?

Mr. Aguilar. Tough question.

Chairman Kyl. And let me preface it by saying you are not the State Department and I appreciate that.

Mr. Aguilar. First of all, Senator, let me say that I agree with you. The working relationships that exist now and are being built on now are, in fact, as you put it, targeted relationships specific to, frankly, our highest priority--national security, terrorist, terrorist-related, terrorist nexus and things of that nature.

Chairman Kyl. And the smuggling operations that are the highest priority target.

Mr. Aguilar. Yes, sir, the criminal organizations that operate south of the border either by way of intelligence, working relationships and things of this nature. There are several fronts that we are working on. For example, as we speak right now, we are continuing to negotiate with the Government of Mexico on the follow-up interior repatriation program, which is a two-pronged approach. One is border safety to get people out of these very dangerous areas in Arizona. The other one is take them out of the queue, if you will, from the smuggling organizations.

Beyond that, there is a reluctance. There is a reluctance to engage in blocking, stemming that flow out there.

Chairman Kyl. Are you familiar with the Mexican town of Altar?

Mr. Aguilar. Yes, sir, very familiar with it.

Chairman Kyl. Describe it in 20 seconds or less.

Mr. Aguilar. The little town of Altar is south of the border, south of Lukeville, Arizona, and it is about 60 to 65 miles south. It is a community that is very, very small in nature. It has a floating population of aliens, of intended

aliens to come into the United States that has been measured upwards of 20,000, 30,000 as a floating population, staging there in order to make their way into the interior of the United States, along with narcotics smugglers also.

Chairman Kyl. And so the sense is that if the Mexican Government, for example, would go to a place like Altar and say, Folks, look, we know you came here from a long ways away, but you should not try to cross the border, and use the authority of the Mexican Government to prevent it, it could, in fact, significantly reduce the flow of illegal immigration coming north, right?

Mr. Aguilar. I would agree with that statement, yes, sir.

Chairman Kyl. Well, I appreciate that is not your--well, there are elements within your jurisdiction in which you have been very successful in pursuing agreements, but as a general proposition, I appreciate that that is not your primary responsibility.

I know I share Senator Cornyn's gratitude for both of you appearing here and taking this much time. There may be some questions of a follow-up nature that we would want to submit to you, and I hope you would be willing to answer those questions. And some of our colleagues who could not be here today might have some questions as well. But I thank you for your testimony. There is so much more we could talk about, and I am already 15 minutes late to another obligation, but I will have the chance to visit with you both personally, I know, and I appreciate very, very much that you were here today.

Thank you.

Chairman Cornyn. Thank you, Senator Kyl, and thanks for co-chairing this important hearing.

Dr. Evans and Chief Aguilar, thank you very much for your service to our Nation, and we know you have a challenging job, and it is our job to try to make sure you have the resources you need in order to be successful.

We will leave the record open until 5:00 p.m. next Thursday, May the 5th, for members to submit additional documents into the record or tender questions in writing for the panelists.

And with that, this hearing is adjourned.

[Whereupon, at 5:00 p.m., the Subcommittees were adjourned.]

[Questions and answers and submissions for the record follow.]

[GRAPHIC] [TIFF OMITTED] T1922.024

[GRAPHIC] [TIFF OMITTED] T1922.025

[GRAPHIC] [TIFF OMITTED] T1922.026
[GRAPHIC] [TIFF OMITTED] T1922.001
[GRAPHIC] [TIFF OMITTED] T1922.002
[GRAPHIC] [TIFF OMITTED] T1922.003
[GRAPHIC] [TIFF OMITTED] T1922.004
[GRAPHIC] [TIFF OMITTED] T1922.005
[GRAPHIC] [TIFF OMITTED] T1922.006
[GRAPHIC] [TIFF OMITTED] T1922.007
[GRAPHIC] [TIFF OMITTED] T1922.008
[GRAPHIC] [TIFF OMITTED] T1922.009
[GRAPHIC] [TIFF OMITTED] T1922.010
[GRAPHIC] [TIFF OMITTED] T1922.027
[GRAPHIC] [TIFF OMITTED] T1922.028
[GRAPHIC] [TIFF OMITTED] T1922.029
[GRAPHIC] [TIFF OMITTED] T1922.030
[GRAPHIC] [TIFF OMITTED] T1922.031
[GRAPHIC] [TIFF OMITTED] T1922.032
[GRAPHIC] [TIFF OMITTED] T1922.033
[GRAPHIC] [TIFF OMITTED] T1922.034
[GRAPHIC] [TIFF OMITTED] T1922.035
[GRAPHIC] [TIFF OMITTED] T1922.036
[GRAPHIC] [TIFF OMITTED] T1922.037
[GRAPHIC] [TIFF OMITTED] T1922.038

[GRAPHIC] [TIFF OMITTED] T1922.039
[GRAPHIC] [TIFF OMITTED] T1922.040
[GRAPHIC] [TIFF OMITTED] T1922.041
[GRAPHIC] [TIFF OMITTED] T1922.042
[GRAPHIC] [TIFF OMITTED] T1922.011
[GRAPHIC] [TIFF OMITTED] T1922.012
[GRAPHIC] [TIFF OMITTED] T1922.013
[GRAPHIC] [TIFF OMITTED] T1922.014
[GRAPHIC] [TIFF OMITTED] T1922.015
[GRAPHIC] [TIFF OMITTED] T1922.016
[GRAPHIC] [TIFF OMITTED] T1922.017
[GRAPHIC] [TIFF OMITTED] T1922.018
[GRAPHIC] [TIFF OMITTED] T1922.019
[GRAPHIC] [TIFF OMITTED] T1922.020
[GRAPHIC] [TIFF OMITTED] T1922.021
[GRAPHIC] [TIFF OMITTED] T1922.022
[GRAPHIC] [TIFF OMITTED] T1922.023
[GRAPHIC] [TIFF OMITTED] T1922.043
[GRAPHIC] [TIFF OMITTED] T1922.044
[GRAPHIC] [TIFF OMITTED] T1922.045
[GRAPHIC] [TIFF OMITTED] T1922.046
[GRAPHIC] [TIFF OMITTED] T1922.047
[GRAPHIC] [TIFF OMITTED] T1922.048
[GRAPHIC] [TIFF OMITTED] T1922.049

[GRAPHIC] [TIFF OMITTED] T1922.050

[GRAPHIC] [TIFF OMITTED] T1922.051

[GRAPHIC] [TIFF OMITTED] T1922.052

[GRAPHIC] [TIFF OMITTED] T1922.053

[GRAPHIC] [TIFF OMITTED] T1922.054

[GRAPHIC] [TIFF OMITTED] T1922.055

[GRAPHIC] [TIFF OMITTED] T1922.056

[GRAPHIC] [TIFF OMITTED] T1922.057

<all>