



**“The Race Between Cooperation and Catastrophe:  
Reducing the Global Nuclear Threat”**

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I have spent a large portion of my life attempting to communicate in clear and understandable words, so I have developed a keen appreciation for those who can capture a complicated subject with a succinct phrase. One of my favorites: When asked to give a definition of foreign policy, Dean Acheson replied, “It’s one damn thing after another.” Today, in the national security arena, we not only have one damn thing after another, we have one damn change after another – some of them big and sweeping.

The greatest dangers we faced during the Cold War were addressed primarily by confrontation with Moscow. The greatest threats we face today – catastrophic terrorism – a rise in the number of nuclear weapons states – increasing danger of mistaken, accidental or unauthorized nuclear launch – we can successfully address only in cooperation with Moscow and many other capitals.

These changes have come in little more than ten years, and have left us with serious security gaps – not because the new threats cannot be countered, but because they have changed quickly, and our responses are changing slowly.

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. He said: “What if all of us discovered that we were threatened by a power from outer space -- from another planet. Wouldn't we come together to fight that 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 “wouldn’t we come together to fight that threat?” should be front and center for the United States, for Russia, and for the world.

I am not sure we fully grasp the devastating, world-changing impact of a nuclear attack. If a 10-kiloton nuclear device goes off in mid-town Manhattan on a typical work day, it could kill more than half a million people. Ten kilotons, a plausible yield for a crude terrorist bomb, has the power of 10,000 tons of TNT. To haul that volume of explosives, you would need a cargo

train one hundred cars long. But if it were a nuclear bomb, it could fit into the back of a truck. Beyond the immediate deaths and the lives that would be shortened by radioactive fallout -- the casualty list would also include civil liberties, privacy and the world economy.

So American citizens have every reason to ask, "Are we doing all we can to prevent a nuclear attack?" The simple answer is "no, we are not."

We have, however, taken important steps. Let me name a few.

- 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 warheads, this funding helped Kazakhstan, Ukraine and Belarus implement a critically important decision to give up all their nuclear weapons. Today, we and the Russians have completed between 25 and 50 percent of the job of securing nuclear weapons and materials, depending on definitions. This program has recently gained renewed support on Capitol Hill and in the White House, and has now been expanded to allow work outside the former Soviet Union – thanks to Senator Lugar's leadership.
- Nearly three years ago, the G8 made a commitment to match the U.S. in threat reduction funding each year for the next 10 years - and non-G8 nations have joined this emerging Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.
- Former Secretary of Energy Abraham and his Russian counterpart Minister Romyantsev last year launched a Global Threat Reduction Initiative to remove and secure highly enriched uranium from research facilities around the globe.
- In 2003, Libya committed to give up its nuclear weapons program, adhere to the Nuclear Nonproliferation Treaty and Test Ban, and sign the additional protocol that would allow the IAEA to do more intrusive monitoring of the country's nuclear facilities. Hopefully, the Khan nuclear distribution network has now been terminated.
- In April 2004, the UN Security Council adopted a resolution that requires countries to establish and strengthen domestic laws against export, sale or transfer of nuclear materials and technology and establish stringent standards for nuclear materials security.
- The Bush Administration also has worked with other nations on the Proliferation Security Initiative, which allows nations to interdict transport of nuclear weapons, their delivery systems and related technology.
- Most recently, President Bush and President Putin, at their summit meeting, agreed to enhance and accelerate cooperation to secure at-risk weapons and materials.
  - They promised to work on the return of highly enriched uranium from U.S. and Russian-designed research reactors around the world.

- They promised to work to convert reactors to run on low-enriched uranium fuels.
- They pledged to share best practices to improve security at nuclear facilities bilaterally and with other nations.
- They promised to enhance our emergency response capabilities to deal with a nuclear or dirty bomb incident.

These are indispensable steps toward greater security. Now that the two Presidents have begun to pay personal attention to this agenda – it is essential that both Presidents also become personally involved in eliminating the bureaucratic disputes that have blocked our progress, that they provide more resources, and that they lead a global effort to address and reduce the nuclear threat. Nothing is more urgent.

Increasingly, we are being warned that an act of nuclear terrorism is inevitable. I am not willing to concede that point. But I do believe that unless we greatly elevate our effort and the speed of our response, we could face disaster.

We are in a race between cooperation and catastrophe, and the threat is outrunning our response.

Let me offer my own – admittedly highly subjective – evaluation of our progress. By “our,” I mean the United States and Russia. In measuring the adequacy of our response to today’s nuclear threats – on a scale from one to ten, I would give us about a three, with the recent summit between Presidents Bush and Putin moving us closer to a four.

Let me explain my sense of urgency – and why, despite all of the important steps we have taken, I give us such a low mark – by describing four nuclear-related threats we face today:

### **Threat 1. Terrorist attack with a nuclear weapon**

Imagine the following scenario: In the dark, quiet hours of early morning, a team of camouflaged terrorists slips into a nuclear research reactor in Belarus. Assisted by insiders, they take fifty kilograms of highly enriched uranium, the raw material of nuclear terrorism, and disappear into the night.

They head for a safe house that is equipped with machine tools, chemicals, bomb designs, and a nuclear weapons expert lured away from a former Soviet nuclear site – everything necessary to turn a terrorist group into a nuclear power.

A few days later, intelligence agents discover the safe house, where they find machine tools with traces of highly enriched uranium – but no trace of the bombs. The combined security forces of many governments deploy to guard hundreds of ports and airports and thousands of miles of coastline. Yet the bomb moves through a border crossing – undetected by radiation sensors because it is shielded by a thin layer of lead. Frustrated heads of state begin to realize that once the terrorists have the bomb, the chances of finding it are small – almost zero. At midday in a city of several million people, the world suffers its first nuclear strike in sixty years.

The day after – what would we wish we had done to prevent it?

- We would wish we had made our top priority a global effort to upgrade the security of all nuclear weapons and weapons-usable materials at their source to prevent theft or diversion.
- We would wish that the U.S. and Russia had insisted on bilateral transparent accountability of tactical nuclear weapons in both the U.S. and Russian arsenals. We don't know how many tactical nuclear weapons the Russians have or where they are located – we hope that they do.
- We would wish that the G8's Global Partnership Against the Spread of Weapons and Materials of Mass Destruction had met its commitments and directed its resources aggressively against the most urgent dangers – as it pledged to do almost three years ago in Canada.
- We would wish we had moved faster to implement the Global Threat Reduction Initiative to remove and secure nuclear weapons materials from research reactors around the world. At NTI, we call this the “Global Cleanout.” It has just begun, and there's a big job ahead.
- We would wish we had stopped commerce in highly enriched uranium, thereby cutting off the wide distribution of this bomb-making material around the globe.

The day after – I believe we would wish we had done all of these things. Why aren't we doing them now?

### **Threat 2. Terrorist attack with a dirty bomb**

Now, imagine the following scenario: a terrorist group with insider help is able to acquire a radiological source from an industrial or medical facility. Let's say it is cesium-137 in the form of powdered cesium chloride. The terrorists use conventional explosives to incorporate the cesium into a “dirty bomb,” and detonate it in New York's financial district – dispersing the cesium isotope across a 60-square block area.

The explosion kills a couple dozen people and millions evacuate the city in panic. Huge areas are contaminated. Billions of dollars of real estate is declared uninhabitable. Cleanup is estimated to take years and cost additional billions.

The day after a dirty bomb attack – what would we wish we had done to prevent it and to mitigate the damage if it occurs?

- We would wish that we had worked harder to develop a risk-based global inventory of vulnerable radioactive sources and better prioritized our efforts to secure them through a partnership effort around the globe.

- We would wish that we had worked harder to secure radioactive sources at each stage of their lifecycle – from their production through their shipment, use, and disposal – a cradle to grave approach to dangerous nuclear materials.
- We would wish that we had accelerated the stockpiling of equipment at key locations and ensured that first responders had plans, protective gear and decontamination equipment in place.
- We would wish that we had greatly accelerated training exercises and mounted a serious public education program to mitigate the consequences of the attack.

The day after – I believe we would wish that we had done each of these things. Why aren't we doing them now?

### **Threat 3. Accidental or unauthorized nuclear missile strike**

Imagine this scenario: The relationship between Russia and the United States deteriorates. Old rivalries and suspicions are rekindled, and as tensions mount, President Putin is informed by the head of the Russian Strategic Rocket Forces that their warning systems have picked up the signature of the launch of a single United States nuclear missile heading toward Moscow.

President Putin would ask if the system could be sending a false warning. He would be told “yes, the warning could be false.”

He would ask if it is one missile or could be more. He would be told that the warning system is badly eroded, so it appears to be one, but it could be a much larger attack.

He would ask: “Is it possible that an all-out attack could destroy all our missiles and take away our ability to retaliate?” He would be told: “Yes.”

He would ask: “How much time do I have before I have to decide whether to launch our missiles or lose them?” He would be told: “Thirty minutes at most.”

Or imagine another scenario:

The commander of an unidentified submarine launches a nuclear strike against a Russian city – knowing that Russia would have difficulty identifying the source of the attack and could easily blame the United States.

Either of these scenarios could result in a mistaken, accidental or unauthorized nuclear missile strike. The day after, what would we wish we had done to prevent it?

- The United States and Russia would wish that we had changed our Cold War force postures and removed our nuclear weapons from hair-trigger alert, so both leaders would have more time to gather data, exchange information, gain perspective, discover an error, and avoid an accidental, mistaken, or unauthorized launch.

- The United States and Russia would wish that we had recognized that our survival depends on each other's nuclear warning systems. We would wish we had followed through on the initiative begun in 1998 to develop a joint early warning center to prevent false warnings and greatly reduce the danger of a catastrophic mistake.
- The U.S. and Russia would wish we had jointly developed the ability to identify in real time the source of any nuclear strike – so that a 3<sup>rd</sup> party nuclear strike could never trigger a mistaken nuclear exchange between the two nuclear superpowers.
- The U.S. and Russia would wish we had planned and trained jointly for these dire scenarios so that we could have greatly decreased the odds of a cataclysmic mistake.

The day after – I believe we would wish we had done each of these things. Why aren't we doing them now?

**Threat 4. My fourth and final example – Imagine a sharp increase in the number of nuclear weapons states (unfortunately, this is getting easier to imagine).**

Imagine the following scenario: North Korea continues to turn its spent nuclear fuel into bomb-grade plutonium and manufacture nuclear weapons, and then suddenly tests a weapon – as India and Pakistan did in 1998. Nationalists in Japan and South Korea push their governments to develop nuclear weapons. China, in response, expands its own nuclear weapons arsenal and joins the U.S. and Russia by putting its weapons on a hair-trigger state of readiness. Iran, studying North Korea's approach, continues playing cat and mouse, until it has developed enough highly enriched uranium to build several nuclear weapons.

As Iran and North Korea become nuclear weapons states, other nations re-examine their options. Before a decade passes, Egypt, South Korea, Japan, Saudi Arabia, Brazil, Argentina and Indonesia have become nuclear powers – provoking greater regional tensions, greater pressure on other nations to go nuclear, greater chance of nuclear accidents, and greater danger that weapons or materials could fall into terrorist hands. The Nuclear Non-Proliferation Treaty becomes an artifact of history.

After this occurs, what would we wish that we had done to prevent it?

- We would wish that we and our allies had developed a time-urgent, coordinated, and direct diplomatic effort with North Korea and Iran to end their nuclear weapons programs, using both carrots and sticks.
- We would wish that nuclear weapons states – especially the United States and Russia – had visibly and steadily reduced their reliance on nuclear weapons at a time when we were asking others to renounce nuclear weapons. In other words, we would wish that we had set an example of devaluing rather than enhancing the importance of nuclear weapons.

- We would wish we had followed the Treaty of Moscow with other substantive actions – by adding benchmarks for progress, mechanisms for verification, timetables for reductions and an obligation to eliminate warheads.
- We would wish that we had begun a bipartisan process to move forward with the Comprehensive Test Ban Treaty and ultimately worked toward ratification of the Treaty, guided by the conditions former Chairman of the Joint Chiefs General Shalikashvili outlined in 2001.
- We would wish that we and other nations had insisted on a system of stronger rules and much stronger enforcement – or as the Carnegie Endowment for International Peace has termed it, “universal compliance” – to prevent nations from acquiring nuclear weapons capability.
- We would wish that we had created a nuclear cartel – made up of states with fuel cycle facilities, guaranteeing nuclear fuel at favorable market rates to other states, but only if they agreed never to develop their own capacity to make nuclear weapons material.

The day after we wake up and discover several new nations with their fingers on the nuclear trigger and with dramatically increased opportunity for terrorists to gain nuclear material – I believe we would wish that we had done all of these things. Why aren't we doing them now?

In March of 2001, here at the National Press Club, I said: “We should seek a world where we evaluate our policies, strategies and programs by their ability to move toward zero the risk that nuclear and other weapons of mass destruction will ever be used anywhere, by anyone, either by design or accident.”

I believe that preventing the spread and use of nuclear and other weapons of mass destruction should be the central organizing security principle for the 21<sup>st</sup> century.

What would this mean? We have a clear lesson from the 20<sup>th</sup> century. Addressing the threat of communism in the 1952 State of the Union message, President Truman said: “The United States and the whole free world are passing through a period of grave danger. Every action you take here in Congress, and every action that I take as President, must be measured against the test of whether it helps to meet that danger.”

In our efforts to fight against the spread of communism, protect the free world and deter World War III, this was the standard that governed our nation during the Truman administration and the Republican and Democratic administrations that followed. Every diplomatic mission, every international alliance, and every national security initiative was guided with that goal in mind.

So we have seen what it looks like when world leaders unite, when they listen to each other, when they cooperate against common threats. It is my hope that we will soon employ this model of international teamwork in responding to the threats from North Korea and Iran, in securing nuclear materials around the globe, and in confronting the danger of catastrophic terrorism anywhere in the world.

The United States and its partners must be as focused on fighting the nuclear threat in this century as we were in fighting the communist threat in the last century. Why wait till the day after? We must do it now.

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