## THE NATIONAL ACADEMIES SCIENCE, TECHNOLOGY AND LAW PROGRAM POLICY AND GLOBAL AFFAIRS DIVISION

## BALANCING NATIONAL SECURITY AND OPEN SCIENTIFIC COMMUNICATION: IMPLICATIONS OF SEPTEMBER 11<sup>th</sup> FOR THE RESEARCH UNIVERSITY

Keynote Address and Discussion December 13, 2001

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HONORABLE CELESTE: ...Most recently Senator Hart co-chaired with Senator Warren Rudman the U.S. Commission on National Security for the  $21^{\rm st}$  Century, which issued a report entitled, A Road Map for National Security.

SENATOR HART: Thank you very much. It is a genuine honor to be invited to this prestigious distinguished Academy. It is a genuine honor to be in the company of this caliber and distinction, and to share the evening with Dick Celeste, who is of course one of the nation's very best governors in our years in office and a great ambassador to a very important country, and who continues to serve his country honorably and well.

On September 15<sup>th</sup>, 1999, the Commission on which I served issued its first of three reports, and its first finding in a report entitled, A New World Coming, was that America's vulnerability to terrorist attacks would increase and that America's military superiority would not necessarily protect us. Americans we said will die on American soil quite possibly in large numbers. That was two years almost to the day when the attacks occurred on New York and Washington.

Thereafter we issued our second report in April

2000, laying out the framework for a new national security policy, and our final report, which I will deal with here this evening, was issued according to the Congressional mandate we were given to the next President of the United States, George W. Bush, January 31<sup>st</sup>, 2001. We had five sets of recommendations. I will itemize those and deal with two of them specifically.

In addition to our recommendation first and foremost to create a new national homeland security agency, we also urged very strongly a re-capitalization of this nation's strength and education and particularly in the sciences. Third, we called for fundamental reorganization of the structure of this country's national security institutions. We found the State Department, for example, to be a crippled institution not prepared or structured to carry out the diplomatic mission of this country in the 21<sup>st</sup> Century in this new world.

We called for some very specific reforms in the Department of Defense, not just in procurement, but also in the way the Department organized its mission of defending the country. We included some specific recommendations for the National Security Council and the intelligence community. We did not exclude, as many commissions calling for reform have done, the Congress. Indeed the four of us on the Commission, two Democrats and two Republicans who had served in Congress, thought that Congress was part of the problem, that the Congressional committees had so proliferated that members of the Administration were spending all their time satisfying chairpersons' egos by appearing before their committees and subcommittees on issues relating to national security, and not therefore able to find the time to do their job. So we called for sweeping reorganization of Congress's role in national security.

And finally, of the five groups of recommendations, we talked about the human element, the human factor. Now I think it is clear to all of us that for the last quarter Century government has not been popular. Indeed we have been told that the government is the problem, and young people particularly have not been encouraged to serve in government. Well this Commission of 14 Americans, present company excepted, distinguished Americans, all together constituting some 250 or 300 person years of public service, mostly in national security and foreign policy areas, across the board reached our conclusions and recommendations.

There were no dissenting views, no negative votes. All 50 specific recommendations in these five fields were unanimously agreed to after great debate and two and a half years of work. But one of the most startling findings was that this country's national security was being weakened because of the caliber and quality of people coming in to government at all levels in all capacities was declining. So even the most conservative members of our Commission, and there were very conservative members, felt that we had to re-invigorate a sense of public service in our country, and particularly in our young people, in the diplomatic corps, in the uniformed military, in the civil service.

Indeed for people like myself and many others of my generation, just to come into public service for a few years on a Congressional staff or some department or agency of the national government, and then go on to a private career, made a difference in that individual's outlook on his or her country and society and the nation. So those were the kind of broad, sweeping views of what constituted national security in this new world.

By way of background just let me say we were created in 1998 by former President Clinton and former Speaker of the House, Newt Gingrich, and former Secretary of Defense, Bill Cohen, and given this task and this mandate, and it was the most comprehensive review of U.S. national security since 1947. There have been many commissions and some looked at one thing and some looked at another, but not since 1947, over 50 years, has this nation undertaken the kind of historic review of our national security threats and opportunities, and we understood that mission to be historic and serious.

Now the two areas that I mentioned at the outset but didn't feature were the creation of a national homeland security agency. We could not conclude as we did that the principal threat to this nation's national security was terrorist attacks using weapons of mass destruction, then look at whether and how we were prepared to deal with that, without concluding that we were not prepared, that there were more than 40 separate offices, agencies, departments, scattered throughout the Federal bureaucracy that had some piece of the responsibility for protecting America, and there was no coordination.

There was one official on the National Security Council who was tasked with generally encouraging people to work together. But if you believed as we did that these attacks would happen, and some of us believed sooner rather than later, you had a sense of urgency, and we urged the President in January, albeit within days after he and his Administration took office, to seriously undertake a reorganization of these assets under one command, with statutory authority, with budget control, so that we would be prepared when these attacks occurred.

Let me emphasize agency. When the President addressed the country 10 days after the catastrophe of September, he announced the creation of a Homeland Security Office under Governor Ridge. A few days later he amended that to call it a Homeland Security Council, roughly parallel to the National Security Council. Our Commission believed and still believes, even though we are not now officially in existence, that neither the office nor the council is sufficient, and we have indirectly, unfortunately not had the opportunity directly to do so, but indirectly urged the Administration to undertake a serious review before it is too late about the consolidation of some of these assets, with statutory authority and with the kind of budget control that will call upon these various agencies to report not just in a collaborative or hortatory manner, but by law to the head of this agency.

I personally think this is extremely, extremely important. I know how reluctant the bureaucracy of Washington is, but as I said in a column in Time Magazine a month or so ago, I cannot believe that any cabinet officer in this government is going to sit across the table from the President of the United States and say it is more important that my department keep this agency than that the nation be secure. The President says do this, it can be done, and it can be done within 60 to 90 days. The people will follow. And so the argument about bureaucratic resistance, where we are talking about American lives, to me just does not resonate.

Now the second topic that I brushed past was recapitalization of American education and science. The topic I think probably of most interest to you, and I just, I'm going to deal with this briefly because I've got two or three other points I wish to make, I would encourage you, if you don't read anything else, the final report of 143 pages, it is available on the web, it is not in print anymore I don't think, but if you visit <a href="www.nssg.gov">www.nssg.gov</a> you can get all three reports. <a href="www.nssg.gov">www.nssg.gov</a>, "nssg" stands for National Security Study Group. The first report is 12 pages, the

second report is 16 pages, the third report is 143 pages, but the essence is encapsulated in the summary of about 25 pages, and let me just excerpt the recommendations regarding re-capitalization of science and education.

Two sentences that lead up I think that are important to those recommendations. We say second only to a weapon of mass destruction detonating in an American city, we can think of nothing more dangerous than a failure to manage properly science, technology, and education for the common good over the next quarter Century. That is pretty strong language. Further we say the harsh fact is that the U.S. need for the highest quality human capital in science, mathematics, and engineering is not being met. And this is again after two and a half years of pretty sober thought and listening to an awful lot of people much brighter than we were, particularly in your respective fields.

I'll just read to you, and I would encourage you to again study for yourselves pages 30 through 46 of this third report, the six recommendations that we make to the President. The President should propose and the Congress should support doubling U.S. government's investment in science and technology research and development by 2010.

The second recommendation is the President should empower his science advisor to establish non-military R&D objectives that meet changing national needs, and to be responsible for coordinating budget development within the relevant departments and agencies.

The third recommendation, the President should propose and the Congress should fund the reorganization of the National Laboratories, providing individual laboratories with new mission goals that minimize overlap. There's a lot of good stuff here in between, but I'm just hitting the high notes because I want to open this up as quickly as possible.

The President should propose and Congress should pass, this is perhaps one of the most important, a national security science and technology education act with four sections: reduced interest loans and scholarships for students to pursue degrees in science, mathematics, and engineering; loan forgiveness and scholarships for those in these fields entering government or military service; a national security teaching program to foster science and math teaching at the K through 12 level; and increased funding for professional development for science and math teachers.

Our final recommendation, sorry, two more. The

President should direct the Department of Education to work with the states to devise a comprehensive plan to avert a looming shortage of quality teachers. This plan should emphasizing raising teacher compensation, improving infrastructure support, reforming the certification process, and expanding existing programs targeted at districts with especially acute problems.

And finally the President and Congress should devise a targeted program to strengthen the historically black colleges and universities in our country, and should particularly support those that emphasize science, mathematics, and engineering.

As I say, there is much, much more to the report than these recommendations that support those recommendations, and I would encourage you to take time not only to learn about them, but if you agree on any one of these, do take the time and trouble, particularly given your status in your communities, to contact your members of Congress or write letters to the White House or whatever, encouraging if not these recommendations, then some variation that you might think to be better. But do undertake to weigh in on this debate, because it is absolutely vital and people in this room can have an enormous impact and those you represent around the country as well.

I want to make two final points if I may very briefly. Having gone through this experience predicting that some kind of terrorist attacks would occur, seeing them occur alive on television, and then being asked most often by the media that paid almost no attention to this what it felt like, I don't think my own personal feeling were any different from any of yours in terms of the gravity of the tragedy, perhaps needless perhaps not. But it has caused me at least to spend a lot of time in the last three months reflecting on a theme that John Kennedy wrote about when he was a senior at Harvard. His senior thesis was why England slept.

And I have thought a lot about why American slept, what were the factors that lulled us into not being prepared. And I can just list the ones that have occurred to me. You can probably come up with a lot more cogent ones yourself. And there is no reason to do this by way of finger pointing or blaming. It is simply to try to find out whether it is necessary for a mass democracy to undergo Pearl Harbors and 9/11s before we change things, change our

way of thinking and governing. And I don't think we are going to do that unless we go back and look at why we were asleep.

I think there were several factors. First obviously was the end of the cold war and the decade between, almost exactly a decade, between the collapse of the Soviet empire and these attacks. There was a loss of a central organizing principle, starting with George Kennan, 1946-1947, and the phrase containment of communism. That became the central organizing principle of our nation for over a half Century.

I remember, and Dick may remember as well, some of you may remember, a well-known Soviet interlocutor named George A. Arbatov, who ran the U.S. Canada Institute in Russia, and he was interviewed by a Western journalist in the early Gorbachev years, I think 1987-1988, something like that. And the journalist said Mr. Arbatov what is this Gorbachev revolution all about. And Arbatov said we are about to do to you, the United States, the worst thing that could happen. The journalist's head snapped back thinking nuclear attack. Arbatov said we are going to take away your enemy. That is exactly what happened.

The enemy disappeared in about 72 hours in August 1991, and with it went the central organizing principle of this nation's foreign policy, much of our domestic policy, certainly our military and national security policy. And 10 years went by with some revisions on the margin, some changing and altering here, some people looking for a new Soviet Union, China or someone else that we could organize against that would provide that central organizing principle. But that was certainly one factor.

I think also the transformation of war that occurred. In the decade of the 90s war was transformed historically from violence which was under a monopoly to nation states, that they conduct in the field between nation state armies, and it began in the Colonial wars with guerilla warfare and that guerilla warfare in the second half of the  $20^{\rm th}$  Century began to migrate into terrorism. We saw it in Ireland, we saw it in the Middle East for sure, and saw it in a lot of other places.

Now there had been terrorism throughout history, but there was a clear migration of the nature of violence as nuclear weapons made traditional war between nation states, armies in the field, less likely. Violence found its outlet in other ways. And what happened in September of this year

was the distinction, the historic distinction between crime and war was virtually obliterated. If five or 50 people had been killed in New York or Washington, that would have been a crime. Five thousand is war. Where between 50 and 5,000 does crime become war.

So now we are confused about what kind of methods to use. If it is a crime, there are certain law enforcement methods. If it is war, there are certain military methods. So now that ambiguity is making its way felt into tribunals, into the procedures for dealing with these people. Are they criminals or are they making war, because there are certain rules of war. They didn't follow the rules of war, they killed innocent women and children.

So the transformation of war was going on and we didn't notice it. We were in an age of acquisition. The long boom of the 90s, one of the longest big growth periods, had everyone preoccupied with doing better for themselves. Nothing wrong with that, but when it comes at the expense of the nation's security, there is something wrong with that. So we were very much transfixed with getting bigger houses, better clothes, better cars, nicer jewelry, getting into the stock boom.

But also there was an evolution in the media. The newspapers that used to be owned by local families in Cleveland and Denver and elsewhere fell into the hands of international media conglomerates, much more interested in entertainment than they were in information. The First Amendment to the Constitution my friends was not passed so international media conglomerates could make money. It was passed so the American people would know about their business. Let me repeat that. The First Amendment to the Constitution did not guarantee the media the right to print money. It gave them freedom so the American people would know about their business, and when the media doesn't do that job, the American people don't know.

There was a decline of respect for government, I've talked about that. Now I don't think Americans ever are going to aggrandize government. We came out of a history in Europe where we were suspicious of government, and that is where that skepticism, it's healthy. Where it is cynicism, it is not healthy. If you tell a generation or two of young people that the government is their enemy or the government is the problem, they are probably not going to want to have much to do with the government. So we didn't have much trust in government.

And finally, philosophically, and I've done a lot of thinking and writing on this subject for the last 10 years, we are a democracy, but we are also a republic, I pledge allegiance to the United States of America and to, not the democracy, to the republic for which it stands. People know the difference between a democracy and a republic? Democracy is about rights, a republic is about duties. To ensure our rights, we must perform our duties. That is not taught in the schools these days, it is not very much heard in the government or in politics. We are a democratic republic. We can only ensure our rights by performing our duties.

What will help us not go to sleep again? Well I think there are some programmatic steps we can take. For example, I don't know, this is up to the Administration and Congress, I would hope that people would think about perhaps institutionalizing something like our Commission as a kind of something like perhaps the President's Foreign Intelligence Advisory Board. But have a group of former office holders, military officers or ambassadors, constantly thinking farther ahead than the State Department can do, than the Defense Department can do, than the National Security Council can do. Take a horizon 25 years out and keep pushing that envelope, because I don't think there is enough of that in government today.

I think we should, as I've said, create a National Homeland Security Agency. We could I think establish a more effective Intelligence Review Board. If I were better at the sciences than I am, I have basically the same attitude toward the sciences that say a 14<sup>th</sup> Century European peasant had toward alchemists, I have respect, awe, and a great deal of fear, but that's about all. All of you and those you represent across our country are going to play a great role in this homeland security business. We are going to have to find ways to look inside sealed shipping containers, because we are inspecting about one to two percent of them right now, one to two percent. They are coming in about 60,000 a day. If anybody here can figure that out, let somebody know, let the White House know.

We are going to have to figure out better ways to tape Osama bin Laden before the fact and not after. But science has to be put at the service of human beings. I mean it is now fashionable, as you well know, criticize the CIA for relying too much on overhead intelligence and being mystified by satellite collection, so that they didn't get

human beings inside these organizations. That is the hardest kind of intelligence. So whatever all of you can do to help crack some of these problems, they all must be done in the service of human beings who have to figure out what all of this means.

Finally I think we could train and equip our National Guard, and I could talk a great deal about this because this is the second Army in America. It was created in the Constitutional era for the specific purpose in the Constitution of defending the United States. That is why we have two Armies. We have one to go abroad, we have one to stay home. The National Guard is the one meant to protect this country. There's a long Constitutional argument here. There's something called the Posse Comitatus Act that some of you ought to be familiar with. The military does not want to play the police role in this country and they shouldn't. But there is something called the citizen soldier, and that's their job.

After all this should we feel depressed, I don't think so, or is the worst over, no, the worst is not over. We are going to be attacked again, maybe tonight, maybe tomorrow. I wouldn't be at all surprised to wake up in the morning and have some other attack. I pray to God not, but I think it is going to happen. I don't think we are prepared yet. We are making strides and steps in that direction.

The scientific community broadly defined has a very, very central role in all this, but indeed all of us do. You wear two hats, most of wear two hats. You wear a professional hat and you wear a citizen hat. It is the citizen hat that I want you to think about also. This issue, this new kind of warfare, this new attack on our country, is going to require a new kind of citizenship and I think you are a key part of it. Thank you all very much. (Applause)