



**Former Senator Sam Nunn
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Thank you, President Tom Becker. Colleen and I have greatly enjoyed our first 36 hours at Chautauqua, and we hope to return for a much longer stay next summer.

I learned yesterday that this wonderful institute was founded by Methodists for Sunday school teachers. Being a Methodist, and looking at Chautauqua's focus today on reaching out to all religions and promoting interfaith understanding, I'm reminded of the Baptist observer appointed to attend the Methodist's weeklong convention as a guest. At the concluding assembly, the Methodist bishop called on the observer for any remarks. The Baptist said, "I've been treated well this week, and I feel I am probably among fellow Christians, but I have one question: All week, I've heard 'John Wesley' this and 'John Wesley' that. Who the heck was John Wesley?" With that, an irate Methodist stood up and hollered, "Read your Bible, man! Read your bible!"

Colleen and I are thrilled to be here at Chautauqua, and I am privileged to kick off this week of discussions on nuclear challenges and opportunities. I am particularly honored to be part of a lecture series named after Senator Charles Goodell, who was an outstanding Senator and public servant from here in New York. I am pleased that Senator Goodell's son, Bill, and his wife, Betsy, could join us this morning. I just missed by one year serving in the Senate with Senator Goodell and just missed by two years practicing law at King & Spalding with Bill.

I confess that I am somewhat awed and apprehensive by this setting and this audience and your history of outstanding speakers and programs here at Chautauqua. Senatorial speeches in New York have a rich, but sometimes colorful and dubious history.

I am reminded of an event many years ago, when the senior Senator from New York, Senator Chauncey Depew, was introducing the President of the United States, William Howard Taft at the Waldorf Astoria. President Taft was a very large man. He weighed about 315 pounds and had a protruding stomach. Senator Depew's introductory remarks were considerably overdone and very lengthy. Finally, he beckoned President Taft to the podium. As the President walked toward the podium with his stomach protruding, Senator Depew said, "Ladies and gentlemen, as you can see, our President is pregnant with integrity." The audience laughed. Then he said, "Our President is pregnant with courage." The audience's laughter grew louder.

Finally, President Taft got to the stand. He replied, “Thank you, Senator Chauncey Depew. Let me inform you, ladies and gentlemen,” he said as he rubbed his stomach, “that if it is a girl, we will call her Integrity. If it is a boy, we will call him Courage. But, if, as I suspect, it is simply gas, we will call it Chauncey Depew.”

So, it is an anxious honor to be here, and I am relieved by the generous introduction by Tom Becker. My former law partner, Jim Pardo, who loves Chautauqua and who camps here in the summer, said words to the effect – “Sam, you are privileged to be part of Chautauqua. You will address a large, sophisticated, and influential audience. Don’t worry about feeling nervous and apprehensive. That is a perfectly sensible reaction -- either make a great speech or a forgettable speech. Please don’t make one that is bad and memorable.”

Despite this dubious encouragement, this is not the toughest audience I’ve ever had to address. Senator Goodell – having served with great distinction for many years in the House and the Senate – would probably agree that in politics, your own constituents are your toughest audience.

I recall right after being elected in 1973, catching my colleague Senator Herman Talmadge of my home state of Georgia on the floor of the Senate. He was sitting at his desk and was frequently using his spittoon under the desk. I can see him now. I said, “Senator Talmadge, I need your advice. I am getting a lot of ‘nut mail’ – people asking about space aliens, flying saucers and worldwide conspiracies. It is coming from every direction. I don’t know how to respond to them. Do I have to answer all this ‘nut mail’?” Herman spit his tobacco, looked up dead serious and replied – “Sam, answer every single piece of ‘nut mail.’ If you don’t carry the ‘nut vote,’ you won’t carry a damn county in Georgia.”

Of course, constituents have their own view of politicians – and this also goes back many decades. Will Rogers once said, “Politicians are like diapers. They have to be changed often and for the same reason.” This is not a segue to our discussion on nuclear challenges, but I will turn to that subject.

Three years ago, George Shultz, Bill Perry, Henry Kissinger and I published an op-ed in the *Wall Street Journal* calling for a global effort to reduce reliance on nuclear weapons, to prevent their spread into potentially dangerous hands, and ultimately, to end them as a threat to the world. In that article, we examined the changed nuclear threat, and we concluded that the world was on the precipice of a new and dangerous nuclear era. The approach we advocated was based on two pillars: first, asserting the vision and goal of a world free of nuclear weapons; and second, outlining specific urgent steps to reduce nuclear dangers and move toward making the vision a reality.

We concluded that without the bold vision, the actions will not be perceived as fair or urgent; and without the actions, the vision will not be perceived as realistic or possible.

The four of us understand that ending nuclear weapons as a threat to the world will be a long-term and difficult undertaking. From my perspective, the goal of a world without nuclear weapons is like the top of a very tall mountain. It is tempting and easy to say: “We can’t get there from here.” In today’s troubled world, we can’t even see the top of the mountain.

But we can see that we are heading down – not up. We can see that we must turn around, that we must take paths leading to higher ground and that we must get others to move with us. A little background.

The Threat Has Changed

Since the end of the Cold War, while the chances of global, all-out nuclear war have declined significantly, Thank God, I believe the chances of a nuclear attack have increased. During the Cold War, the American, NATO and Soviet militaries were diligent, cautious, and professional in the way we handled our nuclear weapons. But we were also lucky and had several near-misses.

Anyone who thinks that our luck is going to hold out with nine nuclear states and growing – plus the spread of technology and know-how for producing enriched uranium that could be used in nuclear bombs – is betting on very long odds. The world must think anew.

There has been a fundamental change in the nature of the risks:

- Nine countries now have nuclear weapons, and more are seeking them.
- Terrorists are seeking nuclear weapons and materials.
- Forty countries house materials that terrorists could use to build a nuclear weapon.
- The know-how and capability to build a nuclear weapon is widely available.
- With the growth of nuclear power, more nations are seeking the capacity to enrich uranium and separate plutonium. The same technology required to enrich uranium for nuclear fuel can enrich it to a higher level to make it a bomb.
- Our new cyber world—along with the proliferation of submarines that could possibly be used to deliver nuclear weapons without clear attribution—has increased challenges to warning systems and command and control decisions for all nuclear weapons countries.

Each of these dangers is either new – or has worsened -- since the Cold War. Each one heightens the risk of the others; together, they create the conditions for a perfect storm.

Nuclear terrorism is not only a threat to life – it’s a threat to our way of life. If a nuclear bomb were detonated in a city somewhere in the world, the challenge to our cherished freedoms would be profound, given the understandable demands for increased security.

This does not mean, however, that a catastrophe is inevitable. All the clouds are not dark, and world leaders are beginning to identify paths leading up the mountain:

- In the United States, during the 2008 presidential campaign, both Barack Obama and John McCain embraced the vision of working toward a world free of nuclear weapons and practical steps toward that goal. And last year, President Obama in the Czech Republic, and Senator McCain on the Senate floor, reaffirmed the statements of support that they each made during the campaign. Significantly, President Obama and Russian President Medvedev issued a joint statement calling for a world without nuclear weapons.
- At the UN Security Council last September, President Obama was joined by all members of the Security Council in passing a resolution calling on nuclear states to continue nuclear reductions, to ratify a ban on nuclear testing, to negotiate a treaty ending production of fissile material for weapon purposes, and to work toward fulfilling Article VI of the Nuclear Non-Proliferation Treaty, which calls for nuclear weapons disarmament.
- The nuclear agenda continues to move in 2010. In April, Presidents Obama and Medvedev signed a New START agreement. If ratified by the United States Senate and the Russian Federal Assembly, the Treaty will reestablish American and Russian leadership and cooperation on nuclear threat reduction, and reaffirm that the two largest nuclear powers are committed to reduce their nuclear arsenals. The new Treaty will also provide for monitoring and verification of U.S. and Russian nuclear forces, and would establish an important political and psychological foundation for further cooperation between the U.S. and Russia on imperative security issues.
- In April, more than 40 heads of state met in Washington, DC for a summit on securing nuclear materials. They agreed to work together to address the threat of nuclear terrorism by securing or eliminating stockpiles of nuclear material and supporting international measures to increase nuclear security worldwide. At the foundation that I head, the Nuclear Threat Initiative, we are particularly pleased by this summit and by its focus, since securing nuclear materials has been at the heart of our work over the last 10 years, and we have a long way to go. As Graham Allison, tomorrow's speaker, will tell you – if we can secure all weapons-usable nuclear material, we can prevent catastrophic nuclear terrorism.

Near-Term Challenges

So the good news is that the world is identifying a number of paths up the mountain. However, we face significant obstacles on the route leading to the top, including a couple of avalanches by the names of “Iran” and “North Korea.”

Our top front burner challenge is to mobilize strong international opposition to nuclear programs in these countries. Cooperation on a much broader and deeper front is essential to stopping their nuclear weapon ambitions without war.

Fortunately, we have recently made modest progress with the UN Security Council passing new sanctions on Iran and taking action to condemn the attack on a South Korean naval vessel, which an international commission determined was conducted by North Korea. China is the key to pressuring North Korea.

But these positive steps are very small, and Iran and North Korea remain intractable and dangerous challenges that must be solved. This is not just a U.S. challenge. It is a global challenge and a challenge to the effectiveness of the United Nations, whose mandates they are defying.

The second near-term challenge is the anticipated debate in the U.S. Senate over the New START agreement. The Senate debate will reveal whether the Senate understands that the nuclear threat has fundamentally changed since the end of the Cold War.

This Treaty has been forcefully advocated by the Obama Administration, including Secretary of Defense Robert Gates and our top military leaders, as well as former Secretaries of State Jim Baker, George Shultz and Henry Kissinger, former Secretaries of Defense Jim Schlesinger and Bill Perry, and former National Security Advisors Brent Scowcroft and Steve Hadley, who served under Bush 41 and 43, respectively. There is broad support across party lines.

This Treaty also has its strong critics – in both the United States and Russia. Nostalgia for the Cold War is still with us, both in Washington and Moscow.

In my view, the opposition misses the bigger picture. Today, our security requires that the United States and Russia must work together on a wide range of security issues that are vital to both countries.

Specifically, cooperation is essential for:

- Securing nuclear materials and preventing catastrophic terrorism;
- Energy and environmental security;
- Euro-Atlantic security;
- Stemming the spread of nuclear weapons to North Korea and Iran;
- Addressing deep instability in Afghanistan and conflict in the Middle East;
- Preventing conflict in Central Asia; and
- A more stable non-nuclear Korean peninsula, which also requires China's leadership.

In each of these cases, cooperation between the United States and Russia is not just important, it is vital. If the New START Treaty is ratified, our odds of establishing

a more cooperative relationship with Russia improve. But the opposition to New START – in both the U.S. and in Russia -- seems to be missing this important context.

So far, the debate reminds me of the humorous story about Sherlock Holmes and Dr. Watson, who are on a camping trip. After a good meal and a bottle of wine, they crawled into their tent and went to sleep. Some hours later, Holmes awoke and nudged his friend: “Watson, look up and tell me what you see.”

Watson replied: “I see millions and millions of stars.”

“What does that tell you, Watson?” asked Holmes.

Watson pondered a minute and replied – “Astronomically, it tells me that there are millions of galaxies and potentially billions of planets. Astrologically, I observe that Saturn is in Leo. Horologically, I deduce that the time is approximately a quarter past three. What does it tell you, Holmes?”

Holmes was silent for a moment, and then spoke. “Watson, you idiot, someone has stolen our tent!”

Watson had all his facts right – but he missed the big picture, because he wasn’t focused on what changed. There has been a drastic change in the nuclear threat since we and Russia first developed the arsenals, policies and doctrines that still govern nuclear weapons today. If we or the Russians follow the advice of unreformed Cold Warriors in Russia and the United States, both of our tents will surely be stolen.

A strong non-partisan vote in favor of the New START Treaty could create a new and much-needed nonpartisan foundation to nuclear threat reduction. The Treaty is a modest but important step. I am cautiously optimistic.

The third near-term challenge to our pathway up this mountain is the adoption of a new NATO Strategic Concept. For the first time in a decade, the NATO alliance is taking a hard look at its mission and purpose. The countries are defining and recommitting to a common defense, assessing what has changed in this post–Cold War, post-9/11 world. NATO governments and citizens should demand that the Alliance re-evaluate long-standing U.S. and NATO nuclear declaratory policy, U.S. tactical nuclear weapons deployed in Europe, and the role of nuclear weapons in NATO security.

Russia’s large number of small, short-range tactical nuclear weapons must be part of this discussion. These weapons are transportable and a terrorist’s dream – they provide more danger than protection. NATO countries must begin to ask and answer the question: In the years ahead, do we want Russia to be inside or outside the Euro-Atlantic security arc? The same question must be asked by Russia. This assessment should not get trapped in a Cold War look backward – or in the failure to observe the obvious changes, as Sherlock Holmes would remind us.

Longer Term Challenges

Winston Churchill said more than once – “No matter how beautiful the strategy, you must occasionally look at the result.” I believe that NATO, the United States, Russia and other nations must look at both the trajectory and the results of our current policies and think anew.

On the nuclear security side of the ledger, almost 20 years after the break-up of the Soviet Union, we continue to live with a risk of a catastrophic nuclear accident that is greater than “zero” – and higher than it should be with the end of the Cold War.

The United States and Russia have more than 90 percent of nuclear weapons and should pursue steps to increase warning and decision time for U.S. and Russian leaders. Such steps could include bilateral and unilateral measures relating to U.S. and Russian early warning, command and control, and force posture – including reductions in warheads on prompt launch (hair-trigger) status. When you look closely at our postures, we both have an existential stake in both warning systems working correctly.

Cooperation on missile defense should also be a high priority and could be a game-changer. And military-to-military discussions are essential.

Nuclear threat reduction is not just an issue between the U.S. and Russia. The United States also must include China and other nuclear nations in our thinking and our dialogue. We need a mechanism to exchange views with China about nuclear policies and programs including missile defense. This dialogue could improve confidence, transparency, and trust in ways that will reduce nuclear threats in Asia and around the globe.

If we are to succeed in reducing and eventually eliminating nuclear dangers, a truly “global enterprise” will be required, where many nations are not just critiquing but also contributing to solutions. This is not unilateral mission, and we must act together. In addition to securing all weapons-usable nuclear material, international efforts are essential:

- We must develop a global approach to the problems of enrichment and reprocessing. Solutions include the concept for an international nuclear fuel bank. Over time, as civil nuclear power expands -- all enriching and reprocessing of uranium should be put under international safeguards;
- We must also ratify the Comprehensive Test Ban Treaty, to end testing of nuclear weapons and impede their development.
- We must negotiate a multilateral and verifiable treaty, which would end the production of fissile material used for nuclear weapons.
- We must strengthen provisions for international monitoring and verification of nuclear activities.
- We must build the global political will to respond quickly and decisively to any attempt to cheat.

Critics – Questions and Response

I am the first to admit that this lofty goal raises a lot of questions, and skeptics play an important role. There are some, of course, who believe that the mountain is too high, the fog too thick and the air too thin. A few questions for the skeptics to consider:

- Would some of the fog be lifted if the U.S. and Russia worked together on increasing warning time and decision time as well as on missile defense designed to protect against limited attacks or accidents/launches?
- Would we have a better vantage point to view the mountaintop if we – working with other nations – succeed in:
 - Securing nuclear material;
 - Blending down most highly enriched uranium;
 - Developing international assurances and guarantees of nuclear fuel supplies for civil purposes -- taking away the excuse of additional nations to enrich?
- Would the high peaks look more reachable if the world succeeds in working together to pressure North Korea and Iran to give up their nuclear weapons programs and if we begin to develop both verification methods and the political will to enforce the Nuclear Non-Proliferation Treaty?
- Would we gain a fresh supply of oxygen if we get a breakthrough settlement on the Middle East, and the world begins cooperating to address other regional conflicts that give rise to new nuclear weapon programs?

I call the achievement of these steps “base camp.” Each of these goals is essential to protect America’s security.

We have to reach base camp before we have a clear view of the top of the mountain. There are also a number of “end state” issues that must be carefully considered, including managing residual nuclear capabilities and the possibility of reconstituting nuclear forces. Shultz, Kissinger, Perry, and Nunn hope to create sufficient political space, so that our brightest young minds, in and out of government, can begin to take a “deep dive” into these long-term challenges. We do not pretend to have all of the answers.

The critics, however, must be challenged not to simply question the vision, but to also consider our current baseline and trajectory. The nuclear world we live in today is full of perils and getting more dangerous. I believe that in a world with a growing number of nuclear weapon states and terrorists with no return address, we dare not expect nuclear deterrence to work in perpetuity – supported increasingly by luck or divine providence.

An article in this January’s issue of *Scientific American* describes the impact on our world that would come, not in a general nuclear war, but in a regional nuclear war between India and Pakistan.

The computer models indicate that in a nuclear conflict between India and Pakistan “more than 20 million people in the two countries could die from the blasts, fires and radioactivity.” Smoke from the fires would cover all the continents within two weeks, rise into the stratosphere and stay there for a decade. “Diminished sunlight, cooler temperatures and drought would shorten growing seasons. Unseasonal frosts and more ultraviolet radiation ... would further harm crops. Yields would decline around the world, halting food trade.... One billion people worldwide with marginal food supplies today could die of starvation, because of ensuing agricultural collapse.” The old war game frame of “we win--you lose” is tragically naïve when applied to nuclear weapons.

No one wins.

Reverend Joan Brown Campbell reminded us yesterday in a powerful sermon that we are all God’s children – one flock, one shepherd.

Uranium may be God’s ultimate test for mankind. We can use it to advance living standards for billions or we use it to destroy God’s universe.

So, to the skeptics and indeed to all of us, I pose these questions: how can we defend America and the world from a nuclear catastrophe without taking these essential steps? How can we take these steps without the cooperation of other nations? And how can we get the cooperation of other nations without the vision and goal that the world will someday end these weapons as a threat to mankind? In my view, we cannot.

The Chautauqua Institution has lined up a truly impressive set of speakers this week. Through all of these conversations, I hope that you will keep asking yourself a couple of fundamental questions: if the unthinkable happened – if a city in the United States or somewhere else in the world was destroyed by a nuclear weapon – the day after that attack, what would we wish we had done? Why don’t we do it now?

I leave you with a parable of hope. After the collapse of the Soviet Union, when the United States began funding work to dismantle Soviet nuclear missiles and warheads, our countries struck a deal called the U.S.–Russian Highly Enriched Uranium Agreement.

Under this HEU agreement, which was signed in 1993, 500 tons of highly enriched uranium from former Soviet nuclear weapons is being blended down to low enriched uranium, and then used as fuel for nuclear power plants in the United States. Shipments began in 1995 and will continue through 2013.

When you calculate that 20% of all electricity in the U.S. comes from nuclear power plants, and 50% of the nuclear fuel used here comes from Russia and Ukraine through the HEU Agreement, you have an interesting fact: Roughly speaking, one out of every ten light bulbs in America today is powered by material that was in Soviet nuclear warheads pointed at us a few years ago.

From swords to ploughshares. Who would have thought this possible in the 1950s, 1960s, 1970s, or 1980s? It would have certainly been seen as a mountain too high to climb, and even base camp would have been lost in the clouds.

My bottom line – we are in a race between cooperation and catastrophe. This is a race that mankind must win.

More than 20 years ago, during his last year in office, President Ronald Reagan asked an audience to imagine that “all of us discovered that we were threatened by a power from outer space – from another planet.” The President then asked: “Wouldn't we come together to fight that particular threat?” After letting that image sink in for a moment, President Reagan came to his point: “We now have a weapon that can destroy the world. Why don't we recognize that threat more clearly and then come together with one aim in mind: how safely, sanely, and quickly can we rid the world of this threat to our civilization and our existence.”

If we want our children and grandchildren to ever see the mountaintop, our generation must begin to answer this question.

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