 Weapons of Mass Destruction: Three Lines of Defense
Remarks at the 15th Oscar Iden Lecture
April 18, 1996

by Dr. William J. Perry
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I have spent most of my career as a “Cold Warrior,” trying to protect our nation and the world from a nuclear holocaust. During this period, we and the Soviet Union each built massive nuclear arsenals under a strategy that was called Mutual Assured Destruction, or MAD.

The United States’ and the Soviet Union’s pursuit of MAD can be compared to two men standing about ten feet apart, each of them with guns pointed at the other’s head. Each had his gun loaded and cocked, and each had his trigger finger quivering. During this deadly standoff, each was shouting insults at the other. Somehow—with good luck and good management—we survived this very dangerous period. Mutual Assured Destruction is only a bad memory. Russia and the United States are pursuing a strategy of mutual assured security and are cooperating in the dismantlement of their fearsome nuclear arsenals.

But there are still tens of thousands of nuclear weapons in the world, and there are many nations trying to acquire these and other weapons of mass destruction. This is not a brave new world, it is a grave new world.

During the Cold War, we knew who the enemy was, what weapons he had, where he might attack and why. But today, anyone can shop the global market for the components to make weapons of mass destruction, and we can no longer assume the who, what, where, or why.

The insidious nature of the proliferation of weapons of mass destruction is not unlike the threat we face from illegal drugs. In the past decade both have spread like cancer, threatening our children and our societies and forcing governments to commit ever-increasing resources to fight these epidemics.

The proliferation threat to our national security, like the drug threat, has a supply dimension and a demand dimension. The demand comes primarily from a group of nations that some call the “rogues gallery”: Iran, Iraq, and Libya. They want these weapons to bully their neighbors, to blackmail world powers, and to offset U.S. military superiority.

The demand also comes from terrorists and organized criminals. These groups operate in total disregard for accepted principles of international behavior. They are usually motivated by ideology or cash, and they often prey on the defenseless and the innocent, as the chilling nerve gas attack in Tokyo illustrated.

The supply dimension of the proliferation problem comes from established world powers that have large nuclear ar-
About the Author...

Dr. William J. Perry was sworn in as Secretary of Defense on February 3, 1994, following a unanimous vote by the Senate. He previously served as Deputy Secretary of Defense from March 5, 1993, until his confirmation as Secretary. Prior to his nomination to these positions, he was the Chairman of Technology Strategies Alliances, a professor in the School of Engineering at Stanford University, and Co-Director of Stanford’s Center for International Security and Arms Control.

Dr. Perry received his B.S. and M.S. from Stanford University and his Ph.D. from Penn State, all in mathematics. He is a member of the National Academy of Engineering and a fellow of the American Academy of Arts and Sciences.

From 1946 until 1947, Dr. Perry was a noncommissioned officer in the Army Corps of Engineers, serving in Japan and Okinawa. He joined the Reserve Officer Training Corps in 1948 and was commissioned a second lieutenant in the Army Reserves in 1950. He remained in the reserves until 1955.

From 1977 to 1981, Dr. Perry was Under Secretary of Defense for Research and Engineering. As Under Secretary, he was responsible for weapon systems procurement and research and development. He was the Secretary of Defense’s principal advisor on technology, communications, intelligence, and atomic energy.

senals, large supplies of nuclear fissile material, and advanced technology. If they do not adequately protect these technologies or resist the temptations to export them, these nations could fuel an explosion of proliferation.

To defend our nation against this insidious threat, we have established three lines of defense. The first is to prevent or reduce the proliferation threat. The second, if prevention fails, is to deter the threat. And the third, if deterrence fails, is to defend against the threat.

Preventing Proliferation

We are placing a heavy reliance on the first line of defense—preventing the proliferation threat from emerging. What is true in medicine is also true in security against weapons of mass destruction: an ounce of prevention is worth a pound of cure.

One of our most successful efforts has been our program to reduce and safeguard the former Soviet nuclear arsenal. The disintegration of the Soviet Union created one of the world’s potentially difficult proliferation problems. Instead of one nuclear empire, we were left with four new states, each with nuclear weapons on their soil: Russia, Kazakhstan, Ukraine, and Belarus. We were also left with a buyer’s market for weapons of mass destruction, including a massive arsenal, infrastructure, and workforce; unsettled political conditions that made it harder to predict both weapons and materials; and a depressed economy that increased the pressure to sell those weapons and materials.

At the same time, the former Soviet Union also represents one of our greatest success stories in preventing proliferation. The story begins with the START I Treaty, under which we are each cutting thousands of nuclear weapons from our strategic forces. Through a defense program created by Senators Sam Nunn and Richard Lugar, we are helping Russia, Ukraine, Belarus, and Kazakhstan to dismantle and destroy nuclear missiles, as well as bombers and warheads, under these same treaties. We have also used the Nunn-Lugar program to help these nations safeguard and secure their weapons and materials to keep them out of the global marketplace. With the help of Nunn-Lugar, Kazakhstan today is already nuclear weapons free, and Ukraine and Belarus will be nuclear weapons free by the end of 1996.

One of Nunn-Lugar’s most dramatic accomplishments for preventing proliferation was a secret initiative called Project Sapphire. It began when the Government of Kazakhstan identified six hundred kilograms of highly enriched uranium—enough for several dozen nuclear weapons—and it felt that it could not adequately safeguard this material. So, we bought the uranium and removed it to a secure facility in the United States, forever out of the reach of thieves, smugglers, and black marketeers.

Our proliferation efforts in the former Soviet Union are unique because we have cooperative relations with each of the successor states. Indeed, in the Defense Department we call this program the CTR, the Cooperative Threat Reduction program.

But when it comes to rogue states and terrorists, we must resort to more coercive measures to prevent proliferation. One of these measures is sanctions. We have led the international community in imposing economic sanctions against two of the most dangerous nations, Iran and Libya. These sanctions have helped prevent Iran from achieving its goal of having nuclear weapons, and they have significantly slowed Libya’s efforts to put a chemical weapon production plant into operation.

We believe that if Libya were to begin production at this plant, it would represent a threat to all nations of the region—indeed, possibly the world. Therefore, we are prepared to take preventive measures to keep Libya from posing such a threat to peace and stability.

Prevention typically includes a combination of diplomacy and defense. In North Korea, for example, we used such a combination to stop that nation’s nuclear weapons program. Just two years ago this spring, North Korea was building facilities that could produce enough plutonium to make about a dozen nuclear bombs per year. But after the United States and the nations in the region threatened economic sanctions and beefed up our military forces in the region, North Korea agreed to meet and discuss the is-
sue, and it finally ended up signing the Framework Agreement. Under this agreement, North Korea agreed to freeze and then dismantle its nuclear weapons program in return for assistance in the production of commercial power. Today, North Korea continues to pose a conventional military threat on the peninsula, but it is abiding by the agreement and is not mounting a nuclear threat.

As we prevent these individual proliferation threats, we must also maintain a constant battle to keep deadly weapons, technology, components, and materials off the global market. The United States led the world in the right direction by gaining unanimous support for the indefinite extension of the Nuclear Non-Proliferation Treaty in 1995. We are also taking a lead in a range of international export controls to limit the flow of goods and technologies that could be used to make nuclear, biological, or chemical weapons. We are working to strengthen the Biological Weapons Convention and to ratify and to bring into force a new tool in our fight against chemical weapons—the Chemical Weapons Convention.

Taken together, these preventative measures have reduced the threat from proliferation, but proliferation threats, like cancer, can sometimes elude preventative measures. So, we need a second line of defense, and that second line of defense is deterrence.

**Defending Against Proliferators**

Deterrence relies on having strong forces, both conventional and nuclear, and the demonstrated willpower to use them to protect our country, our forces, and our allies. Today, we have the strongest conventional military forces in the world, and we continue to maintain a nuclear deterrent, considerably smaller than during the Cold War, but still absolutely devastating in its destructive power. Anyone who considers using a weapon of mass destruction against the United States or its allies must first consider the consequences. We would not specify in advance what our response would be, but it would be both overwhelming and devastating.

Operation Desert Storm was a wake-up call. Saddam Hussein had ballistic missiles and he was willing to use them in a terrorist mode by lobbing SCUDs at population centers in Israel, which was not even a participant in the war. We do not know what he would have done if his nuclear program had succeeded in producing bombs by then. We do know that he had chemical warheads for the SCUDs, but chose not to use them, and certainly, he had a very explicit warning of the retaliation he would suffer if he did.

This deterrent capability should be enough to warn off any nation from using weapons of mass destruction, but the reality is that the simple threat of retaliation may not be enough to deter some rogue nations or to deter terrorists from using these weapons. Thus, we cannot always rely on deterrence: we must be prepared to defend ourselves.

**Deterring Proliferators**

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While we are getting this equipment in the field, we are also incorporating defense against weapons of mass destruction into all aspects of military intelligence, training, planning, and doctrine. We have organized these passive defenses and have raised both their funding and their profile under a comprehensive initiative called the counterproliferation initiative.

But in addition to improving our passive defenses, we have also refocused our active defenses, in particular, ballistic missile defenses to shoot down missiles fired at our nation or our allies.

For the next fiscal year, seventy-five percent of our budget for ballistic missile defenses is focused on the missile threat that is here and now: namely, the short-range ballistic missiles, such as the SCUDs, that can attack our troops and our allies overseas. We call these short-range missiles theater missiles. We already have defenses against theater mis-
siles deployed to a number of hotspots: in the Middle East and in the Korean Peninsula. These include Patriot missiles, which we used in Desert Storm, but this technology is not good enough. Therefore, we have shifted additional funds to building a new generation of advanced Patriots and naval missile defenses that will be operational in just a few years. These new systems will protect a wider area, will be more accurate, and will have a much more effective destructive mechanism so that nuclear, chemical, or biological agents are not dispersed on the ground around their intended targets.

Meanwhile, we are developing the next generation of ballistic missile defenses against the emerging threat of theater missiles that have longer ranges and greater speeds than the SCUDs. These systems will be able to protect areas over ten times larger than the theater missile defenses that we are now building, allowing us to protect an entire army division or a large metropolitan area. Finally, we are developing a missile defense system to protect the continental United States should rogue nations develop strategic missiles sometime in the future.

Today, only the established nuclear powers have strategic missiles, and we do not believe that these nations presently threaten us. Nevertheless, we continue to maintain a powerful strategic nuclear force to serve as a deterrent to any major nuclear power that turns hostile at some time in the future.

But rogue nations may not respond to the same deterrence calculus. Therefore, if such nations develop strategic missiles in the future, we will need a missile defense system based in the United States that can intercept and destroy missiles directed at us. Our plan is to complete the development of a national missile defense system over the next three years. At that time, if such a threat is emerging, we would be ready to deploy this defense system in another three years. If such a threat does not emerge in this six-year period, we would continue developing and improving the technologies—that way, we can employ the most advanced system if and when a threat does emerge.

The national missile defense system that we are now developing is not really comparable to the very sophisticated systems that were considered during the Cold-War program called the Strategic Defense Initiative. This means it would not be capable of defending against the massive threat we faced during the Cold War: thousands of warheads being launched at the United States. On the other hand, it will be quite capable of defending against the relatively low-volume threat that a rogue nation or a terrorist could mount any time in the foreseeable future.

In sum, our approach to missile defense takes a sober and clear-eyed look at the missile threat. It emphasizes defense against the threat that is here and now, and stays well ahead of future threats. It is an approach that is well within our technical capability and is fully consistent with our ABM Treaty obligations.

Conclusion

At the height of the Cold War, Andrei Sakharov said, “Reducing the risk of annihilating humanity in a nuclear war carries an absolute priority over all other considerations.” That is still true today. The nature of the nuclear threat has changed dramatically, and for the better, but there are still tens of thousands of nuclear weapons in the world. Each is capable of destroying a city. In aggregate, they are capable of destroying humanity, and there are still nations that threaten to use these horrible weapons to achieve their political objectives. So, reducing the risk of nuclear war still carries an absolute priority over all other considerations.

With the ending of the Cold War, we all hoped that mankind would be blessed with peace, but we must keep in mind Eli Wiesel’s wise saying: “Mankind must remember that peace is not God’s gift to his creatures, peace is our gift to each other.”

Select Questions and Answers

On Land mines

Question: Land mines have been called weapons of mass destruction in slow motion, and they’ve been compared to chemical weapons in the way they kill indiscriminately. What is your opinion about the campaign to ban all land mines, and how would the issue of land mines fit into the framework that you describe today?
Secretary Perry: I think anti-personnel land mines, as they’re used around the world today, are a terrible weapon, and I think we should seek to find ways of eliminating them. In the course of trying to find this elimination of the anti-personnel land mines, we have to take two considerations into account: First, most of the horror nature, the terrorist nature of these land mines comes from the fact that after the battles are over, after the purpose for which they’re sown is over, they still remain in the ground, for years or even decades, and innocent people are blown up by them years after the wars are over . . . Therefore, one move that is under way, a very strong move under way in the United States, is converting all of our land mines to self-destructing land mines, which, after some short period of time, are rendered ineffective; that is, they self-destruct. That allows the personnel land mines to be used for the military purpose but does not leave them around as a legacy for killing civilians for years or decades afterwards. That can be an important interim step.

The longer-term objective is to eliminate anti-personnel land mines altogether. I think that it’s going to take some time to achieve that objective. Our war plans today, our contingency plans today, in particular our contingency plan which involves the defense of Korea, has land mines used in a fundamental way. Or, to put it more effectively—it is not clear that we could simply effect the removal of all those land mines. If we actually got into a war with Korea, that would lead to the deaths of thousands and thousands of American and South Korean soldiers, and tens of thousands of civilians. And, therefore, that somehow has to be balanced.

Until we can find a way of replacing that military capability, we have to somehow keep those in service. So, the question is one of timing and developing the proper transition plan so that we can get rid of them. But the long-term objective of eliminating anti-personnel land mines, I think, is exactly right.

On Ballistic Missile Defense

Question: Yesterday House Speaker Gingrich made a strong pitch for ballistic missile defense. Could you explain the difference between what he and the Republicans seem to be advocating and the system you just described in your remarks?

Secretary Perry: The accelerated production and deployment of a theater missile defense system against the existing threats—the Scud and related missiles—I believe that the Republicans in Congress support that part of the program just as we are proposing it.

The second thing that I described to you is the development program for building a next-generation theater missile defense system against the emerging threat of longer-range and higher-speed theater missiles. The Republicans support having such a program, but they want us to accelerate the development effort. They would be in favor of putting more funds in it than we’re putting in it. And that’s a perfectly reasonable point of view. It’s a judgment call as to what the right level of spending should be for that development program.

The third issue is national missile defense. We have a development program under way to build a system which is capable of providing defense for the continental United States against limited attacks, a dozen or so missiles coming at us, as opposed to the thousands of missiles which were considered in the Strategic Defense Initiative. My understanding of the Republican position is that they support a national missile defense system and they support one of that type. That is, they’re not promoting a Strategic Defense Initiative, complex, very expensive type system. . . . I think they also support the three-year time scale in which we’re developing that system. But they would like us to now commit to produce and deploy that system over this six-year time period . . . whereas we have argued that we should commit now to develop for the next three years and then, at the end of that three years, decide whether to go ahead and produce and deploy that system, or whether to simply continue the development program, depending on what we see as the then-threat.

In our judgment, the threat has not yet emerged from these rogue nations that might fire missiles against the United States, and might not for a good many years. In their judgment, it is emerging, and we should commit right now to build and deploy the systems. That may seem like a subtle difference, but it’s a fairly important difference in positions. In the budget which we submitted to the Congress—which is not just for next year; it’s for a five-year period after that—we do not include the funding for producing and deploying the systems; we would have to add that funding three years from now, if we decided that such a system were necessary. That’s the difference between the two programs.

Both of us agree that ballistic missile defense is necessary for the United States, but there’s a different emphasis on how much resources we should put in and what aspects of the ballistic missile defense should be emphasized at this time.