## HEARING TO RECEIVE TESTIMONY ON U.S. STRATEGIC COMMAND IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

## FRIDAY, JUNE 3, 2011

U.S. SENATE,
SUBCOMMITTEE ON STRATEGIC FORCES,
COMMITTEE ON ARMED SERVICES,
Bellevue, NE

The subcommittee met, pursuant to notice, at 11:33 a.m. in Bellevue Public Schools/Offutt Air Force Base, Welcome Center, 1600 Highway 370, Senator E. Benjamin Nelson (chairman of the subcommittee) presiding.

Committee member present: Senator Nelson.

Majority staff member present: Madelyn R. Creedon, counsel.

Staff assistant present: Hannah I. Lloyd.

## OPENING STATEMENT OF SENATOR BEN NELSON, CHAIRMAN

Senator Nelson. The Senate Armed Services Subcommittee on Strategic Forces will come to order at this time.

General Kehler, welcome. It is a pleasure to be with you here in Bellevue today, just down the road or up the road from Offutt Air Force Base, the historic home of the Strategic Air Command and today the home of the U.S. Strategic Command and the Fighting 55th.

I also want to acknowledge and welcome two retired military leaders, Lieutenant General Bob Hinson and Vice Admiral Bob Bell, who are close advisors to me and continue to serve this community and the Nation. You may know that Vice Admiral Bell retired after 37 years in the Navy and then was President and CEO of the Greater Omaha Chamber of Commerce from 1988 until 2001. Lieutenant General Hinson, prior to his retirement, as did Admiral Bell, served as Vice Commander of the Air Force Space Command and also served as Deputy Commander of the Strategic Command.

In 2001 they, along with other leaders in the community, established the Military Support Coalition to champion Offutt Air Force Base, the Fighting 55th, and Strategic Command. For many years before that, however, they worked to improve and support Offutt. We are certainly grateful that the military service brought both of these officers to Omaha and the community kept them.

The command has a proud history, dating back to its Cold War roots. Since the creation of the U.S. Strategic Command in 1992,

the reach and breadth of the command has continued to grow, particularly following the merger of Strategic Command with U.S. Space Command in 2002.

Today U.S. Strategic Command is truly a global command. Today its missions include nuclear deterrence, protecting space, thwarting cyber attacks, global strike, combating weapons of mass destruction, overseeing missile defenses, providing real-time battlefield intelligence, and more. It is probably safe to say that U.S. Strategic Command plays one of the most important but perhaps not one of

the best known roles in America's national security.

General Kehler, this is your second appearance before the Senate Armed Services Subcommittee on Strategic Forces, but your first opportunity to discuss the full scope of the command and its activities. And although you assumed your responsibilities of this command just a little over 4 months ago, you are not new to these issues and most of your career has been involved with strategic and space systems and not new to the command, having previously served as Deputy Commander. Maybe I should say welcome back and welcome home.

But before we begin today, I would also like to recognize the men and women who serve around the world as members of the military services in support of the Strategic Command and their families as they support and enable their loved ones to carry out the wide

range of important global missions.

The global strike responsibilities have been repeatedly demonstrated in Afghanistan and Iraq. The B–2, the B–52, and the B–1 bombers have all rotated through Iraq or Afghanistan, providing large amounts of ordnance where and when needed. The B–1 has been able to do double duty by providing both ordnance and intelligence.

With the stand-up of the new Cyber Command, which is part of Strategic Command, there is now a military force to protect and defend military cyber assets and to respond to a cyber attack on the United States when and if necessary. This is a significant challenge. The Defense Department is targeted for thousands of cyber attacks per month. Some estimates range as high as 5,000 attacks per month.

Strategic Command also manages the unmanned aircraft such as Global Hawks, Reapers, and Predators that help the forces in Afghanistan gather intelligence and see over the next hill or mountain. These unmanned aircraft stay in the air for hours and constantly provide eyes in the sky and the fire power necessary to track and, if needed, attack Taliban and others who are attacking U.S. and NATO forces.

The Strategic Command is also responsible for implementing the new strategic arms reduction treaty with Russia, the New START treaty, which the Senate ratified this past December. This new treaty will reduce the number of deployed strategic nuclear weapons and non-deployed nuclear delivery systems that each country has. We look forward to hearing your thoughts on implementing this important new treaty.

The United States military remains a superior military force due in large part to the advantages and capabilities that the military and other national security space systems provide. This advantage is not a secret, and others are constantly trying to reduce that advantage. Strategic Command is responsible for protecting those satellites and finding whoever it is that is trying to interfere with those satellites.

Space is also full of space debris, junk that moves around in space and that can damage our space satellites. Strategic Command is responsible for keeping track of these objects and providing advanced warning so the junk does not collide with the satellites. In 2009, unfortunately a dead Russian satellite collided with a U.S. commercial communications satellite. The two satellites broke apart from the impact and, unfortunately, created even more space debris. Strategic Command also provides warning information to NASA to protect the astronauts on the Space Station from space debris. Even the Space Station has had to change its location on several occasions to avoid that space debris.

The most important role of the Strategic Command is to maintain a safe, secure, and reliable nuclear deterrent. Maintaining the

nuclear deterrent is an everyday event at STRATCOM.

There is also another piece to deterrence for which STRATCOM is also responsible, and that is preventing states and non-state actors from acquiring nuclear weapons, materials, and technologies. This equally important mission is one that is often not well understood by the public or even Congress for that matter, but one that

is growing.

And finally, Strategic Command is the responsible command for ensuring that missile defenses are militarily effective. As missile capabilities of countries such as Iran and North Korea grow, the threat to deployed U.S. forces and allies in these regions also grows. The United States has begun, in cooperation with NATO, a missile defense program that will protect our troops and our allies from existing and anticipated regional missile threats, including those from Iran.

So it is a pleasure for me to be here and to welcome all of you to be able to listen to and discuss these issues and all of the work of Strategic Command. General Kehler, your prepared remarks and

statement will be included for the record.

Before your opening remarks, I just wanted to thank Hannah Lloyd, our subcommittee staff assistant, and your staff, General Kehler, for all their hard work organizing the hearing today. We do not get the chance to do many field hearings, as they require a little extra preparation being outside of Washington, but I do honestly believe they are important as part of our transparent Government and the opportunities that we have to explain to the American public what, in fact, Strategic Command in this case does for our national defense.

General Kehler, I welcome your opening remarks.

## STATEMENT OF GEN. C. ROBERT KEHLER, USAF, COMMANDER, U.S. STRATEGIC COMMAND

General Kehler. Good morning, Mr. Chairman, and thank you on behalf of United States Strategic Command and the Offutt Air Force Base community. We appreciate this opportunity to appear before the subcommittee again and discuss STRATCOM's missions, responsibilities, and requirements.

On a personal note, Marge and I are very happy to be back in Omaha and Bellevue and part of the Offutt Team again. As you say, we get tremendous support from the local communities here,

and I will say a word about that in just another minute.

There is a reason for that and that reason is that the Bellevue and Omaha and Offutt communities share more than 143 years together, beginning with the establishment of what was called Sherman Barracks back in 1868 which later became Fort Omaha and continued with the building of Fort Crook in 1894. And of course, I live in a set of quarters that were completed in 1896. It has been occupied by, I think at last count, 62 leaders that have been assigned here throughout those intervening years. Those quarters have been continuously occupied for all that time.

Of course, Fort Crook added Offutt Field to its purview in 1924

which eventually became Offutt Air Force Base.

Other important milestones include—we, of course, had heavy bomber production for World War II which began in the 1939–1940 timeframe; Strategic Air Command headquarters, which was established here in 1948; the 55th Strategic Reconnaissance Wing, which was established here in 1966, which became the present day 55th Wing in 1991; the stand-down of SAC and establishment of Strategic Command as a joint command initially in 1992; transition of Global Weather Central into the Air Force Weather Agency in 1997; and of course, the new Strategic Command after merging with the United States Space Command in 2002.

I would like to take just a minute to introduce some of STRATCOM's Team Offutt partners whose leaders are with us today. Brigadier General Don Bacon is here. He is the commander of our host unit, the 55th Wing. He took command there in March and leads the second largest wing in the United States Air Force. As I said, the Fighting 55th is our host wing. It operates 48 aircraft from locations around the world. They conduct essential reconnaissance, command and control, treaty verification, presidential sup-

port, and airlift missions.

Last March, Don's command passed 7,500 consecutive days deployed in support of U.S. Central Command operations. That is a tremendous milestone. And they did all of this while providing great host unit support for all of Team Offutt's people, our families,

and the retirees that make Omaha home.

Colonel Bob Russell is also with us this morning. He commands the Air Force Weather Agency. That includes 1,400 active duty, Reserve, civilian, and contract people that are at locations around the world. Through its groups in observatories, the agency provides global weather products and services, including space weather support to the Air Force, Army, Special Operations, intelligence community, and other Department of Defense activities. Notably he claims no credit for the increased rain that has fallen in Nebraska that are causing some worries as we are thinking about the potential for flooding, and our sympathies are with those that are having to deal with those problems right now.

Of course, our three organizations are all successful and these two commanders would say the same thing that I say about this. We are successful because of the extraordinary men and women we

are privileged to lead.

So I would like to recognize four of STRATCOM's enlisted members who represent the best of America's soldiers, sailors, airmen, and marines. From the United States Army, Sergeant Ralph Pohlman who was the 2010 STRATCOM Soldier of the Year; from the U.S. Navy, Petty Officer 2nd Class, Erica Bushell, the STRATCOM 2010 Junior Sailor of the Year; Tech Sergeant Alicia Maharaj, the STRATCOM Mid-Tier Enlisted Person of the Year; and from the United States Marine Corps, Sergeant Kelly Nielson, STRATCOM's Joint Functional Component Command for Global Strike Marine of the Year.

Senator Nelson. Excuse me. Let us have them stand and let us give them a round of applause.

General Kehler. Yes, please. [Applause.] So together, Team Offutt's 35,000 active duty warriors, civilians, reservists, contractors, dependents, and retirees share deep bonds with Omaha, Bellevue, and the communities throughout eastern Nebraska and Western Iowa. As I said, for well over 140 years, our heartland neighbors have opened their arms to welcome our warriors, our families and our children, which is an interesting side note to where this hearing is located today, one of the unique facilities in my experience in 36 years of military service now where a community has actually dedicated its educational institutions to the support of our military children and how welcome that is as our people struggle with these often moves and the conflict that that shows. And I think that says something about Bellevue and the great support that we get from the community here.

In addition, community support and care for our wounded warriors has always been important, and today it has a new and greater sense of emphasis and is an important resource for commanders at every level. On behalf of Team Offutt, and especially to anyone who ever hosted a young service member in your home on a holiday, mowed the lawn of a deployed service member, cared for our wounded warriors, reached out to a new family on the block, or just visited with a deployed member's spouse, I want to say we owe you a very deep and very heartfelt thanks. This bond that we have with this community—as I say, the roots are deep and they go back a

very long time.

In this challenging era of protracted conflict, constant change, and enormous complexity, the demands on our servicemembers and families are great. You may never know how much your many acts of kindness means to those of us who are blessed to receive them,

but we are very grateful.

Indeed, today's armed forces face a significantly different operating environment than in the past. This is a modern operating environment that is characterized by extraordinary technological advances, rapid changes in the number and type of actors, and hybrid combinations of strategies, tactics, and weapons. We operate in a complex, dynamic, and uncertain environment that demands focused effort, flexible approaches, and innovative responses. We must think strategically, plan with flexibility, assess comprehensively, and share information in unprecedented ways.

STRATCOM's mission is to detect, deter, and prevent attacks against the United States and our allies and to join with the other combatant commands to defend the Nation should deterrence fail. At subordinate commands, task forces, and bases around the globe, more than 54,000 active duty, Reserve, National Guard, and civilian members of our team execute this mission every day.

STRATCOM's mission priorities and responsibilities are complex and far-reaching, and we have five priorities that guide our work.

First, we are to deter nuclear attack with a safe, secure, and effective deterrent force. Our men and women operate the Nation's strategic deterrent forces 24 hours a day, 365 days a year. They also produce the Nation's nuclear employment plans that provide the President with credible response options to deter attack and achieve national security objectives should deterrence fail. Today we are working closely with the Office of the Secretary of Defense, the Joint Staff, and the services, as you said, Mr. Chairman, to implement both the Nuclear Posture Review and the New Strategic Arms Reduction Treaty, or New START. In particular, we are working to implement the treaty's provisions safely, securely, efficiently with the right resources and the right timeline and with the right force structure.

The administration's 10-year plan for investment in our nuclear capabilities, as reflected in the President's budget, is absolutely essential. As affirmed by the 2010 Nuclear Posture Review, we must sustain and modernize the nuclear weapons complex, the triad of nuclear forces, our human capital, and key supporting command/control/communications and ISR capabilities. And Mr. Chairman, we appreciate Congress' strong support in fiscal year 2011 and we urge full funding again as you consider the fiscal year 2012 Presi-

dent's budget proposal.

Our next priority is to partner with other combatant commands to win today's fight. Ongoing operations demand our full commitment, and in partnership with other combatant commands, we are working to improve plans, procedures, and capabilities to address regional problems, including the development, proliferation, and delivery of weapons of mass destruction and to bring unity of effort, especially where problems and capabilities requirements cross geographic boundaries.

Our third priority is to respond to new challenges in space. As you pointed out, sir, space is increasingly contested, congested, and competitive, and its importance goes far beyond national security. We must ensure uninterrupted access to space and space-based capabilities, improve our awareness of objects and activities in space and enhance the protection and resilience of our most important systems.

Our fourth priority is to build cyberspace capability and capacity. In cyberspace, our greatest challenge is to improve our ability to operate and defend the Department of Defense's networks at cyber speed, to make sure our vital activities can continue even in the face of attempts to deny or disrupt, something that happens thousands of times every day.

With our sub-unified command, U.S. Cyber Command, we are working hard to improve organizations and relationships, enhance network situational awareness and protection, increase technical capacity and develop the human capital we need as we look to the

future.

And finally, we must prepare for uncertainty. Today's adversaries and tomorrow's potential challengers closely watch our actions, our plans, and our capabilities to understand our values, our operations, and our vulnerabilities. These actors are not static, and combined with environmental, economic, and other factors, these potential adversaries could present surprising and asymmetric conventional, digital, or weapons of mass destruction challenges

against which we must constantly be vigilant.

Tying together this range of truly global responsibilities and associated capabilities must be a reliable and assured national command, control, and communication capability from the President to the nuclear forces and across the range of military capabilities. Our current systems require investment to ensure reliability and to address looming capability gaps. A new strategic command and control complex and nuclear command and control node at Offutt Air Force Base is the center of our nuclear C3 plans for the future. STRATCOM operates a unique national command and control capability, and today's complex command center and IT systems lack the capability and capacity to support our missions in the long term. And sir, again, we appreciate your support and the subcommittee's support for the President's request for funding in fiscal year 2012 for this new nuclear and national command and control node.

So in conclusion, sir, the active duty, Reserve, National Guard, and civilian members of STRATCOM's team perform their difficult mission with remarkable skill and dedication. I am proud to be associated with them and look forward to working with you and the committee as we address these important national security issues.

Again, we appreciate the opportunity to appear in front of the subcommittee. We especially appreciate the opportunity to do so right outside our gate in Bellevue. And with that, sir, I look forward to your questions.

[The prepared statement of General Kehler follows:] Senator Nelson. Well, thank you very much, General.

The advantage of being the only member here is I get to ask all the questions. I do not have to share the time with anybody else. So there is an advantage. It was not why I thought we ought to do it here, but it is certainly an added benefit.

But thank you for your very thoughtful comments, and I do have

a couple of questions.

In your prepared statement, you described the mission of Strategic Command and it includes the responsibility to foster strategic stability and, as you have said, ensure uninterrupted capabilities from and access to space and cyberspace, respond to both traditional and nontraditional threats, and deal with surprise in an era of rapid technological advances as we talked about this morning, a very complex but related set of missions.

And now that you have been in your new responsibilities as commander, what are the three most difficult challenges that you see

in being able to fulfill these missions?

General Kehler. Mr. Chairman, the first challenge that I would continue to highlight is this dramatically different operating environment that we find ourselves in today. I think my colleagues in the other combatant commands would share my assessment of this.

I do not think we have ever seen an operating environment like today's. When we look at the range of activity that we are engaged in around the world today, when we look at the complexity of the National security environment that we find ourselves engaged with today, when we look at the differences for us—for example, when we talk about space and cyberspace, items that we have talked about in military planning for years about distances and time do not mean the same thing when you can span global distances through space and cyberspace in milliseconds.

When we talk about boundaries—and typically we have focused on geographic areas as areas of interest for our military activities those boundaries are not the same when we talk about space and

cyberspace.

When we talk about asymmetric challenges to us—and those come frequently in space and cyberspace. This ambiguity—actors can act in cyberspace and you never know who they are or you do not know for quite some time until you do the forensics and discover who someone was when they were actually doing some criminal activity, for example, in cyberspace.

So the changed operating environment is one of the toughest

challenges that we face.

The second one with aging systems, in particular, is to ensure the level of readiness that we need to meet those challenges in this new operating environment. We find that continued investment is required certainly across the nuclear enterprise. We have testified to that before, as you well know. The President's budget contains requests to continue our investment in the existing forces that we have for strategic deterrence, as well as the support and command and control, as well as the weapons complex that underpins all of it.

But in addition to that, I am equally concerned about aging weapons systems today. We were very gratified with the selection by the Air Force of a new tanker and the ability to move forward there. We are very gratified that the Congress has given us approval to move forward with a replacement to the Ohio class submarine. We have been very encouraged by decisions inside the Department of Defense in the proposal now to the Congress to go forward with a new bomber platform. In the meantime, we have to make sure that we are sustaining those platforms that are out there to include our space systems, to include the new area that we have got for cyberspace.

And then finally, the third challenge that I have that I think about every day is preparing for and responding to surprise. Surprise can be particularly decisive when it involves things like space and cyberspace potentially or the nuclear world, for example. And this is where our concern about combating weapons of mass destruction, not just maintaining this strategic stability we have with Russia, for example, but combating weapons of mass destruction and especially WMD in the hands of violent extremists or state

proliferators are things that we must pay attention to.

I have other concerns but those are the top three that keep me awake at night. And significantly, by the way, when people if anything keeps me awake at night, nothing operational keeps me awake at night because of the magnificent people that you see here

with me today. Once the missions are in their hands, I stop worrying about it. It is all the things that I am supposed to do to make sure that they have the tools that they need that keep me awake.

Senator Nelson. Thank you.

You made reference to the fact that the President's budget request includes the money to start construction of a new head-quarters for Strategic Command, and I think you gave us some indication why this is an important investment as part of our national security. Could you maybe expand on that just a little bit?

General KEHLER. Mr. Chairman, STRATCOM performs a unique mission among the Nation's military forces. We occupy a unique place, not only a unique physical place, but we occupy a unique operational place in our Nation's defense infrastructure. We have a unique location here in terms of our abilities to conduct planning, in terms of our ability and capability to do national level command and control of our strategic deterrent forces, in the ability for us to pull together the pieces of our strategic deterrent with our space activities, with our cyberspace activities, with our National nuclear defense activities, to pull all of those pieces together to perform a uniquely important job.

The facilities that we perform that job from today were designed in the early 1950s, constructed in the middle 1950s, and are much like we were talking earlier this morning. The multiple electronic devices that you bring into your house today or have carting around, in my case in my car—I have a lot of different things that I carry around with me. Those have all come along pretty late, and yet none of my infrastructure in my home supports any of that. I have got more of those plug-in power strips around my house, for example, than I do not have anymore. So that is one example of the facility that we have here not supporting the mission demands

any longer.

Power is an issue for us. Cooling air is an issue for us. We have essentially cobbled together over the years a number of systems on top of systems. And we find ourselves in a position here where, if we are not careful, we have created a very vulnerable place from either a simple accidental problem with the infrastructure to other more significant problems dealing with cyber threats and other

things.

Our assessment has been that for this unique mission we need to go back and reconstruct a new command and control facility, and while we tend to look at that as a building, the building surrounds it. What is important here is what goes in the building and the building that is built to support it. So we have made a budget request, as you know, that is working its way through your committee and others to essentially bring the infrastructure here to the point where it matches now the mission responsibilities that we have been given.

Senator Nelson. If a terrorist, for example, were able to obtain nuclear materials, plutonium or uranium, build an improvised nuclear device, and blow that device up in a U.S. city, obviously, the devastation would be significant. So, first, what is the Strategic Command's role in making sure that this does not happen? And second, if it does happen, what is Strategic Command's role in re-

sponding to that kind of an event?

General Kehler. Sir, one of the mission responsibilities that Strategic Command has is what we would call collectively combating weapons of mass destruction. As I said in my opening remarks, the current national security strategy says very clearly that the most significant threat that we are facing today is weapons of mass destruction in the hands of a violent extremist or in the hands of a state proliferator, which is why we are so concerned

about North Korea and Iran, for example.

STRATCOM has been given planning responsibilities to be the synchronizer, if you will, for the global planning that goes on in every one of our combatant commands, to include U.S. Special Operations Command. We are given the responsibility to sit, if you will, at the top of the pyramid and make sure that all of the plans fit together. The problem is not unique to Strategic Command. I think if you had the other combatant commanders here, which you have done I know in your subcommittee at some length and in front of the full committee, every one of the geographic combatant commanders stated their concerns about proliferation of weapons of mass destruction. It is a concern for all of the combatant commanders today.

Our responsibility is to make sure that all the plans fit together. And we host some planning conferences, which does not sound as important as what it is, but we host some planning conferences where we make sure that all of the combatant commands have the appropriate plans in place to both detect such activity, track it, if necessary, and then offer the President alternatives for how to deal with that if it should ever arise, all the way up to and including U.S. Northern Command which would have the responsibility to assist civil authorities in dealing with the horrible scenario that you laid out for us.

We also have responsibility to work with the Joint Staff and the Chairman of the Joint Chiefs of Staff and the interagency to make sure that our activities are coordinated along with those of law enforcement, the intelligence community, and other parts of our Government to make sure that we are all focused on this issue with the attention that it deserves.

Had we been having a conversation here 20 years ago and you said to me point out to me the number one plan that is on the top shelf in your office, I would have pulled out our nuclear deterrence master plan, and I would have said here it is. This is the number

one most important thing that we are doing today.

If you ask me today, I would say there are two plans up there. One would be the nuclear deterrence plan, which always has to be there in my view, but the other would be a plan called "combating weapons of mass destruction." And it is our plan to pull these pieces together to make sure that we are in the position, even though we do not have a lot of the forces that would be used to deal with such a problem, that we are in a position that we the appropriate plans in place and we have either deterred or dissuaded or prevented that kind of thing from happening to begin with.

Senator NELSON. Thank you.

You have touched on this by mentioning North Korea, but let us say countries like North Korea and Iran proliferate weapons of mass destruction, as well as the delivery systems such as missiles.

Is there anything in particular that you do in connection with proliferating countries as opposed to, let us say, a terrorist or an effort at an attack?

General Kehler. For counterproliferation, sir, we are part of a big team that is an intergovernmental team. In fact, that team extends outside the Department of Defense into the rest of our U.S. Government and from there through state and other means to our

allies and friends around the world as well.

To effectively counter the proliferation of either ballistic missiles or weapons of mass destruction is a hierarchy of steps that we take. Beginning with treaties, international legal arrangements, norms of behavior, all of those things that would typically fall in the State Department's realm are complemented by things that would fall within the intelligence community's realm, within the Department of Defense's realm, and then ultimately at the combatant commander level a series of plans that we could offer to the President if he chose to take action in response to proliferation.

The real objective here is to dissuade it or deter it or prevent it. And those actions are underway through a variety of means. Of course, you are well familiar with your former colleague, Senator Nunn, Senator Lugar, the actions that have gone on there that have been counterproliferation to try to secure weapons of mass destruction materials around the world, the treaty structure that has surrounded some of these activities as well, and then beyond that, ultimately the activities that would go on in the regional combatant commands and then in Strategic Command, Special Operations Command, and elsewhere to be supportive of whatever other steps might need to be taken.

Senator Nelson. Maybe you could help us understand a little bit about how the Missile Defense Agency actually works and how there would be coordination through STRATCOM and Missile Defense in the event—well, to protect against any kind of an attack, but in the event that there was an attack, how that could work.

General KEHLER. Mr. Chairman, first of all, our United States missile defense system is a global system. The national part of this is aimed at a small, very limited number of missiles that would be launched against the United States from one of these smaller state actors. Specifically our orientation today is on North Korea where they have both demonstrated that they have the capability to produce a nuclear weapon and they have demonstrated in a very aggressive way their ability to field ballistic missiles that today are capable—they have not yet put all the pieces together—of reaching our allies in the western Pacific as well as ultimately the testing that they are doing on longer-range missiles that eventually will have the capability to reach the United States.

Our missile defense system today that is oriented for national defense is intended to deal with that problem and, hopefully, it is a part of our overall effort to dissuade that kind of activity on the part of the North Koreans from having them put all those pieces

together eventually.

It also, though, is oriented toward those that are considering

going forward here, Iran, for example.

It is not oriented against Russia and China with larger, far more sophisticated arsenals. The way we maintain stability there, al-

though we do not consider either Russia or China an enemy, with their capabilities is through the arms control and stability, confidence-building transparency measures that we have going on elsewhere, and then ultimately through our strategic deterrent force which is still there and sized and shaped to be that stabilizing force

and deterrent force, vis-a-vis both Russia and China.

So we work very closely with the Missile Defense Agency. We set the requirements for national missile defense. We do the assessment of its military utility. We are working very carefully with U.S. Northern Command that would have the responsibility to use that system under the direction of the President and Secretary of Defense if that was ever necessary, and we pull all of the combatant commanders together to make sure that the needs of the warfighters are being met, in particular, now that we have a good start and an effective system in place for national missile defense, to begin to orient that missile defense system now on where the very large threat and real threat is to our forces and our allies, and that is at the feeder level, which is why we have begun to focus as intensely as we have on the feeder-related pieces of this.

Senator Nelson. Well, our goal is, obviously, to make sure that

Senator NELSON. Well, our goal is, obviously, to make sure that others know what we can do to prevent their being successful in attacking us. If they understand that we can deter, we can prevent, deflect any effort on their part, hopefully then that dissuades them from trying to go forward and spend additional time trying to find

ways to further defeat our defensive system.

Do you think that we have been successful in some respects at least? I understand North Korea is controlled by a very unusual person who does not seem to deal with reality the same way the rest of us do. But apart from that, do you think that we perhaps have been able to dissuade some of the other countries from looking at trying to defeat our systems of defense?

General Kehler. It is hard to say, Mr. Chairman. Well, two

things I would say.

First, I believe in the assessment that we have done on our limited defensive posture that we have for the Nation today, I believe that is an effective system, and I believe that system would work as advertised in response to a limited threat. So, number one, the credibility of how others would view it I think is linked to the assessments that we have made about its potential effectiveness. And I believe that it is to the point where our assessment of this from a military standpoint is that it is effective for the purpose that it is intended. That does not mean that it would be capable of responding to some overwhelming strike. It could not do that, and yet that is why we also still retain offensive weapons to make this a package of things that we would use for deterrence purposes.

And the second point I would make is we do not see one-size-fitsall deterrence any longer. We think that deterrence is a combination of things. Missile defense is one piece of that. Offensive forces is another piece of that. Our conventional forward forces is another piece of that. Our ability to command and control is another piece of that. And so there are lots of pieces that make up the deterrence

equation

I believe that any potential adversary, certainly nation states, take those factors into account in their decisionmaking. They wind

up making their decisions based upon lots of things. It is hard to tell why the North Korean Government makes the decisions that it makes sometimes, but we assume some amount of rationality to other actors out there at the Nation state level. And my view is that all of them take this into account. How effective it is depends on their own assessment of benefit/risk/reward, and all the things that they will go through and the behavior that we will see based upon their own decision calculus. But I believe very firmly that they all take all of these issues into account when they are making those decisions.

Senator Nelson. As you indicated, the Strategic Command is responsible for implementing the New Strategic Arms Reduction Treaty with Russia. Your predecessor, General Chilton, was a strong advocate for the treaty. The treaty has now been ratified by the Senate. It is in place. Can you give us your thoughts on how effective you think this treaty may be and what our objectives will be in reducing mutually the arms and hopefully stop the proliferation in the world of the arms race?

General Kehler. Yes, sir. First of all, I too am a firm supporter of the New START treaty. The Senate did ratify it. It has entered into force in February. We have 7 years to implement the provisions of the treaty. However, we are moving out to implement those provisions. A number of things are already underway. We have exchanged data with the Russians. We have done other things. There have been some preliminary inspections done. There have been some demonstrations and expositions, if you will. So a number of steps are underway.

We have not yet made final decisions on what our force structure will look like within the treaty limits. The treaty does not require us to do anything other than meet its limits, 1,550 operational warheads, 700 deployed operational launchers, up to 800 deployed and non-deployed. How we structure our force remains to be seen, and that decision process is underway both inside the combatant command here, inside the Joint Staff, as the Chairman is working his way through all of this, ultimately en route to discussion with the Secretary of Defense and ultimately en route to a discussion with the White House over how we should structure our forces.

So we are moving forward. I think the single, most valuable thing about the treaty is that it does, in fact, place limits on those weapons that threaten the United States of America most significantly and most immediately. So that was a very positive step.

A second very positive step is the fact that we have a treaty with the Russians at all. I think that what that does is it creates a dialogue with the Russians. We have found that to be a useful dialogue from well before the end of the Cold War. We have found that that is helpful for transparency reasons. It forces us to deal with one another on all kinds of levels, and it, in fact, allows us to continue this pathway that we have been on with the Russians since before the end of the Cold War, which is to reduce the overall number of weapons in a way that promotes stability and yet continues to allow us to have the strategic deterrent force that we think we need to meet our deterrence objectives. So I see all of those as positives, and we see this as a positive way forward to work the

implementation details as we decide what that force structure should ultimately look like.

Senator Nelson. Well, I think there were a lot of questions raised during the debate on the floor of the Senate about the treaty about whether or not there would be enough nuclear weapons for our offense and defense. And so I guess the question is are there enough for our mutually assured destruction given what Russia will have and what we have, which is not our goal, but there was some concern that we are getting down to maybe a manageable level but an unsafe and insecure level.

General Kehler. Sir, I do not think we are unsafe or insecure at all given the levels in the New START treaty. I would not characterize this any longer as mutually assured destruction. That means a lot of things.

Senator Nelson. It is still something to think about.

General Kehler. Yes, sir. That means a lot of things to a lot of

people.

What I would say is that at this force level that I am confident that we can meet our deterrence objectives. The force level that was agreed to and the assessments that were made which were prior to my time but which I fully agree with—those assessments were made based upon a series of deterrence objectives that have been in place for quite some time. The next step is to go back and look, and the Nuclear Posture Review said that we would do this. Once the New START treaty has been put into force, now the question is what next. And so we have begun to work with the rest of the Department of Defense and others to think our way through what next.

Senator Nelson. And there was also a question about whether or not this would, in the words of President Reagan, permit us to trust but verify, and being able to have a certain level of verification was, in fact, part of what this treaty was about. So are you comfortable with the ability that we have to verify what Russia is doing as they would have the ability to verify what we are doing, as I described it, looking under each other's hood of the vehicle to see what is there.

General KEHLER. Yes, sir. I am comfortable with this. I believe that the verification mechanism that was put in place for this treaty fits the treaty. There was some discussion about whether this verification process would have fit the last treaty, and the answer is it would not have but it does fit this one and I am comfortable with it, with the provision, of course, that we continue to source those verification methods to include the national technical means that we use to help us enforce the verification provisions of the treaty.

Senator Nelson. Turning to the area that I think a lot of people are paying close attention to or beginning to learn about, cyberspace, you referred to the Cyber Command as being a sub-unified command under Strategic Command. Maybe you could help us understand exactly what is a sub-unified command as opposed to—we are all trying to learn how to be—our ability to speak the military language. You know, I do not know that I have mastered it all, but I am trying to learn more about it.

General Kehler. Sir, I can just say as an aside, the military peo-

ple in here have not mastered it all, I can guarantee you.

We stand up a sub-unified command when there is a specific mission responsibility that requires focused attention is I think the best way to say it. For example, U.S. Forces-Korea is a sub-unified command to the Pacific Command. We stood that up years ago because there is such a unique set of challenges associated with what is still a standoff, of course, on the Korean Peninsula that we felt it was necessary to put a separate senior officer in charge of worrying about that every day 24 hours a day.

We did the same thing for U.S. Forces-Japan some years ago, and we have done that from time to time over the years when a specific issue was significant enough, required such detailed activities and awareness and specific responses that it required the full-

time attention of a senior officer every day.

That is what we have done in this case with cyberspace. We have stood up United States Cyber Command as a sub- unified command. It is commanded by a four-star officer, General Keith Alexander, of the United States Army. He wears another hat as well as the director of the National Security Agency. The headquarters is at Fort Mead. That is a center of gravity for this kind of activity for the Nation. And we have charged him. In fact, we have delegated the responsibilities that are given to Strategic Command to operate and defend the Department of Defense's networks. We have delegated those responsibilities to him. And what we find is the uniqueness of cyberspace demands that kind of attention where we have made, I believe, very good progress. Certainly we have a long way to go but we have made very good progress.

The other thing this does is it gives a specific focal point for the rest of the Government to interact with when they are talking about how do we do cyberspace business as a complete Government. It also gives a way to reach out to commercial. As you well know, sir, the Department of Homeland Security retains responsibilities here for defending the Nation's critical infrastructure, to include the cyberspace critical infrastructure. What we are trying to work our way through with Cyber Command is not how do we completely reinvent the role of the U.S. military related to cyberspace but how do we apply our traditional military activities to cyberspace. And that is everything from defense support of civil authorities to protecting our own Department of Defense activities to

conducting military operations.

And so Cyber Command is in the thick of all of that conversation. We are, of course, working with them from Strategic Command. In fact, yesterday we spent an entire day, both staffs together, back at the Cyber Command headquarters outside of Washington. And I think that putting a sub-unified command together for this subject at this time has been exactly the right thing to do.

Senator Nelson. Well, statistics are now showing that criminals engaging in cyber crime make more money today in that cyber crime than via the drug trade for the first time. Obviously, we have to deal with criminal efforts in cyber or terrorist activity that could be criminal but for a different purpose not necessarily for profitability but to try to destroy our networks to adversely impact us.

In working with the Department of Homeland Security, how does this work? If you are not reinventing the wheel, trying to work with Homeland Security, which would be concerned primarily, not entirely, with terrorists but with cyber crime. How do you distinguish or how do you divide up those responsibilities or follow up after they are discovered?

General Kehler. Sir, first of all, those relationships are still being established. There has been a memorandum of agreement signed between the Department of Homeland Security and the Department of Defense that lays out an initial relationship between the two Departments. I think it is important to note that the Department of Justice, for example, is a key player in all of this as well. There are other Federal Departments that are also key players in here. And so the question is really one of relationships across the entire Government.

But let us take the DHS example for a second. Our friends in U.S. Northern Command and Admiral Sandy Winnefeld who commands that command today—we have worked through a series of relationships that allow him to do what we would call defense support for civil authorities. He supports the Department of Homeland Security in the physical world in many, many ways whether it is from wildland fire fighting, whether it is flood activities, whatever it is where the Department of Homeland Security turns to the Department of Defense and says I need help, you have unique capabilities, unique tools that we need, unique manpower, unique training, whatever it happens to be, and we need that to support civil authorities and their activities. This is the same set of lanes in the road, if you will, that we need to carve out with DHS for cyber. It is different in that cyber is a different animal for us to deal with, but I am confident—and I think we are all confident—that we can establish those relationships.

You asked how would we respond. In some cases, those relationships are in place today, and we have ways to respond. In other cases, they are not. If you listen to the conversations that go on from our Deputy Secretary of Defense and others, I think we would all acknowledge today that there is much more to do to position the Nation to be able to deal with cyberspace in terms of the amount of activity that we see from all different directions.

But I think the final point I would make here is very significantly, in some cases things that happen in cyberspace, while the press headlines might use the word "attack," when the word "attack" is used for people like us with uniforms like these, that means something to us that is not always necessarily the same thing we mean when we talk about attacks in cyberspace. In some cases, as you pointed out, those are criminal activities and best handled by our criminal activity handlers, whether that is the FBI or whether that is local law enforcement or whether that is the State patrol or whatever, whether it is DOJ. Those are the kinds of questions that we are asking ourselves to make sure that we are not wanting to pick up the phone and call the Department of Defense for the wrong reasons.

Senator Nelson. This is sensitive because I am going to make reference to China. There have been a lot of penetrations of U.S. Government and industrial computer systems with data theft that have been traced back to China, and while it is not possible to determine with certainty that these attacks are coming from or directly directed by the Chinese Government, the evidence over a number of years might cause some people to draw that conclusion. But at a minimum, if these attacks are not sponsored or officially sanctioned by the Chinese government, it appears to most of us that the Chinese government has done little or nothing to stop them, almost reminiscent of intellectual property theft as well.

Is this something that is being looked at? I know it is a very delicate sort of a question, but is this something that is being looked at right now militarily? If you can even answer that in this envi-

ronment.

General Kehler. Sir, what I would say is about a week and a half ago, maybe 2 weeks ago, the White House released a document. I may get the title a little bit wrong, but I think it is called "The International Strategy for Cyberspace." I think that is what it was called. That is close. If it was not called that, that is close.

And one of the highlights of that document is the idea that everyone will have to behave responsibly in cyberspace, that there is some expectation that to get the benefit out of cyberspace, that people will behave responsibly. And I think that gets to your point here, that there needs to be responsible behavior at all levels.

I will not comment on the specifics of any country, et cetera because the other thing that you pointed out with your question is how difficult it is to determine who is doing what in cyberspace. Ambiguity is almost a hallmark of people's behavior in cyberspace. That is not a bad thing because we all want our privacy, of course. But it provides us with some difficult problems in trying to attribute behavior to various actors out there. So that is going to be a problem for us, I think, to work our way through for quite some time to come.

Senator Nelson. Is that something that we could gather as a group of countries who have this capability as governments? We recognize there are private citizens located all around the world that have the capabilities that sometimes astound us that individuals would develop those levels of capability. But is that something where you think we might, as we have with the New START treaty, enter into some sort of an agreement with other countries where it is actual signatories to try to police that back home, wherever we possibly can, whether it is our country or another country? General Kehler. Well, Mr. Chairman, I do not know what the

General KEHLER. Well, Mr. Chairman, I do not know what the mechanism would be, nor would I suggest a mechanism to do it. But I would say that the new national strategy suggests that we need to band together in some way as some type of a community of nations to make sure that our behavior is consistent with what our objectives are for the Internet, which is free and open activity for everywholds.

for everybody.

The interesting thing here is going to be, I think, whether by engaging nation states, you have everyone that you need in such an agreement. If you think about some of the issues we have seen in the last several years, there have been a couple of cases where we have non-nation states accusing nation states of bad behavior. So you have companies accusing nations; nations accusing companies. This is going to be very interesting, I think, for policymakers to

sort out who you include in these kinds of agreements, which is why I think the strategy was pretty insistent on this idea that ev-

eryone has to behave responsibly.

Senator Nelson. And there is the distinction that we talked about between that that is just criminal for profit type efforts versus terrorists or nation state efforts that are the equivalent of spying to try to access our secrets and inveigle their way into our systems.

General Kehler. Yes, sir. Vandalism, criminal activity, espionage, military activity, all of those things are happening in there at some level, and sorting all that out is one of our big challenges.

Senator Nelson. I mentioned and you mentioned as well space debris. Can you give us some relative understanding of how much stuff is up there? Obviously, we think of space as being unlimited and we think about it as expanding the globe. How congested and

contested is space right now with all that debris?

General Kehler. I think the one thing that I have seen that has been—well, maybe two things that I have seen that have been really dramatic changes in my time on active duty. One was, of course, the end of the Cold War and the reduction of our nuclear forces. The other has been the change in space from the start of the Space Age which, of course, I was not on active duty for, but from the late 1950's to today, how much the nature of our space activities has changed, how much our reliance has changed on those space things, and how much the participants have changed, how much the number of manmade objects has changed.

So if I just focus on the objects for a second, I think in 1957 there was one manmade object on orbit. Today we are sitting here in 2011 and there are well over 20,000 manmade objects. About 1,000 of those are active satellites. So 19,000-plus pieces of debris of one kind or another. That is those things that we can see, some sized around a softball or so larger. Our estimates are that there are probably 10 times that amount of debris that is smaller than what we actually actively would look at on a case-by-case basis. So pretty

soon we are talking about a lot of objects here.

And you would say big space, little object theory, but you have to think about this, that there are some places on orbit that are more crowded than others, that are more desirable than others, not unlike driving. There are a lot of cars that transit Nebraska, but most of them are on the interstate, I would hazard a guess, and a lot of them go through the intersection out here of I–80 and 480. So that is the same thing on orbit, that there is a lot of stuff up there but it is channeled in certain places, and in some places it goes through intersections.

So that in and of itself is a risk, first, to human space flight, and we put a protective observation bubble, if you will, around the Space Station and human space flight. Second, we put an observation bubble, if you will, around our active satellites, and then we are in agreements with others around the world to provide that

kind of service for them as well.

The final thing about this that makes it so potentially damaging is the speed at which things are traveling on orbit. Even though they are small objects, they are going at a very high speed, and therefore impacts cause a tremendous amount of damage. When you are talking about things moving at 17,000 miles an hour, for example, collisions that occur at those speeds—that is faster than .30–06 round, by the way, that would go down range. Those kind of speeds are particularly damaging if you talk about the unintended collision.

Senator Nelson. In addition to worrying about space debris, we also have to be concerned about our adversaries perhaps trying to bring down or jam our satellites. What are we doing in a general sense to protect against having somebody, another country or a bad operator, find a way to effectively render inoperative one of our military satellites?

General Kehler. Sir, the threat to our space capabilities is real. The threat that we are concerned about is predominantly a ground-based jamming threat, for example, GPS. GPS, as universally used as it is, is essentially in its orbital component a radio transmitter. It does not transmit at particularly high power, and so it is not a terribly difficult signal to jam, if you have the right pieces of equipment in place. So jamming is one of the issues.

We see the development of jammers in militaries around the world. We know Sadaam Hussein in the early days of Operation Iraqi Freedom actually operated GPS jammers. They were not effective. He did not have many of them and they were not used particularly well. They were not employed effectively, and ultimately they were taken out.

But we see a proliferation of jammers. We see satellite communications jamming. Sometimes we see that today in an unintentional way because the frequency spectrum is getting more crowded, but we have also seen it in an intentional way as well.

And then, of course, we have seen the demonstration by the Chinese and we had seen years ago the demonstration of anti-satellite weapons by the Russians. And so we know that those type of capabilities exist out there in the world and we have to be mindful of those. So we are taking a number of steps.

At some level, some of this is an engineering solution.

We have to design the satellites differently. In some cases, they are pretty well protected today from a lot of things, but they are not protected against everything. And we get into difficulty in determining what those other satellites that are on orbit—what is their real purpose? They can all look like communications satellites, but that may not be their purpose. And so we have a better job that we have to do in situational awareness so we get advance warning of things that could happen, and then we can take some additional protective steps. In some cases, we have not put much in the way of protective steps in place. Resilience in the capability will come maybe from airborne platforms or elsewhere instead of space.

Senator Nelson. So there is a certain amount we can do to protect. Whatever we do can in some way or another be defeated if the other side develops the capacity to do that. We cannot protect anything and everything.

General KEHLER. No, we cannot. Resilience is the ultimate way to take care of these vulnerabilities. That is true in cyberspace as well. But ultimately mission assurance, which means that you can operate through something even in the face of duress of some kind, and then resilience, multiple ways to get the job done, is really the way that we are ultimately trying to get at these vulnerabilities.

Senator Nelson. Well, this question is about our men and women in uniform who are part of the Strategic Command. On any given day, how does Strategic Command support our troops in, let

us say, Afghanistan?

General Kehler. Sir, I tell my colleagues in the other combatant commands—and I actually believe this firmly—that there is no military operation that goes on out there that is not being impacted by Strategic Command in some way. The number one example is GPS. There is not a military activity that is going on out there somewhere today that is not impacted or touched somehow by GPS. Satellite communications is another one that there is either voice traffic or data going over satellite communications somewhere in the world right now in large volumes that is supporting military activities. We are providing the networks over which their data and communications are flowing. We are providing a strategic umbrella, I believe, a deterrent umbrella over top of them. We are ensuring that the missile defensive capabilities that they need are in place and effective. We are taking steps with them to combat weapons of mass destruction. We can provide expertise forward when they need expertise. We can provide other planners that go forward to conduct, for example, global strike operations.

And so let me use a couple of examples here. You asked about Afghanistan. The reason I believe that we can operate the way we do in Afghanistan is because of space and cyberspace. It allows our troops to navigate with accuracy. It allows them to communicate with certainty. It allows them to strike with precision. It allows them to do those kind of things that have essentially become the American way of warfare in a place like Afghanistan. It allows troops to operate in geographically dispersed locations, which we do in Afghanistan. It allows us to put forward operating locations in places where their only communications might be through satellite communications means. It allows us to fly remotely piloted aircraft using a combination of cyberspace and space so that you do that half a world away. All of those things are either provided by the service components of STRATCOM or somehow planned via a global synchronization effort through STRATCOM.

Finally, in the early stages of the Libyan operations, STRATCOM conducted, on behalf of Africa Command, global strike

operations as well.

So we, I believe, have a supporting role that we live every single day with those forward commanders that are out there. We are touching them in ways that they do not really realize we are touching them in. We are also helping to manage the global intelligence, surveillance, and reconnaissance assets that they are relying on every minute of every day.

So I feel very proud of the men and women of STRATCOM and what they do not only when we are supported in our efforts to deter the strategic end of the spectrum, but also in the supporting activities that they put out to support what they would call the warfighters. And I think you would find that. If you went around and talked to any STRATCOM assigned people today in any of our operating locations, they would say that they are there for that. So

I am very proud of them.

Senator Nelson. I think the American public is probably fascinated with the unmanned aerial vehicles and the way in which they operate. Could you give us maybe a little bit of just an overview of how you can operate a machine halfway around the world with precision and that it does not have to be operated like a model airplane with a local control right on the ground close to the vehicle?

General Kehler. Yes, sir. Well, it actually it does.

It is both.

Senator Nelson. Yes, it can be both ways, but it does not have to be.

General Kehler. Right.

The way I think about it, sir, is I split it into two pieces. One is actually flying the aircraft itself. The other is operating the sen-

sors or the systems that are on the airplane.

So to do the airplane operations in the immediate vicinity of the airfield, we do it a lot like a model airplane. There is somebody there in the local vicinity to get it airborne and bring it home when it is on final approach, if you will. But the whole rest of that operation is being flown remotely. The vehicle itself is being flown by a pilot who is remote, and sitting next to that pilot is a sensor operator or a mission operator of one kind or another. That is all being done through cyberspace. It is all being done through a network. It is all being done through a combination of things, by the way, which is some military pieces, but mostly it is commercial pieces. There is probably a commercial satellite link that is involved in there somewhere. There may be some commercial fiber optic that is involved in there somewhere which, by the way, reinforces with us why the nature of cyberspace is largely in the civil and commercial domain when we use it. We are talking about protecting ourselves in cyberspace. A very interesting point of contact between the Department of Defense and the other Departments and commercial industry is in just that kind of a thing for just that kind of a purpose, for example, flying remotely piloted aircraft.

So that is the way it is done. It is done from places that are relatively small rooms. I know you have seen some of them and been with the crews that do that. What strikes me is if they are flying over Afghanistan, if you enter a shelter with them and close the door behind you, you do not know where you are. After a while you forget that you are in the United States somewhere. You are not in Afghanistan with them. You are not where the vehicle is. And after a while, I think the mind set that the people have that do this

is the same.

And that goes all the way out to the tactical level. There are some smaller vehicles that are flown at the tactical level. There are some that are actually flown like model airplanes from some person forward on the ground who is doing almost the same thing that we did as kids, but they have got sensor packages on them that allow them to see and perceive things that are out there that might threats.

I think it is a remarkable testament to space and cyberspace that we do those things today.

Senator Nelson. Well, it is a little bit like science fiction, but there is no fiction to it but there is a lot of science associated with it.

This question relates to the fact that Strategic Command is very technically oriented and requires a lot of dependence on scientists and engineers and other people with a high degree of technical specialty. Are we seeing enough young people and others in the educational system today who are taking that kind of background coursework to fill the needs that we are going to have tomorrow and the next day and the day after that for the kind of capacity that Strategic Command has in the future that is not that very far ahead?

General Kehler. No, sir, I do not think we are seeing enough. It may very well be that if we were to visit the major universities around the country—and certainly we have had a little bit of this conversation with the University of Nebraska—I think you would find that they are producing high quality engineering students, and I think you would find that every one of our major engineering schools around the country are producing high quality engineering students and I think you would find that they are producing maybe significant numbers of them. But I think you would find that of those numbers, the percentage who stay in the U.S. and enter the National security business is way too small. So there are interesting issues here with recruiting, with retention, with making sure that we have identified what skills we need, and making sure that we have put in place the incentives, I think, for people to enter the National security business and stay there when it is a little more difficult to do that.

NASA is shifting its directions and is in a period where we are coming to the end of the Space Shuttle. There is going to be a period of time here as they are reorienting to go off and do some other things.

I think it is going to be a challenge for us to attract and retain the kinds of people that we need. Cyberspace is another one of those areas and particularly when there is highly competitive demand on people to go to industry as well. So I think educating them, keeping them, going back to the secondary education as well and then post-secondary is something that is very concerning for us.

Senator Nelson. Well, it is something that obviously we need to work on because if we do not have the workforce coming into the command, we are not going to be able to continue the command as it is or we will have to structure it differently and that is not in anybody's best interest. So I hope that we can keep pushing to get that kind of effort and capacity growing. Otherwise we will not have any seed corn and we definitely have to have that.

General Kehler. Yes, sir.

Senator NELSON. Strategic Command is responsible for, as we talked about, the intelligence, surveillance, and reconnaissance or, as it referred to in military terms, ISR. And we know that ISR played a role in the successful raid that took out Osama bin Laden. Can you talk about any kind of support that Strategic Command might have provided in that mission?

General Kehler. Sir, not really. However, I would say that—

Senator Nelson. You can say that we had some involvement.

You just do not have to say what it is.

General KEHLER. Well, we did have some involvement. We provide involvement across the board to the activities in Central Command all the time. And so most of what we do for ISR, anyway, in those forward areas is planning and recommendations on what assets they should get. How they use them and what they are using them for is not always apparent to us.

Senator Nelson. Well, that is my final question. Is there any-

thing that I did not ask that I should have asked?

General Kehler. No, sir. Thank you for the opportunity to ap-

pear again.

I will say again in closing, on behalf of the men and women of Strategic Command, we certainly appreciate the support the Congress. We appreciate the support of the entire Senate Armed Services Committee and your support and your subcommittee in particular. These are difficult issues and you know and I know both that there will be fiscal pressures as the President's budget works its way through.

I would just make one final advocacy comment about the need to sustain the funding that is in the President's budget, particularly for these critical items related to sustaining our nuclear forces, the nuclear infrastructure that backs them up, the command and control systems that we have in place, our need to increase both our space and cyberspace situational awareness and the investments that are there to do that, the investments that we

have in place to sustain our force.

And then finally, I would remind all of us again that those steps that you all have taken to support the men and women who actually are the heart and soul of what we do—the hardware is one thing. But it is not the hardware that ultimately is important. It is the men and women that are in STRATCOM and through the rest of our military. So the support that we have for them I would continue to advocate in the strongest possible way.

And other than that, sir, thanks for the opportunity.

Senator Nelson. Well, thank you, General Kehler, for your very candid remarks and responses to questions. Thank you and the men and women of Strategic Command for their service to our country, to wish you and all of them the very best and to thank the young man and women who are here with us, as well as the Fighting 55th and the Weather Command as well.

The colonel was quick to point out that it is the chaplain that

is responsible for the rain. [Laughter.]

All they have to do is report about the weather.

So thank you so very much.

And I also want to thank the staff here at this wonderful facility for, once again, hosting one of our field hearings. We thank you.

And we thank all who are here and hope that you have perhaps some idea, if not a better idea, of the role of Strategic Command which we are all so proud is located here in this part of our wonderful State, and we hope that we will be able to continue to have hearings of this kind for transparency and for enlightenment to the men and women who are relying on this kind of protection for our National defense and the taxpayers who continue to support them. Thank you all.

The hearing is adjourned.

[Whereupon, at 12:55 p.m., the subcommittee adjourned.]