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**EVIDENCE**

**Monday, December 13, 2004**

**Chair**

**Mr. Bernard Patry**

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## Standing Committee on Foreign Affairs and International Trade

Monday, December 13, 2004

• (1540)

[English]

**The Chair (Mr. Bernard Patry (Pierrefonds—Dollard, Lib.)):**  
Good afternoon.

Pursuant to Standing Order 108(2), we have a study on the disarmament issue.

As a witness today, we have Mr. Richard L. Garwin, who is an IBM fellow emeritus. We're very fortunate today to have one of the world's foremost experts on the technical issues involved in missile defence, Dr. Richard Garwin.

During decades of experience working on these issues for the United States government, Dr. Garwin co-authored what was probably the first public discussion on the technical challenges of missile defence, in 1968. From 1993 to 2001 he chaired arms control, a non-proliferation advisory board of the U.S. Department of State. In 1998 he was one of nine members of the Rumsfeld commission to assess the ballistic missile threat to the United States. In the past several months he published yet another article on missile defence in *Scientific American* and co-authored an article on space weapons in the *International Journal of Information Security*.

Thank you very much for coming here today to help us understand these issues. Dr. Garwin, the floor is yours.

**Mr. Richard L. Garwin (IBM Fellow Emeritus, As Individual):** Thank you very much, Mr. Chairman.

I will just add to my written testimony that I'm speaking for myself, not for the U.S. government or for IBM.

In order for you to get your thoughts in order and for me to give the proper emphasis, I will just proceed to read what I have submitted.

Thank you for the opportunity to appear before you to discuss the U.S. program for national missile defence. I've been involved in such activities on behalf of the U.S. government since the 1950s. Initially I was a member of the strategic military panel of the President's Science Advisory Committee, PSAC. Later, for two four-year terms, I was a member of PSAC itself. During that entire time, from about 1958 to 1973, I remained a member of the strategic military panel, and analyzed repeatedly for various U.S. presidents the status and prospects for defending the United States against attack by ballistic missiles carrying nuclear weapons.

[Translation]

I have also been involved for the US government in various other activities related to the ballistic missile threat and to defence against

ballistic missiles. I cite only the 1998 Commission to assess the ballistic missile threat to the United States (the Rumsfeld Commission) of which I was one of the nine members.

[English]

Of course, the threat against which we hope to defend has changed enormously. In the beginning there were very few Soviet ballistic missiles armed with very large thermonuclear warheads. In the late 1960s the United States introduced the MIRV, the multiple independently targeted re-entry vehicles, and the Soviets soon followed suit.

Early missile defence proposals by the U.S. army were natural follow-ons to the air defence of the continental United States and Canada, beginning with Nike Ajax and Nike Hercules, extending to the proposed Nike Zeus, Nike X, and ultimately the Sentinel and the Safeguard systems. Safeguard was actually deployed during the Nixon administration. Safeguard had 100 interceptors armed with nuclear warheads.

Safeguard was deactivated after a few months, and major proposals for missile defence lagged until President Reagan's Star Wars speech of March 23, 1983. The threat and the promise there was to prevent even a single one of a massive attack of 6,000 Soviet nuclear warheads from striking a target on U.S. soil.

President Reagan asked the scientists and engineers who had given us nuclear weapons to find a way to render those same weapons impotent and obsolete, but he did not reckon with the fact that nuclear weapons could be delivered by bombers and by short-range ballistic and cruise missiles, as well as by ICBMs. The space-based systems that were proposed to implement the Reagan goal had little promise against these alternative delivery means. In any case, they were both vulnerable and subject to counter-measures, so they would have had essentially no effectiveness against a Soviet missile force, as it would have existed by the time Star Wars could have been deployed. In short, a Star Wars defence could have been underflown, overwhelmed, or destroyed.

The system that the United States is now deploying and that will presumably be declared operational within weeks has a very different stated goal: to counter a few ballistic missiles launched from a nascent ICBM power, such as North Korea or Iran. As defined during the Clinton administration in response to congressional pressure, the initial goal was to defeat one to five North Korean ICBMs. But faced with the embarrassment of deploying only 20 or 25 ground-based interceptors when 100 were allowed under the 1972 U.S.-Soviet ABM treaty, the threat was somehow inflated to 20 to 25 North Korean ICBMs, in order to have a rationale for deployment of the 100 interceptors.

The Clinton system, as defined under Secretaries of Defense William Perry and William Cohen, would depend upon the detection of ICBM launch by the use of infrared detection satellites in geosynchronous orbit; the alerting of powerful radars that would illuminate the threat cloud of warhead plus decoys, or other accompanying objects; and ground-based interceptors that would perform a hit-to-kill intercept by collision against the re-entry vehicle carrying the nuclear warhead.

• (1545)

The system would have an overall command and control and communication aspect, in order to perform not only the necessary command functions, but also to manage the difficult program of discriminating the object containing the warhead from objects that were intentional or unintentional decoys.

We have distributed some illustrations from the *Scientific American* article of last month that show the various players in this system ranging from the satellite, to the radars, to the interceptors launched from Alaska or California.

Even before my involvement with the President's Science Advisory Committee, I was involved in 1953-54 with our Canadian colleagues in the defence of the North American continent in Project Lamplight. This was a program lasting about a year at Lincoln Laboratory co-chaired by Jerome Wiesner and Jerrold Zacharias, with the intent of extending the continental air defence to the sea lines of approach of Soviet bombers.

I felt that by the time our efforts could bear fruit there would be a major threat from Soviet ICBMs armed with nuclear warheads, and I made this point to my colleagues. I recall Jerrold Zacharias saying we would solve the bomber problem first, and then we would move on to the missile problem. Both are difficult, primarily because the other side does not want the defence to succeed. But the missile problem is more difficult because throughout most of its path the warhead is falling through the vacuum of space, and can be accompanied by light and inexpensive decoys that precisely mimic the warhead to sensors operating in the visible, infrared, and radar portions on the electromagnetic spectrum.

An important participant in the Lamplight Program, Dr. Arthur Porter, was one of the six-man Canadian delegation to Lamplight, fresh from his experience with the Canadian DATAR, Digital Automated Tracking and Resolving system. Dr. Porter recently published a book, *So Many Hills to Climb*, in September 2004, detailing his career and mentioning the Lamplight work.

Many of the problems and techniques of North American defence are similar to what they were half a century ago. In my article in last month's *Scientific American* I described a few of the specific vulnerabilities and inadequacies of the system being deployed against North Korea. Of course, it will have no effectiveness at all against Iran unless an appropriate radar is deployed in England or elsewhere that covers that threat corridor from Iran, over Europe and England, to the United States.

My main point is that neither adversary—North Korea or Iran—can have its ICBM threat eliminated by a system that depends on mid-course intercept, and there is no reason to rush to deploy such a system that will be ineffective the day the first ICBM is deployed by either of those states. The reason goes back to my 1968 article with Professor Hans Bethe. There we explained the nature of re-entry vehicles that protect the nuclear warheads against the fierce heat of re-entry, and the ease of preparing decoys that would mimic the appearance of the re-entry vehicle in space.

U.S. experts are primarily focused on the decoys that the United States has developed for its own advanced re-entry vehicles such as those on the Minuteman III missile. These spin to maintain the fantastic accuracy required to destroy hardened targets, such as missile silos, with a modest thermonuclear warhead yield.

Early U.S. strategic missiles such as the Polaris were not spun up, but only tumbled slowly through space. They would be a lot easier to mimic than the greyhound of a Minuteman III re-entry vehicle. In fact, as Edward Teller published in 1987, *Midgetman Needs Anti-Simulation Decoys*. This means that one should not use decoys that simulate the warhead, with its finely machined surfaces, radar antennas, and the like. Anti-simulation means that the warhead itself, in its re-entry vehicle, should be enclosed in what looks like the cheapest decoy available—a spherical, aluminized, plastic balloon. That would enable vast numbers of decoys to be deployed that would credibly resemble the warhead, dressed in its anti-simulation balloon.

• (1550)

This and other approaches were the subject of an 11-author volume published by the Massachusetts Institute of Technology and the Union of Concerned Scientists in April 2000. The report analyzed also a more complex re-entry vehicle that would be maintained, oriented with respect to the radar, in order to have low detectability. It would have a sharp, pointed nose over the rounded tip of the re-entry vehicle. It would be black, and have its shell cooled to liquid nitrogen temperature. It would be not nearly so easy as the anti-simulation party balloon, but it would satisfy an engineer's desire to do something highly refined.

One reason that those deploying defences no longer talk about the threat of biological weapons on ICBMs is not that the threat has gone away; far from it. The two strategic weapons are nuclear explosives and biological agents. Chemical weapons and high explosives are simply of a much lesser lethality per tonne of weapon delivered. In fact, the biological weapon, or BW, is a greater threat from an early ICBM than is a nuclear explosive, simply because one might need to have a payload of 500 kilograms to 1,000 kilograms for an early nuclear explosive, whereas, whatever the payload, it would serve to deliver BW lethal to tens or hundreds of thousands of people in a city.

As discussed in detail, together with technical analysis, in the countermeasures study, it is an easy task to use the re-entry vehicle technology of 40 years ago to provide individual RVs for each kilogram or few kilograms of BW agent. There would be so many RVs that each would be a real threat and none could be ignored. There would be no way to discriminate, as is possible in principle, between the decoys and the nuclear warhead. Intercepting 10% of the RVs containing BW would simply leave 90% of the threat to penetrate to its target.

Nor would the offence suffer a loss of effectiveness in deploying 100 RVs rather than a single, unitary BW carrier. The latter would then need to have some way of disseminating the bacteria or viruses into the atmosphere at very low altitude in order that there not be enormous overkill in a narrow plume downwind of the impact point, and no effect outside the narrow plume.

In contrast, it would be easy to arrange for the many bomblets, these little BMP vehicles, to cover the populated area of a large city. Each of them would strike the ground subsonically, and could be arranged to have a mild burster charge that would disseminate the bacteria right at nose level, so that it can do the most harm.

The details of such BW bomblets, to which must be added the RV technology, were thoroughly published by the United States at the end of its biological weapons program in the late 1960s. The re-entry vehicle technology was also thoroughly published.

The United States is ignoring reality in the deployment of the national missile defence system. A former chief of staff in the U.S. air force, General Larry D. Welch, at the time president of the Institute for Defense Analyses, led a task force for the Defense Department that looked at the overall missile defence program. An early report by General Welch and his panel was entitled "Report of the Panel on Reducing Risk in Ballistic Missile Defense Flight Test Programs", but it is universally referred to by the sobriquet of "Rush to Failure", quoting a memorable line in the report describing the singular lack of interceptor tests.

But even if the interceptors were thoroughly tested, the system would be defeated by anti-simulation decoys that would inevitably accompany the first North Korean or Iranian ICBM, if either country were so foolish to launch one against the United States.

I will close with this quote:

...countries have placed ballistic missiles in ships...dime a dozen—all over the world. Any given time, there's any number off our coast, coming, going, on transporter-erector-launchers, and they simply erect it, fire off a ballistic missile, put it down, cover it up. Their radar signature's not any different than 50 others in

close proximity. So your comment that they don't have the ability to deliver a ballistic missile to this country is flat wrong.

That was Defense Secretary Donald Rumsfeld in a Pentagon press briefing of September 2002.

• (1555)

Although Canada does not have its major cities within a few hundred kilometres of the open ocean, the United States has much of its key population thus vulnerable to short-range missiles. No nascent missile power would have the capability to destroy them all, but that is not the point. Rather than a risky and self-destructive attack by ICBM with a nuclear warhead, which would not succeed, any state wishing to kill hundreds of thousands or millions of U.S. residents would use other approaches, against which the defences would be very different, defences that are not under development.

Note that the 1998 Rumsfeld commission report made the same point, although it is buried in the wealth of detail provided about the long-range missile programs of states of concern.

Each year during the 1960s and early 1970s, the strategic military panel of the President's Science Advisory Committee would write to the President, through the science adviser, that on sound technical grounds, the deployment of a national missile defence would be ineffective. They would note that there may be, however, other considerations the President would need to take into account.

My report to you is in the same vein: do not join the current U.S. deployment of continental missile defence in the expectation of protection against missiles armed with nuclear warheads or biological payloads. There may be other reasons for your joining the national missile defence, outside the analysis I have presented.

I look forward to responding to questions, and hope this has been helpful so far. The references are all available on the web, with the exception of my 1968 article. You might be interested in reviewing that.

Thank you.

**The Chair:** Thank you very much, Mr. Garwin. Merci.

We're going to start now with our questions and answers. Here we begin with a member of the opposition.

Mr. Menzies, please.

**Mr. Ted Menzies (MacLeod, CPC):** Thank you, Mr. Chairman.

This is the nuts and bolts presentation I've been looking for for a long time. This actual sketch probably tells me more than what I've learned from reading a whole lot of presentations. I have a number of questions, but if you could possibly go through this with us and describe a little bit of the detail, I would certainly appreciate that. I think a picture is worth a thousand words. We now have a better understanding of decoys, from your picture.

Now, correct me if I'm wrong, but I believe last Thursday there was a planned deployment from Alaska, where they were going to send up a missile, and send up an interceptor. It was cancelled because of weather. Do we need to be concerned about that? Is all of this ballistic missile defence dependent on weather, and if so, what are we doing here? I mean, weather is a pretty big factor. As I say, I appreciate the nuts and bolts description of this.

You talked about Iran and North Korea, but certainly there are other issues I would like your comment on. Are there concerns from China, are there concerns from Russia, are there concerns from some source we haven't planned on? On the trajectory, you talked about a California launch site and an Alaska launch site. Obviously, those two positions are limiting as to where they can intercept. Are there concerns or threats from other countries such that these two launch sites couldn't in effect be launched effectively?

You've brought us the mechanics of it, I guess, and why it won't work. I had written down, "Give us your opinion", and I guess in your last sentence you gave us your opinion. Is it all based on mechanics, or is it based on other reasons? I'm assuming that your comments tell us that we can't physically control this system, or it's not physically going to work, but is there another perspective you'd bring to it?

Sorry, that's a lot of questions.

• (1600)

**The Chair:** Yes, it's many questions.

Mr. Garwin, please start with the one you want to answer.

**Mr. Richard L. Garwin:** My position is a technical one. If we could deploy a system that would handle the nuclear threat I would be in favour of doing it. But I don't need to go that far and ask how much it will cost and whether it is worth it, because it won't work.

Against Russia and China, the intelligence community judged in 1999 that these folks could easily deploy countermeasures to the system. In fact the intelligence community has judged that with the emerging ICBM capabilities also, there could be countermeasures. Russia could overwhelm the system with its thousands of re-entry vehicles and nuclear warheads.

China has only 20 strategic ballistic missiles armed with nuclear warheads. China fears that the system with 100 interceptors eventually could somehow destroy the Chinese force. Chinese generals and Chinese industry are not happy with the technical arguments that they could defeat the system with countermeasures—that is, with decoys. They make self-serving arguments that the Americans are pretty smart; why would the Americans be deploying this system if it wouldn't work? So money will flow to the Chinese to increase the threat, in addition to deploying the decoys. Not only will it not work technically because of decoys; it will call forth from the Chinese a bigger threat.

I wouldn't be against it for that purpose; I'm against it because it will not work. As for the weather, you can sympathize with the people who were planning this test. They don't want to spend several hundred million dollars for a test and find that in the upper atmosphere there were hailstones that destroyed the interceptor or the mock re-entry vehicle. That isn't what they were testing. They can test that any day more cheaply. They wanted to test the

performance of the system. So I don't blame that factor for the cancellation of that particular test.

Let me just go through the sketch. Here are the players. In the upper left is the early warning satellite that sees the entire earth surface every 10 seconds and sees a missile launched anywhere on earth within 30 seconds or so after its launch. The missile takes 2,000 seconds—it takes 30 minutes or so—to strike its target. The one thing that's true is that the interceptors launched from the Alaskan site and the California site have a long time to fly to reach their target. They could almost defend the entire United States against missiles launched from any place in the world except Mexico—including Iran, China, and Russia. But they would be ineffective, because they would not be able to identify the target.

The interceptors are shown in flight. Another player, then, is the kill vehicle. There are some shown in the sketch, one kill vehicle per interceptor. Because the missile is going 7 kilometres per second—the speed of sound is only 0.3 kilometres per second, and the missile is going 7 kilometres per second—and the interceptor has some kilometres per second as well, the collision of the mass of the interceptor, with its optics and tanks, with this re-entry vehicle is much more damaging than the same amount of high explosives would be. Tens of kilograms of interceptors, multiplied by a factor of 10 for effectiveness, would really do a good job of destroying the re-entry vehicle—if it could detect the re-entry vehicle and guide itself to it.

Now consider the re-entry vehicles. The sketch shows the ICBM launched, in this case from North Korea. A three-stage missile, it drops its lower stage where the sketch shows "booster jettisoned" and it deploys a cloud, multiple objects of decoys that look like the warhead—anti-simulation decoys, if these people have any sense, and we assume, if they're making missiles and nuclear warheads, that they have something going for them.

• (1605)

The early radar that will be used—the existing radar Cobra Dane, which is inadequate for this purpose—and the replacement floating radar, a shorter-wavelength radar that will be built in Texas and towed to the deployment site off Alaska, both shine radar waves against the threat cloud and determine some detailed characteristics of these objects. The plan is to look at the warhead as it exists and look at the decoys.

But as I say, these will be anti-simulation decoys; they will look just like the balloon around the warhead. Even if the radar could distinguish the warhead from the decoys, it can distinguish it really only in range, not in angle. When the interceptor, the kill vehicle, gets close—it has a telescope, not a radar—it looks at the threat cloud. It sees things now in the visible light and in infrared. It has to do the job first of finding the object the radar said was the warhead, and then homing itself, diverting to it.

It's a marvel of technology. We've done a number of such intercepts, probably four or five successful ones out of—depending how you count—eight or eleven trials, but not when anybody was trying to keep us from intercepting, either by changing the signature or appearance of the warhead or having decoys that looked just like the warhead.

More than one interceptor would be launched against each of the warheads. Because of reliability issues, it has been planned to use two or four.

The intercept in space will not work because it is so easy to have anti-simulation decoys in space. The Safeguard system that was actually deployed used nuclear warheads. It was a terminal defence system. It relied primarily on the dense atmosphere to keep light decoys from coming in and looking like re-entry vehicles. It used a nuclear warhead because we did not have the homing technology at that time.

I think I've answered those questions, and probably somebody else has some. I hope I've answered some other questions too.

**Mr. Ted Menzies:** I'm sorry if I monopolized all the questions.

**The Chair:** I didn't cut it off because it was so interesting.

Now we'll go to Madame Lalonde.

[Translation]

**Ms. Francine Lalonde (La Pointe-de-l'Île, BQ):** Thank you very much, Mr. Garwin. What you say is both interesting and frightening. You said for instance: One reason that those deploying defences no longer talk about the threat of biological weapons on ICBMs is not that the threat has gone away. Far from it.

As a matter of fact, you do not explain why no one is talking about it, though you say that biological weapons can be much more destructive than nuclear weapons. I would like you to explain this to us.

My second question is about our fear to see the United States continue its research or, worse, proceed to the construction and deployment of its antimissile shield. This would trigger a new arms race that could lead to weaponization of space. Don't you think so?

[English]

**Mr. Richard L. Garwin:** The missile defence people don't talk about biological weapons any longer, because they accept that it will be impossible to do anything about that. They say, however, that they plan to deploy a layered system. One of the layers would be an intercept-in-boost phase, while the ICBM rocket is still firing. So if it takes a certain burning time, say 250 seconds, to get to a speed that will cause the rocket to fall on its target and you manage to intercept and destroy the booster at 220 seconds, it will not fall on its target. Of course, it may fall in Canada, but it will not fall on its target. Therefore, they do say that they're working on a boost-phase intercept, and when they perfect that, that will help to solve the problem.

I am a big supporter of boost-phase intercept. I proposed to the missile defence agency in 1999 that they abandon the mid-course and work on the boost phase, because the mid-course adds nothing and what it does do is deceive the taxpayer and our Congress into believing it has some effectiveness, because people cannot believe

the United States would spend all this money on a system that didn't work, and therefore it prevents us from deploying something that will work or from emphasizing deterrence, which also works against any state. Deterrence does not work against terrorists, but it works against states.

So the reason that nobody emphasizes the biological agents carried by ICBMs is because they don't have any solution to the problem. I emphasize it, and other people, and I quote in some of my publications that the missile defence agency does accept that this is an insuperable threat with the present system.

The mid-course system does not propose to deploy weapons in space; it proposes to deploy low earth-orbit observing platforms to do a better job of discriminating the warhead from the decoys in the threat cloud. Those would not be weapons, but other proponents say this will work much better if we do have space weapons. In my *Scientific American* article and in another graphic, there is a discussion of space weapons, powerful lasers that could be used to pop these balloons so that they would no longer resemble the ICBM warheads.

My own view in my other article, not referenced in this paper but in the *International Security* article on my web page, is that if we deploy weapons in space, then just as in peacetime, we would shoot down the weapons of another country deployed in space. That will happen with our own space weapons, so we will have some kind of armed conflict by putting weapons into space.

If they did not shoot them down in peacetime, they would deploy space mines, small satellites, very close to each of our space-based lasers, tremendously costly satellites on our part, and they could destroy them at a moment's notice. If we tried to destroy those space mines, they would destroy themselves by suicide and their target satellite as well. In my opinion, we don't need an additional theatre of conflict.

• (1610)

**The Chair:** Thank you.

Now we'll go to Mr. McTeague.

**Hon. Dan McTeague (Pickering—Scarborough East, Lib.):** Thank you, Mr. Garwin, for being here today. I've been both fascinated and trying to digest what you had written here in the *Scientific American*. I was interested to point out a number of things here, but you comment in your third paragraph, "A strong defense against ballistic missiles is a worthy goal." So you support the idea of ballistic missile defence in theory, but in practice, not this system. Is that correct?

**Mr. Richard L. Garwin:** Exactly.

**Hon. Dan McTeague:** And you pointed out that it would be easier to strike using a series of satellites, DSPs, to potentially strike a missile before it deploys its decoy in the first 200 or 250 seconds at the booster phase. Is that correct?

•(1615)

**Mr. Richard L. Garwin:** For the specific case of North Korea, which is a small country surrounded by water.

**Hon. Dan McTeague:** Correct. In the case of Iran, because it's a much larger country, would you need a much faster system?

**Mr. Richard L. Garwin:** Yes, that's exactly so, and you would need multiple bases for the interceptors. And it's not all water. The Caspian Sea is there, but the Caspian Sea is not international waters. It's divided into territorial waters.

**Hon. Dan McTeague:** One would have to devise a better system or a faster range. I think you point out something from the sixties here, that you suspect it was in the 1960s the U.S. tested a small missile that briefly accelerated an average of 250 Gs.

**Mr. Richard L. Garwin:** Yes, we could deploy interceptors. It would not be a great difficulty technically to deploy interceptors north of Iran. We have military agreements now with Tajikistan for the northern end, or Turkey, and from the south from the Persian Gulf. We could handle Iran if we focused on that.

**Hon. Dan McTeague:** Mr. Garwin, obviously your version of events did not persuade the Pentagon to move in that direction. I guess one would have to make a decision here, and the country will eventually make a decision, about participating or not. Your view on this is that we should participate, but the system that is involved is not the right one.

Would it be helpful if Canada were at the table to be able to determine, among other things, perhaps your version of what you call, again, a worthy missile defence goal?

**Mr. Richard L. Garwin:** It would be good if there were adults other than someone from the United States who would do the analyses, but it's very difficult to sit down with such powerful partners. I've been working on these things and other matters, not just missile defence, for 50 years. It often takes 20 or 30 years for systems that were proposed and evaluated to win out over their competitors.

Bill Perry, long before he was Secretary of Defense, was director of defence for research and engineering in the Carter administration. He laid the foundation with me and others for the systems that were demonstrated in the 2003 Iraq war—the global positioning system, the bombing by navigation, the entire linking of the battlefield so that one could be far more effective in destruction with far less collateral damage.

This doesn't solve the problems of Iraq, which are different from those. But it surely revolutionizes the destruction of identified targets. The same is true: it will take a long while for people to recognize and accept that the systems they're building are ineffective, because nobody wants to admit a mistake.

**Hon. Dan McTeague:** Mr. Garwin, would it be helpful if, in the course of continental defence, Canada were to take a position that would humbly suggest and take your line that perhaps another system might be better? If we're not at the table, do you think we'll have much influence?

**Mr. Richard L. Garwin:** I don't know. I think what would be useful is to convene the people who are deploying the defences together with outside people—some of whom might support, some

of whom might judge them to be ineffective—and have an open discussion. This is all too rare.

Even on the President's Science Advisory Committee, with the convening power of the President of the United States, it happened only once. I was chairing a military aircraft panel. We had judged that the heavy logistic supply ship aircraft, which became the C-5 aircraft, for the stated purpose was inferior to fast deployment logistic ships, which would travel at 25 knots and have several divisions worth of equipment predeployed in them. We arranged for the secretary of the air force, Harold Brown, and the comptroller of the Defense Department to meet with the President's Science Advisory Committee on the one hand, and my military aircraft panel, myself, on the other. But this kind of confrontation is extremely rare. As I've written, Charlie Hitch, the comptroller of the Defense Department, eventually stamped out of the room, saying "I still say airplanes are better", but that was not a debate-winning statement.

•(1620)

**Hon. Dan McTeague:** Thank you for that.

**The Chair:** Thank you.

We'll go to Ms. McDonough, please.

**Ms. Alexa McDonough (Halifax, NDP):** Thank you very much, Mr. Chairman.

Thank you, Dr. Garwin, for being with us today. I have to say, I've read through your presentation twice and then listened carefully the third time, but in some ways your diagram is the thing that was most helpful in terms of being able to really visualize what we're talking about.

I understand you to be focusing very much on the science. I think you're signalling to us that it's not your purpose to become engaged in the politics around it. I understand that. We're politicians, parliamentarians, trying to assess this situation. Hearing you speak again—and I had read some of your previous work—about the fact that at this stage what is proposed is simply not workable leaves some of us thinking about this as a case of "the emperor has no clothes". It seems as though it lays claim to being able to do something that it can't.

We're struggling to understand why this would be going ahead, as it is at this point, particularly with such inadequate control testing. I understand that the normal sort of testing procedure that would have accompanied this phase before moving on with the next phase in Alaska and California hasn't been the rigorous testing program that would normally have been brought to bear. I wonder if I could ask you to comment on that.

Secondly, we've had testimony from several other people whose view was much like your own, I think, that one has to be realistic about possible threats, possible risks, and one should be figuring out what to do about it. But they put forward the notion that there are other probably more cost-effective, more responsible, and, at the end of the day, more promising alternatives to missile defence that we should be rigorously pursuing.



One of the concerns expressed again and again was that if this project goes ahead full force, it could do irreparable damage to the international architecture or infrastructure for non-proliferation and the work that has gone on up to this point. I wonder if I could ask you to comment on that, as well.

**The Chair:** Mr. Garwin.

**Mr. Richard L. Garwin:** I would say that the political judgment is analogous to that required to identify which medicines or approaches would be used against a disease. You may have quacks who propose systems that are inadequately tested and have no science behind them, yet sometimes they have great political support, either for religious reasons or because legislators are friends with some of the people who argue in this way.

We've had such instances in the United States in cancer cures, in.... The head of the National Bureau of Standards in the 1960s was dismissed because his organization issued a report showing that a battery additive was ineffective, and the person who was marketing the additive got to the Secretary of Commerce, Lewis Strauss, who fired the head of the Bureau of Standards. This kind of thing happens all the time.

Politicians have to be able to form judgments about effectiveness; and if the science isn't there, then the political task is easy—you just do not do that.

It's hard, politically, to do nothing, particularly when there's a threat to health or security. All too often people will argue, as Secretary Rumsfeld has in many television appearances.... He and I appeared together on July 15, 1998, on the MacNeil-Lehrer program. We presented our report on the ballistic missile threat to the United States. We were in agreement on the missile threat, that any nation sooner could pose a short-range missile threat from ships.

And then of course the interviewer was not content with asking about the threat but asked about defences, which we hadn't studied. Both of us agreed that we hadn't studied it, and I said that I knew a lot about missile defence and that any defence system, such as the one considered by the Clinton administration, would be ineffective because of decoys.

Secretary-to-be Rumsfeld said that he hadn't studied defences, that he would have to get his mind around it, and that he tended to favour a missile defence. In response to the argument that the real threat was from ships off our shores, he said we would have to deploy defences against that too. Well, you shouldn't spend an enormous amount of money to combat a rare disease when there are easier cures to help public health.

Testing would have given opponents more arguments. There's no doubt that this system could work in principle, in the sense that if the enemy wanted to be destroyed and did nothing to hide the re-entry vehicles, then we could, with sufficient development, build a system that could destroy them. Testing would not show that. Nobody was testing realistic decoys.

I think you're exactly right. There are more cost-effective options, such as deterrence and non-proliferation; such as security guarantees that would keep people from acquiring ballistic missiles and such dangerous elements; such as international agreements with teeth that would use international force against people who acquired biological

weapons. These are all shortchanged, and intentionally so, with the argument that we absolutely need a defence because these things may not work or do not work; that is, non-proliferation doesn't always work—and you can point to many cases where people have proliferated—but these are a better bet than the system we are spending money on.

As I often point out—with somewhat dated numbers—the Defense Department has a \$300 billion annual budget in the United States. The arms control agency, for which I chaired the advisory committee for seven years, was a \$30 million annual budget; that's one dollar in 10,000 for the dollars spent on defence. Surely that is not the right ratio between trying to get people not to be our enemy, trying to get other nations to support the international efforts to limit and to walk back and sometimes to intervene by force. That's not the right ratio, and the bureaucratic power is similarly minimal.

• (1625)

**The Chair:** Now we'll go to Mr. Boudria.

**Hon. Don Boudria (Glengarry—Prescott—Russell, Lib.):** I'm fascinated by this ratio of one to 10,000.

Doctor, I have just one observation and a couple of questions, if I may. One observation is that in Canada it's generally easy to be against the system on political grounds. There's no doubt—at the risk of shocking you, which I don't think I will do—your president is a little less popular in our country than in yours, and in yours the difference between the majority and the minority in the election was not all that great to begin with, percentage-wise. This means that if this is portrayed as the president's defence system—or put more graphically, Bush's Star Wars or some such thing—it automatically makes it less popular than otherwise. There's some of that rhetoric going around, and that taints the debate, which I think is unfortunate, but it does.

What I'm more interested in, fundamentally, is that not doing anything is in itself a decision in this and may have an impact. I asked a question last week of another witness, and it was along those lines: did the witness think our non-participation, our not being at the table in any way, would have an impact on NORAD? If it does, then that non-decision has a price in itself. If we weaken NORAD by having some elements of NORAD removed and put under this umbrella, then NORAD has a lesser role. If you remove enough of them, NORAD becomes ineffective, or if it still exists, it doesn't make any difference. That's what worries me.

In other words—I go back to one point my colleague Mr. McTeague raised a little earlier—at least if we're at the table, we can argue that either this is a great idea with the wrong system, or this is a not-so-good idea with the wrong system—or any other variation thereof. But if you're not at the table at all, how can you pitch your case? That's one point.

Second, there's the issue of NORAD. Can you comment on any of that, Doctor, if you don't mind?

• (1630)

**The Chair:** Mr. Garwin.

**Mr. Richard L. Garwin:** Well, if you're at the table and you do argue—that is, you do get independent judgments and you present your views—I think that will be helpful. If you're at the table and your participation is advanced by the United States as support by Canada for the system without reflection of your questioning or critical attitude, that will not be a plus.

**Hon. Don Boudria:** In other words, don't be a cheerleader.

**Mr. Richard L. Garwin:** Don't be a patsy.

**Some hon. members:** Oh, oh!

**Mr. Richard L. Garwin:** That's how it was with Star Wars. The Strategic Defense Initiative Office, the SDIO, intentionally spread research funds around the world and then characterized that as political support.

Now, I'm not against defence, as you may have seen—or against offence. I've had a lot of involvement over the years and even at present, and I'm proud of many of the achievements and even the military operations the United States has conducted.

Even the Bush administration—and this will not earn me friends in Canada—has, I think, the right policy for land mines, and it is for anti-personnel land mines to be self-destructing and self-deactivating and for bringing the anti-vehicular land mines under that same requirement. I should say I'm trying to push them in the direction that all bomblets—that is, explosives that are not intended to be land mines—should also be self-destructing, so they would have electronic fuses and we would no longer have this unexploded ordnance problem with the little unexploded bomblets lying around.

I don't expect anybody in Canada to cheer me on for that position, especially with the Ottawa treaty, of which Canada is quite proud, but I believe that is the right approach and I support the Bush administration for taking it.

But I don't believe they're doing a good job in many other aspects, namely the use of science and technology in defence, in health, or in the conduct of the government. I have a general criticism, and my name is on a letter of February of this year criticizing the Bush administration for doing a very poor job of staffing committees, of listening to scientists, and of making choices in fields ranging from global warming to public health.

**Hon. Don Boudria:** Could you comment on NORAD, Professor, if you don't mind?

**The Chair:** Go ahead.

**Mr. Richard L. Garwin:** Well, I answered you. I don't want to be specific. If you are willing to maintain participation in NORAD, to say what you think, and to have formal briefings with outside people, just as you're having here—but this would have to be the military as the government representative, not Parliament, who would do that—yes, that would be useful.

**The Chair:** Thank you.

Now we'll go to Mr. Goldring, please.

**Mr. Peter Goldring (Edmonton East, CPC):** Thank you very much. Thank you, Doctor.

This drawing is very interesting and I think it brings it into perspective. I'd like to explore an avenue I've been looking at in the

past, and I think this drawing actually bears that out, that we're looking at three different factors here. We're looking at launch detection, missile tracking, and a warhead.

Now, even within that warhead intercept we still have intelligence or radar data that comes from the missile tracking. Then of course we have the command centre in Cheyenne. It's my belief, for example, that if we look at the launch detection itself, we'll probably find there are multiple satellites. We would need a number of these satellites, whether stationary or moving, and those multiple satellites are all one system of their own that would feed into this Cheyenne centre as part of an integrated intelligence system. The satellites themselves may also do much more than just this detection of the trail of the rocket itself. They may also have cameras, sensors, radio detection, communication, and other intelligence means the command centre might need for other reasons of security and international information. That's one system.

The next one is the missile tracking, which is your radar base out here, and whether it's sea-based or land-based, once again I'm sure it would take a multiple of those locations and constant upgrading of them as new technology comes along. But once again, that's a separate system that would tie into the command centre to send the intelligence. It's not just for missile interception; it will have many other uses, for other forms of incoming threats that might be approaching. I'm sure they would use the capability of it for more than just tracking missiles.

Then of course we have the kill vehicle. Well, I think everybody agrees that is really problematic and may be in question at this point in time on a theoretical basis. There are a lot of reasons Canada should not or maybe should be involved in that aspect.

But my question is, is this entire page here not able to be separated into two aspects, something that could be supported from the international perspective of Canada with regard to launch detection, surveillance, radar, and undersea monitoring—in other words, the detection portion of it—and this kill portion, the kill vehicle, which really seems to be highly in question now? Is that not a kind of separate system that can be looked at separately and decided on separately?

• (1635)

**Mr. Richard L. Garwin:** If I understand your question, it's whether these elements have some value other than the questionable value of a missile defence.

**Mr. Peter Goldring:** And do they have enough value for Canada to participate?

This kill vehicle portion could be separated out, because, really, it just takes the intelligence from all of these other systems and utilizes it. Whether it's going to be effective or not is really up to the technology of the future. To your mind it's unworkable, but those two systems, the detection and the missile tracking, are two systems that do work. They can detect threats, can be improved upon, and can provide good surveillance and security monitoring for all of North America.

**Mr. Richard L. Garwin:** Well, the United States has been spending about \$10 billion a year on missile defence, and that money could have been better spent on providing intelligence and other knowledge on threats. So it comes at a cost.

We've done a very poor job of upgrading this infrared warning satellite system, the defence support program satellites. They were initially deployed in the 1970s in order to look at strategic ballistic missile launch, but in fact they see shorter-range ballistic missiles. They see every Scud that has been launched and they're very valuable for that. They provide warning; they help defend against the Scuds and help people take defensive measures.

**Mr. Peter Goldring:** Is not the real question whether there's a will be to involved in a kill vehicle that you say—and many agree with you—does not work? But it would seem to me to be prudent for the United States and Canada to be jointly involved with these other elements—number one and number two—and a central command centre.

**Mr. Richard L. Garwin:** These X-band radars are very specialized, and the things other than supporting mid-course intercept that they do, one can do for much less. You have radars in the United States or at the test sites that can have a similar function.

So it's really a question of cost. The early warning systems, the satellites, yes. The low-earth multiple satellite systems, no. We've not managed to make the decision to deploy them. We haven't managed to develop them. They really don't have a role in this system.

Could they be used for other things? Yes, but you should find out what they can be used for before you make the decision to develop them for that purpose, because if you specialize them, you reduce their capabilities.

• (1640)

**Mr. Peter Goldring:** So is it not feasible to separate it into the two, make that decision on whether there is value for a country like Canada to be involved in the detection portion, and leave that missile aspect—which is probably 20% of the whole project—separate, work on the 80% where you can participate?

**Mr. Richard L. Garwin:** That would make sense, except that Canada's participation on those grounds would be taken as support for the overall system, as evidence that one regards it as effective in the missile defence role. And that would be very unfortunate.

**Mr. Peter Goldring:** But I think it was said before that we have a chance to mould this contract coming through to Canada, to mould the agreement. Can that not be moulded into two spheres?

**Mr. Richard L. Garwin:** Well, you would have to try very hard. I would hope that you would be successful.

I've worked a lot of my life in these space-based sensors, radars, and communications systems, and there is much good that can come out of them. I think President Johnson, to go back a ways, said when discussing Edwin Land, the inventor of Polaroid film, the head of the Polaroid company, and a very important participant in the photographic reconnaissance satellites, that all of the money we'd spent on NASA, the civilian space program, and the military space program was justified by just a few pictures. I believe that. But we spend a lot more money when we try to integrate that into an operational system.

So the question is how best to deploy systems that will support not only the military, but also the environmental role. In the recent

decade or 15 years, the environmental role of these military sensors has also been recognized.

**Mr. Peter Goldring:** That's right. Thank you.

**The Chair:** We'll go to Madam Lalonde.

[Translation]

**Ms. Francine Lalonde:** Thank you. This meeting is fascinating.

I want to get back to the issue on which my colleagues opposite stopped—I can well understand their motives—which is the advantage of having a seat at that table. At the National Defence committee, I heard experts say that Canada would not be seated at the policy and decision-making table but at the systems implementation table. We would only participate in organizing detection.

You are a scientist and you have access to the scientific decision-making process. As a matter of fact, you are encouraging us to influence issues over which I don't think Canada can have any influence.

[English]

**Mr. Richard L. Garwin:** I fear that this is the case.

To a similar and much greater extent, our Congress does not have much participation in the decisions. They can say yes, or no, and they have, of course, much more power and many more committees that are involved in the technical aspect. We have our defence committees, we have our intelligence committees, and so much more of an opportunity under normal circumstances for people to learn the facts in these cases.

The present Congress, with the majority in the House and in the Senate supporting the administration, has managed not to convene hearings in which criticism could be presented.

One might argue that the Democrats did the same thing, that the Republicans had difficulty getting their points of view expressed by witnesses, but it is really much more the case with the Republican-dominated House and Senate.

So it's very difficult for our Congress to have a proper role, in my opinion. Furthermore, our Congress has not been working very efficiently. In the House, the Democrats have been entirely cut out of the process. So a bill is finally put on their desk and they're asked to vote for it the next day without the ability to read it. That is not conducive toward having proper technical decisions either.

So yes, I would say to be at the table, one has to ask which table that is. To be the vice-director of NORAD is an operational job. It is not a decision-making, deployment-deciding job. So I don't know whether there is any other table that's involved.

• (1645)

[Translation]

**Ms. Francine Lalonde:** Thank you.

[English]

**The Chair:** Ms. McDonough.

**Ms. Alexa McDonough:** Thank you very much.

You made mention of the disproportionate allocation of funds for basically the military budget versus what I suppose I would call the prevention budget—the budget to concentrate on non-proliferation, on arms control and so on.

One of the suggestions that has been made to this committee is the idea that under article 9 of the Outer Space Treaty, to which Canada is a signatory, we should avail ourselves of that provision and request a formal consultation with the U.S. around this whole question. I noted that you suggested that if we're going to be at the table we shouldn't be patsies. I think some people would suggest that it's uppity of us to even consider the possibility of availing ourselves of that provision in the Outer Space Treaty, but I wonder if you might comment on whether you think that is one way in which we might try to get some kind of enlightened, open discussion about what's involved here.

**Mr. Richard L. Garwin:** I don't recall the text of article 9. Could you prompt me?

**Ms. Alexa McDonough:** I don't have the exact wording in my head, and I don't have it in front of me, but it simply provides that signatories to the treaty, if they have reason to be concerned that an initiative by another signatory to the treaty could in some way offend or compromise the provisions of that treaty, can request such a consultation.

**Mr. Richard L. Garwin:** It probably wouldn't do much good, and that's because there's nothing in the treaty that says you shouldn't look at, shouldn't analyze, shouldn't do research and development. It is very much a treaty that is oriented toward deployments.

Of course, the Outer Space Treaty limits only weapons of mass destruction, nuclear weapons and other weapons of mass destruction, and almost nobody would be so foolish as to propose putting a nuclear weapon in space.

The Outer Space Treaty also bans military deployments, military bases, arms of any kind on the planets and other places in outer space.

I've heard, and you see even in the newspapers, suggestions from the administration that we ought to have a military base on the moon, on Mars, to prevent other people from having military bases there.

I think there is a role for the international community to make a record here to point out that no military bases means that all the nations have an interest in making sure that there are no military bases and that they would be willing to use armed force to make sure that there are no military bases, not that one nation should have a military base in order to prevent others from doing that.

But the Outer Space Treaty, because it is focused on nuclear and other weapons of mass destruction, I don't think gives an entry into doing something here.

**Ms. Alexa McDonough:** It has been suggested by some witnesses that the interceptors being developed by the U.S. could in fact be viewed by some nations as an anti-satellite system. I'm wondering if you agree with that and what you see as the implications.

• (1650)

**Mr. Richard L. Garwin:** Unfortunately, it does not take one of these high-performance interceptors, capable of going thousands of

kilometres, to threaten a satellite. Our international security paper, available on my website, discusses this in detail. Even Scud missiles, or extended-range Scuds, will threaten the most valuable low-orbit satellites. So it does not add to the U.S. capability. We have plenty of launch capability for anti-satellite weapons.

My own preference is that the United States should not conduct anti-satellite tests, should support a treaty banning anti-satellite activities, and also a treaty banning weapons in space. But I have to say that I'm not against these interceptors, because they would provide the United States an ASAT role, while we'd try to discourage other people from having one. It's not like the Non-Proliferation Treaty, where we have, and the other nuclear weapon states have, a discriminatory position compared with the non-nuclear-weapon states.

**The Chair:** Thank you.

Now we'll go to Mr. Boudria.

**Hon. Don Boudria:** Mr. Chairman, I want to go back to something I touched on.

Do you want to go first? Do it now, and I'll get the next round. Go ahead.

**The Chair:** You share your time.

Go ahead.

**Hon. Dan McTeague:** Thank you.

Dr. Garwin, thank you, again.

You've suggested here quite a few interesting commentaries, and I have some interest here in trying to determine something. You would suggest that it is far more likely that the United States would be hit from proximity. And on this point you quoted Don Rumsfeld talking about ships coming a little closer to the United States and attacking from a platform off the sea. I'm wondering what, in your mind, would have concluded or compelled the North Koreans to launch their missile in 1998? Second, what do you believe is compelling them to continue with the testing of the Taepodong-2 missile that they have?

At the same time, could you also, perhaps, give us some commentary as to how you see Canada's geography north of the United States as playing an important geopolitical role in terms of this debate, if any?

**Mr. Richard L. Garwin:** North Korea developed extended-range Scuds. Scud was just an acronym. These are 300-kilometre-range missiles with about a one-tonne payload. So it developed extended-range versions of these things and sold them for foreign exchange. It's almost the only thing that the North Koreans can do, except maybe drugs and counterfeiting, to earn foreign exchange. They have told the United States—of course, they have told us many things—that if we would provide them the money that they earn from selling missiles, they would stop selling missiles.

They launched the Taepodong-1 in 1998. That was a surprise. I was watching it from the Pentagon at the time. It was initially thought by the United States to be a two-stage missile. Only some days after it had been launched did we accept that it was a three-stage missile, and the third stage was intended to put a tiny satellite into orbit. But they haven't launched it since.

Beyond the Scud and the extended-range Scud, there's the Nodong missile. North Koreans have tested the Nodong several times, and they have sold it to others, who have tested it. The Pakistani Ghauri missile is a Nodong missile.

The missile that could pose a threat to the United States is the Taepodong-2, and it is not the Taepodong-2 that we believe was under development; it would have to be a Taepodong-2 built with aluminum, rather than steel, components. The Taepodong-2 has never been tested, never been test-flown. Even in 1998, the CIA had been expecting the test of the Taepodong-2 for years, and it has still not been tested.

So I would say the reason that the North Koreans have tested missiles is in order to be able to sell them and to support their missile community. That's why they support the missile community, because they make money. The North Koreans have also had a place at the international table because they potentially pose a threat to others by means of their missiles.

The same thing might be said for their nuclear weapon development, although that's less clear. The Rumsfeld report in 1998 unanimously stated that it was our judgment that the North Koreans had enough material for and had assembled two nuclear weapons. At that time, there was enough plutonium for another four, five, or six, but it had not been reprocessed, and now the North Koreans claim that it has all been reprocessed.

I don't believe those nuclear weapons are a big threat to the United States. Our problem is that North Korea has an ally of the United States, South Korea, as a close neighbour. South Korea does feel that North Korea can be a threat to them, so they do not like the United States indicating that it might take military action against North Korea.

So the short answer is that North Korea does this for money and for prestige.

Canada's position is not in the path of ICBMs. Where it is, it's the mid-course and it does not do a lot of good. It's not like the bombers that used to come over the pole and traverse thousands of kilometres of Canadian territory. We relied on Canada for early warning and for the ability to provide strategic space for repeated intercepts. We had acoustic detectors; we had the Pinetree Line; we had standard radars. I was much involved in all of that.

I don't think Canada has a major role as a northern neighbour, but it does have a political role as helping to defend the entire North American continent, not only from ICBMs but from bombers, from close-in weapons. And of course Canada does have some significant cities—Vancouver, and so on—on the coast.

• (1655)

**The Chair:** Thank you, Mr. Garwin.

Mr. Boudria, your last question, please.

**Hon. Don Boudria:** Thank you very much.

I just want to ask you the following question in light of what you answered earlier, Doctor.

Is there a way, in your opinion as an American, in which Canada can support its participation, and at the same time, while indicating that it does so, be at the table to influence the process, to improve on it, or will any role by Canada be spun out of control by whoever at the Pentagon and elsewhere to indicate that its unequivocal support in 100% of all of this is so great that there couldn't possibly be anything wrong with it? Is there a way of doing one without it automatically being equated with the other? Is it doable?

**Mr. Richard L. Garwin:** One should never say never, but it's beyond my political skills to see how it would happen. That's a very good question, and one might ask the United States, under what circumstances can Canada participate? Could you offer participation such that Canada of course wants to support the joint security enterprise and to participate, but you would like to have some real influence?

I haven't really focused on that, and I don't think I'm the right person to tell you about it, but there is a very big danger, as you say in your subsidiary clause, that participation will be taken of its own to be support without reservation.

**Hon. Don Boudria:** Thank you.

**The Chair:** Thank you, Mr. Garwin. Before closing, I have one very short question for you.

You suggested that while the current system will not work, the plan is to supplement it with other systems in the future that will be effective. In your opinion, how long will it take to develop a system that will work?

**Mr. Richard L. Garwin:** My 1999 paper, also available on the web, is called "Cooperative Ballistic Missile Defense", and I called it that because I thought if we presented it to the Russians as a limited system involving some Russian hardware, south of Vladivostok, together with a sea-based fast interceptor ship that we would have near North Korea, then the Russians could cooperate in that limited system. They could accept this as an exception or an interpretation under the ABM Treaty of 1972. All in all, I thought this made technical sense, and if one focused on it, instead of the mid-course system, it could be done in about five years.

I say that because I know about our nuclear weapon development in World War II. I know about the development of many satellite systems and other military systems in which there was a separate group that focused on these things and really did them.

The deployment of the Polaris missile must have taken about two years only, involving cutting open nuclear submarines, putting in a missile compartment, developing the missile in parallel, and having this capability.

So if they had accepted that the system they were deploying had no effectiveness and they wanted a high-priority system that would really have some effectiveness, they could have done it. One could still do it in about four years.

We haven't made much progress on it, but the main requirement is to give up the systems that will not work because they are too easily countermeasured. A layered system isn't going to do the job if you have layers on which large amounts of money are spent and do not contribute to the effectiveness.

● (1700)

**The Chair:** Professor Garwin, thank you very much for taking the time from your very busy schedule to come and meet with us here in Ottawa. I wish you all the best and a safe trip back tomorrow, and also a merry Christmas to you and your family. Once again, thanks very much.

We'll recess for about four or five minutes and come back for committee business.

Thank you.

**Mr. Richard L. Garwin:** Thank you for your participation. It was very good.

**The Chair:** It was great. Thank you.

● \_\_\_\_\_ (Pause) \_\_\_\_\_

●

● (1705)

[Translation]

**The Chair:** We will now move to the business of the committee.

[English]

We have a budget request from the Subcommittee on Human Rights and International Development, an amount requested of \$10,100 for witnesses' expenses and miscellaneous costs. Would anyone like to move it?

It is moved by Mr. Goldring and seconded by Madame Lalonde.

(Motion agreed to) [See *Minutes of Proceedings*]

**The Chair:** Now, for the second one....

[Translation]

We have here three reports from the Subcommittee on Human rights and International Development.

[English]

I received these three reports. I must say there was no request from the subcommittee that the main committee adopt this report; usually it's a technicality if they want us to adopt a report. We already adopted one concerning Burma. But usually they request that we adopt it, and if they want us to report it to the House, they should say that. Usually it's up to the clerk to tell the chair of the subcommittee to do that.

Mr. Goldring.

**Mr. Peter Goldring:** Thank you very much.

I wasn't part of the discussions on these particular reports, and if I were to make a recommendation at all, I would make a recommendation to hold the reports until we have somebody present here who has been part of the reports.

● (1710)

**The Chair:** I fully agree. When Mr. Cotler was the previous chair of that committee, most of the time when we had such a motion or report adopted by the subcommittee, he would come to present his report to the main committee. I think we should have someone from the subcommittee come to present this.

Madame Lalonde.

[Translation]

**Ms. Francine Lalonde:** We sometimes had witnesses appear before the committee in such cases. Indeed, the committee can report to the House. We know that reports are more important now. Mr. Chairman, we have passed a motion on Burma. Thus a report will be presented to the House on this matter.

**The Chair:** We were not asked to report to the House. We can present this report along with the three other reports of the subcommittee when the House resumes in February.

**Ms. Francine Lalonde:** Okay.

**The Chair:** Is this agreed?

Mr. Boudria.

**Hon. Don Boudria:** I was present at the subcommittee meeting. As you know, I am a member of neither committees. I am often a substitute member because it's something I like to do. I can very distinctly remember that the subcommittee members were eager to report in order to inform the House of our findings relating to Burma and particularly to Canadian investments.

Someone may have made a technical error but I distinctly remember—though I can't always trust my memory—that the subcommittee intended to report to the House.

**The Chair:** Ms. McDonough, then Mr. Goldring.

Ms. McDonough, we're still on the same subject. Is that okay?

[English]

**Ms. Alexa McDonough:** I'm just concerned at the possibility that we would let these sit now until February, literally, when obviously a considerable investment of time was put into these by the committee, the staff, and various witnesses and resource people. I wonder if we couldn't agree now to ask the clerk or the chair to seek clarification from the chair of the subcommittee, and if it is their desire for us to forward the reports—and I can't imagine it isn't, as Don has suggested—that we consider dealing with that on Wednesday afternoon when we meet.

It seems to show a terrible lack of urgency on our part. I know that's nobody's intention, but each of these situations is very urgent, and for us to say let's leave them and maybe we'll look at them, or maybe we won't, in mid-February, when we could actually forward them right away, seems unfortunate.

Can I just seek clarification on one other thing?

**The Chair:** Yes.

**Ms. Alexa McDonough:** We did actually pass a motion on Burma, which we amended by consensus. Am I to understand that has in fact been tabled in the House?

**The Chair:** No. I'll clarify this and then I'll go to Mr. Goldring.

We adopted the motion and it was amended. If the chair of the subcommittee had not requested that we table it in the House, we could have accepted it today; there would be no problem with this, because it was accepted by our committee.

But in reading this first report provided to us by the subcommittee, there is no amendment. You will remember the word “political”, which we amended. It has not been changed, and I cannot table a report that has not been amended. The subcommittee has provided to us the original report without amendment; I need to get an amended report. But I have no problem accepting it and reporting it to the House if it is amended, because the main committee here accepts the report, as amended.

I have Mr. Goldring, then I'll go to Madame Lalonde.

**Mr. Peter Goldring:** Thank you.

I don't wish to comment too much on the report because I wasn't there for the discussion on it, but in making a quick perusal through it, I'm finding comments in here that I would like to have confirmed; I don't know how we would make “aid conditional upon” and establish a no-fly zone and freeze the assets of people. I would really like to have somebody who was involved in it to properly enter it and substantiate that's what happened with the reports.

Thank you.

**The Chair:** I agree with you.

Madam McDonough.

**Ms. Alexa McDonough:** On the Burma report, I completely agree with you that the subcommittee report doesn't reflect the amendments. But we've already completed that work, so can we not agree today, at least, on the Burmese report and go ahead and table it in the House? What would be in the way of doing that?

• (1715)

**The Chair:** It was amended.

Madame Lalonde.

[*Translation*]

**Ms. Francine Lalonde:** I move that we report to the House about the Burma resolution passed at our last meeting.

[*English*]

**The Chair:** Okay.

**Hon. Don Boudria:** It's not even clear to me whether this is the amended version or the unamended version.

**The Chair:** It's not the amended version; we don't have the amended version. The version in front of us is not the amended version. That's why.

Monsieur Clerk.

[*Translation*]

**The Clerk of the Committee:** I just want to point out that on December 1st, the committee and the subcommittee considered a motion relating to Burma. However the language of the motions was a bit different. Our committee made some changes and then passed the motion as is, without follow-up. For example, you can see that the word “political” was deleted here, in committee.

**Hon. Don Boudria:** Mr. Chairman, if I understand what you are saying, apart from the word “political” that's been deleted, the remainder of the report reflects the amendment made by the subcommittee. During the subcommittee meeting, we made many amendments. I myself suggested a long motion amending several other things. All this is included?

**The Chair:** Yes.

**Hon. Don Boudria:** Then there is no reason not to pass it.

**The Chair:** No. Madame Lalonde just moved the resolution as amended by the main committee and suggested that we report that to the House.

[*English*]

Now, is everyone in favour of adopting the motion that was adopted last time, as amended, and that the chair table this as a report in the House of Commons?

**The Clerk:** As amended by the committee on the first of December.

**The Chair:** Yes, as amended by the committee, not as it is now or was distributed to us.

(Motion agreed to) [See *Minutes of Proceedings*]

**The Chair:** Fine, and a few other ones will be postponed to February, at the request of Mr. Goldring. Fine.

Madam McDonough, I'll let you speak on your motion, and I'll give you my opinion after that.

**Ms. Alexa McDonough:** Thank you, Mr. Chair.

The motion is before the committee. Let me say very directly and upfront that I'm bringing this forward because we feel that it's very much in everyone's interest to establish what process is going to be in place at respective committees to deal with government appointments that fall within our committee's purview.

I state clearly that I'm not absolutely wedded to this. It's a beginning. It's an attempt to try to get some discussion and some agreement on what the process should be so that we don't have chaos when it comes to actually dealing with this. The commitment has been made that we should be dealing with it, so I put it forward for the committee to consider.

There have been a couple of suggestions made from those who read the motion. For example, one suggestion is that the suggested period of 60 days prior to the date of appointment might more practically and reasonably be reduced to 30 days. You don't want to prolong an appointment process once there is a nominee.

I can see the wisdom of that, and would point it out as an example of how there could be some changes proposed to improve it. The purpose of it is for us to try to streamline the procedures and have them in the works, rather than finally getting around to dealing with this at some distant date and meanwhile there are appointments that come and go.

**The Chair:** Madam McDonough, I have two ways to answer you.

First of all, the motion that you present and the outstanding ones that are in front of our committee have also been sent to many other committees. I only want to say that there is an implication for all the other committees.

I really feel that the motion should be directed first to the Standing Committee on Procedure and House Affairs. There may be implications for the Standing Orders of the House. Your motion mixes policy and the request to the government with its own internal operation. These should be separated. I recommend that this motion should be sent to our standing committee to discuss.

The second portion of my answer is the fact that I received a letter from my leader, Mr. Valeri. Every member will receive a copy of this letter by e-mail. He asked the committee for our views concerning all the nominations, not only the nominations that are within our jurisdiction.

We receive all nominations for an ambassador or a consul to Barém or Qatar, or any place. We're entitled to have all of them appear in front of the committee with 30 days notice. In the last 11 years that I've been here, I think we had three or four. I remember Mr. Sergio Marchi came, and Mr. Bernier because he was the ambassador to Haiti. The last one was Mr. Gagliano.

The request is that we look at all the nominations listed concerning all the arm's-length bodies of the government internationally, such as EDC and CCC. I will send you a copy of the letter this week.

The standing committee could study this and come back to the main committee with a recommendation. I'll give you an example. You could have one chair in one of the arm's-length bodies, like EDC, but you could have twenty people involved and sitting on the board, coming from every province.

If you want to look at this, you can give me an answer regarding that, but I'm not ready to accept your motion today because I feel that it mixes policies and government affairs. We should know exactly where we want to go.

After you receive the letter that my leader sent to me, as chair, I think we could make a better decision early in February.

Are there any comments?

Monsieur Boudria and Madame Lalonde.

• (1720)

[Translation]

**Hon. Don Boudria:** If anyone else wants to speak before me, I do not mind.

**Ms. Francine Lalonde:** I would—

**Hon. Don Boudria:** Mr. Chairman, I am not in a hurry.

**The Chair:** Then we will go to Madame Lalonde.

**Ms. Francine Lalonde:** Thank you.

This issue is of great interest to me, not only after Mr. Gagliano's appearance but mainly because I saw the interpretation made of the limits that we set for ourselves. I would truly like this to be reviewed although I understand that this is to be done under certain conditions. I believe that when moving her motion, Alexa knew it would not be

passed tonight. However there seems to be a link between Mr. Valeri's letter and what you're suggesting. I would like to add two elements to what has been said. Mr. Chairman, you're suggesting one way of doing this.

During some of the missions I took part in, I was able to see that honorary consuls are often in a position close to a conflict of interest when they are business people residing in a country where other people want to do business with Canada and where the honorary consul seems to be a privileged person. I found myself in situations where I believe this behaviour was really embarrassing. I was told this was true but that it was not possible to appoint ambassadors everywhere. I feel this is an issue to be considered. Should we be doing this?

I would also like the committee to be provided with information on the people being recommended. I agree that specific criteria should be set. There may also be political appointments but then, we have to know what criteria they have to meet. We must know where these people come from. Approving their appointment requires research that we do not have the resources nor the time to do. So we should either be provided with the required information relating to their nomination, which would make the process significant, or we do not get the information and then we're nothing more than rubber stamps.

• (1725)

**The Chair:** Mr. Boudria.

**Hon. Don Boudria:** First, I want to say that I share some of Madame Lalonde's views. It also happened to me to meet an honorary consul and to wonder why he was chosen for this position. Honorary consuls receive almost no pay. So you have to find people who want the job. It's not always easy but there may be better ways to choose them. We also have to admit that some honorary consuls do with their job extremely well. They are highly competent quasi-ambassadors.

There is one thing I find irritating. In fact, we are being asked to change the Standing Orders of the House, which only one committee is entitled to do. I've circled the relevant rule and gave it to the clerk of the committee. I may be prejudiced since I chair the Standing Committee on procedure and House affairs. Even if this were not the case, should the rules be different when the appointment of an official is reviewed by the foreign affairs committee, the transport committee or another committee? Then we would have approximately 45 different sets of rules. I do not think this is a good approach. I'm all for improving the rules but the same rules should apply to everyone. We should not have a rule for the foreign affairs committee and another rule for other committees, according to amendments passed by each. I believe this motion has at least the two flaws I just mentioned.



The third flaw is the one you brought to our attention. In fact, Minister Valeri has already asked us not exactly this but something close. Nothing prevents committees from answering him, then all this can be presented to the Standing Committee on procedure and House affairs that I chair. Then it could be said that several committees considered the matter and are suggesting to change the rules for a specific reason. After that, the Standing Committee on procedure and House affairs would be asked to approve this. Anyway, rules should be the same for everyone.

[English]

**The Chair:** Thank you. You've pinpointed it very clearly. That is why I think you're going to receive the letter....

[Translation]

You will be getting a letter from my leader, Mr. Valeri. We will then review it and send him back our recommendations, which he can later on transmit to the Standing Committee on procedure and House affairs.

[English]

Are you fine with this?

Madame McDonough.

**Ms. Alexa McDonough:** I'm satisfied that this is a good beginning to the discussion. A couple of points have been raised that I think already inform that discussion. If I understand what you're saying, you're going to circulate Mr. Valeri's letter that we would have some further discussion, and the outcome of that would go back to the committee, which is fair enough.

**The Chair:** Fine.

Madame Lalonde.

[Translation]

**Ms. Francine Lalonde:** I have another question, Mr. Chairman.

**The Chair:** Go ahead, please.

**Ms. Francine Lalonde:** When are we going to consider the two bills relating to international trade and foreign affairs? I know my party will oppose the division as proposed, particularly since this would involve the establishment of two committees. We object to that.

**The Chair:** Madame Lalonde, in answer to your question, I want first to speak of Bill C-25. I would like to get the unanimous consent of the committee about Bill C-25, an act governing the operation of remote-sensing space systems, that was just sent to us by Parliament. The draft resolution reads as follows:

[English]

that the committee commence consideration of Bill C-25, an act governing the operation of remote-sensing space systems, during the week of January 31, 2005; that the chair, in consultation with committee staff, identify and call witnesses for that week; and that a list of additional witnesses for subsequent hearings, if required, be drafted following a recommendation from members, forwarded to the clerk of the committee by January 24, 2005.

A legislative summary of the bill will be circulated in the next few days.

Oui?

[Translation]

**Ms. Francine Lalonde:** Are we going to consider it in January?

**The Chair:** No, the House resumes on January 31. During this week, we will start our study of Bill C-25 since it was sent to us by the House.

**Ms. Francine Lalonde:** This is after and not before the House resumes, right?

**The Chair:** We will definitely not meet before the House resumes, even if I know that you really love your work.

Madame Lalonde, in answer to your question about Bill C-31, an act to establish the Department of International Trade and to make related amendments to certain acts, and the Foreign Affairs Bill, they went through first reading on December 7 but second reading has not started yet. This is why the committee cannot consider them for the time being.

Is that all right?

[English]

Are all in agreement that in the first week we're back after the recess we will start to study Bill C-25?

Mr. Goldring.

• (1730)

**Mr. Peter Goldring:** Does this have relevancy to a possible agreement on missile defence too? Is this the entire purpose of it?

**The Chair:** This has nothing at all to do with that.

**Mr. Peter Goldring:** A portion of that is sensing too. So this is just commercial sensing, not military.

**The Chair:** No. It has nothing at all to do with missile defence.

**Mr. Peter Goldring:** All right.

**The Chair:** Madam McDonough.

**Ms. Alexa McDonough:** When staff put together the next report to the committee, I wonder if we could have just an update on where we are with the agenda we already adopted. I'm not necessarily objecting to our dealing with Bill C-25; I'm just wondering, if we're on course, whether we still have some unfinished matters.

I know it was a problem of scheduling. We were told to anticipate the bill dividing the departments, and so on. We're now dealing with this. Can we just ask for an update right now, or a written update?

**The Chair:** I'll give the answer to you right now.

I'm not going to take the decision alone; we're going to take the decision in the full committee. The draft is prepared. You're going to receive it in both official languages within the next few days, and I want you to look at it.

When we're back at the end of January, first of February, we're going to look at it together. Right now when we're doing missile defence it's a pre-review, if we can call it that, of the foreign affairs and defence review that the government wants us to do. It's a plan for the next few months. You'll receive it in the next few days. Look at it very carefully, and we'll study it when we come back.

**Ms. Alexa McDonough:** The point of today's decision, if we adopt this, is to say that in the first week we'll deal with Bill C-25, but then further decisions about what else goes on the agenda will be—

**The Chair:** It could be one week or two weeks, but our first duty, when we receive a bill from the House, is to study it. It's an order from the House, so we need to study the bill instead of doing any other studies.

[*Translation*]

**Ms. Francine Lalonde:** What about the dialogue on foreign affairs?

[*English*]

**The Chair:** Mr. Schmitz.

**Mr. Gerry Schmitz (Committee Researcher):** Just to add to that, it's quite an extensive draft work plan for the international policy review as a whole. It obviously cannot start until the government tables its policy statement, probably in February, we understand. That will take a number of months and has a number of elements to it. But that won't start until we deal with the legislation that will be before the committee.

**The Chair:** Do you agree to the motion on Bill C-25?

(Motion agreed to) [*See Minutes of Proceedings*]

**The Chair:** Thank you.

The meeting is adjourned.

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