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Thank you very much, Gary. I am truly honored and pleased to be back at the Richard Russell forum. One of the great things about public service was my honor and privilege of following as the next elected Senator to serve Georgia after the passing of Richard Russell. I thank Charlie Campbell, the members of the foundation and the members of the Russell family for preserving this tremendous legacy, which his indeed a wonderful legacy and a blessing to our state and to our nation and indeed to the world. He had quite a record.

Gary, I was thinking as we were sitting here about what I put right at the very top of compliments I ever received in terms of my public service. It was from a fellow that Charlie Campbell probably will remember; he passed away three or four years ago. Rogers Wade, who's somewhere out in the audience and Gene Younts, those of us of this vintage, probably remember a fellow named Sims Garrett.

Sims was very active in Georgia politics and legislative affairs. I remember in 1968 when I first ran for the state legislature, I was fortunate enough to escape any opposition. It was my first race, and I didn't have any opposition. I didn't have many contributions but a few, and when the campaign was over and I was elected, of course there wasn't a campaign and I hadn't spent any money, I sent the money back.

About 10 or 15 years later when I was in the Senate, Sims Garrett came to my Washington office and he said to me, "In all my years in politics there are only two people who ever sent back a contribution: You and Richard Russell. I put both of you in a special class." And to me that was the greatest compliment that I think I ever got because Russell not only was a man of skill and tremendous influence, he was man of tremendous integrity. He was known for integrity. He was known for his keeping his word. He was known for his honesty. And that was not a coincidence to his accumulation of unprecedented power in Washington. The two went together. So it's great to be here and great to be part of this forum.

I want to thank Gary Bertsch because Gary is doing something for a young squirt like Gary that I can't believe: He's retiring next year. I want to be one of the first to say what a wonderful job you've done here. You've put together a tremendous team. You've been a big help to me while I was in the United States Senate, and you've been a big help to me in my public policy role since I've left the Senate.

Gary's made an indelible mark both here at the University of Georgia and in the world. Gary was years in front of 9/11 in sounding the alarm on nuclear proliferation and terrorism growing out of the breakup of the Soviet Union. Gary, after he came to the University of Georgia, about the time, actually a little before, I got elected to the United States Senate, Gary quickly became a national and international leader in many fields but particularly in combating illicit nuclear trade and concentrating on the people and the culture. Gary was out front in recognizing the urgent imperative in training security personnel and changing the culture of the security environment in the former Soviet Union and elsewhere. History does not usually record catastrophes avoided. I've often wondered why someone didn't write a book sometime, not about the march of folly, it's easy to identify the great mistakes and the great catastrophes, but we almost never identify those that have been avoided by sterling and far-sighted leadership.

I can tell you with great confidence that Gary, Igor, and Igor's a great leader in his own right and is bragged on often by our team in Washington, but their team has helped to avoid quite a few catastrophes around the world. I'm absolutely certain of it. I can't prove it. I can't quantify it, but I know it. Gary's assembled a great team here at the Center for International Trade and Security. They've enhanced the security of our country and our world. Gary, I'm confident in your retirement next year, you will continue to find plenty of time to devote to the security and well being of Georgia and indeed our nation.

Secretary of State Dean Acheson was once asked how he would define foreign policy. He pondered for a moment and then he replied, "Foreign policy is one damn thing after another." I would say the same thing about nuclear policy and nuclear challenges: one damn thing after another. And the latest one has been the North Korean challenge.

North Korea's recent test and its nuclear program not only create the threat of a nuclear arms race in Asia, but also create the danger of sale or leakage of nuclear materials to groups that will use them. I hope that this North Korea test, and maybe this is looking too far for a silver lining but perhaps not, I hope it will be a wakeup call to unifying not just our own country, but the international community, not only to confront the threat posed by North Korea, but also to formulate a broader and more effective approach to nuclear threat reduction around the world.

The first goal must be to fix the problem we failed to prevent. We need to insist that North Korea fulfill the commitment it made itself in 2005 for a nuclear weapons-free Korean peninsula. That is the imperative, and we should not lose sight of that goal.

This demand must be backed by tough economic sanctions that are supported by China, South Korea, Russia, Japan, the United States and indeed the United Nations and the world. I was pleased that the sanctions in recent days were quickly agreed upon after the test. I was, however, deeply disappointed to see the news in the last couple of days that we may not have a meeting of the minds between the United States, China, South Korea and Japan. There are two fundamental prohibitions, one is luxury goods, and that one is not likely to be enforceable. It's a "feel-good" prohibition, but it would be almost impossible to enforce; I hope it is, but it's unlikely.

The other one is an absolute imperative and in the vital security in the United States and the world, and that is preventing the export and import of nuclear material and technology into or out of North Korea. The North Korea nuclear weapons program represents a failure of United States' foreign policy, there's no doubt about that, but also a failure of China's policy, a failure of South Korea's policy and a failure of Japan's policy.

While I don't believe that economic sanctions alone will solve the problem, one of the reasons they won't is that North Korea is isolated and doesn't do much trading except with China and South Korea. But while I don't believe they'll solve the problem, I do believe that the sanctions are very important and can send a powerful signal not only to North Korea, but also to Iran and others that have nuclear aspirations around the globe. I think that's very important, but it can only happen if we stand together. If we continue to spin in different directions, which we've done in the last two or three days, the world is about become a much more dangerous place. A united and speedy and successfully implemented response that can be built upon as we go along is much more important that a perfect response.

We must also make it clear to North Korea that there will be dire consequences if it acts to sell or to spread nuclear weapons or nuclear materials. We must make sure North Korea understand that unlike previous warnings, we really do mean this one.

To prevent a nuclear arms race in Asia, the Unites States must publicly reiterate our security guarantees to Japan and South Korea. Generations of Japanese and South Korean citizens may not remember that the United States has assured their security all of these years. They must be reassured that they remain under the US nuclear umbrella and that we will regard a nuclear attack by North Korea against South Korea or Japan as an attack against the United States. And it is also very important that American citizens understand that long-standing commitment. President Bush made a good start on these reassurances last week.

It will take a combination of carrots and sticks to achieve a nuclear-free Korean peninsula and to convince North Korea and show other nations like Iran that their country will be better off without nuclear weapons. While we're urging our allies to sharpen their sticks on sanctions, we must be willing to cook our carrots on both economic and security assurances. In my view, the Bush administration must get beyond what I believe is a counterproductive ideology that views talking to our adversaries as a reward for good behavior and refusing to talk as an effective punishment.

History shows that nations rarely give up nuclear weapons without credible assurances of their own security. In the case of North Korea, these assurances must come from several key nations, but must begin with an extensive United States-North Korea dialogue and understanding. It is enormously important that we talk.

We talked to our adversaries during the worst parts of the Cold War. Who knows what catastrophes we prevented? But I do know one thing: When you do not communicate

with your adversaries and when you know that war is going to be devastating if it comes, it is a mistake to leave any ambiguity about policy. Those ambiguities can only be removed by frank and candid dialogue. The greatest nuclear dangers we faced during the Cold War were addressed primarily by being able to prevent war against the United States and our allies by assured survivability of our nuclear deterrents and assured destruction of any nation launching an attack on us. No one's better qualified to speak on that than General Gene Habiger here who headed up U.S. strategic forces. You'll be hearing from him and another man of great experience who served at the top of Navy, Admiral Skip Bowman. You have two experts who'll be talking about the changes in the nuclear equation today.

Today, as I see it, we are facing far different dangers, including the rise in the number of nuclear weapon states and the number of states that can produce weapon-grade material. Another key ingredients is not simply the weapons, it's the weapons-grade material. We'll talk about that more as the day goes on.

The wide availability of knowledge of how to make a nuclear weapon, that's what fundamentally changed. Twenty or 30 years ago, countries did not think, could not believe that anyone besides a nation could gather the kind of technological capability together to produce a nuclear weapon. Now you can look up on the Internet and get the instructions of how to make a rudimentary, crude nuclear weapon that probably couldn't be delivered by a missile through space, but it could be put in the back of an SUV and take out a large portion of a U.S. city. So that's a fundamental change.

The great increase also, and this is the other fundamental change, is the number of fanatics willing to use a nuclear weapon if they acquire the materials and the know-how. It's very difficult to deter someone with the threat of retaliation when they're suicidal to begin with -- very difficult. These threats are new and we must think anew. Fanatics who don't value their lives are not deterred by, and accidents are not deterred by, the threat of nuclear retaliation.

We're at the edge of a dangerous new period of nuclear challenges that cannot be met with a Cold War posture or a Cold War nuclear theory. These changes have come in a little more than 15 years and threaten not just the United States and our former adversaries, particularly Russia, but our allies and the world. These new threats have emerged more rapidly than our thinking and our responses, and certainly more rapidly than our coordination and cooperation with other nations. We are in an era of too many new threats and too much old thinking. We have an obligation to our children and to our grandchildren to think anew. When I say "we" I don't just mean the United States, I mean the key countries and particularly the key nuclear weapons states of the world.

In his last year in office, when President Reagan was asked what he believed was the most important need in international relations, he talked of the need to cooperate against a common threat: "What if all of us discovered that we were threatened by power from outer space, from another planet. Wouldn't we all come together to fight this particular threat?" I submit that when weapons of mass destruction are at the fingertips of

individuals and groups who are eager to use them to inflict massive damage to mankind, President Reagan's question of "wouldn't we come together to fight that threat?", should be front and center for the United States, for Europe, for Russia, for China, for Japan, for South Korea and indeed for the world.

Our slowness in adapting, and we have been slow in my view, has not prevented us from taking important steps. And I think it's important while we're talking about the future to talk about what we have done successfully in the past few years. The Nunn-Lugar Cooperative Threat Reduction Program has been working since 1991 to secure and destroy weapons and materials in the former Soviet Union. In addition to helping Russia remove thousands of nuclear warheads, this funding has helped Kazakhstan, Ukraine and Belarus, three former parts of the Soviet Union, now independent states, reach and implement critically important decisions to give up all their nuclear weapons. So when someone asks, "Isn't it hopeless? No one's ever given up their nuclear weapons" that isn't true. South Africa gave up their nuclear weapons after they had tested. Other countries have given up their programs, but not without a lot of conversation and a lot of assurances.

Also under the Nunn-Lugar program, we have done a lot of things in the former Soviet Union relating to not only weapons, but weapons material. Today the Russians, with our help, have completed about 50 percent of the job of securing nuclear weapons and materials in Russia. There's a complicated set of definitions about how to judge whether its 50 percent, that's just a rough number, there are a lot of different nuances to that. This program has been, I think, very importantly expanded to allow work outside the former Soviet Union, thanks to Sen. Richard Lugar's leadership in the Senate.

The second big development in my view is that more than four years ago, the G-8 countries made a commitment to match the United States in threat reduction funding each year for the next 10 years. And non G-8 nations, a number of them, have joined this emerging Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. The words are much stronger than the actions thus far, but at least a solid foundation has been laid and other countries have acknowledged that they too, not just the United States, have a responsibility in this arena.

Number three: In 2003, Libya committed to give up its nuclear weapons program, adhere to the Nuclear Nonproliferation Treaty and Test Ban Treaty, and sign the Additional Protocol that would allow the International Atomic Energy Agency to do more intrusive monitoring of the country's facilities. Hopefully, the A.Q. Kahn nuclear distribution network out of Pakistan has now been disrupted though no one can be sure of its scope and reach, and our inability to talk to Kahn is a roadblock to critical intelligence in this arena.

Number four: In 2004, the UN Security Council adopted a resolution that requires countries to establish and strengthen domestic laws against the export, sale or transfer of nuclear materials and technology and to stringent standards for nuclear material security.

Again, the words from the UN are much stronger than any follow through or actions. Many countries are not able to do this, they simply do not have the skill or capability, but those countries can be very dangerous. So I think we need a Nunn-Lugar type program funded by many countries throughout the world starting with the G-8, to really help countries around the globe meet their obligations in securing their own borders and making sure they do not develop nuclear materials for terrorism and expose nuclear materials in their own country being sold or stolen. That is enormously important. It takes only a small amount of highly enriched uranium or plutonium to make a weapon that can blow up much of a city.

Number five, I think very importantly, and as Gene Habiger knows, this has been one of our top priorities and Gary, Igor and team knows this, is to get weapons materials secured all over the globe. We, for several years and before the U.S. government really got into the act in a big way, called it the "Global Cleanout". It's now known as the Global Threat Reduction Initiative. The United States in 2004 launched this initiative to secure highly enriched uranium in research facilities around the globe, but the pace and scale is far from what it needs to be. We at our foundation, the Nuclear Threat Initiative, call this the Global Cleanout and it's been one of our top priorities since we started in 2001. We spent our biggest amount of money, one $5 million grant, to help the U.S. and Russian governments get rid of a supply of several bombs' worth of material in a suburb right outside of Belgrade called Vinca.

This was material that had almost no security. We didn't even know it was there, our government didn't, until you'll remember a few years back we were bombing Belgrade and the Russians were alarmed, and I'm not sure if it was before or after we hit the Chinese embassy by mistake, and called us and told us that that material was there and that we needed to avoid it, which was a key piece of needed intelligence.

No. 6 on my list: The Bush administration has worked with other nations on the Proliferation Security Initiative, which coordinates national capabilities to interdict the transport of nuclear, biological and chemical materials, their delivery systems and related technology. We at our foundation and most nuclear experts agree that securing nuclear material at the source is the most important feature, and you have to have cooperation around the globe for that. Securing material at the source is the least expensive and most efficient. Once it gets out it's a needle in a haystack, but we need mechanisms to deal with those contingencies, and the Proliferation Security Initiative is beginning to do that, so this to me is very important.

Number seven, in 2005, President Bush and President Putin announced an agreement to enhance and accelerate cooperation to secure at-risk weapons and materials, and then last July, Presidents Bush and Putin announced the Global Initiative to Combat Nuclear Terrorism. So things are being done. The problem is, if you look at all the words now, we've got all the words we need. We've got countries signed up to do all sorts of things around the globe. It's the implementation, the follow-through, keeping it on the front burner, the leadership. That is the imperative, not just from the president of the United States, but from his counterparts throughout the world. This is the challenge.

Today, another important opportunity and challenge has been added: A keen interest in the increased use of nuclear power to generate electricity around the globe. Energy experts predict that energy demand will grow by 50 percent in the next 20 years and even more in developing countries. As energy needs rise, as oil and gas prices surge, and production shifts more each year to more volatile and less secure areas of the world and as the pace of global warming increases, nations and the private sector are looking more and more to nuclear power to meet those needs. And you have Barnie Beasley here who is in that business, who's a real expert, and Skip Bowman, who after retiring from the nuclear program in the Navy is heading up one of most important nuclear energy institutes, they're going to talk about that. This is enormously important.

When you look at what China and India need to do in the next few years to provide electricity to their populations, if they don't have nuclear power as a part of that equation, then we're going to all get the kind of global warming that no one will doubt 15 or 20 years from now. I don't doubt it now, but some still do. But watch out if China and India have to use coal for their growing energy needs.

I strongly support nuclear power, but to increase and sustain our global use of nuclear power requires the urgent development of what I call a cradle-to-grave culture in protecting nuclear materials -- not just weapon-grade materials, but radiological materials that could be used in a dirty bomb.

As more nations seek nuclear energy and if more nations exercise their sovereign right to enrich uranium and reprocess plutonium, the world will become a more dangerous place. While we are focusing with justified concern on Iran and North Korea's quest for nuclear weapons capacity, a number of nations, some of them our good friends, are planning to go into the enrichment and/or reprocessing business, and that conversion means making material for nuclear power. But when you start enriching, it's very difficult to tell when you move from a nuclear power level of enrichment, which I believe is about four percent, to a 70 to 75 percent enrichment, which can blow up a lot of the world. That's the tricky part. This means more capacity for churning out weapons-usable and weapons-grade material, the raw material for catastrophic nuclear terrorism.

We're clearly at a tipping point with regard to the both the proliferation of nuclear weapons and the production of weapons-usable nuclear material. And both are important. Terrorists are seeking nuclear materials and weapons as the list of potential suppliers expands.

Three weeks ago, as Gary mentioned, in Vienna, Austria, I announced that our organization, the Nuclear Threat Initiative, is prepared to donate $50 million to the International Atomic Energy Agency (IAEA) to help create a nuclear stockpile managed by the IAEA. We envision that this stockpile will be available as a last resort fuel reserve to nations that have made the sovereign choice to develop nuclear energy based on foreign sources of supply services and therefore have no indigenous enrichment facilities. The goal of this proposed initiative is to help make fuel supplies from the international

market more secure by offering customer states that are in full compliance with their nonproliferation obligations reliable access to a nuclear fuel reserve under impartial IAEA control if their commercial supply arrangements are interrupted. In so doing, we hope to make a state's voluntary choice to rely on the international market for fuel services more secure.

Our foundation's contribution is contingent on two conditions, provided they are both met within the next two years. First, that the IAEA take the necessary actions to approve the establishment of this reserve under international auspices, and second, that one or more member states contribute an additional $100 million in funding or an equivalent value of low-enriched uranium to jump-start the reserve. It's my hope that both Russia and the United States will get together and both contribute to this fund. Every other element of its arrangement, its structure, its location, the conditions for access, would be up to the IAEA and its member states to determine.

In its full expression, we envision a fuel reserve of sufficient size to give current and prospective customer states confidence that they will be able to obtain nuclear fuel in the event their fuel supplies are interrupted. We believe this reserve must not be so large to impair the historically effective and efficient market, but also it's got to be big enough to inspire confidence. The quantity of low-enriched uranium held by the IAEA will have to be determined by the customer states, the supplier states and the IAEA. We hope that NTI's contribution combined with the additional $100 million will constitute an initial reserve that will, of course, grow as the nuclear market around the world grows. We think our proposal is consistent with other fuel assurance proposals from Russia and the nuclear fuel supplier states, as well as the United States.

I believe that these approaches, after being in Vienna and talking to a number of the delegates, can be put together in an organized, what I call tiered, approach. This will take skill from IAEA Director General ElBaradei, the IAEA and the nuclear fuel supplier states. It is our hope and the hope of Warren Buffett, who is funding this NTI commitment, that this last resort fuel reserve under IAEA will become a reality and help avoid, pardon the expression but it's appropriate, an explosion of new enrichment nations around the globe.

Given the challenges today, however, we've got to go much further than this proposal. I believe that we must establish a Fissile Material Cutoff Treaty to ban production of nuclear weapons materials and require inspections and monitoring of all plutonium processing and all uranium enrichment facilities to ensure that they're not being used to create materials for military use. The Bush administration has proposed such a treaty, but opposes verification provisions, which from my point of view is a nonstarter.

The good news is that most nations, including the United States and Russia, are willing to give at least lip service to this concept. The bad news: no nation is stepping up, pushing for a treaty and there are a number of obstacles to its successful negotiation and implementation. To sharply reduce the chances that terrorists can acquire the materials they need to build a nuclear weapon, in my view, we must also phase out, and this will

not be easy, we need to phase out the use of highly enriched uranium in civil commerce around the globe. This will include converting nuclear facilities that use highly enriched uranium to low-enriched uranium.

The bottom line is that if we keep producing more and more material that can be used by terrorists to build a bomb and the explosion of information continues as it is going today, then it is just a question of time until we have a catastrophe. And when we have that catastrophe, it's not going to only be a humanitarian disaster in one city, it's going to shake the economic confidence of the world. Can you imagine a bomb going off successfully and destroying a major city whether it's Moscow, or whether it's Tel-Aviv or whether it's New York or Washington or Beijing? If it happens, just think of what the terrorist groups are then going to say they have in basements of these cities and in SUVs running around; if they have one bomb, they'll claim two or three. So the economic disruption and the shaking of confidence we've never experienced in human history.

You know Warren Buffett looks at this in an interesting way. This is not about absolute guarantees. It's not about total certainty that you're never going to have a problem. This is about reducing risk as much as you possibly can. And that reduction is tremendously important. From the point of view, if I can recall Buffett's example, if you had a 10 percent chance, and he's not saying you do, but if you had a 10 percent chance of a nuclear weapon going off in a major city around the globe and that chance persisted for 50 years, you would then mathematically, have only a one-half percent chance over 50 year period of avoidance. In other words, a 99 percent chance it's going to happen. But, if you can reduce that 10 percent chance to a 1 percent chance, and that persists over 50 years, you increase your odds against it happening to 67.5 percent. That's what risk reduction is all about. That's what everyday work by Gary and Igor and their team in terms of their skills with the environment surrounding the material is all about. That's what our work at NTI is all about.

Today, I'm sure that the distinguished panel will bring its wisdom and its experience to bear on these challenges. Let me suggest a few, very broad questions:

Can we avoid catastrophic nuclear terrorism and nuclear use if our world keeps producing weapons-grade, fissile material and fails to secure or get rid of the supply of such material already in existence? A fundamental question. You already know my answer, but I think it's a beginning point.

Number two: Can the nuclear power industry around the globe expand if we have a serious nuclear incident or catastrophe in the nuclear weapons arena?

Number three: Can we develop real momentum behind the fissile material cutoff concept?

Number four: Can we start phasing out the using of highly enriched uranium in civil commerce? You're not going to be able to do it all at once, but in my view it's a start.

Number five: Will a world growing more and more hostile to the division between those states that possess nuclear weapons and those that do not, be willing to agree to a new category of states that have enrichment facilities and those that do not?

And finally, number six, will it help to alleviate the charge of a double-standard, and that is a charge around the world to the nuclear weapons states, saying "you've got the weapons and we don't, now you want us not to have enrichment and you have it" -- that's one of our huge political obstacles. But will it help if we do what I'm suggesting this morning and that is agree to have international monitoring of all enrichment, wherever it's located, including the United States, including Britain, including Russia and including Pakistan, those countries that are nuclear states and including Israel.

Are we willing to bite that bullet as nuclear weapons states? Because if we're not it's going to be extremely difficult to get even our friends -- countries like Brazil, Argentina, Canada, Australia -- those countries are going to be very reluctant to agree to another standard of have states, enrichment-wise and have-not states, enrichment wise. So this is a fundamental political challenge of enormous importance. It's barely been focused on.

The bottom line of all this is there's much for our panel to discuss. We must find new and better answers to the imperative of the nuclear age: how to maximize the benefit of nuclear power, which I believe in, but at the same time minimize the proliferation dangers. That is a dual challenge.

Our cooperation and nuclear security is being sorely tested today by mounting tensions over three areas of consensus and commitment that created the Nonproliferation Treaty and held it together for nearly 40 years. Joe Cirincione is, in my view, one of the people who wrote the book on what we have to do on the Nonproliferation Treaty because it is eroding. We can take steps to revitalize it. So you'll hear from Joe later this morning.

That treaty has held together nearly 40 years on three basic legs on that stool: First, the commitment by nuclear weapons states to make progress toward nuclear disarmament. That was agreed to and has been agreed to by every president since I think 1968. Number two: the commitment of non-nuclear weapons states to forego nuclear weapons and that's under great stress with both North Korea and Iran. And number three, what we'll talk about later this morning, and that is the commitment of all nations to ensure Nonproliferation Treaty-compliant members access to nuclear technology for peaceful purposes. That's what I was talking about with the fuel bank, and that's what I'm sure the panel will discuss.

None of these commitments exist in isolation. And today, world confidence in all three legs of the stool is eroding. The tenants of the Nonproliferation Treaty are mutually dependent and mutually reinforcing or they spiral down together also. We must make continuous progress in all three areas or we will destroy the mutual trust that is absolutely essential for our survival. We're in a race between cooperation and catastrophe and at the moment, the outcome is unclear. Thank you very much.