Graham Allison

Is nuclear terrorism a threat to Canada’s national security?

In the first nationally televised debate between President George Bush and Senator John Kerry in September 2004, the moderator asked each candidate “What is the single most serious threat to American national security?” In rare agreement, Kerry and Bush both answered “nuclear terrorism.” As the president said: “I agree with my opponent that the biggest threat facing the country is weapons of mass destruction in the hands of a terrorist network.”

In the final weeks of the presidential campaign, Vice President Dick Cheney made nuclear terrorism a centrepiece of his stump speech, arguing that “the biggest threat we face now as a nation is the possibility of terrorists ending up in the middle of one of our cities with deadlier weapons than have ever been used against us... nuclear weapons able to threaten the lives of hundreds of thousands of Americans.” According to Cheney, “That’s the ultimate threat. For us to have a strategy that’s capable of defeating that threat, you’ve got to get your mind around that concept.”

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It is unlikely that candidates for party leaders vying for the position of prime minister in Canada would give a similar answer about the greatest threat to their country’s national security. The purpose of this article, nevertheless, is to present evidence for the conclusion that nuclear terrorism is a very serious threat to Canada, as well as to the US and the world. Moreover, Canada has an opportunity to play a special role in combating this threat.

This argument will be developed in four parts. First, I ask whether the answer given by Bush and Kerry to the question about the “single greatest threat” is correct.

Second, what about Canada? Is nuclear terrorism a serious threat to Canada’s national well-being? My answer is yes, indeed a double-threat. Directly, Montreal or Toronto or Vancouver could be the target of a nuclear terrorist bomb. Indirectly, if terrorists transport their nuclear bomb (or the material from which they make a bomb) through Canada to an American city, the economic consequences for Canada could be substantial.

The good news about the issue of nuclear terrorism, as I claim in the third section, is that it is preventable, indeed, it is the ultimate preventable catastrophe. Success in preventing nuclear terrorist attacks on our cities will require a global undertaking well beyond current actions of key governments, an undertaking in which the US and Canada share deep common interests.

In the fourth part, I observe that, in fact, the Canadian government has recognized the threat of nuclear terrorism and has taken a leadership role in addressing it. Canada, however, cannot remain on the sidelines. Canada has the experience and the standing it takes to play a much more significant leadership role in defeating this spectre.

THE SINGLE GREATEST THREAT
In December 2004, the UN high-level panel on threats, challenges, and change issued its report on threats to the global community. Among a dozen global ills from AIDS and poverty to civil war and environmental degradation, the panel gave pride of place to the proliferation of nuclear weapons and the specific threat of nuclear terrorism. In sober but stark

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terms it warned that a continuation of current trends risks a "cascade of proliferation."

Al Qaeda remains a formidable enemy with clear nuclear ambitions. The former head of the CIA’s bin Laden task force, Michael Scheuer, provides instructive details about Osama bin Laden’s success in acquiring a fatwa from a Saudi cleric that provided a religious justification to use nuclear weapons. Titled “A treatise on the legal status of using weapons of mass destruction against infidels,” and issued in May 2003, the fatwa asserts that “if a bomb that killed 10 million of them and burned as much of their land as they have burned Muslims’ land were dropped on them, it would be permissible.” The 9/11 commission report found that “al Qaeda has tried to acquire or make weapons of mass destruction for at least ten years. There is no doubt the United States would be a prime target.”

According to Porter Goss, the new director of the CIA, it is “only a matter of time before al Qaeda or another group attempts to use chemical, biological, radiological, and nuclear weapons against us.” During Goss’s 16 February 2005 testimony to the US senate intelligence committee, Senator John Rockefeller asked whether “the material missing from Russian nuclear facilities [is] sufficient to construct a nuclear weapon.” Goss: “There is sufficient material unaccounted for so that it would be possible for those with know-how to construct the nuclear weapon.” Rockefeller: “Can you assure the American people that the material missing from Russian nuclear sites has not found its way into terrorist hands?” Goss answered, “No, I can’t make that assurance.”

Russia’s 12-time-zone expanse contains more nuclear weapons and materials than any country in the world, including more than 8,000 assembled warheads and enough weapons-usable material for 80,000 more, much of it vulnerable to theft. Thirteen years after the Nunn-Lugar cooperative threat reduction programs began, according to Department of Energy data, less than half of Russia’s nuclear weapons and materials have been

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4 Attorney general John Ashcroft, “Remarks to house judiciary committee, Thursday, 5 June 2003.”

secured to acceptable standards. These present attractive targets for terrorists shopping for a bomb. In her confirmation hearing, secretary of state Condoleezza Rice agreed, stating, “I really can think of nothing more important than being able to proceed with the safe dismantlement of the Soviet arsenal, with nuclear safeguards to make certain that nuclear-weapons facilities and the like are well secured.”

Nuclear materials remain vulnerable to theft in a number of other countries as well. As inspectors have been unravelling A.Q. Khan’s global black market network, we now know that Libya was not his only customer. Clearly he traded nuclear secrets and technologies to the North Koreans for their assistance with Pakistani missile programs. Inspectors are still searching for the results of his dozen trips to Iran in the 1990s. Although in the past four years some highly enriched uranium has been removed from five countries, bombs-worth amounts of nuclear material remain at risky research reactors in more than 20 transitional and developing states, including Belarus and Uzbekistan. In some cases, little more than a padlock and an unarmed guard protect the weapons-quality material.

In the past two years, Iran has rushed to complete its factories for producing highly enriched uranium and plutonium. Today it stands only months from that finish line. Once Tehran achieves this goal, it will have crossed the last bright policeable line between itself and nuclear bombs.

Certifiably the world’s most promiscuous proliferator, North Korea has demonstrated that it will sell missiles to whomever will pay: Iraq, Iran, Libya, and Yemen. Yet with the United States distracted by Iraq and others states looking the other way, since January 2003 North Korea has successfully withdrawn from the nonproliferation treaty, kicked out the International Atomic Energy Agency inspectors, turned off the video cameras that were monitoring the 8,000 fuel rods that contain enough plutonium for six additional nuclear weapons, trucked the fuel rods to reprocessing plants, and produced enough plutonium for six additional bombs. Al Qaeda, meanwhile, is shopping the black market for a nuclear bomb, and North Korea may soon have bombs to sell.

The world’s most successful investor is also a legendary odds maker in pricing insurance policies for unlikely but catastrophic events like

earthquakes. After thinking hard about this issue, Warren Buffett has described a nuclear terrorist attack as “the ultimate depressing thing. It will happen. It’s inevitable. I don’t see any way that it won’t happen.” My personal view is that if things continue on their present course, the likelihood of a nuclear terrorist attack in the decade ahead is greater than 50 percent.

A single terrorist nuclear bomb destroying just one city would fall mercifully short of the nuclear Armageddon we feared in Cold War confrontations. Nonetheless, even one small nuclear bomb in New York or Toronto would be a world-altering event. A second nuclear bomb in any city anywhere would likely trigger a great de-urbanization that would threaten civilization as we know it. The gravity of the potential consequences requires that absolute priority be given to this challenge. During the Cold War, we recognized that preventing a global nuclear war was a necessary condition for pursuing any other objective, as per Ronald Reagan’s oft-quoted one-liner, “a nuclear war can never be won and must never be fought.” The face of that danger today is a nuclear terrorist attack on a city. The categorical imperative, therefore, is to do everything technically feasible on the fastest possible time line to prevent it.

WHAT ABOUT CANADA?
A nuclear bomb going off on Parliament Hill in Ottawa would cause everything from the supreme court to the Ottawa Congress Centre to disappear; everything for several blocks past the National Archives and the Canadian War Museum would be left in rubble; and fires would consume the Canadian Museum of Nature. Tens of thousands of people would die immediately and the seriously injured would number in the hundreds of thousands. Fallout from the blast would be carried by winds across Canada, contaminating farmland and cities alike and creating thousands of additional casualties.

Given its close ties with the United States and the support it provides in the global war on terrorism, Canada is undoubtedly on al Qaeda’s target list. Even more likely, however, are scenarios in which Canada will be used as what Canadian minister of transport Jean Lapierre calls “a springboard” to assault the US, a danger he considers his “top priority,” indeed his “worst nightmare.” Lapierre understands just how realistic such a nightmare is,

since Canada and the US share a common security space with a border that resembles Swiss cheese—but with more holes than cheese.

In December 1999, veteran customs agent Diana Dean asked a series of routine questions to a driver disembarking from a ferry from Victoria, BC, at Port Angeles in northern Washington State. She questioned him about his citizenship, his travel plans, and the belongings in his car. But as Dean later put it, “after working on this job a while, you get a knack for knowing when something isn’t right.” Her gut reaction proved correct: the driver, Ahmed Ressam, was carrying over 100 pounds of explosives that he intended to use in al Qaeda’s millennium plot to bomb Los Angeles International Airport. He could have been transporting enough highly enriched uranium for a nuclear bomb.

Indirectly, a nuclear terrorist attack on the United States would have serious ramifications for Canada, leading to paralysis at the borders and significant economic fallout. After 9/11, every airplane within US airspace was grounded and all international flights inbound to the US were forced to either turn around or land elsewhere (many hospitably welcomed in Canada). After the first nuclear terrorist attack, the immediate reaction would be to block all entry points to prevent another bomb from reaching its target. Not just aircraft but all seaports and land crossings along the 4,000-mile border with Canada would be closed for a period of time, resulting in the disruption of the global “just-in-time” flow of goods and raw materials. The US and Canada are the world’s largest bilateral trading partners, with more than 80 percent of Canada’s exports flowing into the United States and 70 percent of its imports arriving from the US. With closed borders, vital markets for Canadian manufactured and agricultural products will disappear and closely linked financial markets will crash. Researchers at the RAND think tank estimated that a nuclear explosion at the port of Los Angeles would cause indirect costs worldwide of more than $3 billion and that shutting down US ports would immediately cut world trade by 10 percent.

NUCLEAR TERRORISM IS PREVENTABLE
The largely unrecognized good news is that nuclear terrorism is preventable. The fortuitous fact of physics is that without fissile material, there can

be no nuclear explosion and no nuclear terrorism. Technologies for securing valuable and dangerous materials are well developed. Russians do not lose items from the Kremlin armoury, nor Americans gold from Fort Knox. Thus the strategic narrows of this challenge is to prevent terrorists from acquiring a nuclear weapon, or material from which a weapon could be made. There is an agenda of specific, feasible, and affordable actions that, if taken, would reduce the likelihood of a terrorist's Hiroshima essentially to zero. A strategy for pursuing that agenda is presented in Nuclear Terrorism, organized under a doctrine of the three nos: no loose nukes, no new nascent nukes, and no new nuclear weapons states.

No loose nukes first requires securing all nuclear weapons and weapons-usable material, on the fastest possible timetable, to a new “gold standard.” Locking up valuable or dangerous items is something human beings know how to do. The United States and Russia should jointly develop a standard and then act at once to secure their own nuclear materials. Russian President Vladimir Putin must be made to feel this threat in his gut. He should visualize the Chechens who killed 172 schoolchildren in Beslan exploding a nuclear bomb in Moscow. Moscow must come to see safeguarding those weapons not as a favour to the United States but as an essential protection for its own country and citizens.

Once Putin is on board, the two countries should jointly launch a new alliance against nuclear terrorism. Its mission would be to lock down all weapons and materials everywhere and clean out what cannot be locked down. This would require engaging the leaders of other nuclear states on the basis of a bedrock of vital national interest: no nuclear bomb can ever go off in my capital. The global clean-out of at-risk nuclear material must be a multilateral effort with a target of finishing in 12 or 18 months.

No new nascent nukes means no new national capabilities to enrich uranium or reprocess plutonium. A loophole in the 1968 nuclear nonproliferation treaty allows states to develop these capacities in civilian programs, then withdraw from the treaty and declare themselves nuclear states. The proposition of no new nascent nukes acknowledges what the national-security community is now beginning to realize: highly enriched uranium and plutonium are bombs just about to hatch.

The crucial challenge to this principle today is Iran. Preventing Iranian completion of its nuclear infrastructure will require a combination of benefits and credible threats to persuade Tehran to accept a grand bargain for denuclearization. Such a bargain should include a generous fuel-cycle
agreement, acceptance of Iran’s Bushehr reactor, the relaxation of trade sanctions, and a security guarantee that the United States will not attack Iran to change its regime by force. In exchange, Iran would freeze and, over time, dismantle its enrichment and reprocessing facilities. In current negotiations, British, French, and German leaders have focused on extending a voluntary moratorium on enrichment or reprocessing. But unless and until the United States becomes an active player in this game, the haggling between Europeans and Iranians will likely offer little more than temporary delay, or even a cover for secret Iranian efforts to complete its nuclear-enrichment program.

No new nuclear weapons states draws a line under the current eight nuclear powers and says unambiguously “no more.” The immediate test of this principle is North Korea. To prevent Pyongyang from becoming a nukes-’r’-us for terrorists will require both carrots and sticks, including a security guarantee that the US will not attack Pyongyang if it freezes current nuclear production and begins a process of dismantling its arsenal, together with a credible military threat to the country’s nuclear facilities should North Korea refuse.

In the case of North Korea, sharp internal divisions paralysed the Bush administration in its first term. As a result, it offered a policy of no carrots and no sticks. In Cheney’s words, “[w]e don’t negotiate with evil; we defeat it.” But rather than defeat it, the administration simultaneously threatened North Korea and ignored it. The United States needs a new strategy, one that subordinates all other Korean Peninsula policy objectives to the goal of preventing a nuclear 9/11.

The United States cannot undertake or sustain the war on nuclear terrorism unilaterally. Fortunately, it need not try. Today all of the great powers share vital national interests in the proposed campaign. Each has sufficient reason to fear nuclear weapons in the hands of terrorists, whether al Qaeda, Chechens, or Chinese Uighur separatists. Each nation’s best hope to achieve conditions essential for its own security requires serious cooperation with the others. The great powers are therefore ripe for mobilization in a new global concert, indeed a grand alliance against nuclear terrorism. The mission of this alliance should be to minimize the risk of nuclear terrorism by taking every action physically possible to prevent nuclear weapons or materials from being acquired by terrorists. UN security council resolution 1540, adopted 28 April 2004, provides a UN framework for this alliance. It calls for securing nuclear weapons, materials, and technologies requiring all
states to criminalize proliferation, enact strict export controls, and secure sensitive materials within their borders. While it obliges sovereign states to adopt and enforce laws that would close the loopholes exploited by black market WMD networks, it currently lacks the necessary enforcement mechanisms. On 13 April 2005, the UN general assembly took a step towards rectifying that by approving the “international convention on the suppression of acts of nuclear terrorism.” It makes all forms of nuclear terrorism illegal, requiring states to prosecute those found to possess radioactive materials or nuclear devices.

A SPECIAL ROLE FOR CANADA
Canada recognized the looming threat, understood the need for global action, and took a lead in early efforts to address it. Under Canada’s chairmanship, at the Kananaskis summit in June 2002, the G8 established the global partnership against the spread of weapons and materials of mass destruction. Together, the United Kingdom, Russia, Japan, France, Germany, Italy, and Canada pledged $10 billion over the decade ahead to match a US commitment of an equal amount. The $20 billion would be spent assisting Russia and the states of the former Soviet Union in securing or eliminating chemical, biological, and nuclear weapons. Canada pledged $1 billion—0.781 percent of its military expenditures.

Unfortunately, however, activity funded by this global partnership has not been adequately prioritized. Most of Canada’s pledged funds are being spent destroying chemical weapons and dismantling nuclear submarines. While important, these activities are not as vital to the national security of Canada, or the world, as accounting, securing, and permanently disposing of nuclear weapons and fissile material. Rusting Russian nuclear submarines present an environmental threat that pales in comparison to a nuclear explosion. Chemical weapons can kill hundreds or, if conditions are optimal, thousands. While terrible, this falls within the band of lethality for conventional explosives. Only a nuclear weapon, or some biological weapons, can cause truly catastrophic damage. We should therefore focus like a laser beam on securing the deadliest of weapons and materials.

While few Canadians seem to recognize it, Canada is well positioned to take a leadership role in combating nuclear terrorism. First, it is a technologically advanced state that has voluntarily foresworn nuclear weapons; indeed, it was the first such state to do so as a deliberate matter of policy. Second, as the world’s largest producer of uranium (with the world’s largest
stock of reserves), Canada is a major player with high stakes in the global use of nuclear technologies for peaceful purposes. Third, Canada could easily build its own uranium enrichment facility but has decided not to. It was no accident that the G8 global partnership was launched under Canada's chairmanship or that Canada has been the second largest supporter of the nuclear security activities of the International Atomic Energy Agency. Canada thus has an opportunity to capitalize on unique assets in claiming a leadership role.

As a world leader in nuclear technology, Canada must become a model in securing its own weapons-useable material and technologies. The plutonium used in India's 1974 nuclear test explosion was manufactured in a small research reactor near Bombay that Canada supplied as part of a larger “technology-transfer” program in the late 1950s and early 1960s. Canada has also supplied its patented CANDU reactors to Argentina, Pakistan, Romania, South Korea, and Taiwan. All states now have a responsibility to ensure that nuclear-related technology does not find its way into terrorist hands. By applying a gold standard of security to technology, not just nuclear weapons or fissile material, Canada can provide a model for other nuclear-capable countries to secure their own technologies.

As Canadians reflect on what role a relatively small, technically advanced, economically wealthy middle power can realistically hope to play in world politics in the decade ahead, leadership in a global campaign to prevent the most serious threat to the national security of Canadians, Americans, and others around the globe should top their list.