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**Wilmington World Affairs Council**  
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Thank you President Fenton, members of the World Affairs Council, ladies and gentlemen. I am delighted to be in Wilmington and am grateful to you all for being here tonight, especially after learning about the two prominent fundraisers being held in Wilmington tonight. For those who chose this event, I have just one observation: either you are a loyal member of the Council or your intellectual curiosity exceeds your bank accounts – or you're just plain cheap!

I am reminded of an evening in New York when another distinguished group gathered. President William Howard Taft was being introduced by Senator Chauncey Depew. Senator Depew gave a long but glowing introduction of the President and beckoned him to the podium. President Taft was a large man -- 6'4", 300 pounds, with a protruding stomach. As he strode to the podium, Senator Depew said – Ladies and gentlemen, as you can see, our President is pregnant with courage. The audience laughed and he continued -- Our President is pregnant with integrity. President Taft came to the podium and started rubbing his stomach. Thank you Senator Depew. If it's a boy, he said, we'll name him courage; if it's a girl, we'll name her integrity; but if, as I suspect, it's only gas, we'll name it Chauncey Depew.

As a retired Senator, I'll try to avoid the Chancey Depew role this evening and deal with a few facts -- a different set of challenges and our responsibility to think anew.

I now co-chair a new foundation called the Nuclear Threat Initiative, funded by Ted Turner and guided by a distinguished, international Board, including Senator Dick Lugar, Senator Pete Domenici and former Secretary of Defense Bill Perry. Our job -- simply put -- is to help reduce the global threat from nuclear, biological and chemical weapons.

We also need to understand the factors in an increasingly globalized world that increase the danger from nuclear, biological and chemical weapons and that compel us to broaden our definition of national security. They include:

- The persistent gap between the developed and the undeveloped world – the haves and the have-nots. This gap is not just a rich-poor gap, but a population gap, an environmental gap, a public health gap and a knowledge gap. In our information age, these gaps are easier for all to see and they breed resentment, inflict humiliation and spark conflict in many parts of the world.
- The number of seemingly intractable conflicts that continue to fester around the globe, inciting public outrage, a shared sense of grievance and even sympathy for terrorists in some areas, including the Israeli-Palestinian conflict and the Kashmir dispute between India and Pakistan.

- The fact that nuclear, biological and chemicals weapons, materials and know-how are becoming more widely accessible to states and non-state actors, which has the potential to give terrorist groups or individuals the capacity to create levels of destruction and disruption that historically have been the exclusive province of states.

## **BRIEF HISTORY**

Eleven years ago, just after President Gorbachev was released from house arrest following the failed coup, a U.S. Senator on a visit to Moscow met with him in his Kremlin office, and asked him directly if he had retained command and control of the Soviet nuclear forces during the coup attempt. President Gorbachev did not answer, and that was answer enough for me. I was that Senator.

It was clear that the Soviet empire was coming apart. I was optimistic that this break up would expand freedom and reduce the risk of global war, but I left Moscow in the early fall of 1991 convinced that it would also present a whole new set of dangers. Over the next two months, I formed a partnership with Senator Dick Lugar and others to address these new threats to our security. We passed legislation in the fall of 1991 – that has since become known as the Nunn-Lugar program -- to help Russia and the former Soviet Union control and safeguard their nuclear weapons, materials and know-how. In the ten years since, much has been done, but the dangers persist and in some cases have increased. Let's take a look at a few events:

- In 1994 in Prague, authorities confiscated 2.7 kilograms of extremely potent nuclear bomb-making material.
- In 1995, Russia started procedures for initiating a nuclear response when it mistook a peaceful U.S. research rocket for a possible incoming nuclear missile.
- In the spring of 1995, members of the Japanese cult, Aum Shinrikyo, launched a sarin gas attack on the Tokyo subway. Before their organization was broken up, they were actively recruiting Russian scientists and also were working to develop biological weapons and to obtain the Ebola virus.
- In the spring of 1998, India and Pakistan, two countries that have fought three recent wars, exploded nuclear tests within days of each other. Both nations now have nuclear weapons; neither has sophisticated warning or safety systems, and there is a continuing conflict over Kashmir.
- In 1998, an employee at a Russian nuclear weapons laboratory was arrested trying to sell nuclear weapons designs to agents of Iraq and Afghanistan.
- In 2000, the USS Cole became a target for a suicide attack by al Qaeda operatives.
- Throughout the 1990s, thousands of Russian weapons scientists saw their jobs cut or wages slashed, and thousands responsible for the security of nuclear, chemical, and biological weapons and materials went months without pay. During this period, Iranian intelligence officers began making recruiting trips to Russia, offering biological weapons scientists many times their pay to move to Iran.
- In 1995, the Oklahoma City bombing brought attention to the need for homeland security and reminded us that not all attacks on U.S. soil are by terrorists from abroad. Some are home grown.

- Six months ago today -- September 11, 2001. None of us need to be reminded of the horror of that day.
- The anthrax attacks that followed also sent a wake-up call to official Washington and the public that the threat from biological weapons is real and needs serious attention.
- In 1999, terrorist Osama Bin Laden, said: "To seek to possess the weapons that could counter those of the infidels is a religious duty." The terrorists who planned and carried out the attacks on September 11 showed that there is no limit to the number of innocent lives they are willing to take, and if they gained possession of weapons of mass destruction, there is little hope that they would hesitate to use them.

These are known events. The larger danger may lie in what we don't know.

When the Soviet Union broke apart, it left as its legacy: 30,000 nuclear warheads, more than 1,000 tons of highly enriched uranium and at least 150 tons of weapons-grade plutonium -- enough material to build at least 60,000 additional nuclear weapons. The empire also left behind 40,000 metric tons of chemical weapons; a sophisticated capability to make bioweapons; and tens of thousands of scientists who know how to make missiles and weapons but can't afford to take care of their families.

The question is not whether we must prepare for terrorism or for attacks with nuclear, biological or chemical weapons. These two threats are not separate but interrelated and reinforcing, and if joined together, become our worst nightmare. We must close the gap between the threats and our response.

The old threats we faced during the Cold War -- a Soviet nuclear strike or an invasion of Europe -- were threats made dangerous by Soviet strength. The new threats we face today -- eroded early warning and increased reliance on early launch, and increased reliance on tactical nuclear weapons -- are threats made dangerous by Russia's weakness. And these threats go far beyond deployed nuclear forces. Much of Russia's weapons of mass destruction and materials are poorly secured; its weapons scientists and security personnel poorly paid. This, too, is a consequence of Russia's economic weakness, and it multiplies the chance that weapons of mass destruction will come into the hands of rogue states or terrorists.

We addressed the Cold War's threats by confrontation with Moscow, but most of today's greatest threats we can address only in cooperation with Russia. This is the overarching present day reality of our relationship and our dependency on each other.

We won't be successful in the fight against terrorism unless we are able to work with Russia, our allies and with other nations whose cooperation is essential for effective defenses against these multiple dangers.

America has the greatest military in history and we can win military battles without much help, as we are demonstrating in Afghanistan. We cannot, however, win the war against terrorism and protect ourselves against nuclear, biological and chemical weapons without a lot of help from a lot of nations. President Bush emphasized this point today.

## **GOVERNMENT RESPONSE TO DATE**

There is a starting point for this cooperation. Over the last ten years, through the Nunn-Lugar program, we have worked with Russia to persuade Ukraine, Kazakhstan, and Belarus to give up the nuclear weapons they inherited from the Soviet Union. This eliminated more nuclear weapons than those contained in the entire nuclear arsenals of China, France, and the United Kingdom combined, and kept these newly independent states from adding their fingers to the nuclear trigger. Through the Nunn-Lugar program, we have destroyed hundreds of missiles and hardened silos, more than 80 bombers, 18 nuclear submarines and hundreds of submarine launchers, and deactivated thousands of warheads.

We have also helped the Russians secure their nuclear weapons and materials to prevent theft and accidents; helped them convert nuclear weapons facilities to civilian purposes; and helped them employ some of their weapons scientists in peaceful purposes. These are important steps, but we need giant strides. There is a huge gap between these threats and the world's response.

## **GAP BETWEEN THE THREATS AND THE RESPONSE**

We are in a new kind of arms race: terrorists and rogue states are racing to get weapons of mass destruction. We ought to be racing to stop them and to secure vulnerable weapons and materials.

In January 2001, a distinguished bipartisan task force headed by Former Senate Majority Leader Howard Baker and former White House Counsel Lloyd Cutler published a major report on the need to secure Russian weapons, materials, and know-how. The panel declared it "the most urgent unmet national security threat to the United States," and called for a three-fold funding increase for these threat reduction efforts. We have not yet heeded their warnings or taken their advice.

For example, under the current timetable, U.S.–Russian cooperative work to secure vulnerable weapons materials in Russia will take many more years. We cannot afford to continue this work at such a leisurely pace. We must increase our resources and ask others to join us to reduce these risks much more rapidly. We must think anew.

The need to think anew was made painfully clear with the anthrax attacks this fall. In the event of a biological weapons attack, thousands – perhaps tens of thousands -- of lives will depend on how quickly doctors diagnose the illness, report their findings, and bring forth a fast and effective response from the local, state and federal levels. This means, clearly, that public health and medical professionals must be part of the national security team.

The biological weapons threat may turn out to be the most significant danger of the 21st century and the hardest to defend against. Biological materials and technology are overwhelmingly in the hands of private industry. In this arena in particular, industry must take the lead in creating normative standards and best practices for safe and secure transfer and handling of dangerous pathogens.

NTI is trying to help fill the gap between the threats and our response. We realize that the heavy, large-scale work of threat reduction must be done by governments. Governments are the only entities with the authority and resources to close the gap between the threats we face and the response we need. But we believe a private organization can make a difference.

Our goals are straightforward. We want to reduce toward zero the chance that weapons of mass destruction will ever be used against anyone, anywhere -- whether by intent or accident.

Ted Turner has pledged to provide \$250 million to NTI over 5 years – believed to be the largest private donation ever devoted to these security issues.

## **NTI PROGRAMS**

Let me briefly describe tonight some of our work that's designed to help fill these gaps and to stimulate governments to do much more -- not just the United States government, but governments around the world.

In our nuclear program, we hope to strengthen the work of the International Atomic Energy Agency in their efforts to secure vulnerable nuclear material. The IAEA is the only world body that is responsible for nuclear safety and security. We are providing over \$1 million to expand their work to secure vulnerable nuclear materials worldwide and to help them leverage additional financial contributions for this program. Our grant was recently matched by Secretary Abraham at the U.S. Department of Energy for \$1.2 million.

Another project involves efforts to gain assistance from our European allies in reducing the dangers in Russia and the former Soviet Union. We are funding a three-year effort with the Center for Strategic and International Studies in Washington in partnership with their think tank colleagues in several European countries to develop support and funding in Europe for cooperative threat reduction programs in the former Soviet Union.

Another NTI project complements an important program our government is funding in Russia to blenddown excess highly enriched uranium coming from dismantled weapons -- so that it will not be used to make new weapons. Russia is cooperating, but at the rate we are going, this dangerous material will be around for many years. Our foundation is now funding an analysis with the Russian Ministry of Atomic Energy to determine if we can double the blenddown rate at which we are transforming this dangerous material into safer forms to be used in civilian power plants. We are also contributing funds to the consolidation and blend-down of all remaining highly enriched uranium (HEU) in Kazakhstan, now located at nuclear power and research reactors.

We are also contributing \$1 million to an existing Russian loan fund that has been established at the local level to create permanent, commercially viable civilian businesses in Sarov. This is a former top secret Russian nuclear city, and this fund aims to provide alternative employment to nuclear weapons scientists.

Russian and U.S. collaboration on threat reduction is currently focused on our two nations alone. Yet a number of nations have nuclear weapons and material and forty-three nations have research reactors that use highly enriched uranium. This is the potential raw material of nuclear terrorism, and some of it is secured by nothing more than an underpaid guard sitting inside a chain-link fence. Our foundation is making every effort to stimulate our government and other governments to help secure or close down non-secure reactors that use dangerous material.

In the biological arena, we are now funding an Emergency Outbreak Revolving Fund within the World Health Organization. Today, when an infectious disease breaks out in a poor country, it often takes weeks for the World Health Organization to raise enough money to respond and send help. This delay is unacceptable from a humanitarian viewpoint and a health security viewpoint, including our own health. A quick response is required to prevent the disease from spreading around the globe. NTI has provided \$500,000 as an emergency response fund so that the World Health Organization can respond immediately and then have a fundraiser to replace the funds.

We have projects underway to bring additional resources to programs that reduce the danger that former Soviet biological weapons scientists will – out of economic desperation – be tempted to sell their skills to the highest bidder. This includes a Hepatitis Vaccine Manufacturing Feasibility Study to analyze the possible commercial manufacture of vaccines involving bioscientists who were formerly involved in the Soviet bioweapons program. These vaccines are needed in Russia but are not produced there and are often unaffordable. This funding goes to the Gorbachev Foundation where they hope to attract investors in a viable commercial venture.

We are also supporting the efforts of the U.S. Defense Threat Reduction Agency to involve former Soviet weapons scientists in the development of a new brucellosis vaccine to treat the disease that threatens livestock herds in Russia, the United States and around the globe.

We have undertaken a series of projects involving the biotechnology industry – particularly the pharmaceutical industry – the academic community, and government scientists to develop standards and oversight practices that can reduce the potential for harmful use of biotechnology and biological research without putting an undue burden on the pursuit of science for peaceful and beneficial aims. Hundreds of labs and repositories around the world sell biological materials and technology for legitimate research – and some of the same substances used in legitimate research can be turned into weapons. The bad news -- rapid advances in bio science, bio technology, and bio medicine are overcoming historic barriers to the weaponization of widely available pathogens. The good news – we can do something about it.

In the chemical arena, we have made a pledge of \$1 million dollars to aid high-priority infrastructure development for the Shchuchye Chemical Weapons Destruction Facility in Russia – to help destroy excess chemical weapons there.

In the field of communications and public education, we have launched a content-rich website to give people access to the facts about the threats from weapons of mass destruction. In less than 4 months, we've had over 88,000 visitors from 93 countries around the globe, including over 3,700 visitors from the Congress and Executive branches of the U.S. government. The website offers an exclusive daily news service produced by National Journal that provides original reporting

and a comprehensive snapshot of the day's global news on nuclear, biological and chemical weapons and terrorism. We have also developed a special section on the website to support high school debates which this year are focused on weapons of mass destruction.

We are also working to develop a project that will bring together Russian and American security experts to develop joint curricular materials for students that compare current security problems with the Cold War experience, examine risks associated with ongoing operational practices and explore new cooperative security arrangements to move from deterrence to reassurance. The idea is to educate both U.S. and Russian students on the dangers from the same book.

### **U.S.-RUSSIAN COALITION**

Turning to broader issues, it is essential that the US and Russia join together as lead partners in a multi-layered global coalition against catastrophic terrorism. No global effort is possible without Russian and US participation – but our two nations' participation alone is not enough. The personal relationship between Presidents Bush and Putin is strong, but we must put “meat on the bones.”

#### **Nuclear Cooperation**

Today, there are no binding standards for the physical protection of nuclear materials within a state. An acceptable level of accountability, transparency, safety and security must be established and maintained in every nation that has nuclear weapons or dangerous nuclear material.

As leaders of a global effort, the US and Russia must develop and pledge to meet world-class standards of nuclear security and safety and encourage every nation to do the same. These standards would cover inventory accounting, security of fissile materials and weapons, border and export control, and international transparency - with each member developing a national plan to meet these standards. It would also include tightened export controls and international cooperation for interdiction of diverted weapons or materials and consequence management of radiological or nuclear incidents worldwide. If a weapon or material is missing from either Russian or U.S. inventory, we should both know what to do in advance.

#### **Biological Cooperation**

The US and Russia should also accelerate our cooperation on biological weapons defense and ask others to join. Thousands of scientists accumulated great expertise in the Soviet biological weapons program. Today, this expertise gives Russia a special opportunity to advance global protection against bioterrorism. Now is the time for the US and Russia to share knowledge on the nature of biological threats and develop better means to address them - from prevention, to early detection and warning, to treatment and consequence management.

Prevention would include efforts to safeguard dangerous materials, prevent brain drain of weapons expertise, develop normative standards for the handling of dangerous pathogens and dual-use technologies and improve intelligence systems. It would also include improved early

warning capacity - strengthening core public health and medical capacity to detect, diagnose and treat infectious disease.

The coalition could advance disease control and treatment efforts by developing new drugs, vaccines and antidotes. The coalition could improve approaches to consequence management, including enhancing the capacity of health care systems to manage mass casualty situations, developing strategies for environmental decontamination and improving communications systems to spread information and prevent panic.

This agenda can do more than protect against bioterrorism - increased investment in disease surveillance, antibiotics, and early treatment can also make significant improvements in public health. We must also recognize that infectious disease is an international security issue - threatening the stability of governments, economic growth and human potential - and address the terror and instability afflicting the developing world every day by disease. When the same investments can improve global security, advance public health and promote global partnership, it is an investment we should make.

The threat of terrorism and weapons of mass destruction is global. The US and Russia cannot meet it alone. But the actions of many nations often follow from the actions of a few - particularly when the actions of a few are in the interest of the many. The US and Russia were the key competitors in the arms race. The deadly residue of that race endangers global security. These two countries have an obligation to lead the world in undoing the danger. Other nations must also join and lead.

We must also keep our perspective and particularly help our young people put today's dangers in historical perspective.

Let me conclude by telling a story I heard years ago that can help us put things in perspective. A young college girl wrote to her parents and said: Dear Mom and Dad, I'm sorry to be so long in writing you -- but all of my stationery was destroyed the night the dorm was burned down by the demonstrators. The doctor says my eyesight should be back to normal sooner or later, in spite of the severe smoke damage. I'm enjoying living with this wonderful boy named Bill who I met soon after the fire. He was kind enough to share his small apartment with me until the dorm is rebuilt. You've always wanted to be grandparents and I have news for you - I'm expecting a child in July.

Then there was a big gap in the letter and it continued - Calm down, there was no fire, my eyes are great and I'm not pregnant - I don't even have a boyfriend. But I did get a D in math and an F in chemistry, and I wanted to be sure that you received this news in the proper perspective.

So, perspective is important. There are a great number of dangers facing America and the world, but I believe we are far safer from nuclear Armageddon than we were during the 40 years of the Cold War. Today, the danger of an all-out nuclear war is very low, but there is an increased danger of a nuclear accident or a terrorist attack using nuclear, biological or chemical weapons.

If the United States and Russia begin working together as partners in fighting terror and the weapons of mass destruction threat, and encourage others to join, the world will be a much safer place for our children and grandchildren. Yes – we face major challenges, but also an historic opportunity. We must seize it now.

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