PROTECTING THE HOMELAND: HOW CAN DHS USE DOD TECHNOLOGY TO SECURE THE BORDER?

HEARING
BEFORE THE
SUBCOMMITTEE ON BORDER AND MARITIME SECURITY
OF THE
COMMITTEE ON HOMELAND SECURITY
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
FIRST SESSION
NOVEMBER 15, 2011
Serial No. 112-56
Printed for the use of the Committee on Homeland Security

Available via the World Wide Web: http://www.gpo.gov/fdsys/
# CONTENTS

## STATEMENTS

The Honorable Candice S. Miller, a Representative in Congress From the State of Michigan, and Chairwoman, Subcommittee on Border and Maritime Security:
- Oral Statement ................................................................. 1
- Prepared Statement ........................................................... 3

The Honorable Henry Cuellar, a Representative in Congress From the State of Texas, and Ranking Member, Subcommittee on Border and Maritime Security ................................................................. 4

The Honorable Bennie G. Thompson, a Representative in Congress From the State of Mississippi, and Ranking Member, Committee on Homeland Security ................................................................. 9

## WITNESSES

Mr. Paul N. Stockton, Assistant Secretary of Defense for Homeland Defense and America’s Security Affairs, Office of Under Secretary of Defense for Policy, U.S. Department of Defense:
- Oral Statement ................................................................. 11
- Prepared Statement ........................................................... 12

Mr. Mark S. Borkowski, Assistant Commissioner, Office of Technology Innovation and Acquisition, U.S. Customs and Border Protection, U.S. Department of Homeland Security:
- Oral Statement ................................................................. 15
- Joint Prepared Statement ..................................................... 17

Mr. Adam Cox, Deputy Director (Acting), Homeland Security Advanced Research Projects Agency, U.S. Department of Homeland Security:
- Oral Statement ................................................................. 26
- Joint Prepared Statement ..................................................... 17

Mr. Michael Tangora, Deputy Assistant Commandant and Director of Acquisition Services, United States Coast Guard, U.S. Department of Homeland Security:
- Oral Statement ................................................................. 28
- Joint Prepared Statement ..................................................... 17

## FOR THE RECORD

The Honorable Henry Cuellar, a Representative in Congress From the State of Texas, and Ranking Member, Subcommittee on Border and Maritime Security:
- Letter .................................................................................. 7

## APPENDIX

Questions for Paul N. Stockton From Honorable Michael T. McCaul ................. 47
Questions for the Department of Homeland Security From Honorable Mike Rogers ......................................................................................................................... 48
Questions for the Department of Homeland Security From Honorable Michael T. McCaul ................................................................. 48
PROTECTING THE HOMELAND: HOW CAN DHS USE DOD TECHNOLOGY TO SECURE THE BORDER?

Tuesday, November 15, 2011

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON BORDER AND MARITIME SECURITY,
Washington, DC.

The subcommittee met, pursuant to call, at 10:04 a.m., in Room 311, Cannon House Office Building, Hon. Candice S. Miller [Chairwoman of the subcommittee] presiding.
Present: Representatives Miller, Rogers, McCaul, Duncan, Cuellar, Sanchez, Jackson Lee, Clarke of Michigan, and Thompson.

Mrs. MILLER. Good morning, everyone. The Committee on Homeland Security Subcommittee on Border and Maritime Security will come to order.

The subcommittee today is meeting to hear testimony from Paul Stockton, the assistant secretary of defense for Homeland Defense and America's Security Affairs; Mark Borkowski, who is CBP's Office of Technology Innovation and Acquisition chair; Dr. Adam Cox, acting deputy director of the Homeland Security Advanced Research Projects; and Michael Tangora, of the U.S. Coast Guard—he is the deputy assistant commandant for acquisition on the use of Department of Defense technology by the Department of Homeland Security. So, fantastic witnesses that we have here today.

Let me just recognize myself for an opening statement.

We think that three main tools have really been brought to bear to help secure our Nation's porous border: Personnel, of course; infrastructure; and technology. We have nearly doubled the size of the U.S. Border Patrol since 2004, and we have built nearly 650 miles of vehicle and pedestrian fence. We have spent nearly $1 billion as a Nation on the now-cancelled Secure Border Initiative, SBInet, and we have had a number of hearings on that in this committee and our full committee, as well.

Today we are having this hearing. We have called it today to examine how the Department of Homeland Security can use off-the-shelf hardware, innovative Department of Defense technology and hardware to address the needs of the men and women who are charged with securing our Nation's border.

For years we have been trying the same basic technology on the borders: Some variation of cameras mounted onto towers. The SBInet was just the latest version of really a similar technology that we have been using on the Southwest Border for many years,
starting with ISIS, and then P28, and of course, the SBInet, and the successor, Integrated Fixed Towers.

GAO’s recent report casts some doubt on CBP’s ability to accurately forecast the 10-year life-cycle cost for the Integrated Fixed Towers, roughly estimated at $1.5 billion, and add to that, of course, $1 billion, as I mentioned, already spent on SBInet where we just have coverage for about 53 miles of virtual fence, and this, of course, is a very serious investment by the American taxpayer thus far.

Congress needs to be able to justify to the American people that our border is tangibly more secure as a result of that spending and other spending that we are doing, and I think that the budget situation, obviously, that we face is—all of us are painfully aware of what is happening at the Federal level here, and Federal funding levels are heading in one direction—down—and we need to be good stewards of very scarce taxpayer dollars to provide the security the American people demand. Again, keeping, in fact, in mind, being very cognizant of the fiscal restraints that we currently are operating under.

My hope is that CBP will be listening to the concerns of GAO and that we look at possibilities of cost overruns and delays as we field the Integrated Fixed Towers and the mix of technologies selected to replace SBInet. Although we face challenges with the technology on the border, I am absolutely convinced that America certainly needs a robust technology solution for the border because we can’t build enough fence or afford thousands of additional agents to link arms to prevent illegal crossings or do drug interdiction and other kinds of things. Technology, if properly applied, can leverage the Nation’s previous investment in manpower and infrastructure to more effectively secure our borders.

For some time myself, along with many of my colleagues here on the dais, have been advocating for the use of the Department of Defense—the DOD’s technology to be tested and, where appropriate, to be used where it has application along our Nation’s borders. Of course, again, we are thinking of this because the American taxpayer has already spent their money—they spent billions of dollars on R&D, on research and development, to test, to prove, to field all kinds of various types of equipment.

I think as our military is now drawing down in both Iraq and Afghanistan we should, certainly at a minimum, consider using DOD equipment to determine if it can fill a capabilities gap right here at home instead of, perhaps, just putting it out into a warehouse or looking at other uses for it. I think there are some real applications for DOD in regards to DHS.

The Predator B, the drone, is perhaps the best example of how DOD technology can be successfully utilized along the border. It has literally revolutionized how we fight insurgents in the border between Afghanistan and Pakistan and the officials at the Department of Homeland rightly saw the potential for its use here at home, and now we have eight unmanned aerial vehicles patrolling the skies over the Northern Border, the Southern Border, the Coastal Borders, as well. Again, my colleagues and I have had a number of hearings on the UAVs.
Aerostats are another surveillance platform that has been used successfully in theater, being currently used along the border, and I think if surplus aerostats come back from theater that they could be used to increase our central awareness along the Southwest Border. That was actually an amendment filed to the reauthorization that this committee recently did by my Ranking Member and Mr. McCaul, in regards to the aerostats.

The purpose of this hearing is to examine the process that the Department of Homeland Security uses to locate—what they call foraging—forage for technology that has application for the homeland environment. Science and Technology has an important role to play in helping the Department of Homeland Security component understand what technology is available for use and what technology is being developed to meet our capability gaps.

DOD has some small-scale technology transfer programs for the Nation’s first responders, and I certainly commend them for the work that they do through that program. But it is also our intent to see what Congress can do to facilitate the transfer of larger, more sophisticated technology solutions, as I mentioned, like the Predator drone, tunnel detection, and a wide area of surveillance platforms.

DOD is obviously a huge organization, and I think we are somewhat concerned that there is not one single office that the Department of Homeland Security can go to to find technology solutions that may have applicability for our border security efforts, and we will be asking some questions about that today. Certainly not every piece of equipment within the DOD inventory will work on the border or be affordable by the Department of Homeland, but there should be some sort of a formal structure to facilitate the testing and the evaluation of equipment to see what works and what doesn’t.

DHS should be constantly searching for technology already purchased by the Government to help our agents better secure the Nation, both at home and—at our borders and between the ports of entry, as well. So I certainly look forward to the testimony of all of our witnesses.

That really is the predicate for our hearing this morning, as we keep thinking about an evolving world and less money at the Federal level, and how we can actually utilize so many of these various things that I say are sort of off-the-shelf hardware from the Department of Defense that have application for securing our border. I think we have a lot of fertile territory there to till, and especially, as we have mentioned, in light of the fact of the drawdown in theater in Iraq and Afghanistan. How can we utilize some of these things very, very effectively?

With that, I would recognize my Ranking Member of the subcommittee, Mr. Cuellar, for his opening statements.

[The statement of Chairwoman Miller follows:]

PREPARED STATEMENT OF CHAIRWOMAN CANDICE S. MILLER

NOVEMBER 15, 2011

Three main tools have been brought to bear to help secure the Nation’s porous border: Personnel, infrastructure, and technology. We have nearly doubled the size of the U.S. Border Patrol since 2004, we have built nearly 650 miles of vehicle and
pedestrian fence, and we have spent nearly $1 billion on the now-cancelled Secure Border Initiative. I have called this hearing today to examine how DHS can use off-the-shelf, innovative Department of Defense technology and hardware to address the needs of the men and women who are charged with securing our border.

For years we have been using the same basic technology on the borders—cameras mounted on towers. SBInet was just the latest version of the same technology we have been using on the Southwest Border for years starting with ISIS, P–28, SBInet, and the successor—Integrated Fixed Towers. All of these high-technology solutions have a less than stellar track record on the Southwest Border due to a combination of mismanagement, poor planning, and a top-down approach that failed to take into account the actual needs of the Border Patrol Agents on the ground.

GAO’s recent report casts some more doubt on CBP’s ability to accurately forecast the 10-year life-cycle cost for the Integrated Fixed Towers—roughly estimated at $1.5 billion dollars. Add that to the $1 billion already spent on SBInet for just 53 miles of virtual fence and we are talking about a serious investment by the American taxpayer. Congress needs to be able to justify to the American people that our border is tangibly more secure as a result of that spending. My hope is that CBP will listen to the concerns of GAO and will not lead us down that same path with cost overruns and delays as we field the Integrated Fixed Towers.

Although we have faced challenges with technology on the border, America still needs a robust technological solution because we can’t build enough fence or afford thousands of additional agents to link arms to prevent illegal crossings. Technology, if properly applied, can leverage the Nation’s previous investment in manpower and infrastructure to more effectively secure our borders. However, let us be under no illusion, the budget situation is dire, and we need to be good stewards of scarce taxpayer dollars to provide the security the American people demand, without breaking the bank.

For some time I, along with some of my colleagues here on the dais, have been advocating for the use of Department of Defense technology to be tested, and where appropriate, used along the Nation’s borders. The reason is simple, the American taxpayer has already spent billions of research and development dollars to test, prove, and field such equipment. As our military draws down in Iraq and Afghanistan we should, at a minimum, consider using Department of Defense equipment to determine if it can fill a capabilities gap here at home instead of collecting dust on a shelf or in a warehouse.

The Predator B is perhaps the best example of how DOD technology can be successfully used along the border. It has literally revolutionized how we fight insurgents in the border between Afghanistan and Pakistan. Officials at DHS rightly saw the potential for its use here at home and now we have eight unmanned aerial vehicles patrolling the skies over the Northern, Southern, and Coastal Borders. Aerostats are another surveillance platform that has been used successfully in theater, and should be tested along the border.

The purpose of this hearing is to examine the process that DHS uses to locate technology that has application for the homeland environment. I have no doubt there are other technologies waiting to be found and applied to defend the homeland. The Science and Technology Directorate has an important role to play in helping DHS components understand what technology is available for use, and what technology is being developed to meet our capability gaps.

I understand that DOD has some small-scale technology transfer programs for the Nation’s first responders, and I commend them for the work they do through that program, but my intent is to see what Congress can do to facilitate the transfer of sophisticated technology solutions specifically for use by DHS.

DOD is a huge organization and I am concerned that there is not one single office that DHS can go to and find technology solutions that may have applicability for our border security efforts. Not every piece of equipment within the DOD inventory will work on the border, but there should be a formal structure to facilitate the testing and evaluation of equipment to see what works, and what doesn’t. DHS should be constantly searching for technology already purchased by Government to help our agents better secure the Nation both at and between the ports of entry.

I look forward to the witness’s testimony.

Mr. Cuellar. Thank you, Madam Chairwoman. Thank you for holding this meeting today.

Thank you, Mr. Thompson.

Madam Chairwoman, if you would ask me just—I mean, allow me just for a point I just noticed that my brother, who is a sheriff on the border, Martin Cuellar, who served with DPS, Narcotics,
and Intelligence, I believe, for about 27 years, just walked in. So if you don’t mind, just to keep family harmony together, I would ask my brother, and I think he has got some of his deputies also here.

So, Martin Cuellar, up there. Just——

Mrs. MILLER. Welcome. Welcome. We appreciate your service—and your brother. Everyone in your family.

Mr. CUELLAR. Let me, again, thank you, Madam Chairwoman.

As a Member of Congress representing a district along the Southern Border I have had the opportunity to see first-hand the benefits of the Department of Homeland Security’s collaboration with the Department of Defense, with the—working with Mr. Borkowski, also, and other folks there, and of course the Coast Guard, also, on our border security technology. Last year both Mr. McCaul and some of the Members who were down there, and we saw a DHS-DOD operation on Laredo, Texas, where technology was used to secure the border.

Mr. Borkowski, thank you, again, for being there with us at that time.

DIA, I believe, was the other partner. Again, I think this is something that, you know, we have been on it, as the Chairwoman said. We have been asking the SBI and the Science and Technology parts of DHS to look at what taxpayers have paid already and see what the Department of Defense has so we can go ahead and use that as much as possible along the Southern Border.

I truly understand, some things we can use, some things we can’t use. But working together, I think, it will be important.

Along with, again, with my other colleagues from Texas, Mr. McCaul and myself, we have been supporters of the DHS use of unmanned aerial systems, the UAS, along the border. We just got our second one down there. We will be working with General Kostelnik on that one.

Again, this is another example of how technology developed for the DOD has been a proven invaluable DHS border security mission. Most recently, with Chairman McCaul, we traveled on a Congressional delegation—Mr. Duncan, I believe—well, Mr. Duncan was with us, also, and we traveled to the Middle East down there, and when we were in Iraq and Afghanistan we saw some of the technology that I think will have an application for Homeland Security.

As the military drawdown in Iraq continues there may be technology and equipment that is no longer needed there but may be used through DHS, and I think the questions that I asked there was, “What are we going to do with the billions of dollars of assets, which includes technology?” The answer that General Austin there gave us there, and the ambassador, was that: No. 1, part of it will be transferred to Afghanistan; No. 2, some of it will be repositioned in Kuwait or wherever the case might be; and No. 3, the rest will be—or the—part of it will be coming down to the United States.

Of course, our question is: No. 1, how does DHS use that? No. 2, how do we have State officials—for example, the Texas National Guard has communicated both to McCaul and myself that they are interested in some of the equipment resources that they can certainly use for the border, and certainly in California, Arizona, New
Mexico, or other areas, and the northern area, also, that can be used also.

One of the issues that came up—and I believe, Assistant Secretary Stockton, you will address this issue—was how do we pay for this? Because most of it is—for example, a sheriff or police can get on a website and say, “This is equipment that we want.”

But the understanding, at least what they told us in Iraq, and I think you gave us a—you are going to give us an answer, was that, who is going to pay for this technology? I mean, you are going to have a small town sheriff that is going to say, “I want this technology, but how much would it cost to bring it from Iraq all the way down to Arizona?”, for example, and it might be prohibitive.

But my understanding is it might be where there is excess space that they can put on, and we certainly would like for the committee to hear this is something that the Northern Border, the Southern Border can certainly use. Whether it is DHS, Mr. Borkowski, whether it is a sheriff, or National Guard, I think this is something that we certainly want to look at as to how we can do that. Because I was talking to Mr. Norm Dicks about putting some language there in the appropriation bill to see if we can take care of it, but if it is something that you all could handle, or it is something that we might have to follow up, I would ask you to do that.

So again, I am also pleased that we also have the Coast Guard present here. You know, when we talk about border security technology that facilitates the interdiction, whether it is narcotics, or undocumented aliens, or those who wish to do harm to us, we know that people will take the route where they perceive to offer the best opportunity to enter the country. If we secure the land borders and the maritime borders people will, you know, if we take care of the land they will go through the maritime, or push on the maritime they will come in. It is like a balloon that you press, and they will pop up somewhere else.

So we have got to make sure that we are all working along, and certainly the maritime, the Coast Guard, is something, and certainly on the Texas border we have the Rio Grande. It is an area of international waters. We had a little discussion with Coast Guard, and I think you have, I think we are all on the same page that it is international waters.

I think you all are doing some pulse—especially in Lake Falcon, as you remember, Madam Chairwoman, that is where the individual got killed, which happened 2½ miles on the Mexican side—not on the U.S. side, for emphasis. Then you have Lake Amistad, also, where you do some of that work, also, there.

Last year’s Coast Guard authorization I added some language—authored some language that directed the Coast Guard to prepare a mission requirement analysis for the navigable parts of Rio Grande, which includes those two large lakes. We finally got a copy, little late, but we finally got a copy of this. Members, I am going to provide to you, for official use only; this is not to be shared with the public, but for official use, and this will be handed out to the committee Members.

But I asked Coast Guard to put something out that we can put out in public, so I would ask, Madam Chairwoman, that this letter
that is addressed to me from the Coast Guard to be made part of the record.

Mrs. Miller. Without objection.
Mr. CUELLAR. Basically there are, because we want to use technology, and we will look at the risk, but the main thing that came out of this—and this is important for you to note—this is the Coast Guard saying this, this is no—this is the Coast Guard. Let me just leave it like this.

But the main thing is, when they talked about the drug cartels and what sort of violence they provide, they said on the Mexican side the drug cartels it is a high threat; on the U.S. side—and I emphasize this—on the U.S. side the Coast Guard said that it was a moderate threat to the United States, at least on the navigable part, on the lake part of it.

So when you look at the drug trafficking organizations and what challenges they have—and as you know, they have a low, a moderate, and I think it is a high one, there are about four of them—just for the record, the Coast Guard said it was a moderate threat on the U.S. side. When we asked them, also, about smuggling of migrants, at least on the water side of it, on the border Rio Grande and the lakes, they said that the level of migrant activity has been relatively low compared to other parts of the country itself.

So therefore, when we were asking—the reason I put this assessment, because I wanted to get an assessment so we can get the Coast Guard involved a lot more instead of a pulse—I think you all go, like, every quarter, you do your fly-overs and put your boats out there.

Based on this report, Members, they are saying, what we are doing now, the pulse, is sufficient, and therefore, this is what they are doing. So I would ask you to look at this report.

Finally, just to go ahead and conclude, we know that we are in particularly tough budgetary times, but again, as the Madam Chairwoman and a lot of us have been saying for a long time, if there are taxpayers' dollars that are being used for Defense let's use that for Homeland Security. So I certainly look forward to listening to the witnesses, and I thank you all very much.
Mrs. MILLER. Thank the gentleman. The Chairwoman now recognizes the Ranking Member of the full committee, the gentleman from Mississippi, for his opening statement.

Mr. THOMPSON. Thank you very much, Madam Chairwoman, for holding this hearing. I welcome and look forward to the testimony of our witnesses.

This committee has a long history of oversight of the Department of Homeland Security's efforts to deploy technology along our Nation's border. Since the inception of DHS's efforts, Department of Defense technology and expertise has played an important role.

To the extent that the DoD has technology or equipment that may be useful to DHS's mission to secure the homeland, it makes sense that DHS take advantage of those sources whenever possible. Particularly in the current budget environment, the Federal Government must make taxpayers' dollars go further.

I hope to hear from our witnesses today about the existing relationship between DoD and DHS regarding security technologies. I would also like to hear whether the witnesses believe a more formal, comprehensive process for technology transfer between the agencies would be advantageous.

That being said, we should be mindful that there are limitations to this approach to border security technology. DHS and DoD have different missions, so it stands to reason their technologies may differ. In some cases, a less elaborate, more affordable technology may fully meet DHS's requirement, and those kind of technologies should not be overlooked.

Even where the agencies' needs align, there are likely to be obstacles. For example, just because a technology works in Afghanistan does not mean it will work in Arizona. Technology may have to be adapted due to differences in terrain and climate, or it may simply be inappropriate for use in the homeland.

Also, just because a technology fits within DoD's budget does not necessarily mean it will fit within DHS's budget. DoD's technology acquisition budget is orders of magnitude greater than DHS’s, so what is affordable for one agency may not be for the other.

I hope to hear from our DHS witnesses about these challenges and how they address them as they examine the array of available security technologies.

Also, since we are here today to discuss border security technology, I would be remiss if I did not address a report released this month by GAO on Customs and Border Protection's Arizona Border Surveillance Technology Plan. In short, GAO found that DHS does not have the information necessary to fully support and implement the estimated $1.5 billion plan, which is the successor to the cancelled SBInet program.

More specifically, the report states that DHS does not yet demonstrate the effectiveness and suitability of its new approach for deploying surveillance technology in Arizona and that it needs to document how, where, and why it plans to deploy specific combinations of technology prior to its acquisition and deployment. Also, GAO found that $1.5 billion 10-year cost estimate for the program may not be reliable.

I have said that the similarities GAO found between the failed SBInet program and aspects of the planned Arizona Border Sur-
veillance Technology Plan are both striking and troubling. There is still time for DHS to avoid another failed border security technology project, but DHS must heed GAO's recommendation by conducting a thorough and accurate cost analysis and carefully planning the purchase and deployment of technology.

I certainly hope CBP is following through on GAO's recommendation, and I would ask Mr. Borkowski to speak to that issue today. I thank our witnesses for joining us, and I look forward to their testimony.

Mrs. MILLER. Thank the gentleman very much for his opening statement.

Other Members of the committee are reminded that their opening statements may be submitted for the record. Then what I am going to do is go through the bios of each one of our witnesses today, and then we will start with Mr. Stockton.

Paul Stockton is the assistant secretary of defense for Homeland Defense and America's Security Affairs. In this position he is responsible for the supervision of homeland defense activities, defense support for civilian authorities, and Western Hemisphere security affairs for the Department of Defense. Prior to his confirmation, Assistant Secretary Stockton was a senior research scholar at Stanford University's Center for International Security and Cooperation.

Mark Borkowski became the assistant commissioner for the Office of Technology Innovation and Acquisition with U.S. Customs and Border Protection in July 2010. He is responsible for ensuring technology efforts are properly focused on mission and well-integrated across CBP and for strengthening effectiveness in acquisition and program management.

Prior to his appointment as the assistant commissioner Mr. Borkowski was named executive director of the SBInet. As executive director, he oversees the Department of Homeland Security's implementation of SBI at U.S. Customs and Border Protection and oversees the continued efforts to develop border security resources that will provide enhanced situational awareness for front-line CBP personnel.

Mr. Borkowski served over 23 years on active duty in the United States Air Force, retiring at the rank of colonel.

Dr. Adam Cox is currently the acting deputy director of the Homeland Security Advanced Research Projects Agency. Formerly, he was the chief of staff for the Strategy, Policy, and Budget Division. In this role he acted as a principal liaison with Congressional staff and OMB and worked to align DHS S&T programs with the priorities and goals of the administration, Congress, and the Department.

Michael Tangora is the deputy assistant commandant for acquisition and director of acquisition services for the United States Coast Guard. Prior to assuming this role he served as deputy program executive officer for the Coast Guard's Integrated Deepwater System. A Level 3 acquisition and program management professional, he came to the Coast Guard from the Navy, where he served as the deputy program manager for the Navy's aircraft carrier programs. He was previously assigned as the assistant program manager and technical director for surface mine warfare systems programs,
where he was responsible for the Navy’s total mine inventory, as well as all mine warfare sonar and autonomous vehicles used to persecute enemy mines.

Very, very distinguished panel, so we appreciate all of you coming today and look forward to your testimony and Q&A, as well.

We will start with Mr. Stockton.

STATEMENT OF PAUL N. STOCKTON, ASSISTANT SECRETARY OF DEFENSE FOR HOMELAND DEFENSE AND AMERICA’S SECURITY AFFAIRS, OFFICE OF UNDER SECRETARY OF DEFENSE FOR POLICY, U.S. DEPARTMENT OF DEFENSE

Mr. Stockton. Chairman Miller, Ranking Member Cuellar, distinguished Members of the subcommittee, I am going to cut to the chase right now: We have an historic opportunity with the drawdown of operations outside the United States to continue to press forward to find ways of supporting the Department of Homeland Security, our other Federal partners, State and local first responders, so the military technology that you pointed out, Chairwoman, that the taxpayers already pay to develop, that we find ways of transferring that technology at a time when the budgets of our State and local first responders are under incredible pressure.

This is a great opportunity. We have a one-stop shopping opportunity for our Federal partners and for the State and local first responders with whom we coordinate. That is me. That is what I do. It is a responsibility I take very, very seriously, and I will be happy to talk a little bit more about how that process works a little bit later.

But first, let me take just a couple of moments to briefly summarize the programs that we have underway, especially those programs, Ranking Member Cuellar, that recognize the problem of affordability. First of all, we have acquisition programs in the Department of Defense to facilitate Federal, State, and local agency acquisition of equipment from the Department of Defense. So we, in summary, for certain scarce types of technology and equipment, we make it possible to buy these pieces of equipment from the Department of Defense.

I think more valuable, given the kind of budget crunch that States and localities are in today, are our excess property programs. We operate programs to transfer excess DoD equipment to Federal, State, and local agencies. In 50 States and more than 1,700 Federal, State, and local agencies they have received over $2.6 billion worth of donated excess DoD equipment for use in counternarcotic, counterterrorism activities, border security.

Let me emphasize that we are drastically ramping up the pace at which we are able to provide this equipment that our first responders and our Federal partners say they need. This year alone we have gone—my testimony says $500 million—we have just passed $600 million worth of equipment in this fiscal year alone that is required by States and localities and our Federal partners in order to do their jobs, including support to border security.

Let me give you some examples: 27 light armored vehicles provided to law enforcement organizations in 10 States; three C–12 aircraft worth $4 million each to California’s Department of Forestry, fire protection; tactical vehicles and helicopters worth $5 mil-
lion that went to DHS Immigration and Customs Enforcement; robots, radiological detection equipment. Lots and lots of valuable equipment that DoD was able to acquire thanks to the taxpayers we are now transferring to our Federal partners and our State and local first responders, recognizing the budget crunch that they are in.

We also have another way of transferring DoD equipment to our partners that is low-cost, and that is equipment loan-lease programs. So, for example, robotics for IEDs and other explosive ordnance disposal—very, very expensive to have these robots for local governments to purchase them; instead, we loan these robots to local law enforcement agencies, other public safety organizations.

We enable bomb squads to meet their certification requirements. We have a night vision loan pool that provides very expensive night vision equipment to local law enforcement jurisdictions on a loan basis. We maintain the pool. We provide it to those agencies in 48 States.

Then we have expertise-sharing. You pointed out, Chairman, that the Department of Defense has acquired enormous expertise in dealing with explosive ordnance disposal, other kinds of challenges that we have faced abroad. Now we provide that kind of training, for example, to the Hazardous Devices School, an FBI investigation facility which is operated in Redstone Arsenal, Alabama.

I will point out that I have had the honor of supporting the Center for Domestic Preparedness in my past life. It is a wonderful institution, and in my old job in the Department of Defense we really enjoyed having an opportunity to support the curriculum development and the very important work that CDP continues to do.

We have dual-use technologies that I hope to be able to speak to later. It is all in my testimony, and I see my time is up. Thank you.

[The prepared statement of Mr. Stockton follows:]

**PREPARED STATEMENT OF PAUL N. STOCKTON**

**NOVEMBER 15, 2011**

**INTRODUCTION**

Chairman Miller, Ranking Member Cuellar, distinguished Members of the subcommittee: Thank you for the opportunity to address you today on the Department of Defense’s (DoD’s) programs for transferring capabilities and equipment to its Federal, State, and local partners.

DoD supports the Department of Homeland Security (DHS), and other Federal partners, as part of a whole-of-Government, whole-of-Nation approach to both domestic security and domestic incident response. One of the pillars of the Department’s Strategy for Homeland Defense and Civil Support is to promote the integrating and sharing of applicable DoD capabilities, equipment, technologies, and technical expertise with Federal, State, local, Tribal, and private sector partners. This sharing arrangement strengthens the Nation’s ability to respond to threats and domestic emergencies. DoD continues to work closely with its interagency partners, in particular DHS, to build capacity vertically from the Federal level down to the local level, and horizontally across the Federal Government. I want to thank Congress for providing DoD with the tools that are absolutely essential to making this possible.

In accordance with Section 1401 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Pub. L. 107–314), I serve as the senior DoD official responsible for coordinating “all Department of Defense efforts to identify, evaluate, deploy, and transfer to Federal, State, and local first responders technology items and equipment in support of homeland security.” To this end, I established what
I call the “DoD Domestic Preparedness Support Initiative.” Through this program, I work closely with DHS, the Department of Justice (DOJ), and our other Federal, State, and local partners.

The Domestic Preparedness Support Initiative focuses on five approaches: Acquisition programs; excess property programs; equipment loan-lease programs; expertise sharing; and the leveraging of dual-use technologies developed by DoD.

ACQUISITION PROGRAMS

DoD operates several programs to facilitate Federal, State, and local agency acquisition of equipment from DoD. For instance, in September 1968, Congress authorized DoD to sell 2 suitable surplus equipment to State and local law enforcement and firefighting agencies. In 2010, DoD championed, and Congress passed, an expansion of this authority to include homeland security and emergency management agencies. In November 1993, Congress authorized State and local governments to purchase law enforcement equipment suitable for counter-drug activities through DoD. In 2008, DoD championed, and Congress passed, an expansion of this authority to include equipment suitable for homeland security and emergency response activities. In September 1996, Congress authorized DoD to sell or donate to Federal and State law enforcement agencies excess property suitable for use by the agencies in law enforcement activities, including counter-drug and counter-terrorism activities. In October 2000, Congress authorized DoD to sell or donate to State firefighting agencies excess property suitable for use in fire and emergency medical services.

At least 43 States access DoD procurement contracts through these programs, allowing law enforcement agencies to purchase weapons and ammunition; chemical and biological defense equipment (e.g., decontamination, full body protection, shelter protection, and respiration protection); aviation support equipment (e.g., aviation parts and support items); and communications and electronics equipment (e.g., early warning systems, tactical radios, and night vision goggles).

EXCESS PROPERTY PROGRAMS

DoD also operates programs to transfer excess DoD equipment to Federal, State, and local agencies. For example, as noted above, in September 1996, Congress authorized DoD to donate to Federal and State law enforcement agencies excess property suitable for use in counter-drug and counter-terrorism activities. Also, as noted above, in October 2000, Congress authorized DoD to donate State firefighting agencies excess property suitable for use in firefighting activities.

All 50 States and more than 17,000 Federal, State, and local agencies have received more than $2.6 billion worth of donated excess DoD equipment for use in counter-drug and counter-terrorism activities, almost $500 million of this in fiscal year 2011 alone. More than 2,200 Fire Departments and State Forestry Departments in at least 32 States have received excess DoD equipment for use in firefighting activities. From fiscal year 2008 to fiscal year 2010, these States received more than $382 million worth of equipment, including more than 5,927 vehicles and trailers. Other donations included:

- Twenty-seven light armored vehicles (V–150s and V–300s), worth $500,000 each, that went to 10 States (in 2007 and 2009).
- Three C–12 aircraft, worth $4 million each, that went to California’s Department of Forestry and Fire Protection (in 2008).
- Winches, hoists, and cranes; tents and tarps; guns up to .30 caliber; and field litters, worth approximately $638,000, that went to DHS/Customs and Border
Protection (CBP) (in 2010). In addition, 34 snowmobiles to patrol the border, thereby saving more than $150,000, also went to DHS/CBP (also in 2010).

- Tactical vehicles and five helicopters, worth approximately $5 million, that went to DHS/Immigration and Customs Enforcement (ICE).
- An excess DoD Mark II robot, originally valued at $55,000, that went to the Ashland County Bomb Squad in Ohio.
- Through a partnership with DHS, the Department of Energy (DOE), and the Health Physics Society (the Homeland Defense Equipment Reuse (HDER) Program), excess DoD radiological detection instrumentation and other equipment, as well as no-cost training and long-term technical support, that went to emergency responders.

EQUIPMENT LOAN-LEASE PROGRAMS

DoD’s equipment loan-lease program provided Federal, State, and local agencies access to valuable capabilities. These agencies then have an opportunity to use, evaluate, and experiment with these capabilities in return for feedback on their effectiveness in the field. For example, DoD’s Robotics Loan Pool loaned robotic systems to public safety organizations. Currently, five robots are on loan in Massachusetts and Hawaii. Over the life of this program, more than 100 Government organizations, mostly State and local agencies, and 22 commercial entities participated in this program. In many cases, Government organizations used this loan program to enable bomb squads to meet their certification requirements. In general, commercial entities used this program to develop new payloads for use by the military and first responders. DoD’s Night Vision Loan Pool provides State law enforcement agencies with a low-cost (i.e., $300 annually), low-maintenance alternative to purchasing night vision devices. Currently, approximately 1,231 night vision devices are on loan to 429 agencies in 48 States.

EXPERTISE SHARING

By sharing DoD’s expertise with its Federal, State, and local partners, DoD helps improve their capabilities. In return, DoD can readily leverage the expertise and experience of its partners to improve DoD’s capabilities. The Hazardous Devices School (HDS), a Federal Bureau of Investigation facility, which is operated by the Army’s Ordnance Munitions and Electronics Maintenance School at Redstone Arsenal, Alabama, trains Federal, State, and local bomb squads. Since 1971, HDS has trained and accredited thousands of technicians, including more than 50 new bomb squads since September 11, 2011. The Domestic Preparedness Equipment Technical Assistance Program (DPETAP), which is executed by the Army’s Pine Bluff Arsenal, Arkansas, provides mobile teams to provide on-site technical assistance to first responders for selecting, operating, and maintaining radiological, chemical, and biological equipment. The Interoperable Communications Technical Assistance Program (ICTAP), which is executed by the Space and Naval Warfare Systems Center (SPAWAR) Pacific, has helped more than 75 States and metropolitan areas to develop and implement regional communications plans using the Communication Asset Survey and Mapping Tool (CASM). ICTAP addresses interoperability issues, including governance and planning, technical needs and solutions, and exercising and training.

DUAL-USE TECHNOLOGIES

DoD research and development has led to the production of many items that are now routinely used by our Federal, State, and local partners. DoD works closely with its partners to leverage potential “dual-use technologies” originally developed for military application for civilian applications. As an example, DoD assisted the U.S. Coast Guard in evaluating sensors and platforms that could enhance its ability to conduct wide area surveillance to detect, identify, and track vessels of interest. Likewise, in 2003, a Predator B Unmanned Aerial Vehicle (UAV), scheduled for future delivery to DoD, operated in support of DHS/ICE Operation SAFEGUARD, a joint humanitarian/law enforcement effort along the Southwest Border. Operation SAFEGUARD provided an opportunity for DoD to demonstrate UAV capabilities to border authorities and also served to highlight the policy, legal, and infrastructure issues that must be examined in tandem with technology development. These include challenges associated with the use of UAVs in controlled domestic airspace as well as the extensive infrastructure (e.g., communications, exploitation tools, and imagery analysts) required to process and exploit information collected by UAVs. In addition, in 2008, DoD developed and installed a fiber optic-based acoustic sensor prototype system in the San Diego area. In 2009, DHS purchased this system and continues to support its operational evaluation by the San Diego Tunnel Task
The bulk of TSWG core funding is provided by DoD. Additional funding is supplied by the Department of State, while other Federal departments and agencies share the costs of selected projects.

DoD’s Counterterrorism Technical Support Office (CTTSCO), which oversees the interagency Technical Support Working Group (TSWG) (85 Federal agencies, including DHS, DOJ, DOE, and the Department of Health and Human Services, work together to research and develop, test and evaluate, and deliver combating terrorism capabilities to the National interagency community rapidly), is currently developing capabilities to detect, locate, monitor, and disrupt subterranean operations in semi-permissive and non-permissive environments to allow tactical forces to conduct operations and counter hostile and/or criminal networks. Current, CTTSCO counter-tunnel projects of interest include:

- **Portable Ground-Penetrating Radar.**—Battery powered, man-portable, ruggedized system to detect subterranean structures (tunnels, bunkers, and caches) to a minimum depth of 15 feet, with antenna configuration to allow for operation by one person and be employable in any terrain.
- **Improved Underground Communications.**—A planned proof-of-concept involving multiple technology demonstrations, which is currently investigating if further funding is warranted.
- **Remote Imaging and Detection of Underground Anomalies.**—A proven prototype that implements laser technology to identify buried objects (e.g., caches and improvised explosive devices). In fiscal year 2011, development of this prototype was expanded to determine if the technology is capable of detecting voids.
- **Seismic-Acoustic Sensor Kit.**—A mobile seismic acoustic sensor system designed to detect underground activity with the intent of easy deployment and operation in a temporary environment (though permanent installation is also an option).

**CONCLUSION**

At the signing of the Declaration of Independence, Benjamin Franklin is reported to have said, “We must, indeed, all hang together, or assuredly we shall all hang separately.” Similarly, as we—Federal, State, and local government agencies, the public sector and the private sector, non-governmental organizations, and individual citizens—share the burden of the threats challenging our Nation, so too must we share our strengths and capabilities to meet these challenges more effectively. If we do not, assuredly we shall all hang separately.

Chairman Miller, Ranking Member Cuellar, distinguished Members of the subcommittee: I commend you for your leadership, continued interest, efforts, and support in DoD’s defense of the United States and support to civil authorities here at home. I look forward to working with you in the future.

**STATEMENT OF MARK S. BORKOWSKI, ASSISTANT COMMISSIONER, OFFICE OF TECHNOLOGY INNOVATION AND ACQUISITION, U.S. CUSTOMS AND BORDER PROTECTION, U.S. DEPARTMENT OF HOMELAND SECURITY**

Mr. BORKOWSKI. Thank you.

Chairwoman Miller, Ranking Member Cuellar, Ranking Member Thompson, distinguished Members of the committee, it is a pleasure to be here before you again to talk about CBP’s plans for technology and how we interact with DoD. My two colleagues and I have submitted joint written testimony, but we will each have brief opening remarks from our own perspective on this issue.
If you do look at that written technology you will see that what we did is we tried to cast a picture to show that we have had a long and extensive and very broad relationship with the Department of Defense, looking at a whole range of technologies, and ability to evaluate them, and operational concepts. In fact, from that relationship we have derived our plan going forward—the plan that replaced—I am not so sure I am prepared to say succeeds—replaced SBInet. Because that plan itself is a plan that is based on existing technology, many elements of which come from DoD.

Elements of that are, in fact, systems that Congressman Cuellar, Congressman McCaul, and I went and looked and in Laredo in November. So I think it is important to start with that. This is a different technology approach.

When we talk about things like the GAO report, where we are contrasted with SBInet, I would just call the committee’s attention to the fact that another contrast might be with the way we bought remote video surveillance systems for the Northern Border. Didn’t hear a lot of problems with that because we changed our method of buying them, and that method we applied to the Northern Border is the method we are applying now to the Southern Border.

Also, interestingly enough, what we bought on the Northern Border are systems we are buying and estimated the cost for on the Southern Border. So while it is true that we need to be attentive to the risks in the plan going forward, it is a much different plan, and it is a plan that is based on existing available technologies. Even the IFT—the Integrated Fixed Towers, which are one element of that plan—is not SBInet. It is not a successor. It is not a development program. It is a program that is based on available systems, including systems that are available in the Department of Defense today.

So our whole approach to the initial deployment of technology on the border is based very much with the kinds of concepts that I think this committee is interested in, and we will continue to do that.

It is interesting, because I have had a little trouble explaining this, and perhaps I am not as eloquent, perhaps, as General Schwartz, but I was reminded of something that General Schwartz, the chief of staff of the Air Force, had said. I thought, if I may, I—because this is our view—I would share this. He said, although historically we have had more trade space to advance the state-of-the-art we now must be more calibrated in pushing the technological envelope. We must be ruthlessly honest and disciplined when our operational requirements allow for more modest, less exquisite, and higher confidence acquisition programs.

He goes on to say, Government must ensure stable requirements and reliable funding streams, while industry must bid realistically and resist offering to sell more than what is operationally required. In a time of robust funding we lost the ability to differentiate what is essential and what is nice to have.

That is exactly where we are. So I think we and the Department of Defense also share a view of how best to proceed in getting focused on what we need, not what is the shiniest thing in the box. We are aware that many of those systems exist today from DoD.
Going forward, there are systems that we are interested in, going forward. We have flexibility in our planning that will require additional evaluation and additional work, but it may be worth it. We continue to evaluate those, and we will hear more from the Department of Homeland Security’s Science and Technology because we rely on them to help us in that regard.

In my remaining minute I did—I think I have a remaining minute—I did want to address the GAO report briefly, and I will look forward to questions. But certainly when we look at the GAO report I have two views of it. One is, it is actually rather good. It is rather good in the sense that it identifies and confirms risks that we ourselves had identified and, frankly, believe we have managed. It is rather good in setting context. As you can imagine, when you have a risk all kinds—there is a whole range of things that can happen, from nothing bad to tremendously bad, and the GAO report focuses on the range that is tremendously bad. I will tell you that we don’t think that it is likely that we will be on that end of the risk.

I will give you, for example, in terms of cost—we understood the issues that the GAO recognized in cost and we provided for that. While we maybe didn’t measure the risk, we certainly did accommodate it, and to this point, what we are actually finding—keep your fingers crossed—but what we are actually finding is that the actual costs that we seem to be incurring are likely to be less than we identified in those rough order magnitude costs because we did accommodate the risk.

So I will look forward to the questions. I do think that the GAO did a nice job of identifying risks, but I would say those were risks that we were aware of and we believe we have plans in place that will minimize the likelihood that getting that risk will get us to the far bad end of the spectrum.

With that, I will look forward to your questions.

The joint prepared statement of Mr. Borkowski, Mr. Benda, and Mr. Tangora follows:

JOINT PREPARED STATEMENT OF MARK S. BORKOWSKI, PAUL BENDA, AND MICHAEL TANGORA

NOVEMBER 15, 2011

INTRODUCTION

Chairwoman Miller, Ranking Member Cuellar, and distinguished Members of the committee, it is a privilege and an honor to appear before you today to discuss the Department of Homeland Security’s (DHS) on-going collaboration with the Department of Defense (DoD) to secure our Nation’s borders and particularly the role U.S. Customs and Border Protection’s (CBP), the Science and Technology Directorate (S&T), and the U.S. Coast Guard (USCG) have played in such cooperative efforts. I am Mark Borkowski, Assistant Commissioner of CBP’s Office of Technology Innovation and Acquisition (OTIA) and the CBP Component Acquisition Executive. I am pleased to offer this joint statement with my colleagues Paul Benda, Chief of Staff for DHS S&T and Director of the S&T Homeland Security Advanced Research Projects Agency (HSARPA), and Michael Tangora, Deputy Assistant Commandant for Acquisition in the U.S. Coast Guard.

As America’s front-line border agency, CBP’s priority mission is to protect the American public while facilitating lawful travel and trade. To do this, CBP has deployed a multi-layered, risk-based approach to enhance the security of our borders while facilitating the flow of lawful people and goods entering the United States. This layered approach to security reduces our reliance on any single point or program that could be compromised. It also extends our zone of security outward, en-
suring that our physical border is not the first or last line of defense, but one of
many.
Technology plays a critical role in this layered approach. My role, as assistant
commissioner and CBP's component acquisition executive, is to ensure our tech-
nology efforts are mission-oriented and well-integrated across agencies and Depart-
ments. To support us in our mission, we have developed extensive partnerships with
DHS S&T and DoD.

OVERVIEW OF CBP, DHS, S&T, AND DOD INTERACTIONS

CBP is one of many components within DHS that work with DoD on a regular
basis. In many cases, CBP partners with DHS S&T and together we work with DoD
to leverage their investments and experiences to help identify potential solutions for
CBP programs. DHS S&T plays a key role in many CBP activities including funding,
co-founding, and providing technical expertise to many of the projects discussed
throughout this testimony.

Together, CBP and S&T enjoy a close working relationship with our DoD counter-
parts. Many of the technologies CBP needs to support our officers and agents in the
field have already been put into practice by DoD. There are many similarities, but
also differences, between DoD and CBP missions and objectives. Through our his-
tory of close collaboration, we have been able to take advantage of what we have
in common.

There are also opportunities for us to further refine our partnership with DoD.
We look forward to continuing to work closely with DoD to develop a comprehensive
view of the technologies we can leverage together, while keeping in mind the different missions, objectives, and needs for the two departments.

As we look back over our extensive history and relationship with DoD, we have
found four general types of collaboration. They are:
• Joint Development and Demonstration;
• Test Support;
• Deployed Systems;
• Joint Operations.

The following examples are testament to the breadth and depth of our work with
DoD. The examples are a snapshot in time; we find new opportunities every day.
We look forward to continuing to build these relationships and seek new ones with
those offices that have the technology and capability to help us perform our critical
missions.

JOINT DEVELOPMENT AND DEMONSTRATION

“Development and Demonstration” is the creation of a technology and the demon-
stration of the applicability of that technology in a particular mission setting. We
often work with DoD to tailor already-existing technology (originally designed for a
DoD application) to CBP's mission. We also benefit from joint opportunities to evalu-
ate potential future technologies. In some cases, we work with an acquisition com-
mand with specific expertise like the U.S. Army Night Vision and Electronic Sensors
Directorate. In other instances, we work with an OSD organization such as Rapid
Reaction Technology Office, an organization that coordinates across Service organi-
zations. We also conduct cooperative demonstrations to assess DoD technology in a
joint or CBP unique mission area. The examples listed below describe a variety of
projects and concepts that have arisen through collaborations with DoD.

DoD Organization: OSD Rapid Reaction Technology Office (RRTO)
Joint Effort.—Due to RRTO's extensive history of demonstrating technology for
rapid deployment to the field, DHS has been able to leverage RRTO's efforts instead
of creating new demonstrations. For example, knowledge we gained from RRTO re-
search is currently informing our acquisition strategy for the sensor systems we will
be deploying as part of our Arizona Technology Deployment Plan.

DoD Organization: Joint Project Manager Guardian (JPMG)
Joint Effort.—Joint Program Manager Guardian acts as a clearinghouse for infor-
mation about a wide range of technology systems, including Weapons of Mass De-
struction (WMD) detection, tunnel detection, and monitoring technologies.

DoD Organization: U.S. Northern Command
Joint Effort.—The Rapid Reaction Tunnel Detection (R2TD) Joint Capabilities
Technology Demonstration (JCTD) is a DoD program to evaluate a readily available
technology for tunnel detection. Working with Northern Command, we have been
able to apply the system as a demonstrator for tunnel detection at the border as
well as to collect data for DoD’s purposes. The Border Tunnel Activity Detection
System (BTADS), part of the R2TD initiative, is a multi-sensor system utilizing a combination of sensors and mobile equipment to detect general tunnel activity and find its specific location. The system has undergone extensive testing in the San Diego Sector and other locations within and outside the United States. We continue to use it while we complete our effectiveness evaluations. The result of those evaluations will also help inform the development of requirements for future tunnel detection projects.

DoD Organization: Defense Threat Reduction Agency (DTRA)

Joint Effort.—Our experience with tunnel detection and unattended ground sensors has shown that it is critical to understand the geophysical characteristics of a particular area in order to design effective detection systems. This on-going project with DTRA is developing a detailed understanding of the subsurface geophysical characteristics and their effect on seismic, acoustic, and electro-magnetic signal sources. The result of this effort will be a 3-D modeling program that will assist in the deployment and use of tunnel detection technologies.

DoD Organization: Combating Terrorism Technical Support Office (CTTSO), Technical Support Working Group (TSWG)

Joint Effort.—This is another on-going project focused on tunnel detection. It will include evaluations of various technologies including a portable seismic acoustic sensor kit, advanced ground penetrating radar, thermal cameras, robot platforms for remote illicit tunnel inspection, and 360-degree video systems.

DoD Organization: Army Communications Electronic Research Development and Engineering Center (CERDEC)

Joint Effort.—Between 2009 and into the summer of 2011, DHS and CERDEC (along with several other supporting DoD organizations) evaluated the Vehicle and Dismount Exploitation Radar (VaDER) on both fixed-wing and DHS’s Predator drone aircraft. VaDER offers the potential for an affordable sensor package that can detect small moving objects on the ground. Its operation on the DHS Predator offered proof-of-concept for both DoD and DHS. In addition, during the evaluation, VaDER successfully supported the detection and interdiction of illicit border incursions. The results to date have demonstrated the significant potential of VaDER as applied to CBP’s mission.

DoD Organization: Army Research Lab, Acoustic Signal Processing Branch

Joint Effort.—Unattended Ground Sensors (UGS) have long been a staple of our border surveillance technology. Understanding how and where they work, and what we can do to improve their performance, has value to both DoD and DHS. We have worked with this laboratory since 2006 to expand our understanding and continue to gain useful insights as a result of this collaboration.

DoD Organization: Naval Research Lab (NRL)

Joint Effort.—Since 2005, we have collaborated with NRL on algorithm development to distinguish tripwire activity so that we are able to differentiate among human, animals, and vehicle movement.

DoD Organization: Defense Intelligence Agency (DIA)

Joint Effort.—This on-going collaboration with the Defense Intelligence Agency will develop sensor technology capable of distinguishing between human, animal and vehicle traffic.

DoD Organization: Sandia National Lab

Joint Effort.—Sandia is a U.S. Department of Energy (DOE) laboratory with expertise in Non-Intrusive Inspection (NII) technology. NII systems help us detect hidden contraband quickly and effectively. Both DHS and DoD use Sandia’s expertise to support research, development, and evaluation of the Non-Intrusive Inspection (NII) technology and detector designs.

DoD Organization: OSD Rapid Reaction Technology Office (RRTO)

Joint Effort.—The Thunderstorm program was established to test evolving intelligence, surveillance, and reconnaissance (ISR) architectures, emerging technologies, and transformational concepts. The first generation testing of Thunderstorm included Border Patrol using DoD sensor data to provide a more complete operational picture in Southern Arizona. Future planning will include demonstration of two-way communication capability to provide a common operational picture (and improved, integrated command and control) among multiple agencies.
Joint Effort.—Radars are becoming increasingly important elements of our border security technology suite. There are many types of radars available so characterization of them in our border environment helps us to select among them. This collaboration is assisting with performance analysis and test and evaluation of radars and their associated signal processing suite, and the integration and test and evaluation of imagery sensors to include assessment of image performance characteristics and life-cycle costs.

Joint Effort.—We depend on well-established and recognized experts to advise us about existing and potential technologies for application to our missions. Since 2007, the Institute for Defense Analyses has provided subject matter expertise for market research, radar recommendations, test site and test methodology planning, test support and data analysis assistance on improving detection and tracking of ground surveillance radars in challenging border environments.

Joint Effort.—Part of any technology deployment plan should be a strong and effective logistics support strategy. DHS and CBP have limited expertise in this area, so we have solicited assistance from DoD experts. This effort is developing logistics and sustainment plans and processes for SBInet Block 1 and other CBP acquisitions.

Joint Effort.—Many DoD organizations have tools and extensive experience in Mission Analysis and Operations Research, which CBP has leveraged to augment our own capabilities. Together, this collaboration completed a study to determine the sensor mix that maximizes the probability and efficiency of detecting existing tunnels and tunnel construction activity on the U.S. border according to geographic location, infrastructure, and historical data. Also addressed in the study was a business model for illegal cross-border tunnels based on production rates of interceded narcotic quantities.

Joint Effort.—We have an on-going effort to develop a Cross-Border Secure Communications Network (CBSCN) Project with Mexico. This project is designed to enhance international cooperation and interoperability, which in turn should enhance our overall border security. This collaboration supports the installation of microwave equipment at 10 city pairs along the U.S.-Mexico border for the purpose of addressing the need for a long-term solution to cross-border communications.

Joint Effort.—Starting in 2010, the two agencies worked together on a joint demonstration to determine the effectiveness of current CBP air assets to detect and track small, dark aircraft. The demonstration showed how CBP air assets could increase their ability to detect these aircraft by changing their patrol strategies.

Joint Effort.—This project is focused on developing innovative technologies that can detect and track small dark aircraft along the Northwest Border of the United States. To date, exercises/testing have identified three promising, low-cost sensor technologies that can detect these aircraft at significant standoff ranges.

Joint Effort.—Low-flying aircraft are a concern for border security because they are difficult to detect with existing radars. In this collaboration, we studied the use of Sentinel DoD radars during demonstrations along the Northern Border to evaluate their ability to detect low-flying aircraft.

Joint Effort.—CBP’s mission includes requirements to detect small items of interest in large expanses of oceans—for example, to detect potential drug smugglers.
The Tipsheet Review and Correlation EnhanceR (TRACER) is a software application that enables an intelligence imagery analyst to quickly find and characterize small maritime vessels in an image showing over 1,000 square miles of ocean. The value of TRACER stems from the speed with which it finds small vessels in large areas of ocean and shares critical information about those vessels.

DoD Organization: Naval Research Lab and Naval Systems Warfare Center (NSWC)

Joint Effort.—The Small Vessel Tracking system consists of a system to fuse and present multiple vessel information sources to law enforcement operators, through a laptop, into real-time tracking and mobile field kit software. This effort also evaluated RFID tags for tracking small vessels in a port/coastal environment. The core technology was developed by DoD to assist in mission planning for interdiction efforts. NSWC program management continues to provide support and technical expertise for the development of these sensor and surveillance technologies; a Small Business Innovation Research (SBIR) effort.

DoD Organization: Naval Research Lab (NRL)

Joint Effort.—This on-going effort began in 2010. Shipboard Automated Automatic Identification System (AIS) Radar Contact Reporting (SARCR) is a NRL Rapid Prototype System developed to deploy on-board U.S.-flagged commercial vessels, USCG costal patrol boats, and select naval support vessels with a feed to DoD and DHS operational components including CBP. The purpose of the SARCR System is to capture and relay vessel radar and AIS data from the ship to a land-based central processing center for distribution to DoD/DHS operating agencies. SARCR addresses the DHS maritime capability gap associated with wide-area surveillance against illegal traffic which includes GO FAST boats, chugs, yolas, and potentially self-propelled semi-submersibles (SPSS). These non-radiating targets are often referred to as “dark” targets and separation of AIS contacts from non-radiating targets is the first level of filtering in determining suspicious behavior.

DoD Organization: Naval Research Lab and USAF Air Combat Command (ACC)

Joint Effort.—This collaboration conducted over the past year was a demonstration of Tethered Aerostat System Adjunct Radar Processor (TARP) by leveraging the existing USAF ACC Tethered Aerostat Radar System (TARS) radar surveillance capability in the region (optimized to detect low, slow-flying aircraft) to provide enhanced maritime surface coverage and tracking capability. DHS adapted a new, high-resolution radar processor to function with L-band radar designed specifically for detecting low- and slow-flying aircraft and making that surface contact data available to the appropriate action agency via the web-based radar display.

DoD Organization: Naval Research Lab and NSWC

Joint Effort.—The Modular Sensor System/Improved Imaging Technology Project is a sensor and processing suite used for persistent wide-area surveillance and target tracking for port, harbor, and coastal environments. The Improved Imaging Technology (IIT) camera was developed over the last year at NRL as an Office of Naval Research (ONR) Future Naval Capability (FNC) program. This project integrated the camera system into an established port/coastal surveillance system used by the USCG but also has applicability to the CBP maritime mission area.

DoD Organization: Naval Research Lab (NRL)

Joint Effort.—This on-going effort is focused on leveraging existing weather radars for ocean surveillance. The National High Frequency (HF) Radar Network, component of U.S. Integrated Ocean Observing System (IOOS) led by NOAA, provides beyond the horizon surface current data. The HF radars are also capable of detecting the speed and location of vessels at sea, using algorithms developed by Rutgers. HF radar are currently monitoring approaches to New York Harbor.

DoD Organization: Naval Underwater Warfare Center Newport (NUWC Newport)

Joint Effort.—Between 2008 and 2010, The NUWC Newport conducted a test and evaluation of an improved radar capability to enhance ocean surveillance. The effort focused on the potential applicability and effectiveness of low-cost, commercially available radars to the detection and tracking of large and small vessels in port and coastal regions.

TEST SUPPORT

The Department of Defense has extensive test facilities, test ranges, and subject matter experts that DHS can use for checkout, demonstration, and operational evaluation of technology solutions and tactics. Use of these DoD capabilities offers a “try-before-buy” opportunity that reduces the risk of technology acquisition and in-
creases the likelihood that selected technologies will be operationally useful. The DoD has not only offered testing environments for our new assets, but also provided experts to conduct the tests. The use of DoD facilities for testing purposes will continue to support DHS efforts to test and accredit technology as the following examples demonstrate.

**DoD Organization:** U.S. Army Test and Evaluation Command (ATEC)

**Joint Effort.**—DHS solicited support from ATEC for the structured, quantitative, and comprehensive operational test and evaluation of our SBInet Block 1 effort. ATEC conducted the test in late 2010, performed data analysis, summarized test results, and provided recommendations for improved system effectiveness and suitability. In the process, DHS also gained valuable experience in performing this type of robust operational test and evaluation.

**DoD Organization:** Joint Technology Assessment Activity (JTAA), Naval Systems Warfare Center (NSWC)

**Joint Effort.**—DHS has a continuing need for support to conduct operational test and evaluation activities. NSWC signed a 5-year Interagency Agreement that will provide Operational Test Agent support so that we can better ensure our technology provides value to our law enforcement personnel.

**DoD Organization:** Commander Operational Test and Evaluation Force (COMOPTEVFOR)

**Joint Effort.**—As we deploy the Integrated Fixed Towers (one of the systems within the technology portfolio selected as part of the new Arizona Technology Deployment Plan), we have asked and received support from COMOPTEVFOR. COMOPTEVFOR will serve as our formal “Operational Test Agent.”

**DoD Organization:** U.S. Army's Joint Interoperability Test Command (JITC)

**Joint Effort.**—We have a strong interest in maintaining awareness of the capabilities and availabilities of sensor systems. This awareness, in turn, advises our acquisition strategies and plans for technology along the border. The JITC has provided facilities, ranges, and personnel for several radar tests to characterize and compare systems for their potential effectiveness along the border.

**DoD Organization:** Naval Facilities Engineering Support Center, Space and Naval Warfare (SPAWAR) Systems Center Pacific

**Joint Effort.**—As part of our approach to secure the maritime environment, we are interested in capabilities to detect small, underwater targets. The Center supported test and evaluation of a Low-Cost Underwater Swimmer/Diver Detection Systems [a Small Business Innovative Research (SBIR) project] and provided field support for testing of this technology and marine engineering technical support including analysis and recommendations.

**DEPLOYED SYSTEMS**

Many of the systems DHS currently uses for surveillance and situational awareness along the border come directly from DoD development and heritage. These systems include:

- Predator Drone—MQ–9
- Blackhawk—UH–60
- Orion P–3
- KingAir—Beechcraft
- Mobile Surveillance System (MSS)
- Agent Portable Sensor System (APSS)
- Remote Video Surveillance System (legacy system)
- Unattended Ground Sensors (Monitron, McQ Omnisense)
- Night Vision Camera (FLIR Night Ranger)
- SBInet Block 1 Laser Illuminator
- SBInet Block 1 Radar

Other examples include:

**DoD Organization:** U.S. Navy Space and Naval Warfare Systems Command (SPAWAR)

**Joint Effort.**—The Advanced Wireless System is an upgrade of our CPB communications infrastructure to correct obsolescence and shift frequencies. SPAWAR supports us by providing project management expertise and support, especially for tower construction.
DoD Organization: SPAWAR
Joint Effort.—SPAWAR and CBP have entered an Interagency Agreement with the Northern Border for the Law Enforcement Technical Collection project.

DoD Organization: Biometric Identification Management Agency (BIMA)
Joint Effort.—This collaboration developed the Automated Biometric Identification System (ABIS)—an application to process and identify all apprehended subjects. As part of normal processing, the fingerprints are searched against the FBI and DHS’s biometric databases. The Border Patrol now has the ability to automatically search the fingerprints and facial images against the DoD’s ABIS database, which has resulted in positive identifications of apprehended subjects.

DoD Organization: U.S. Army Night Vision and Electronic Sensors Directorate
Joint Effort.—DoD developed the Agent Portable Sensor System (APSS) and demonstrated its effectiveness during collaborative operations along the border. Based on this collaboration, DHS selected the APSS systems as part of the technology portfolio for the new Arizona Technology Deployment Plan. The Directorate also supported DHS by providing an Army contract for DHS procurements, which accelerated deployment of this capability to the border.

JOINT OPERATIONS

In addition to efforts that support development, evaluation, and deployment of technology systems, DHS collaborates with DoD and other agencies in direct support of the border security mission. DoD and other agency resources and personnel operate alongside our DHS personnel, providing expertise and support that increase our mission effectiveness. Examples include:

DoD Organization: Joint Task Force North (JTFN)
Joint Effort.—DHS has an extensive history of operational collaboration with JTFN. This collaboration provides a wide variety of capabilities in operations, engineering, training, intelligence, and application of technology. Some recent examples include:
• Operations.—JTFN has aided CBP in operations dealing with ground sensors, radar, aviation FLIR, and air reconnaissance.
• Engineering.—JTFN has supported CBP in construction of border tactical infrastructure such as roads, lights, bridges, and barriers.
• Training.—Mobile training teams have provided 92 classroom instruction missions that have covered planning, intelligence and field craft, and survival.
• Intelligence.—JTFN has provided support in the form of intelligence analysts, mapping, and imagery.
• Technology.—JTFN has supported 10 missions relating to tunnel detection. Currently, 62 JTFN support missions are tentatively planned for execution in fiscal year 2012.

Other Organization: Alliance to Combat Transnational Threats (ACTT)
Joint Effort.—This is an enforcement collaboration which leverages the capabilities and resources of more than 60 Federal, State, local, and Tribal agencies in Arizona, and the Mexican government, to combat individuals and criminal organizations that pose a threat to communities on either side of the border. This collaboration has resulted in the seizure of more than 2.2 million pounds of marijuana, 8,200 pounds of cocaine, and 2,700 pounds of methamphetamine; the seizure of more than $18 million in undeclared U.S. currency and 343 weapons; over 16,000 aliens denied entry to the United States at Arizona ports of entry due to criminal background or other disqualifying factors; and approximately 342,000 apprehensions between ports of entry.

DoD/Other Organization: DHS, DoD, and DOJ
Joint Effort.—Within the El Paso Intelligence Center, the DHS Office of Intelligence and Analysis established the Border Intelligence Fusion Section (BIFS) as a collaborative effort among DHS, DOJ, and DoD, which enables the integration and synthesis of all available Southwest Border intelligence from Federal, State, local, and Tribal partners. The result is a common intelligence picture that supports enforcement activities on the Southwest Border.

DoD Organization: DoD Central Command (CENTCOM)
Joint Effort.—Where DoD and DHS have a shared interest in Port Security, we can combine our resources to increase our effectiveness. For example, in 2008 CBP and CENTCOM entered an agreement to scan all U.S.-bound DoD containers at Port Shuaiba, Kuwait prior to landing in the United States.
DoD Organization: U.S. Northern Command and JTFN

Joint Effort.—CBP recognizes that we can increase our mission effectiveness by better operational integration among our front-line law enforcement components. While the concept is relatively new to us, DoD has extensive experience in designing and leveraging joint, multi-service capabilities. This collaboration has provided CBP’s Joint Operations Directorate (JOD) Joint Field Command (JFC) DoD’s experience with unification efforts to ensure CBP has a joint and integrated approach to border security, commercial enforcement, and trade facilitation missions in the Arizona area of responsibility. As a result of working together, CBP has benefited with assistance in processes, procedures, technology solutions, and received support.


Joint Effort.—Conducted intermittently since 2009 and continuing today, this effort has provided personnel of the Rangeley Station in Houlton Sector with cold weather survival training and detection and interdiction of Special Interest Targets using Advance Evasive Tactics training.

DoD Organization: U.S. Southern Command and JIATF-S

Joint Effort.—The groups have worked closely with the Homeland Security Task Force—Southeast (HSTF-SE) in coordinating multi-component/multi-agency prevention of potential or full-scale Caribbean mass migration, achieved through supporting criminal prosecutions and maintaining an active air, land, and sea presence.

Other Organization: JTFN, New York and Vermont National Guard

Joint Effort.—The first of three operations, Operation Maple Guard I (conducted in 2008), combined CBP and DoD’s assets in a concentrated interdiction effort. Ground-based radar sensors were deployed at two locations within Border Patrol’s Swanton Sector in order to gather intelligence on aircraft incursions. Interdiction aircraft and crews were deployed as a means of apprehending any identified incursions.

Other Organization: Royal Canadian Mounted Police (RCMP)

Joint Effort.—Operation Maple Guard II (conducted in 2008) supported CBP in an initiative aimed at identifying, limiting, and disrupting the ability of terrorists, traffickers, and immigration law violators to smuggle in the Swanton Sector area of responsibility using low-flying non-commercial aircraft.

Other Organization: RCMP, JTFN, Vermont National Guard and State Police

Joint Effort.—Operation Maple Guard III (conducted in 2010) facilitated collaboration and synchronization of assets from Canada, DoD, and CBP assets. Ground-based radar was deployed at 5 locations to gather intelligence on aircraft incursions. Interdiction aircraft and crews were on stand-by as a means of apprehending the identified incursions.

Other Organization: RCMP, Canadian Armed Forces, and the Canadian Network Operation Center (NOC)

Joint Effort.—This collaboration combined CBP and Canadian assets in a concentrated interdiction effort. A ground-based radar sensor was deployed in Canada in order to gather intelligence on aircraft incursions. Interdiction aircraft and crews were deployed as a means of apprehending any identified incursions.

Other Organization: DoD and National Guard

Joint Effort.—This collaboration provided assets and sensors towards Operation Southeast Watch, a multi-agency coordination effort to detect and interdict suspect targets of interests seeking to penetrate the border of the United States.

Other Organization: Washington National Guard Counter Drug Task Force (CDTF) and the Washington Air Guard CDTF

Joint Effort.—This collaboration, conducted between 2007 and 2010, provided additional personnel and deployed the DoD Beechcraft “Big Crow” to Spokane Sector, greatly enhancing the Sector’s situational awareness and overall detection capabilities.

Other Organization: JTFN, Northeast Counterdrug Training Center (NCTC), and Wisconsin National Guard

Joint Effort.—As a result of working together, DHS received training courses during fiscal year 2011 including courses in Interview and Interrogation, Intelligence and Link Analysis, and Intelligence and Preparation of the Operational Environment.
Other Organization: Vermont National Guard Civil Support Team (CST)

Joint Effort.—In 2011, the CST provided training to Border Patrol Agents stationed in Vermont, as well as local law enforcement agents. Courses covered WMD awareness, Officer Safety, Basic Combat Medic, and CST Awareness and Capabilities.

Other Organization: California National Guard (CALGUARD)

Joint Effort.—CALGUARD supports the engineering missions of Border Patrol’s San Diego Sector. They have supported the construction of border tactical infrastructure and facilities, such as drainage structure installation, landing mat fence, vehicle maintenance facility, two heavy equipment loading docks, and maintenance on over 90 miles of border road. Between 2006 and 2010, CALGUARD conducted 26 missions with us.

Other Organization: National Guard

Joint Effort.—DHS (including CBP) and the various elements of the National Guard often collaborate in responding to natural disasters. As one recent example, the North Dakota Army National Guard provided mutual support and engagement response to natural disasters in North Dakota.

DoD Organization: Army National Guard 1–188th Air Defense Artillery Battalion (North Dakota)

Joint Effort.—The battalion provided support through the use of their facilities. There is potential for expansion into an operational role if the unit’s Avenger GBASR is viable and utilized for short-term border security missions.

Other Organization: Minnesota Air National Guard

Joint Effort.—This collaboration provided an established operational intelligence-sharing environment between the Duluth Border Patrol Station and the 148th Fighter Wing. Duluth Station provides law enforcement support to wing Security Forces conducting immigration and criminal record checks for entrance via the Duluth International Airport. This venture has led to the arrest of undocumented aliens and one U.S. Citizen on an extraditable warrant.

Other Organization: Maine Army National Guard (ARNG)

Joint Effort.—Between 2006 and 2007, the Maine ARNG Counterdrug Program aircraft supported the sector’s counterdrug operations with aerial observation, interagency communications, and other capabilities using rotary-wing assets.

Other Organization: Puerto Rican National Guard

Joint Effort.—The Puerto Rican National Guard assigned a radio technician to Border Patrol’s Ramey Sector. They have supported Operation Southeast Watch (2009) in eastern Puerto Rico with an Athena maritime radar platform, and Operation Island Hopper III (2011). Additionally, they have provided sniper training and use of their firing range to BORTAC agents.

OVERVIEW OF USCG AND DOD INTERACTIONS

The Coast Guard has long partnered with the Department of Defense, the U.S. Navy and the other military services to develop joint systems and capabilities for its cutters, aircraft, and information and communications systems. These partnerships are vital to the Coast Guard’s ability to meet its defense readiness mission requirements and deploy in support of Combatant Commanders. In addition, the Coast Guard is working with other DHS agencies to develop assets and capabilities that have applications across shared areas of responsibility such as border security and other law enforcement operations. In order to support these partnerships, the Coast Guard employs Coast Guard liaisons in the Department of Defense and other partner organizations.

The purpose of the Coast Guard’s Research, Development, Test and Evaluation (RDT&E) Program is to support Coast Guard operational, regulatory, and acquisition activities by leveraging innovative scientific and technological solutions. The primary organization that performs RDT&E in support of Coast Guard programs is the Research and Development Center (RDC), located in New London, Connecticut. The Coast Guard also works in close cooperation with the other military services and DHS. These partnerships are providing the Coast Guard with additional capabilities to meet its RDT&E needs.
Chairwoman Miller, Ranking Member Cuellar, and distinguished Members of the subcommittee, we thank you for this opportunity to testify about the work of U.S. Customs and Border Protection and the U.S. Coast Guard and our collaboration with DoD—across nearly 40 agencies and organizations—to help secure our borders. We look forward to finding new ways to collaborate in the coming months and years. CBP and the USCG recognize the importance of eliminating redundancies and increasing efficiency within the Government, and collaboration is paramount to our overall success. The complexity and shared interests of the Northern, Southern, and Coastal Borders have spurred many long-standing partnerships and such initiatives strengthen manpower, technology, and intelligence.

We look forward to answering your questions at this time.

Mrs. MILLER. Thank you.

The Chairwoman now recognizes Dr. Cox, for his testimony.

STATEMENT OF ADAM COX, DEPUTY DIRECTOR (ACTING), HOMELAND SECURITY ADVANCED RESEARCH PROJECTS AGENCY, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. COX. Thank you.

Good morning, Chairman Miller, Ranking Member Cuellar, Ranking Member Thompson, and the rest of the distinguished Members of the committee. The director, of course, regrets he couldn’t be here today as he is celebrating the birth of his first child, Quinn Isabella Benda, who was born yesterday morning.

As you know, S&T strives to strengthen American security and resiliency by providing innovative technology solutions and knowledge products to the homeland security enterprise. HSARPA is the primary R&D entity within S&T and it includes six technical divisions, one of which is our borders and maritime division, whose primary focus is the technology needs of CBP, the Coast Guard, and ICE in their missions to secure our border at and between the ports of entry.

I appreciate the opportunity to appear today before you, and I would like to use the remainder of my time to quickly cover three topics: our close working relationship with CBP’s Office of Technology Innovation and Acquisition, the formal mechanisms with which we coordinate R&D and collaborate with DoD, and why transitioning technology from the battlefield to the border is not simply plug-and-play.

The collaboration and interaction we have at S&T with OTIA is strong and getting stronger. We are both young, maturing organizations and we are building upon the strong working relationship S&T has enjoyed and established with CBP over the last 8 years.

First, S&T has established a permanent liaison position within OTIA. This person currently serves as the director of technology management and is responsible for building the CBP technology roadmap that will drive the future S&T–OTIA R&D activities.

We also co-fund and collaborate on many projects across the TRL spectrum. We share funding, resources, and subject matter expertise.

Finally, we are establishing a formal set of roles and responsibilities for S&T and OTIA through an MOA on the evaluation of cost technology for use in CBP operations.

Since the formation of DHS, S&T has always looked to DoD as a source of technology and to partner in R&D, and in this environment and this budget climate this is especially critical. We use the
multiple formal interactions we have with R&D agencies across DoD to coordinate and collaborate to—excuse me—our future plans and our R&D activities.

The majority of these interactions are through interagency working groups and committees, where we have shared mission space, such as chem and bio defense, explosives detection, cybersecurity, and of course, physical security. Participation on these committees and the working groups ranges from our under secretary to individual program managers.

For example, Under Secretary O'Toole co-chairs the National Science and Technology Council's Committee on Homeland and National Security, along with our counterparts at DoD and OSTP. Other examples include the DoD–DHS capability development working group, TSWG, and a laundry list of policy coordinating committees and working groups across those shared DoD–DHS mission spaces.

DHS, and specifically CBP, rely on S&T to be the transition path for DoD technology. We evaluate DoD technologies and adapt them, when applicable, to homeland mission.

While the interaction between DoD and DHS is robust in many areas and the terrains do look similar in Arizona and Afghanistan, the transition of technology from battlefield to border is not as simple as it looks. DHS is primarily a law enforcement and public safety agency, and our cops and needs can be very different from those of soldiers in a war zone.

Then when technology from DoD does appear to be directly applicable there are several steps required to move that technology between the two agencies. DoD technologies are designed to work within DoD systems, within DoD operations, and DoD has the resources to dedicate support personnel to operate technology systems that DHS typically does not or is not able to afford.

These differences all require additional development for DHS to deploy DoD technology. So as much as we would like to pick up those systems and—that appear to meet our technology needs we must ensure that we have done our due diligence and determined that they are effective for our mission and not only meet our needs but make operational and financial sense, as well.

To that end, we are currently evaluating and leveraging multiple DoD technologies and R&D investments, including sensor management systems that we are using in the Port of L.A.-Long Beach and are soon to be deployed along the Northern Border; airborne border monitoring technologies; unmanned aerial systems; and detection technologies for semi-submersible maritime vessels. The list goes on, but uncertain budgets are also detrimental to our relationships with DoD. When we do collaborate on R&D projects they need to be able to depend on our investment commitments that we made.

In closing, I would like to thank you, again, for the opportunity to join this conversation today. This is a critical topic. I believe that S&T is providing the much-needed technology development and evaluation services needed to leverage DoD and other interagency technologies and bring them to bear on the DHS mission.

Thank you, and I am happy to answer any further questions.

Mrs. MILLER. Thank you very much, Dr. Cox.

The Chairwoman now recognizes Mr. Tangora for his testimony.
STATEMENT OF MICHAEL TANGORA, DEPUTY ASSISTANT COMMANDANT AND DIRECTOR OF ACQUISITION SERVICES, UNITED STATES COAST GUARD, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. TANGORA, Chairman Miller, Ranking Member Cuellar, Members of the subcommittee, thank you for the opportunity to discuss the Coast Guard’s close relationship with the Department of Defense and our on-going utilization of DoD’s capabilities and programs in support of Coast Guard acquisition and research and development.

The Coast Guard operates at all times as both an armed force and a component of Department of Homeland Security. Our statutory authorities under Titles 10 and 14 provide the Coast Guard with extensive security, law enforcement, and regulatory responsibilities throughout the maritime domain.

The Coast Guard has developed strategies to meet its mission requirements, including arrangements with the other military services in support of our acquisition projects. Additionally, our R&D program provides critical support across the Coast Guard’s unique mission set.

The Coast Guard’s Acquisition Directorate, where our research and development efforts are managed, is addressing its mission requirements through a multi-billion dollar recapitalization of Coast Guard’s cutters, boats, aircraft, and command-and-control systems. In the process of carrying out more than 20 major and non-major acquisition programs we are using a wide variety of organic and external resources to provide oversight and assistance at all points throughout the acquisition life-cycle of our projects.

In the past 5 years we have entered into 62 different interagency agreements with DoD activities, and nine with our partners in Department of Homeland Security. These agreements facilitate development, testing, evaluation, and certification of Coast Guard assets. These partnerships are an integral component of our strategy to establish effective governance and cost efficiency over all aspects of our acquisition programs.

In addition to our agreements and memoranda of understanding the Coast Guard has placed liaison officers throughout the DHS and DoD enterprises. Our liaison officers provide the Coast Guard with information on new and on-going acquisition and research and development initiatives.

We use this information to determine whether or not the Coast Guard has equities that can be capitalized, and if they are identified early enough, whether we can work with DoD and DHS activities to tailor the research initiative to address the specific Coast Guard requirement. Leveraging DoD research and development programs has enabled the Coast Guard to assess technologies for potential applicability for a fraction of the cost that a Coast Guard-unique R&D effort would entail.

Coast Guard liaison officers are currently placed in strategic locations, including the Pentagon, DHS Science and Technology Directorate, Customs and Border Protection, the Unified Combatant Commands, U.S. Navy System Commands, and others. These liaisons officers have had a significant and positive benefit to the Coast Guard.
In addition to our extensive engagement with DoD research and development programs the Coast Guard maintains an internal R&D program as part of the Acquisition Directorate. The program directly supports Coast Guard’s specific needs across its full range of operational, regulatory, and acquisition activities. Our R&D projects are designed to minimize risk and maximize mission effectiveness across the Coast Guard activities by leveraging and applying innovative, scientific, and technological solutions.

One such partnership with the Office of Naval Research has resulted in the development of numerous mission-enabling technologies, including running gear entanglement systems designed to foul and ultimately stop non-compliant vessels. Through our collective efforts we are effectively meeting our requirements for continued development of enhanced technologies and capabilities.

Our recent research and development efforts build on the long-standing relationships and partnerships that we have with our fellow sea service, the U.S. Navy, and other military services to develop joint systems and capabilities for Coast Guard platforms to maintain readiness in the event that the Coast Guard is required to operate jointly with or under the direction of the U.S. Navy.

We continue to partner with the Navy to install common sensors, weapons, intelligence collection, and processing systems aboard our major cutters. Today approximately half of our command and control and communication capabilities installed aboard Coast Guard platforms are Navy-type, which enables us to interoperate under a joint operational conditions.

We are also collaborating with DoD and DHS to align our biometrics concept of operations and assess biometrics capabilities currently used by U.S. Coast Guard boarding teams in the Persian Gulf and the Caribbean Sea for potential use across a wider scope of DHS homeland security missions. The Coast Guard is working to translate our experience gained from our on-going work with DoD’s services to support expanding efforts under the lead of Science and Technology Directorate of the Department of Homeland Security.

The Coast Guard is committed to continuing with our departmental partners and other military services to support complex projects with the potential application across military and government. The approach maximizes the limited resources that we have to address the research and development priorities of the U.S. Coast Guard.

Thank you for the opportunity to discuss the Coast Guard’s effort and association with our partners in DHS and DoD, and I am ready to answer your questions.

Mrs. Miller. Thank you very much. We are ready to ask you some questions, as well.

So we appreciate all the testimony.

You know, I have been sort of on this thing for—ever since I came to Congress, quite frankly, because as somebody said, we have an historic opportunity now, with the drawdown in Iraq and Afghanistan, et cetera, to really look at how we can best utilize so much of this equipment that has been used very effectively in theater. I always remind myself that the first and foremost responsi-
bility of the Federal Government is to provide for the common defense.

That is actually in the preamble of the Constitution. It doesn't say that we are to be doing a lot of other things that we do, not that they are not priorities, but the common defense, in my opinion, is National defense, is National security, homeland security, and a big part of that is securing our border, and that is what this committee's mission is.

So, how can we think about all of this DoD equipment that might be able to be utilized? You know, as well, of course, we all have copies of the 9/11 Commission recommendations. I have a copy right on my desk; I try to make sure it doesn't become just shelfware and collect dust, but we look at it all the time. One of the principal recommendations of the 9/11 Commission recommendation was that we need to move from the need-to-know to the need-to-share. I think whether that is intel or equipment, whatever, the taxpayer is not always making the assumption that we are in these silos that we all do here on Capitol Hill. So I think it is for us to look at how we can actually share some of these things.

In fact, that is my thought about having this committee hearing today. Actually, when we did the recent DoD defense reauthorization bill I actually had an amendment that I offered that I was delighted passed that required the DoD and the DHS to look at these kinds of things and what each agency may be able to bring to bear to the best utilization of the taxpayers' bang for the buck. So I am glad about all of that.

You know, I say a historic time and an opportunity that could be missed here because in my mind we missed an opportunity as a Congress when we did the last BRAC—the base realignment and closure commission. Quite frankly, as we were looking at how we could best utilize inventory domestically, in particular—military inventory—and I am not sure exactly the wiring diagram with the Department of Homeland Security as far as looking out regionally and renting office space and everything else, I think we should be using military facilities, quite frankly, as a physical footprint for a lot of DHS, as well.

We have that, just for a moment, in my area—Mr. Borkowski is well aware of—where we have recently stood up the Great Lakes branch of the Northern Border wing, and as we look at, on the Northern Border security that is more personnel from CBP, air assets, both fixed-wings and rotor, it is water assets, as we have the unique circumstances and dynamics of a long liquid border there.

It is also something we call an OIC, which is an operational integration center pilot program for the Northern Border that can be replicated along the Southern Border, as well, where we had, actually, very good success with the SBInet in our area, but this thing is state-of-the-art data analyzing feed by all of the various stakeholders.

Again, it is the need-to-know, the need-to-share, where you have got the Federal Government, the State government, even the emergency management directors of our local counties, marine divisions all feeding in assessments of a threat that can be then used. The Coast Guard is there, as well, but the Coast Guard Air Station De-
trot is there, as Mr. Tangora knows, all feeding their information in that can be utilized by our brave men and women out in the field to assess the threat.

So I guess I sort of want to know how—and I suppose this is for Mr. Stockton and Mr. Borkowski, as well—the DHS sort-of calls this foraging, which I thought was an interesting term, sort of reminds you of an animal out in the woods foraging for nuts, I guess. But you are sort of foraging through DoD to see what kind of technology can be utilized, and if you have a one-stop shop how does it all work? Is there a necessity for a stronger structural system throughout the wiring diagram so that it can be used—because it is such a huge department—DoD, and now DHS, as well. How can this be utilized most effectively? So I throw that question out—either gentleman.

Mr. Stockton. I will be happy to speak to it first. The Domestic Preparedness Support Initiative is the program that we have put together in order to provide for that one-stop shopping. Let me tell you how it works.

We work in two directions, both to identify capabilities that we can transfer to our DHS partners in response to their requests for assistance, but also to State and local public safety organizations who work very closely with the armed services and other components of the Department of Defense to find out which kinds of articles are likely to be declared to be excess that might actually be needed by our partners. So we work that very, very closely with our lead partners, the Defense Logistics Agency.

Let me just add my praise to an organization that doesn’t get enough. DLA does a great job in this regard.

So we look at the supply. Then we work very closely with DHS, CBP, all of our partners, and also aggressive outreach to State and local first responders to find out what are their highest priority requirements. We have built a web-based system to identify what they need, and with the help of DLA, match that up to the capabilities that are acquired in excess property.

That is the way that we work, but with TSWG and a variety of other opportunities to be in support of DHS in ways that make sense for the taxpayer, that add great value at marginal cost to the Department of Defense——

Mrs. Miller. So, if I might, you are not advocating any change. You are saying that what you are doing right now is adequate?

If that is the case, let me just ask you this: What is the criteria, for instance, when you go to local first responders, or through the State coordinators, or however you are determining how you are giving some of this excess to first responders, as an example? Because our Congress has had a huge debate, for instance, about firefighters’ assistance grants and whether or not we should be sending it to New York, or Nebraska, or who gets it—or what is the criteria, et cetera?

Mr. Stockton. The specific criteria I would be happy to provide for the record——

Mrs. Miller. Okay.

Mr. Stockton [continuing]. But what I do, for example, is last week I met with Jim Schwartz, the fire chief for Arlington, and we talked about what his priority needs were in that jurisdiction. I
have a team of folks who conduct this aggressive outreach. We rack and stack their prioritized requests for assistance, and then we, with the help of the Defense Logistics Agency, try to match up their requirements with what we have.

I will say this, though, that there are some assets that are very scarce and very expensive, such as night vision devices. That is why we have this pool of equipment to lend out, to loan, to lease, again, at very low cost, because we know that demand for this equipment vastly outstrips the supply that we have available. That is why we have had this particular program.

Mrs. MILLER. In the interest of time, just one follow-up question to that: One of the things I have a huge interest in, as we mentioned, about the Predator drones, which is a great technology that has application for DoD and DHS, have you looked at land systems, some of these land systems? You look at these robots that they are using on the border between Afghanistan and Pakistan. Again, you know, you get somebody sitting in a cubicle drinking a Starbucks that are running these things. Too bad if they get knocked off, but the—if the robot gets shot, but we didn't lose a person so it is wonderful technology.

But these have the ability to, again, send back the information to the individual about assessing the threat, what the environment is, et cetera, et cetera, and if we can utilize those kinds of things in theater certainly we could use that on the Southern Border, as well, and the Northern Border, for that matter. Is there any movement in regard, specifically, to land systems?

Mr. STOCKTON. There is, but I would defer to my friends from CBP to talk about that, and then I will also follow up as needed.

Mr. BORKOWSKI. Part of the issue with connectivity, by the way, is on our side of the equation. One of the reasons that my office was created a little more than a year ago was because we needed to collect to come up with a single point of entry into CBP, and we are still evolving that. So part of the—there is an issue on our side. I don't think everybody really understands all the time that DHS Science and Technology is a key part of that, so I think we have some marketing to do on our——

But the challenge that I have is that I do understand that there are these points of contact in the Department of Defense, but I have things that come to me outside of those chains. Often they are interesting, and I don't think that it would be appropriate to try to shut that dialogue down. So I am a little skeptical about the likelihood of success of defining rigidly, you know, an infrastructure that connects DHS and DoD because I think it would shut down—the best I can do is make it clear that I am willing to receive as much as someone is willing to offer.

Just so you know, I am probably up to, like, 1,000 meetings, and some of those are DoD, and some of those are industry, including, by the way, ground systems that you talk about, which we are interested in. The question for us is going to be, what do I do first?

Those are the kinds of trays that we have going forward, but we do have capacity to pilot things. We have included within CBP the capacity to pilot, so we take things like ground systems that are available to us, or identified to us, show them to the Border Patrol, show them to the Office of Field Operations, show them to Air and
Marine, and say, is this something you would like us to check out as one of our first priorities?

If it is we will go do it, but we do have that dialogue with ground systems; we have that dialogue with the communications systems; we have that dialogue with aerostats.

I would also say that at a lower level than some of the discussions that we are talking about here we have tried to create some networks. For example, Joint Program Manager Guardian is a clearinghouse of sorts for the Department of Defense for systems. So I have co-chaired with them some conferences to bring in—by the way, not just DoD and DHS; we have had FBI—other Federal agencies with common technology interests to at least start the dialogue of what is available.

So I think we need a little more structure, but I am a little skeptical that we can make it too structured. The best approach that I have found is let people know that we are willing to hear what is available and then invite those discussions and expose them to our operational users.

Mrs. MILLER. Thank you.

I am over my time here, but I would just say, we also had discussion between Mr. Clarke, who is a Member of the full committee and this subcommittee, as well, from Detroit, and myself, and he was offering an amendment. We decided not to do it, but we are going to pursue it in the reauthorization on the floor, about test bedding, whether or not—and I don't know if that maybe gets in the way of your structure, or if it is an assist for the Department to be able to test bed in various locales, whether it is the Southern Border or the Northern Border, on these kinds of things. I would like to talk to you, maybe, after the committee hearing a little bit more about that, if that is something that is of value to you.

At this time I would recognize the Ranking Member.

Mr. CUELLAR. Thank you very much, Madam Chairwoman.

Assistant Secretary Stockton, let me follow up on what the Chairwoman said. Since the Southern Border, as you know, is the emphasis of a lot of the Members I would ask you, first of all, would you be willing to go down there and meet—if I can put border sheriffs and border policemen, DPS, and other folks from me, would you be willing to travel down to the border to go meet with them?

Mr. STOCKTON. It would be an honor. I have been there before, but the facts on the ground continue to evolve, and so a chance to go down there, listen to local law enforcement, listen to our CBP partners, it would be an honor.

Mr. CUELLAR. Okay. What we will do is we will have, of course—Homeland Security, we will have the Coast Guard, also, since they have a presence there on the border, and certainly, you know, we will bring border sheriffs and border police at some place there where we would love to have you there, No. 1, so thank you for that, No. 1.

No. 2, give me—and following what the Chairwoman said, let's say that I am a policeman in Mission, Texas, border county—I mean, border area. Where do I start? If you were me—I didn't know you until now, and I was looking that you have the—under
the defense authorization you are the key person to share with the
State and local folks and Federal folks on homeland security assets
and technology.

If I was a police commissioner in a border area, where do I get
started? Could you give us a one, two, three, because I am sure if
a police chief tried to get ahold of you it might be a little difficult,
might be different lines before they can get ahold of you. Tell me,
what is—how does somebody get started?

Mr. STOCKTON. Well, I meet as many police chiefs and sheriffs
as I can. We have an aggressive outreach effort. We bring people
here to the National Capitol region by the thousands. I also travel.

But web-based outreach is especially effective. We have done a
very aggressive job of trying to make it easy to get to my team so
that we can then engage with DLA, engage with the services, and
match up the supply of excess defense articles with what is re-
quired by our DHS partners, but also, ultimately, cops on the beat.

In the State of Texas I am proud to say that thus far this fiscal
year we have already transferred almost $16 million worth of
equipment—tactical vehicles—62 vehicles this year, almost 1,200
weapons—specialized weapons for law enforcement, watercraft.
These are coming to the State of Texas based on requests that we
get from local law enforcement and the State interloculars that we
have in the great State of Texas.

We have got a system that is working well. It has gone from
$200 million in transfer of excess materials to almost $600 million
thus far this fiscal year, compared to last. We are ramping up.

That gets back to the question of whether structurally we need
help. I don’t believe we do. We need continued, dedicated focus of
the Department of Defense to be in support of our DHS partners
and the State and local public safety organizations, ultimately
whom we are in support of, at no cost to the Department of De-
fense or marginal cost, because that is—we are in a very difficult
budget situation, as well, and so we are looking to maximize the
efficiency and the effectiveness of this program rather than adding
burdens on the American taxpayer.

Mr. Cuellar. Thank you, Mr. Secretary. Do you know what cit-
ies they went to when you mentioned Texas, just out of——

Mr. STOCKTON. I do not know, but I would be happy to provide
that material for the record.

Mr. Cuellar. Okay. Okay. I mean, I am just—you know, Texas
is a large State——

Mr. STOCKTON. Yes.

Mr. Cuellar [continuing]. And I know that when we provide
homeland security dollars in the millions of dollars and people em-
phasize the border, what is it, 9, 10, 11 percent only goes to the
border, and everything goes—and again, I support the whole State
of Texas, but—so I am just wondering if that is going to border,
or it is going to the Dallas, Fort Worth, Houston areas, and I would
be just curious. But I certainly want to—there is a lot of emphasis
on the border, and I certainly want to do my job in representing
the whole border in the State of Texas.

So we are going to follow up on that meeting, and we will get
you border sheriffs and police, and other folks, and certainly the
other partners here, because we are very interested in your work.
Especially, the more I look at this sentence, your, you know, your authorization and you are key—I think you are going to be very key to the Northern Border, and to the Southern Border, and we are going to have to get out the word on what you do in our own way.

So we thank you.

So, Madam Chairwoman, I don't have any questions. I just want to thank the Secretary for being here, and of course, the other Members here that are present here today.

Mrs. Miller. Chairwoman now recognizes the gentleman from Mississippi.

Mr. Thompson. Thank you very much, Madam Chairwoman. Good hearing.

I wanted to move it a little bit from the 1401 arena, which is good, but let's talk about accessing DoD technology, okay? The equipment is fine, absolutely. I have seen it rust on military bases for years.

But how—what is a formal process that a border sheriff or somebody who is looking for a specific technology—what will they have to do with DoD?

Mr. Stockton. For technology outreach, much of what we do is in support of our Federal partners through the TSWG and for the other kinds of Federal partner support, for DHS, above all, that then they can provide to the emergency managers in States and localities. So our primary technology support is for our Federal partners.

But I would say that for wound treatment, for many of the other capabilities that we have built to win our wars abroad, that technology then does get applied for support for our first responders.

Mr. Thompson. So is that a formalized process for this technology access?

Mr. Stockton. It is, and I would invite my partners from the Department of Homeland Security to talk about that process, and then I will have a specific example, also, to offer.

Mr. Borkowski. Well, I would just offer that we are aware that—I think what you are talking about is when equipment might be excess and might be available, and there is a formal process. I believe the acronym is DRMO, the defense reutilization—

Mr. Thompson. Yes. No, I am not talking about—

Mr. Borkowski. Oh, okay. All right.

Mr. Thompson. We understand the hardware piece. But this hearing is to talk about DoD technology and how we can use it to secure the border, and we have kind of moved toward the equipment side of the conversation rather than the technology side.

I am trying to figure out how—what is the process by which a local official makes a request for a specific technology, if we have that process defined, and if so, what is it?

Mr. Stockton. That may be an opportunity to make further progress, because to the best of my knowledge most of the technology focus that we have is in direct support and partnership with the Department of Homeland Security and other Federal department partners, as opposed to providing technology directly to local law enforcement. Equipment goes to law enforcement; our technology partnership—and I take your point—is primarily with our
Federal partners, as opposed to building that same two-way system that exists for equipment with State and locals for technology.

Mr. THOMPSON. Okay. Well, is there a formal process for DoD to use that technology with CBP, for instance? What is the process?

Mr. STOCKTON. Well, on the Southwest Border, above all, we have Joint Task Force North that provides technical expertise in support to CBP. So that involves demonstration projects that enable the CBP to understand how to use Predators effectively, ground-based radars, tunnel detection technology, both acoustic and non-acoustic. So we have intensive technology sharing between the Department of Defense and our partners at CBP, ICE, and DHS as a whole. That is very robust.

Mr. THOMPSON. Right.

So, Mr. Borkowski, the process is you define a technology that you, for whatever reason, need. Do you make that formal request to DoD? What do you do?

Mr. BORKOWSKI. Yes. We have a process where we have a frequent dialogue—and in fact, in some cases it is an organized meeting—with JTF North, Joint Task Force North, and Joint Task Force North and our folks on the border get together and say, what have you got? What are you interested in? So they have a little bit back and forth, these are the technologies we could bring to bear; these are the operations we would like to conduct. Joint Task Force North will reach out to the rest of the Department of Defense. Many times this becomes part of a training exercise for an element of the Department of Defense.

In fact, the technologies that Representative McCaul and Ranking Member Cuellar and I went and saw at Laredo were part of one of those operations. It was an agreement reached between JTF North and, in that case, the Border Patrol to conduct an operation with technology in support of Border Patrol operations in Laredo. So there is a process. We have that dialogue routinely, and then JTF North will schedule operations in support of those discussions.

Mr. THOMPSON. If I might, so if you do that——

Mr. BORKOWSKI. Yes.

Mr. THOMPSON [continuing]. Do you shift the cost of that operation to CBP or is it still within the budget of DoD?

Mr. BORKOWSKI. Typically we do not, and I want to get specific answers to you so let me double-check. But I believe the answer is no; DoD does this as part of a DoD then training exercise, so it usually gets covered under a training exercise for DoD that we are able to take advantage of operationally. So for the most part I believe we do not pick up the cost of that. I would like to confirm that, but I am pretty sure that is true.

Mr. THOMPSON. Beyond the training, does it become an on-going integral part of CBP or is it just for the training?

Mr. BORKOWSKI. It is training for the military. There is a continuing relationship. So we don’t have the same operations all the time with the same technology and the same units of the military all the time, but we do have a continuing relationship with Joint Task Force North, which we have come to depend and rely on. Joint Task Force North will apply different resources, different units, different technologies based on those discussions. So there is
a continuing relationship but the specific thing we might be doing will change over time.

Mr. THOMPSON. Thank you.

Thank you, Madam Chairwoman.

Mrs. MILLER. Chairwoman now recognizes the gentleman from South Carolina, Mr. Duncan.

Mr. DUNCAN. Thank you, Madam Chairwoman. I want to commend you for making the comments about the 9/11 Commission report.

Some of my own thoughts of integration and sharing of information—and let me remind the panelists and the committee, we are all in this together. Whether you are working for DHS or DoD or are Members of Congress, we are all in this together to protect the sovereignty of this great Nation, to enforce the laws that we have here, to stop illegal and illicit drugs from coming in, and other things that could possibly come and cross the border. So I hope that the information sharing does take place, that the equipment, technology, research, all that is shared across agency lines, because that is how it should be done and that is what the American people expect.

I just came back from a trip over to Afghanistan, Iraq, and Pakistan where the border situation was a topic of discussion many, many times, whether we were meeting with the military folks coming out of Iraq, with folks charged with securing and enforcing the border between Pakistan and Afghanistan, or Mr. Cuellar asking the Pakistani president about the border, and the question back and forth—Pakistan—the Pakistan president asked Mr. Cuellar how much we spend on securing our border.

So it is an interesting opportunity today to have this hearing following up on that, and I want to commend the Chairman McCaul for inviting me to go on that trip that was very worthwhile.

So having come back from talking with the military leaders that are coming out of Iraq and understanding there is a lot of technology, a lot of lessons learned in that theater—lessons learned every day in Afghanistan—and many Members of this committee continue to advocate the acquisition of proven technologies used by the DoD and learning from those lessons in those theaters, and also hearing today of the deployment of some of those technologies on the Southwest Border as we wind down those operations.

While I understand DoD has a much larger budget for researching and developing new technologies and a large group of personnel who are trained using certain technologies, I guess, Mr. Borkowski, can you describe some of DHS's challenges in transferring or receiving some of those technologies from DoD?

Mr. BORKOWSKI. Sure. In terms of technologies that are fairly self-contained, like the—what we call the agent portable sensor systems are the things that we looked at in Laredo and that we are actually buying, there isn't too much of a challenge. We do have to train our agents to use that, but that is typically not terribly difficult. We can do that.

The difficulty comes when I bring in a DoD system that I have to plug into my command-and-control system. Typically DoD systems, for example, will use satellite communications fairly routinely. Satellite communications are expensive for us if done on a
persistent basis. We also need to plug that into our command-and-control system, which may not be the same as DoD's command-and-control system, and that can be a challenging technical development activity.

If it is an extensive technology, something like aerostats—which, by the way, look very promising to us—but they require crews. They have significant operational costs associated with them, and that is often missed in here. So I also have to be able to absorb the cost to operate and maintain the systems, which, again, I have a different budget threshold for that than maybe the Department of Defense does.

So the challenges are if they are not self-contained and I have to plug them into my current operational system I will have engineering development that I will have to do, which can be expensive. I do have to be sensitive to the operations and support costs of the systems.

For very—relatively, not very—relatively complex systems I do have to worry about the training and the development of crews to operate them as I bring them in. Having——

Mr. DUNCAN. Along that line, though, we have got a huge number of personnel coming out of the military. As the deployments transition and we wind down the theater in Iraq, there is an opportunity there to hire already-trained DoD personnel to run these systems.

Are you all looking into that? What are the hiring guidelines and practices that you are putting in place?

Mr. BORKOWSKI. We haven’t quite gotten to the point where we are buying the systems yet, but I think you are absolutely right. If we get to that situation we would need to look at that opportunity to bring in these trained people if, in fact, they are available. We would need allocation of funds to pay their salaries and we would probably need some kind of expedited authorities to hire them, but that is something we would be very interested in talking to you about.

Mr. DUNCAN. Okay.

I don’t have any further questions, Madam Chairwoman. I yield back.

Mrs. MILLER. Thank you.

Chairwoman now recognizes the gentleman from Texas.

Mr. McCaul. Thank you, Madam Chairwoman, and Ranking Member, for holding the hearing on this issue. I think it is one we have been focused on for a while. I think it makes a lot of sense.

Mr. Borkowski, you mentioned previously our trip down to the border and we were looking at that time the Defense Intelligence Agency technology. Can you tell me where we are today with deploying that technology on the Southwest Border?

Mr. BORKOWSKI. Yes, sir. In the Arizona Technology Plan, which, as you know, is kind of a down-payment for the Southwest Border, we are buying 15 of those systems. We are actually buying them from the Army. I believe four are already delivered, and all of them should be delivered by December.

We are also developing plans, obviously, for the rest of the border, which will include future procurements of those, as well, but that is the current status.
Mr. MCCAUL. You know, we are always talking about securing the border. I think the physical infrastructure has been put in place, for the most part; it is the technology piece that has been lacking.

Where do you—I mean, UAVs, you know, we have been working hard to get those down there, these fixed towers, sensor surveillance equipment. Can you tell me kind of where you are with your game plan and how long it is going to take before we can say, you know, that the technology piece has been fulfilled?

Mr. BORKOWSKI. Well, first of all, it is going to be many years at the current, you know, funding profile. But in terms of the plan, we have shown you in the past the lay down, essentially a map of Arizona and what we intend to put in Arizona. These are, again, available systems, many of which leverage DoD. We have built at my level—that is important to understand—that map for the whole Southwest Border. We are currently in the process of, you know, reviewing that with the senior management in the Department, but we are well along in having a map along the whole Southwest Border.

The next element—we are also going to do the Northern Border, and we have done the early process of the Northern Border, but if I could start with the Southwest Border, because I want to talk about things like UAVs and such—the analysis that we did, which followed from SBInet answer to sort of the question that said, if we want something to replace SBInet what should it be? But that “if we want something to replace SBInet” is a very important kind of predicate to that discussion, right?

The next thing we need to do is test that, “if we want.” That is where things like UAV or aerostats come into play, because there may be areas of the border where it makes less sense to put in persistent fixed infrastructure and more sense to put intelligence surveillance and reconnaissance assets that can assess whether things are changing, and in response to those changes adjust our technology plans.

So over the next probably 9 months we will baseline that map of the Southwest Border, but then we will test that map against the—test the “if” question, if it makes sense to do this, against things like more persistent use of UAVs, aerostats, fixed-wing ISR kind of capabilities, so that is what we will be doing for about the next 9 months.

Mr. MCCAUL. Thank you.

Mr. Stockton, we, as I think the Ranking Member mentioned, we had a very interesting trip to Afghanistan, Pakistan, and Iraq. General Austin, in Iraq, pledged his support through our delegation to assist in any way the DoD can with assets as we wind down those operations overseas towards the Southwest Border and Northern, as well.

Where do you see—you are sitting down with General Austin, what would you say that we need, and what is available to transfer to the border?

Mr. STOCKTON. Let me talk about both sides of those equations in turn. First of all, when we analyze what the requirements are we depend on our partners in CBP and the Department of Homeland Security, our other lead Federal agency departments, to speci-
fy what their requirements are. Border security is a law enforce-
ment mission, not a military mission, and this is an opportunity to
be in support of our closest partners.

So we listen hard to Commissioner Bersin, all of our friends at
CBP and at DHS as a whole, so that we can make sure that scarce
DoD resources are used in a way that has the biggest bang for the
buck, but also fits the integrated vision that CBP is developing for
the future. That is their vision. We are in support, although the
scarcity of DoD resources, of course, is very much in our minds.

Turning to the other side of the question, how do we source these
potential requirements that we get from our lead Federal partners,
there we work very closely with the armed forces, with the military
departments, with the Defense Logistics Agency to understand
what are the priority demands on equipment that may be coming
back, and what could be most useful that is available to support
Department of Homeland Security?

So the challenge, of course, as you were to understand, is there
is only so many assets to go around, and it is a harsh process of
prioritization that we have to go through at levels above mine,
frankly, to decide where some of these scarce assets are going to
go.

Mr. McCaul. Well, I think this committee would like to be a part
of that decision-making process, and I think the idea of bringing
you all down to the border is actually a very good one, and I hope
we can follow up on that with the Chairwoman and Ranking Mem-
er. I think a visit to the Joint Task Force North, which seems to
be the plug-in between the DoD and the Southwest Border and
DHS, would be very productive.

With that, I yield back. Thank you.

Mrs. Miller. Thank the gentleman.

Chairwoman now recognizes the gentlelady from California, Ms.
Sanchez.

Ms. Sanchez. Thank you, Madam Chairwoman. Appreciate your
leadership on this.

Mr. Tangora, given the growing risks of pirates and other inter-
diction efforts that are going on by our Coast Guard—for example,
semi-submersibles, and other things—I believe that our Coast
Guard's men and women need a quick way to identify who they
have got on their hands when they have stopped them, for exam-
ple, to see if those individuals are on watch lists and to take what-
ever appropriate action that they need to do.

I am also a Member of the Armed Services Committee, and I am
very familiar with DoD's biometric efforts, their technologies that
they are using in particular in the remote areas of Afghanistan
to—the technologies that they use to biometrically identify high—
and look at and enroll high-risk individuals they have picked up.

So my question to you would be: Have you been looking at some
of the technology that DoD has that you might be able to leverage,
and where would you see—I mean, I am thinking in particular of
people that we catch as they are trying to land on our beaches, et

cetera, but where else might that be applied? What are the con-
straints in your ability to be able to get that technology and use
it for the Department of Homeland?

Mr. Tangora. Thank you, Congresswoman.
The biometrics initiative that we have been now doing for approximately 8 years have been yielding outstanding success. I mean, we have cut down immigration in the Mona Pass with biometrics—two-print biometrics—by 80 percent. You know, we are being able to spread our assets a lot further in the Caribbean because of the success of that. We are able to get the right people identified and prosecuted—I think we have prosecuted over 400 people in the last 6 years in migrant interdiction based primarily upon what we are getting out of the biometrics.

The challenge is we have very small cutters that are interdicting these boats in the Caribbean, and we do not have a large pipe or a large satellite feed down to these small units, and so we go with a two-print, but we want to get further into what the DoD uses, which is—and the FBI uses—which is the 10-print. We are going to be able to use that technology to better aid our men and women being able to quickly identify exactly that people have known criminal backgrounds when we interdict them, especially in the Caribbean.

We use the technology in the Persian Gulf, also. It is absolutely a game-changer, and it is a force-multiplier.

Ms. SANCHEZ. If you gentlemen would talk to me about, I know one of the things that we saw—I was the Chairwoman of the Border, Counterterrorism Subcommittee of this committee when the Democrats were in charge, and under that fell SBInet. One of the issues that we had was the cellular towers that we had up, and under that fell SBInet. One of the issues that we had was the cellular towers that we had up, and the sabotaging of that technology by coyotes or whomever—drug dealers, let’s say. Talk to me about communications for these systems, and what are the difficulties?

I mean, I can think, wouldn’t it be great if we had this biometric handheld thing that, you know, when we have found somebody out in international waters, or what have you, and we thought they were drug dealers, and we wanted to scan them, is there a technology—what cell towers, how are we going to get that done and what are the drawbacks to having that technology based on that?

Mr. COX. Thank you for the question. We actually have been working for several years now with DoD and the Department of Justice to bring biometrics to the field. A lot of the issue is actually getting the heavy prisms and other collection methods to get beyond the two-print into the field and make it sort of man-portable and ruggedized for deployment along the border or in a maritime environment.

Then we will have to address the complicated nature of having these systems transmit their information to all of the databases that contain—please——

Ms. SANCHEZ. But the ruggedized is done in the DoD, isn’t it? I mean, that is what we have. They are actually in remote areas in Afghanistan with handheld rugged.

Why aren’t we moving that technology or those instruments——

Mr. COX. We are.

Ms. SANCHEZ [continuing]. Over to DHS?

Mr. COX. We are. We are—those investments, but it is also the marinization, everything—making it affordable for our mission and making the connection to the multiple databases across law en-
forcement agencies that have this information that you are asking about.

Ms. SANCHEZ. Thank you.

Thank you, Madam Chairwoman.

Mrs. MILLER. Thank you very much.

Chairwoman now recognizes the gentleman from Detroit, Mr. Clarke.

Mr. CLARKE of Michigan. Thank you, Madam Chairwoman, and thank you for acknowledging the city that I am born and raised and currently represent.

Also, I want to thank you for holding this hearing because, you know, as you are aware, the region that I represent is at high risk of an attack, or the economic consequences of any type of natural disaster impacting that region could be great, and by looking at the possible synergy of DoD technology to protect that region and that border, wanted to get your opinions on if you feel that this could create an opportunity to build the capacity of local businesses in metro Detroit, and thereby creating jobs. Let me just give you an example.

First, just to share with you my view of the risk of an attack at that border: We have the busiest international border crossing of North America, so our bridge, our tunnel, they are targets; our drinking water plant there could be vulnerable to a bioterrorism attack; as a matter of fact, our international regional airport has already been a target of an attempted bombing. The infamous Christmas day bomber attempted to bring down a plane that landed in the Detroit Metropolitan Airport.

While we have that risk, that region also has the capacity, I believe, to respond. We have DoD contractors in the region, primarily in the area that the Chairwoman represents.

This is Detroit. We still have the manufacturing know-how. We also have some of the best-trained engineers in the country.

We also have strong research universities. As a matter of fact, right within the heart of the city we have Wayne State University, and in Detroit we have large parcels of vacant land that are ready to develop—it already has the infrastructure needed to serve a facility there.

So my question is: Do you see the possibility of the city of Detroit being a site for testing and evaluating homeland security technology or DoD technology that could have an application to homeland security uses, such as—let me give an example—video surveillance to monitor our borders, cybersecurity, as well, and preparing—preparedness against a bioterrorist attack? That is No. 1, and then if I have time I have a follow-up related to that question.

Mr. BORKOWSKI. Yes. Thank you for that question, Congressman Clarke.

The short answer to your question is, do we see Detroit as a potential—yes, we do. Now, to be fair, as a member of the Executive branch I can't, you know, be—favor one part of the country as opposed to another, so to be fair we have often asked the same question about other parts of the border.

We do see that Detroit has some unique characteristics, including the fact that it has got the largest port of entry, and that makes it attractive in some ways, compared to some other places,
for particular parts of the mission. So to the degree we are able to look at tailoring that—because it is also true we have test beds in a lot of other areas.

We don't want to be overly redundant, but we recognize the characteristics of Detroit; we recognize the existence of heavy industry there that perhaps is unique; we recognize that it is the largest port of entry. We think those things taken together make it worth at least having a dialogue about whether or not we ought to put something in Detroit.

But again, there is a lot more homework to be done on that, and to be fair, there are similar situations with characteristics on other parts of the border that we also have to be sensitive to.

Mr. CLARKE of Michigan. Well, thank you. I would be willing to work directly with you to help you better see those opportunities there.

One thing I will say is that, you know, Detroit has been very hard-hit. We have lost more jobs and more homes, more capital over the last 10 years than virtually any other metropolitan city in the country.

But here is the difference, though: Our region has the best potential, though, for job growth, just because of the capacity that we have in manufacturing, and the universities, and the vacant land, and the trained engineers, and also with the DoD contractors that are there.

So the second part of my question is: Do any of you see a way that our current DoD contractors in metro Detroit or other businesses could benefit from some type of a procurement or acquisition preference, especially since those businesses are located in areas that have high unemployment rates, like Oakland County, Macomb, Wayne County, and the city of Detroit—so some type of acquisition preference that would give them an edge in getting work with the Department of Defense or with the Department of Homeland Security, you know, considering all things equal?

They have got to have the capability to do the job and they have got to be scored, you know, well in the evaluation process, but especially if they are going to be delivering the technology right there in metropolitan Detroit, it would be great to have a metro Detroit company hiring metro Detroit employees to actually help protect our country.

Mr. BORKOWSKI. Certainly, Congress has the capability to develop acquisition and procurement preferences, and subject to the fact that the systems actually meet the needs, we are sort of, frankly, agnostic to that. That is a policy decision that we are perfectly comfortable and prepared to execute as long as we can get the products that we need.

So I don't think it is appropriate for us to comment on that determination, but clearly, if there are preferences they do have—they do tend to affect the way that we buy things, and our only real interest is in making sure that what we ask for gets delivered to us.

Mr. TANGORA. If I could add, I mean, there is socioeconomic goals that we do, and the Coast Guard hit every one of them—all of our hub zone, all of our small, disadvantaged businesses, all of our women-owned businesses. All of those different socioeconomic goals that the Department lays on us, you know, we try and do that.
So, you know, looking at Detroit, it is a—in parts of Detroit it is a perfect hub zone type of thing, and I would think you would be able to exploit that and—in a lot of different Federal contracting initiatives.

Mr. Clarke of Michigan. Thank you.

Mrs. Miller. Thank the gentleman.

The Chairwoman now recognizes the gentlelady from Texas, Ms. Jackson Lee.

Ms. Jackson Lee. Thank you very much, Madam Chairwoman. More than just protocol, I want to stress my appreciation for this hearing, to the Ranking Member, as well, for his insight and very constructive letter that I know you must have written to get a response that we have gotten from the Coast Guard. Thank you for that leadership.

I have always said that the role of—even in this quiet room, the role of this committee and its counterpart on the other—in the other body, and the Department, and all of you who are sitting here is to ensure with every fiber in our body, if possible, that another attack on the homeland does not occur. Many times we sit in quiet hearing rooms away from the thunderous cloud of fear and potential threats that many of our soldiers see on the battlefield, it looks as if we are doing mundane work. I think that this is crucial work, and I am very concerned that we are confronting it the way we should.

I am going to start with Secretary Stockton, on the return home of—and how are you? Return home of throngs of soldiers from Iraq, with the pending return of those from Afghanistan—some of us would ask for them to come home earlier than they are. They will be coming home with a great degree of expertise. I would like to know the Defense Department’s thoughts and plans for taking that expertise and cross-pollinating with departments such as the Department of Homeland Security, which is the closest partner to that, a possibility of DOJ, so that these resources can be used.

I am not so apt—I am a big believer in small businesses, but I am not so inclined to ignore this talent, use of technology, and let it dissipate when we are confronting threats unknown.

Secretary.

Mr. Stockton. That is a terrific question. Portions of the answer go beyond my portfolio, but some of it is right on.

First of all, I want to talk about the benefit of having these returning soldiers, sailors, and airmen continue to serve the Nation, continue to serve States and localities by virtue of joining the National Guard and the Title 10 Reserves, because Mother Nature is going to continue to confront the United States with severe hazards; as you pointed out, Congresswoman, the threat of attack is always there. So to have the terrific expertise that our forces have gained abroad and be able to serve in the homeland, for me that is an extremely important opportunity.

But also, to have these returning soldiers be able to serve in public safety organizations in States and localities, again, to leverage the expertise, the leadership skills they have provided. We are building programs to facilitate that as well as into related industry. I know this is a priority for the First Lady, for the Vice President,
and for the President, and it is a priority for my boss and all of us in the Department of Defense. It is a terrific opportunity. Let’s not miss it.

Ms. JACKSON LEE. I thank you.

I ask the Chairwoman my indulgence. I see my time is almost running, and I have a couple of more questions, but I will—do want to say this: I come from the largest—fourth-largest city in the Nation with a lot of influence in the energy industry, which crippled, would be a terrible blow for this country. I would like to extend an invitation for you to visit Houston and to talk to many of our leaders in the security area on just some of the ways of collaboration. So I would like to extend that invitation to you and work with your office.

Mr. STOCKTON. It would be an honor to visit your district and get to know your community better.

Ms. JACKSON LEE. Thank you.

Let me go quickly to Mr. Borkowski, quickly. Would you tell me how a collaboration with the DoD would be helpful to Customs and Border Protection?

Could I get the Coast Guard—I am going to ask these questions, and then if you would just answer them—to indicate what the cuts in budget—the proposed budget cuts would do to your operations? I do want to thank you for helping us find a domestic abuser who killed his wife and who was out on the waters off of the Atlantic Ocean. Thank you for the kind of work that you do.

Mr. Borkowski.

Mr. BORKOWSKI. Very quickly, and there are multiple ways that we collaborate with DoD that add value to us. One is in helping us to learn how to operate as an integrated force. One is in using their test facilities to test out the capabilities of various systems for our purposes, and one is actually to have developed systems and technologies that are fairly immediately transportable to our use. But one last that I would like to add is we do conduct joint operations, and we talked about that to some degree earlier with Joint Task Force North. That is another way that we collaborate, and those things actually operate to support surge capability and support border security activities.

Ms. JACKSON LEE. Very good.

Mr. Tangora.

Mr. TANGORA. I stand with my commandant, who has been on record saying that the President’s budget in fiscal year 2012 is adequate for the Coast Guard, and we recognize that there are a lot of discussions about looming budget cuts, and—

Ms. JACKSON LEE. So, that is the question. The further budget cuts, how would that impact your operations? Having seen you operate off the coast—the Pacific Coast, or off the coast of some of our Central American countries, dealing with drug interdiction?

Mr. TANGORA. Right. It becomes a matter of capacity. I mean, you pay for what you are going to get, and at this point in time it would be purely speculative, you know, based on what we know, what the cuts would be and what that impact would be to the Coast Guard.

Ms. JACKSON LEE. Madam Chairwoman, let me just inquire to you or comment as I close, thanking you for your kindness. I think
there is much room for the combined witnesses that represent the different organizations to collaborate.

I hope this hearing will encourage further collaboration and I hope it will be noted that cuts to the Coast Guard budget, I think, would be severe. I have seen it in operation, and I see what would happen if they were cut even more than they have already been cut.

With that, I thank the Chairwoman and I yield back.

Mrs. MILLER. Thank you very much. Thank the gentlelady.

Thank all the Members that were here today, and all of their questions, and certainly the testimony from all of our witnesses, as well, which I think was very, very enlightening for all of us here. Again, when I started thinking about this hearing it was because of the historic opportunity that is staring us right in the face, and sometimes we don't recognize these opportunities as readily as we should, or certainly advantage ourselves as we should with them.

So because of that, I think many of the questions today, and sort of getting right at the heart of the matter, specifically of what we need to be able to do jointly, and the total force concept is something that the military looks at and the Department of Homeland Security needs to continue to look at, as well. It is for those of us in Congress as we exercise our role in the whole overall, with oversight and having hearings such as this and asking questions that we all start thinking about better ways to do what is our joint mission.

So I thank all of you.

I appreciate your question, as well, about the budgetary constraints and what it would do to the Coast Guard, or anybody else, for that matter.

We are all painfully aware, as I say, of the economic transition that has occurred in our country and what it means to every level of government, and which is one of the principal drivers of the impetus for this hearing, again, is how can we do a better job with the existing resources, those that have already been paid for, to secure our Nation? That is our common goal and our common mission, certainly.

I would just mention for the other Members that the hearing record will be held open for 10 days, and if they have any additional questions they can submit them for the record, and we will have the witnesses answer those questions as they can, and we will appreciate it, and without—now recognize the Ranking Member.

Mr. CUellar. Yes, ma'am. Mr. Thompson, who had to leave, asked me if I can introduce into the records the Arizona Border Surveillance Technology GAO report that he was referring to.

Mrs. MILLER. Very well. Without objection.*

Without objection, this subcommittee stands adjourned. Thank you.

[Whereupon, at 11:44 a.m., the subcommittee was adjourned.]

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*The document has been retained in committee files and is available at http://www.gao.gov/products/GAO-12-22.


APPENDIX

QUESTIONS FOR PAUL N. STOCKTON FROM HONORABLE MICHAEL T. MCCaul

LAWS AND REGULATIONS

Question 1. Are there any changes to laws or regulations that would make it easier for DHS to receive transfers of DoD technology or make it easier for DHS to leverage DoD research? How can this process be made smoother?

Answer. As noted in my statement for the record, DoD has proposed, and the administration and Congress have supported, expanding the laws permitting State and local law enforcement and firefighting agencies, including State and local homeland security and emergency management agencies, to receive excess DoD equipment or to purchase DoD equipment. DoD donated almost $500 million worth of excess equipment to Federal, State, and local agencies for use in counter-drug and counter-terrorism activities in fiscal year 2011. Additionally, DoD donated $1.7 million worth of excess equipment to DHS during that same period. To the extent that any such laws remain that have not been similarly expanded, DoD would support changes to these laws to expand them.

DoD continues to work closely with its interagency partners, in particular DHS, to build capacity vertically from the Federal level down to the local level, and horizontally across the Federal Government. Pursuant to my responsibilities as the Secretary of Defense-designated senior DoD official responsible for coordinating “all Department of Defense efforts to identify, evaluate, deploy, and transfer to Federal, State, and local first responders technology items and equipment in support of homeland security,” in accordance with section 1401 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Pub. L. 107–314), I established the DoD Domestic Preparedness Support Initiative to facilitate Federal, State, and local awareness of the availability of DoD technology and equipment, as well as DoD research initiatives. I would appreciate continued support from Congress for the DoD Domestic Preparedness Support Initiative.

ASSISTANCE FROM CONGRESS

Question 2. What can Congress do to further assist DHS in leveraging DoD research and development?

Answer. As illustrated in my statement, and those of my colleagues from DHS, DHS has been very successful at leveraging DoD research and development, as well as working cooperatively with DoD on research and the development, testing, and evaluation of technologies. At this time, I cannot identify any additional assistance that DoD or DHS require beyond the already vital leadership and support we have received from the Congress.

EXPEDITED HIRING AUTHORITY

Question 3. Would it be helpful to give DHS an expedited hiring authority for returning armed services members to operate DoD equipment that has been transferred from use in the Middle East to the DHS components? How would this hiring authority work?

Answer. It would be best to ask DHS whether it requires an expedited hiring authority. My understanding is that DHS has sufficient authorities to hire members of the Armed Forces, who are retiring or separating from military service.

As for members of the Armed Forces returning from operations in Iraq and Afghanistan, it is important to note that most of these members remain in the Armed Forces after their return. DoD would not support any change in law that would diminish the retention of members of the Armed Forces. Such a change would seriously threaten the military preparedness of the Armed Forces.
QUESTIONS FOR THE DEPARTMENT OF HOMELAND SECURITY FROM HONORABLE MIKE ROGERS

Question 1. Has DHS coordinated with DoD to identify existing command-and-control technologies or techniques that allow for large-scale data integration and processing from ground sensors, video cameras, radar arrays, and other devices?
Answer. The response, containing sensitive information, is retained in the committee files.

Question 2. Has DHS explored integrating more advanced imaging systems onto its current manned and unmanned air assets?
Answer. The response, containing sensitive information, is retained in the committee files.

Question 3. Has DHS fully reviewed DoD's use of unmanned airships as persistent sensor platforms and communications relays? Has DHS conducted a cost comparison between various types of unmanned air platforms?
Answer. The response, containing sensitive information, is retained in the committee files.

QUESTIONS FOR THE DEPARTMENT OF HOMELAND SECURITY FROM HONORABLE MICHAEL T. MCCaul

Question 1a. Are there any changes to laws or regulations that would make it easier for DHS to receive transfers of DoD technology or make it easier for DHS to leverage DoD research?
Question 1b. How can this process be made smoother?
Question 2. What can Congress do to further assist DHS in leveraging DoD research and development?
Question 4a. Would it be helpful to give DHS an expedited hiring authority for returning armed services members to operate DoD equipment that has been transferred from use in the Middle East to the DHS components?
Question 4b. How would this hiring authority work?

Answer. DHS is a key partner in the President's Export Control Reform Initiative, of which the cornerstone of the effort is the rebuilding of the export control lists. The administration is currently in the process of publishing proposed regulations to solicit input on the draft rebuilt control lists, which prioritize those defense articles that should remain controlled on the U.S. Munitions List (USML) administered by State and those that should be moved to the more flexible authorities of the Commerce Control List (CCL) administered by Commerce. Once all the proposed rebuilt categories of the control lists are published for public input, State and Commerce will publish these regulations in final throughout the course of 2012. DHS supports this effort, as the prioritization of U.S. export controls will facilitate DHS use of controlled items and technologies.

DHS appreciates the interest of the committee in ensuring that the Department has the authorities and mechanisms necessary to accomplish its mission. However, sufficient authorities exist allowing for the transfer of technologies, the sharing of research, and the hiring of veterans to fulfill critical needs. Section 1401, Pub. L. 107–314, along with other laws regarding government use rights and disposed equipment, already allow DHS access to newly developed technology and retired military hardware that it deems appropriate to the mission. DoD has established the “Domestic Preparedness Support Initiative” which addresses the requirements set forth in section 1401 and the formal relationships between DHS Science and Technology and DoD provide the interagency mechanisms needed to ensure DHS is aware of technologies and that they are shared. Additionally, existing hiring authorities and preferences for veterans, in conjunction with the specialized experience required to perform duties in this arena, are sufficient to attract and appoint the talent with the requisite knowledge, skills, and abilities.

Question 3. DHS S&T and the Department generally rely heavily upon personal relationships, the individual experiences of its workforce, many of whom previously worked at DoD, and a reliance on detailed employees to linison between components and DoD. Should the process be more formalized, in the event that the people retire, move on, and are replaced, in order to maximize collaboration, technology transfers, and research and development investment between DoD and DHS?

Answer. Since the formation of the Department of Homeland Security (DHS), DHS’s Science and Technology Directorate (S&T) has looked to the Department of Defense (DoD) as a source of technology and partner in research and development, and formal interactions to do so are especially critical in this budget climate. S&T currently uses an established and formalized mechanism for these interagency relationships. These formalized relationships include established Memoranda of Understanding with other Federal agencies; working groups, and committees established
through the Office of Science and Technology Policy (OSTP); and joint programmatic investments and reviews with organizations such as the Technical Support Working Group, the Joint Improvised Explosive Device Defeat Organization, and the United States Special Operations Command.

The majority of these interactions are conducted through formal interagency working groups and committees in areas of shared mission space such as chemical and biological defense, explosives detection, cybersecurity, and physical security. Participation on these committees and working groups ranges from the Under Secretary to individual program managers. Under Secretary O'Toole currently co-chairs the National Science and Technology Council's Committee on Homeland and National Security, along with the Assistant Secretary of Defense for Research and Engineering and the Associate Director for National Security and International Affairs within OSTP. In particular cases, such as port and coastal security, S&T is the lead organization of these larger agency working groups that include DoD and their subsequent areas of interest.

S&T has worked with the United States Visitor and Immigrant Status Indicator Technology (US–VISIT) Program, the National Institute of Standards and Technology (NIST), and the Naval Postgraduate School to test new technologies. That includes facial and iris recognition in both laboratory and field settings and testing on how to successfully link these technologies to fingerprint biometrics stored in US–VISIT's Automated Biometric Identification System (IDENT).

S&T has successfully leveraged multiple DoD technologies over the years in the biometric, chemical/biological, and explosives fields and S&T has established a formal technology foraging office that leverages opportunities from other agencies, universities, the private sector, etc. to increase the field of view and ensure confidence that all potential possibilities are explored.