

University School of Law; Professor Ellen Yaroshesky, Jacob Burns Ethics Center, Cardozo Law School, Yeshiva University; and Karen Kithan Yau, Robert M. Cover Clinical Teaching Fellow, Yale Law School and Member of the Connecticut, Massachusetts and New York State Bars.

PROCEDURAL SAFEGUARDS FOR MILITARY  
TRIBUNALS

(i) That the tribunal is independent and impartial—Sources: Protocol Additional to the Geneva Conventions of 12 August 1949 (Protocol II) Part II, Art. 6, No. 2; International Covenant on Civil and Political Rights (ICCPR), Part III, Art. 14, No. 1; Universal Declaration of Human Rights (UDHR), Art. 10.

(ii) That the particulars of the offense charged or alleged against the accused are given without delay—Sources: Protocol II, Part II, Art. 6, No. 2(a); ICCPR, Part III, Art. 14, No. 3(a) and (c); Statute of the International Criminal Tribunal for former Yugoslavia (ICTY), Art. 20(3), 21(4)(a); Additional Protocol I to the Geneva Conventions (Protocol I), Art. 75(4)(a); U.S. Rules of Courts-Martial (RCM) 308; RCM 405(f)(1), (2), and (6); and RCM 602.

(iii) That the proceedings be made intelligible by translation or interpretation—Sources: ICCPR, Part III, Art. 14, No. 3(a) and (f); ICTY, Art. 21(4)(a) and (f); Geneva Convention 3, Art. 105; Implicit in Protocol I, Art. 4(a).

(iv) That the evidence supporting the conviction is given to the accused, with exceptions only for demonstrable reasons of national security or public safety—Sources: ICCPR, Part III, Art. 14, No. 1; Geneva Convention 3, Art. 105; Protocol I, Art. 75(4)(g); Universal Declaration of Human Rights, Art. 11; ICTY 21(4)(e); RCM 308; RCM 405(f)(3) and (5); RCM 405(g)(1)(B); RCM 703(f); Military Rules of Evidence (MRE) 401.

(v) That the accused has the opportunity to be present at trial—Sources: Protocol II, Part II, Art. 6, No. 2(e); ICCPR, Part III, Art. 14, No. 3(d); ICTY, Art. 21(4)(d); Implicit in Geneva Convention 3, Art. 99; Protocol I, Art. 75(4)(e); RCM 804.

(vi) That the accused may be represented by counsel—Sources: ICCPR, Part III, Art. 14, No. 3(b) and (d); ICTY, Art. 21(4)(b) and (d) implicit in Protocol II, Part II, Art. 6, No. 2(a); RCM 405(d)(2); RCM 405(f)(4); RCM 506.

(vii) That the accused has the opportunity to respond to the evidence supporting conviction and present exculpatory evidence—Sources: ICCPR, Part III, Art. 14, No. 3(e); Geneva Convention 3, Art. 105; RCM 405(f)(10) and (11).

(viii) That the accused has the opportunity to cross-examine adverse witnesses and to offer witnesses—Sources: ICCPR, Part III, Art. 14, No. 3(e); ICTY, Art. 21(4)(e); Geneva Convention 3, Art. 105; Protocol I, Art. 75(4)(g); Universal Declaration of Human Rights, Art. 11; RCM 405(f)(8) and (9); RCM 703(a); MRE 611(b).

(ix) That the proceeding and disposition are expeditious—Sources: ICCPR, Part III, Art. 14, No. 3(c); ICTY, Art. 20(1), Art. 21(4)(c); implicit in Protocol II, Part II, Art. 6, No. 2(a); Geneva Convention 3, Art. 105; Additional Protocol I to the Geneva Conventions, Art. 75(4)(g); UDHR, Art. 11; RCM 707(a) (calls for arraignment within 120 days).

(x) That reasonable rules of evidence, designed to ensure admission only of material with probative value, are used—Sources: This is a suggestion made by Cass Sunstein in testimony before the Judiciary Cmte on 12/4/2001; it responds to section 4(c)(3) of the

President's military order; see also Geneva Convention 3, Art. 103; Protocol I, Art. 75(4)(a); MRE 401-403 (NOTE: protections are nearly equal to safeguards in federal civilian courts).

(x) That before and after the trial, the accused is afforded all necessary means of defense—Sources: Protocol II, Part II, Art. 6, No. 2(a); ICCPR, Part III, Art. 14, No. 3(b).

(xi) That conviction is based only upon proof of individual responsibility for the offense—Sources: Protocol II, Part II, Art. 6, No. 2(b); ICTY, Art. 21(4)(b); Geneva Convention 3, Art. 105.

(xii) That conviction is not based upon acts, offenses or omissions which were not offenses under the law at the time they were committed—Sources: Protocol II, Part II, Art. 6, No. 2(c); UDHR, Art. 11(2); ICTY, Art. 7; Protocol I, Art. 75(4)(b).

(xiii) That the penalty for an offense is not greater than it was at the time that the offense was committed—Sources: Protocol II, Part II, Art. 6, No. 2(c); UDHR, Art. 11(2); ICTY, Art. 10; ICCPR, Art. 15; Protocol I, Art. 75(4)(c).

(xiv) That the accused is presumed innocent until proved guilty—Sources: Protocol II, Part II, Art. 6, No. 2(d); ICCPR, Part III, Art. 14, No. 2; Art. 15; UDHR, Art. 11(1); ICTY, Art. 21(3); Protocol I, Art. 75(4)(c).

(xv) That the accused is not compelled to confess guilt or testify against himself—Sources: Protocol II, Part II, Art. 6, No. 2(f); ICCPR, Part III, Art. 14, No. 3(g); ICTY, Art. 21(4)(g); RCM 405(f)(7); MRE 301; Implicit in Geneva Convention 3, Art. 99; Protocol I, Art. 75(4)(d).

(xvi) That the trial is open and public, including public availability of the transcripts of the trial and pronouncement of judgment, with exceptions only for demonstrable reasons of national security or public safety—Sources: ICCPR, Part III, Art. 14, No. 1; ICTY, Art. 20(4) and 21(2); Protocol I, Art. 75(4)(f); RCM 806; RCM 922; RCM 1007.

(xvii) That a convicted person is informed of remedies and appeals and the time limits for the exercise thereof—Sources: Protocol II, Part II, Art. 6, No. 3; ICCPR, Part III, Art. 14, No. 5; UDHR, Art. 10, 11; Protocol I, Art. 75(4)(i); RCM 1010.

(xviii) That a convicted person is informed of remedies and appeals and the time limits for the exercise thereof—Sources: Protocol II, Part II, Art. 6, No. 3; ICCPR, Part III, Art. 14, No. 5; Geneva Convention 3, Art. 106; Protocol I, Art. 75(4)(j) [to be informed if available]; UDHR, Art. 14; ICTY, Art. 25.

Mr. LUGAR. Mr. President, I want to take advantage of the presence of the distinguished Senator from Vermont and the present chairman of the Agriculture Committee, who are the sole survivors of the agriculture debate today. This may be indicative of the kind of stamina required for this work.

It would be my hope to proceed in morning business to, in fact, give a statement about national security. I ask the Chair informally, because he has had a very long week, and I had not anticipated that he would be assuming this responsibility—nor do I wish to take advantage of that—if I may, I would like to proceed in morning business.

The PRESIDING OFFICER (Mr. HARKIN). Without objection, it is so ordered.

NATIONAL SECURITY

Mr. LUGAR. Mr. President, I found in the current issue of the National Journal a very important article entitled "Nuclear Nightmares," by James Kitfield, who has written knowledgeably in the past about matters of national security, and particularly those involving nuclear energy and weapons of mass destruction.

I want to place this article by James Kitfield into the RECORD. I ask unanimous consent that it be printed in the RECORD.

There being no objection, the Article was ordered to be printed in the RECORD, as follows:

[From the National Journal, Dec. 14, 2001]

NUCLEAR NIGHTMARES

(By James Kitfield)

The recent disclosure that documents about nuclear bombs and radiological "dirty bombs" had been found at captured Al Qaeda terrorist network facilities in Kabul, Afghanistan, immediately triggered alarms among the nuclear scientists who work atop the high desert mesas in this remote region of New Mexico. For more than 50 years, nuclear experts at Los Alamos and at nearby Sandia National Laboratories have studied terrorist and criminal groups for any signs that they were on the verge of cracking the nuclear code first broken here. Everything they knew about Al Qaeda told them that these terrorists might be drawing too close to a terrible discovery.

Indeed, ever since members of the Manhattan Project tested the first atomic bomb in New Mexico in 1945, scientists at Los Alamos have been the pre-eminent keepers of the nuclear flame. When the former Soviet Union created the secret nuclear city "Arzamas-16" as the birthplace of its own atomic bomb, it hewed closely to the Los Alamos blueprint. So much so, in fact, that Russian residents later jokingly referred to their town as "Los Arzamas."

Almost from the inception of the nuclear age, no one understood better the apocalyptic threat of these weapons than the nuclear scientists who made them. J. Robert Oppenheimer, the director of the Manhattan Project and the father of the atomic bomb, eventually feel out of favor with the U.S. military at least partly over his strident support for arms control and his opposition to development of the much more powerful hydrogen bomb. The scientists at Los Alamos developed and help train and man the Energy Department's secretive Nuclear Emergency Search Teams that for 30 years have stood poised to respond to the threat of nuclear terror or the smuggling of a nuclear weapon onto U.S. soil.

Most important, the scientists at the Los Alamos, Sandia, and Lawrence Livermore national laboratories helped devise a U.S. nuclear doctrine designed to strictly limit the spread of nuclear weapons and technology, and to render their use unthinkable through the dynamic tension of "mutually assured destruction." And for the past decade, they have watched with growing concern as unpredictable world events have repeatedly tested the tolerances of that careful calculation and narrowed its margins for error.

WEAKENED SECURITY

The breakup of the former Soviet Union, followed by the fundamental restructuring of

a Russian society that accounted for the world's largest stockpile of both nuclear weapons and the fissile material necessary to make them, created a gaping hole of vulnerability in terms of nuclear proliferation. U.S. experts concede that hole remains open to this day.

"We've been worried about Russia for 10 years, because initially the Russians insisted they didn't need any help securing their weapons and nuclear material, which was a ludicrous assertion," Siegfried Hecker, a senior fellow and former longtime director of Los Alamos National Laboratory, told *National Journal*. "The Russians simply failed to take into account how dramatically their country had changed with the breakup of the Soviet Union. With the evolution toward an open society, the old Soviet security system based on guns, guards, and gulags was simply not good enough anymore. So we've spent a lot of time educating the Russians about the gaps in their own security system, and I still don't think the Russian leadership fully appreciates just how real the continued vulnerabilities are in the Russian nuclear complex."

On top of Russian instability has come the rise of Islamic fundamentalism particularly the Taliban regime in Afghanistan, which has—or had, until recent weeks—strong links with the government of Pakistan, an emerging nuclear power. Pakistan's detention of two of its nuclear scientists for suspected connections to Osama bin Laden and his Al Qaeda network, and recent news reports suggesting previously undisclosed contacts between other Pakistani nuclear weapons experts and Al Qaeda, underscore the difficulty such societies have in safeguarding their nuclear secrets in times of extreme turmoil.

John Immele, a deputy director of Los Alamos, said: "The biggest security threat in terms of nuclear weapons or expertise falling into the wrong hands has always been the 'inside job,' because it short-circuits so many of the traditional barriers to nuclear proliferation. From that standpoint, the threat to the Pakistani government from Islamic fundamentalists, and the close ties between fundamentalists inside the government and Pakistan's nuclear weapons program, are obviously causes for concern. If a terrorist group were to get its hands on nuclear fissile material," he said, "the main impediment to making a bomb would be to find an expert to assemble it. As cases concerning Pakistani and some Russian nuclear scientists in the past have shown, there are an increasing number of nuclear experts out there, and some find themselves in desperate circumstances. That's one more way the bar to a terrorist group acquiring a nuclear device has dropped."

Perhaps the greatest disruption to the equilibrium of the nuclear "balance of terror" is the emergence of criminal and terrorist organizations with a level of power and technological sophistication once associated only with nation-states. Should Al Qaeda or another one of these terrorist groups with global reach succeed in acquiring nuclear weapons, experts say, it would turn on its head a nuclear doctrine that is based on the deterrent value of mutually assured destruction. Doomsday cults or religious zealots bent on martyrdom may not care much about traditional theories of deterrence.

Roger Hagengruber, the senior vice president for national security at Sandia, has spent much of his career contemplating the threat of nuclear terror. "For 50 years, the

United States has closely watched various terrorist organizations for telltale indications that they might become a nuclear threat," he told *National Journal*. Possible warning signs include evidence of state sponsorship, a display of rapidly increasing technological sophistication, or persistent attempts to acquire materials or expertise associated with nuclear weapons.

"The reason we've been so concerned about Al Qaeda for some time is because all the warning indicators are positive," Hagengruber said, citing bin Laden's statements that acquiring nuclear and other weapons of mass destruction was a "religious duty" for Muslims, and intelligence reports of persistent attempts by Al Qaeda operatives to acquire nuclear fissile material. "You have a large, seemingly well-funded terrorist organization that has persisted over a long period of time. They have operated with either direct or indirect state support in a region of the world where the security infrastructure guarding nuclear materials is under significant stress. And they have an unprecedented degree of enmity toward the United States. I still think it's relatively unlikely that bin Laden actually acquired a crude nuclear weapon, or even significant amounts of weapons-grade fissile material, but that is not a set of circumstances that engenders either confidence or complacency. The consequences of being wrong or not paying the requisite attention are just too catastrophic."

#### SUITCASE BOMBS

Even a brief visit to the National Atomic Museum at the Sandia National Laboratories in Albuquerque, N.M., reveals the degree to which the nuclear flame threatened to become a wildfire during the arms race of the 1950s and '60s. On display are full-scale models of both of the original nuclear bombs dropped on Hiroshima and Nagasaki, "Little Boy" and "Fat Man," and a mockup of a Titan II intercontinental ballistic missile with multiple thermonuclear warheads, arguably the most fearsome weapon ever devised. In between sit replicas of virtually every nuclear weapon designed at Los Alamos and fielded by the U.S. military: nuclear air-to-air missiles, atomic mines, atomic depth charges and torpedoes, nuclear artillery shells—even the equivalent of an atomic bazooka to put atom-splitting destructiveness into the hands of the U.S. infantry.

Implied by this exhibit of nuclear inventiveness run amok, but not on display at the museum, are perhaps the least-talked-about of all nuclear weapons—portable atomic demolition charges, or nuclear "suitcase bombs." Speculation has been heated, although unsubstantiated, that Al Qaeda may have acquired such weapons from the former Soviet arsenal.

Gen. Aleksandr Lebed, a former Russian national security adviser, sparked the speculation in 1997 when he told CBS's 60 Minutes that the Russian military had lost track of more than 100 suitcase-sized nuclear weapons, out of a total arsenal of some 250. The Russian atomic energy commission denied the report—and even the existence of such weapons—and Lebed later seemed to back away from his own assertions. However, other Russian experts have confirmed the reality of such bombs. For instance, the *Los Angeles Times* recently quoted Russian START II negotiator Nikolai Sokov as saying the suitcase bombs existed but speculating that they have been dismantled. Russian scientist Alexei Yablokov, a former member of the Russian National Security Council, told Congress that the suitcase

nukes were actually controlled by the KGB, the former Soviet intelligence service, and were thus outside the inventory-accounting system of the Russian military.

Yossef Bodansky, the director of the U.S. Congressional Task Force on Terrorism and Unconventional Warfare, heightened concerns over the Russian suitcase bombs. Citing unnamed intelligence sources in his 2000 book, *Bin Laden: The Man Who Declared War on America*, Bodansky claimed: "Although there is debate over the precise quantities of weapons purchased, there is no longer much doubt that bin Laden has finally succeeded in his quest for nuclear suitcase bombs. Bin Laden's emissaries paid the Chechens \$30 million in cash, and gave them two tons of Afghan heroin worth about \$70 million" for the bombs. Bodansky's book seemed to lend credence to bin Laden's assertion in a recent interview that Al Qaeda possessed nuclear weapons as a "deterrent."

Nuclear experts at Sandia and Los Alamos confirm that both the Soviet Union and the United States developed portable nuclear weapons. The U.S. weapon is the MK-54 Small Atomic Demolition Munition. Given the stringent security systems that nuclear states create to guard such weapons, however, the scientists consider the threat of loose mini-nukes as the least likely of all nuclear terror threats.

"Every state that has ever created a nuclear arsenal has come to a sobering realization of what it possesses, and has established extraordinary levels of security to protect those weapons," said Hagengruber of Sandia. "So while we can never dismiss the possibility of a stolen Russian nuclear weapon, that would be extremely difficult to accomplish, and the Russian president would almost certainly know about such a theft immediately."

Immele of Los Alamos concurs. "There is no question that both the United States and the Russians developed suitcase-sized atomic demolition munitions," he said. "We studied Lebed's comments very closely and compared them to our extensive knowledge about what the Russian military has done to account for its nuclear weapons, however, and we have no intelligence leading us to believe that those weapons have escaped Russian control. What you find is that even a country with 25,000 nuclear weapons and a less-than-state-of-the-art accounting system will keep a very close accounting and jealously guard control of its actual nuclear weapons." However, he cautioned, "nuclear materials and expertise are much harder to account for and keep track of, which is why so much of our concerns about Russia are focused on its nuclear fissile material and scientists."

#### DOOMSDAY INGREDIENTS

Most analysts cite as a success story the joint U.S.-Russian programs designed to rid the former Soviet states of their nuclear weapons, and to help Russia secure and dismantle its own weapons. The United States has spent roughly \$4 billion on the Nunn-Lugar Cooperative Threat Reduction program (named for legislative co-sponsors former Sens. Sam Nunn, D-Ga., and Richard Lugar, R-Ind.). To date, the Nunn-Lugar program has deactivated 5,700 nuclear warheads, destroyed 434 ICBMs and 483 air-to-surface missiles, and eliminated hundreds of Russian bombers, submarines, and missile launchers.

However, attempts to consolidate and safeguard the much larger Russian stockpile of nuclear fissile material—the essential ingredient of these doomsday weapons—have had a more checkered record. Indeed, the first indication that Russia might be leaking lethal

nuclear material from its increasingly decrepit inventory came as early as 1992, when a Russian was caught attempting to steal 1.5 kilograms of highly enriched uranium from a facility in Podolsk. Other incidents soon followed. In March 1993, authorities in St. Petersburg seized 6.6 pounds of weapons-grade uranium from smugglers. In August 1994, police in Munich, Germany, seized 360 grams of plutonium and 5 pounds of uranium, part of a shipment apparently stolen from a nuclear research center in Obninsk, Russia. In one of the most worrisome incidents, an anonymous tip enabled the Czech police to seize 2.7 kilograms of highly enriched uranium in December 1994.

Because nuclear experts consider the difficulty of acquiring weapons-grade fissile material as the single greatest impediment to a group or nation that wants to build nuclear weapons, these seizures sounded a loud wake-up call. The theft of significant amounts of uranium is particularly frightening because uranium can be used as the key ingredient in relatively rudimentary nuclear devices that experts consider most within the technological grasp of fledgling nuclear states or terrorist groups.

The Energy Department's efforts, under its "Lab-to-Lab" initiative, to protect Russia's stockpile of fissile material have encountered severe obstacles. One is the continuing Russian reluctance to open its secret nuclear cities and research facilities to prying Western eyes. The second has been the unwillingness of both Russian and American authorities to acknowledge the vast scope of the problem of securing the enormous Russian stockpile of fissile material.

"I think it's fair to say that the Russians themselves didn't have a complete handle on the quantities and scattered locations that made up their fissile-material stockpile," said Kent Biringer, who works on cooperative international programs at Sandia. "As we started out on these programs, we didn't have a solid baseline from which to work that told us what we were trying to get our arms around."

When the true size of the Russian stockpile eventually came into clearer focus, U.S. officials realized they had greatly underestimated the challenge. Richard Wallace, the program manager for material protection, control, and accounting in the Russian Nonproliferation Program at Los Alamos, said: "What we found was that Russia had produced roughly 10 times more nuclear fissile material during the Cold War than the United States, and they had it scattered at many more sites. They also had 10 secret nuclear cities," Wallace said, "and each one dwarfed one of our comparable nuclear weapons laboratories. The Russians also had to go through a major cultural change in how they thought about security at their stockpile sites."

Eventually, U.S. experts were able to estimate that Russia had a total of 850 metric tons of weapons-usable missile material—enough for more than 70,000 nuclear weapons—stored at 95 separate sites. Because it takes only about 17.5 pounds of plutonium or 55 pounds of enriched uranium to make a nuclear bomb, securing that vast trove of fissile material became one of the United States' top nonproliferation priorities of the 1990s.

The lax security systems at some of those Russian sites have become legendary within the weapons-lab community. Security experts talk about perimeter fences with gaping holes; fissile material stored in unguarded boxes in hallways of poorly guarded

facilities; and facilities without air conditioning, where windows without bars were routinely kept open to ease the summer heat. According to experts at Los Alamos, managers of Russian nuclear reactors also routinely set aside extra stashes of plutonium and uranium "off the books" to make up for potential shortfalls in their production quotas at the end of each accounting period.

U.S. experts thus focused in the early years of the Lab-to-Lab program on rudimentary fixes such as consolidating fissile material at fewer sites, and protecting it with radiation detectors, closed-circuit television camera systems, electronic sensors on perimeter fences, and computerized accounting systems. Even some of these relatively simple fixes went awry. U.S. experts discovered, for instance, that the batteries in some of their security systems failed in the harsh Siberian winters. Levels of radiation dust and radiation contamination on workers that were considered routine at some Russian facilities often set off U.S. radiation detectors.

Today, U.S. experts at Los Alamos estimate that roughly 570 tons of Russia's total 850 tons of weapons-usable material are more secure as a result of the security upgrades. They concede, however, that more than 200 tons of fissile material remain largely unsecured. A May 2000 report by the General Accounting Office, Congress's investigative arm, found that U.S. officials have yet to gain access to 104 of 252 nuclear sites "requiring improved security systems."

"There is still a lot of room for improvement in securing Russia's fissile materials," according to Larry Walker, the manager of Cooperative International Programs at Sandia. "What you find is, the closer you get to Russia's actual nuclear weapons, the more secretive and less willing to give access the Russians become. Access remains an issue, because it's difficult to improve security unless you can actually see a storage site and witness how things are stored and handled."

#### STALLED PROGRESS

After making significant headway in the early years, the U.S.-Russian cooperative programs to secure Moscow's fissile-material stockpile got stuck in 1998 and have not yet recovered. The reasons for the lagging progress are varied, experts say. As the materials protection program grew in cost from a few million dollars to more than \$100 million annually, Congress and Administration officials began demanding a higher level of access to Russian nuclear facilities, and the Russians balked. A bureaucracy that had been thrown into disarray by the dissolution of the Soviet Union in the early 1990s also began to reassert itself, throwing up red-tape barriers to greater Western access. And the Russians angered the United States by insisting on exporting a civilian nuclear reactor to Iran. The State Department lists Iran as the most active state sponsor of terrorist groups in the world.

Political tensions over the bombing of Serbia, NATO expansion, and a U.S. national missile defense system also soured relations between senior American and Russian officials in the late 1990s. Finally, because of a financial collapse in 1998, many Russian nuclear scientists and technicians were not paid for months at a time, raising fears that they would peddle their expertise on the world market. The Japanese doomsday cult Aum Shinrikyo, for instance, was known to have actively recruited Russian nuclear design specialists, and even student physicists from Moscow State University, in an attempt to acquire nuclear weapons.

"After making enormous progress in the first three to four years, our cooperative programs with the Russians basically ground to a halt, and I don't think many officials in the Bush Administration still understand just how broken this process now is," said Hecker, the former director of Los Alamos. "Partly because the U.S. government lost its way and switched from an approach of cooperation to one that dictated an unnecessarily intrusive level of access into sensitive Russian facilities, we've lost the spirit of partnership necessary to make these programs work. Couple that with the fact that the Clinton Administration never really had a strategic vision or overarching strategy for dealing with the Russian nuclear complex and setting priorities among all these various programs, and you have a process that has essentially ground to a standstill in many respects. And until we can restore a common sense of purpose between us and the Russians, no amount of money will fix the Russian nuclear security problems."

Meanwhile, indications of serious Russian security lapses continue. Russian officials in 1998 broke up a conspiracy by employees of a major nuclear facility in the Chelyabinsk region of the Ural Mountains to steal 18.5 kilograms of weapons-usable material. The Center for Nonproliferation Studies at the Monterey Institute of International Studies has documented 11 cases involving diversion and recovery of Russian weapons-grade material between 1992 and 1997. The International Atomic Energy Agency further documents six seizures of weapons-grade material linked to states of the former Soviet Union between 1999 and 2001. Four Russian sailors were arrested at a base on the Kamchatka Peninsula in January 2000, with radioactive materials that they were suspected of stealing from a Russian nuclear submarine. According to a New York Times report, Turkey recently revealed that its undercover police had broken up a smuggling ring holding 2.2 pounds of what appeared to be enriched uranium, brought from a Russian of Azeri origin. The head of the Russian agency responsible for nuclear security recently told reporters that, on two occasions last year, terrorists had staked out Russian nuclear facilities. Earlier this month, on December 6, Russian police arrested members of a criminal gang who were trying to sell uranium for \$30,000.

Reports coming in a steady drumbeat from U.S. commissions and blue-ribbon panels have warned that the inadequate security of the fissile-material stockpile of the former Soviet union remains a glaring weakness in the global system designed to prevent a nuclear catastrophe. A 1997 Defense Science Board Study noted: "Defense planners are increasingly concerned about possible state and non-state use of radiological dispersal devices [dirty bombs] against U.S. forces and population centers abroad and at home, as technological barriers have fallen and radiological materials have become more plentiful." A 1999 congressional commission chaired by former CIA Director John Deutch and Sen. ARLEN SPECTER, R-Pa., warned that power outages, inadequate inventory control, and unpaid Russian guards and technicians had all increased the threat of an "insider" diversion of Russian nuclear fissile material.

Perhaps the starkest warning was issued earlier this year by an Energy Department advisory group headed by former Sen. Howard Baker, R-Tenn., and former White House counsel Lloyd Cutler. "The most urgent unmet national security threat to the United

States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen or sold to terrorists or hostile nation-states," the Baker-Cutler study concluded. The group recommended that the United States spend \$30 billion over the next eight to 10 years on a crash program to finally secure Russia's weapons of mass destruction and its stockpile of fissile material.

Ominously, the steady stream of warnings in recent years resembles similar unheeded alarms raised before September 11 about the possibility of a catastrophic terrorist attack. Nonproliferation advocates were thus dismayed that the Bush Administration's fiscal 2002 budget proposed cutting the Pentagon's Nunn-Lugar programs by 9 percent (from \$443.4 million in fiscal 2001 to \$403 million), and the Energy Department's nonproliferation programs by 11.5 percent (from \$872.4 million in fiscal 2001 to about \$773.7 million). Congress has since moved to restore some of the proposed funding cuts, however. And in a December 11 speech at the Citadel, Bush promised expanded efforts and increased funding for securing Russian fissile material and for finding peaceful employment for Russian nuclear scientists.

In an attempt to jump-start the stalled threat-reduction programs, Senate Foreign Relations Chairman JOSEPH R. BIDEN Jr., D-Del., and LUGAR recently introduced the Debt Reduction for Non-Proliferation Act, which would forgive Russia's debt of \$3.7 billion to the United States in exchange for its cooperation with U.S. efforts to secure and monitor Russian weapons of mass destruction and fissile material.

"Time after time, the United States has put together groups of objective, bipartisan policy experts to study this problem, and each time, they have concluded that this is an urgent national security issue—and every time, their reports are ignored," said Joseph Cirincione, the director of the Non-Proliferation Project at the Carnegie Endowment for International Peace in Washington. Part of the problem, he says, is that such programs have no natural domestic constituency in Russia, and in the United States they smack of unpopular foreign aid. And because cooperative threat-reduction programs do not command the same priority within the Administration as missile defense, they can easily get shoved off the summit-level agenda.

"Another problem is, this seems like a distant threat because nothing terrible has happened yet," Cirincione said. "The general feeling among experts, however, is that we've been lucky so far. There is absolutely no doubt that there are bad people out there trying very hard to get their hands on Russian weapons of mass destruction and nuclear materials, and if we don't secure the source, sooner or later they will succeed. After September 11, the once-inconceivable is now all too easily imagined."

#### AN UNSEEN HAND

A decade's worth of seizures and the break-up of numerous smuggling rings in Russia and Europe clearly point to a lucrative black market in nuclear fissile materials. No one knows with any certainty whether terrorists have successfully smuggled any of that material through the porous southern Russian border into Central Asia or nearby Afghanistan. Few intelligence experts doubt, however, that one of the unseen hands creating the demand for fissile material was that of Osama bin Laden.

The most unambiguous testimony to date on Al Qaeda's methodical, well-financed

campaign to acquire nuclear bomb-making material came from Ahmed Al-Fadl, an Al Qaeda operative who turned state's witness in the trial earlier this year of men accused of bombing two U.S. embassies in East Africa in 1998. Al-Fadl claimed he was the middleman in a mid-1990s deal between Al Qaeda and Sudanese officials for the purchase of \$1.5 million worth of highly enriched uranium, apparently diverted from South Africa's former nuclear program. Though Al-Fadl was not present for the final exchange, his testimony convinced U.S. prosecutors that "at least since 1993, bin Laden and others made efforts to obtain components of nuclear weapons."

Recent years have yielded a steady stream of news reports and intelligence leaks about Al Qaeda's attempts to acquire fissile material. In 1998, for instance, bin Laden aide Mamdouh Mahmud Salim was arrested in Munich and charged with acting on behalf of Al Qaeda to acquire nuclear materials. As The Christian Science Monitor recently reported, a Bulgarian businessman claimed to have met bin Laden himself last year to talk over a complex deal to transship nuclear materials across Bulgaria to Afghanistan.

Pakistan, meanwhile, continues to detain Sultan Bashiruddin Mahmood and a second nuclear scientist considered key to Pakistan's nuclear program. Mahmood has reportedly acknowledged meeting bin Laden and Taliban leader Mohammed Omar during at least three visits to Afghanistan last year, and he is said to have talked at length about developing nuclear and biological weapons. According to the New York Times, CIA Director George J. Tenet, during his recent trip to Pakistan, raised U.S. concerns about additional contacts between Pakistani nuclear weapons experts and Al Qaeda.

If the Al Qaeda network has successfully acquired enough weapons-grade uranium, U.S. experts say the group's last major challenge in eventually constructing a workable nuclear bomb would be to entice a trained nuclear scientist to spearhead the project. "The history of nuclear programs suggest that they depend on only a few key, knowledgeable scientists, with sufficient time and bankrolling, to bring a program to fruition," said Biringor of Sandia. "That's why we have focused a lot of effort on trying to retrain Russian scientists in other disciplines so they will not attempt to sell their services on the open market."

U.S. experts say that Russian nuclear scientists are generally much better off today than in 1998, when they went unpaid for up to eight months because of a financial crisis and the collapse of the ruble. Nevertheless, they worry that Energy's "Nuclear Cities Initiative," designed to retrain Russian scientists and shrink the Russian nuclear complex, has suffered from erratic funding and tepid congressional support.

"Virtually all Russian scientists we have dealt with are enormously loyal and patriotic, and most of them would like to stay where they are and continue to conduct meaningful work and research," Hagengruber said. "So we are not worried about Russian hemorrhaging nuclear scientists. These scientists remain one of our major concerns, however—because unfortunately, all it takes is enough fissile material and one or two good scientists to create a real problem. Even a 99 percent solution is not really good enough."

Experts at Los Alamos and Sandia doubt that Al Qaeda has had the requisite time, weapons-grade fissile material, and nuclear expertise to actually construct a crude nu-

clear weapon, though they would not rule the possibility out. One expert who concurs in those doubts is Iraqi defector Khidhir Hamza who headed Saddam Hussein's secret nuclear bomb program through the mid-1990s and co-authored the book, *Saddam's Bombmaker*. Despite obvious weaknesses in global nuclear nonproliferation defenses, Hamza insists that the difficulties inherent in constructing a nuclear weapon remain daunting.

"We in Iraq were in the market for nuclear materials, and not a week passed without us getting an offer from somebody to sell us such materials," he told CNBC's Geraldo Rivera on October 26. "People came to Baghdad with bags of samples, and left with bags of money, and we never got any serious nuclear materials. Despite what people say, the [protections of such materials] are not that loose, and this radioactive material is very difficult to transport." As for actually constructing a nuclear bomb, "that's not that easy either," Hamza said. "Iraq is a country with thousands of nuclear workers, and we still couldn't get a bomb ready in time for the Gulf War"

U.S. experts are much less skeptical that Al Qaeda or another terrorist organization could build a dirty bomb by packing a conventional explosive with fissile material that would kill and injure, mainly through radioactive dispersal and contamination. On the spectrum of nuclear threats, experts consider this a "high-likelihood, low-lethality" scenario.

Bruce Blair, an arms control expert and former nuclear missileer who is now the president of the Center for Defense Information in Washington, said: "There's almost no credible evidence that Al Qaeda acquired a portable nuclear device that could actually split the atom, but I think it's very plausible that bin Laden acquired fissile material that could be wrapped around dynamite and exploded in an urban center like Lower Manhattan to cause panic and terror, and require the evacuation of large portions of the city for a considerable period of time."

According to Blair, the Defense Department ran an analysis of just such a worst-case scenario involving a dirty bomb made with 50 kilograms of nuclear power plant spent fuel packed around 100 pounds of conventional explosives. "The calculation was that lethal doses of radiation would be dispersed over roughly a half-mile area, leading to hundreds, if not thousands, of casualties," Blair said. "There is also considerable data on what would be involved in cleaning up after such a terrorist attack, and that dates back to 1966, when an Air Force plane carrying nuclear weapons crashed in Spain."

Indeed, a display at Sandia's National Atomic Museum depicts the collision of a B-52 and a KC-135 tanker during midair refueling over Palomares, Spain, on January 17, 1966. Photos document how three thermodynamic nuclear weapons that burst open in the crash contaminated a 285-acre area with highly enriched plutonium, which has a half-life of 24,000 years. More than 4,000 Air Force personnel were drafted into the cleanup effort, which required plowing hundreds of acres and removing 4,810 barrels of plutonium-contaminated earth to a storage site in South Carolina. In 2001 dollars, the cleanup operation cost \$230 million.

In a post-September 11 world, a Palomares-type incident occupies the "high-likelihood, low-lethality" end of the spectrum of threats to U.S. national security. Such a classification is a testament to the almost unthinkable menace posed by nuclear-armed terrorists.

Mr. LUGAR. I wish to quote liberally from what I think are remarkable summaries of some very tough decisions that we will need to make. The author begins:

The recent disclosure that documents about nuclear bombs and radiological "dirty bombs" had been found at captured Al Qaeda terrorist network facilities in Kabul, Afghanistan, immediately triggered alarms among the nuclear scientists who work atop the high desert mesas in this remote region of New Mexico. For more than 50 years, nuclear experts at Los Alamos and at nearby Sandia National Laboratories have studied terrorist and criminal groups for any signs that they were on the verge of cracking the nuclear code first broken here. Everything they knew about Al Qaeda told them that these terrorists might be drawing too close to a terrible discovery.

Indeed, ever since members of the Manhattan Project tested the first atomic bomb in New Mexico in 1945, scientists at Los Alamos have been the pre-eminent keepers of the nuclear flame. When the former Soviet Union created the secret nuclear city "Arzamas-16" as the birthplace of its own atomic bomb, it hewed closely to the Los Alamos blueprint. So much so, in fact, that Russian residents later jokingly referred to their town as "Los Arzamas."

Almost from the inception of the nuclear age, no one understood better the apocalyptic threat of these weapons than the nuclear scientists who made them.

J. Robert Oppenheimer, the director of the Manhattan Project and the father of the atomic bomb, eventually fell out of favor with the U.S. military at least partly over his strident support for arms control and his opposition to development of the much more powerful hydrogen bomb. The scientists at Los Alamos developed and help train and man the Energy Department's secretive Nuclear Emergency Search Teams that for 30 years have stood poised to respond to the threat of nuclear terror or the smuggling of a nuclear weapon onto U.S. soil.

Most important, the scientists at the Los Alamos, Sandia, and Lawrence Livermore national laboratories helped devise a U.S. nuclear doctrine designed to strictly limit the spread of nuclear weapons and technology, and to render their use unthinkable through the dynamic tension of "mutually assured destruction." And for the past decade, they watched with growing concern as unpredictable world events have repeatedly tested the tolerances of that careful calculation and narrowed its margins for error.

The breakup of the former Soviet Union, followed by the fundamental restructuring of a Russian society that accounted for the world's largest stockpile of both nuclear weapons and the fissile material necessary to make them, created a gaping hole of vulnerability in terms of nuclear proliferation. U.S. experts concede that that hole remains open to this day.

"We've been worried about Russia for 10 years, because initially the Russians insisted they didn't need any help securing their weapons and nuclear material, which was a ludicrous assertion," said Siegfried Hecker, a senior fellow and former longtime director of Los Alamos National Laboratory. . . .

Mr. Hecker continues:

"The Russians simply failed to take into account how dramatically their country had changed with the breakup of the Soviet Union. With the evolution toward an open society, the old Soviet security system based

on guns, guards, and gulags was simply not good enough anymore. So we've spent a lot of time educating the Russians about the gaps in their own security system, and I still don't think the Russian leadership fully appreciates just how real the continued vulnerabilities are in the Russian nuclear complex."

On top of this Russian instability has come the rise now of Islamic fundamentalism, particularly the Taliban regime in Afghanistan, which has—or had, until recent weeks—strong links with the government of Pakistan, an emerging nuclear power. Pakistan's detention of two of its nuclear scientists for suspected connections to Osama bin Laden and his Al Qaeda network, and most recent news reports suggesting previously undisclosed contacts between other Pakistani nuclear weapons experts and Al Qaeda, underscore the difficulty such societies have in safeguarding their nuclear secrets in time of extreme turmoil.

John Immele, a deputy director of Los Alamos, said: "The biggest security threat in terms of nuclear weapons or expertise falling into the wrong hands has always been the 'inside job,' because it short-circuits so many of the traditional barriers to nuclear proliferation. From that standpoint, the threat to the Pakistani government from Islamic fundamentalists, and the close ties between fundamentalists inside the government and Pakistan's nuclear program, are obviously causes for concern. If a terrorist group were to get its hands on nuclear fissile material," he said, "the main impediment to making a bomb would be to find an expert to assemble it. As cases concerning Pakistani and some Russian nuclear scientists in the past have shown, there are an increasing number of nuclear experts out there, and some find themselves in desperate circumstances. . . .

Perhaps the greatest disruption to the equilibrium of the nuclear "balance of terror" is the emergence of criminal and terrorist organizations with a level of power and technological sophistication once associated only with nation-states.

Quoting again from James Kitfield:

Should Al Qaeda or another one of these terrorist groups with global reach succeed in acquiring nuclear weapons, experts say, it would turn on its head a nuclear doctrine that is based on the deterrent value of mutually assured destruction. Domsday cults or religion zealots bent on martyrdom may not care much for traditional theories of deterrence.

Mr. President, in a piece in the Washington Post published from my writings last week, I tried to say the bottom line I thought in this war was the search for al-Qaida and then nuclear cells wherever they may be in many countries where such have been identified. That is critical and that continues even as we speak with important American forces and a broad coalition.

The second path is equally, if not more, crucially important, and that is as weapons of mass destruction or materials that might produce weapons of mass destruction are identified in various countries, U.S. policy, and hopefully the alliance policy, must be, first, to gain accountability and transparency as to what there is, and, secondly, to work with each of those coun-

tries to make sure that material is secure, not an invasion of a sovereignty, and I mentioned Pakistan and India in my article in particular because these are very vital cases in the area we are now talking about, Afghanistan.

We offer, I hope, some assistance to make certain, first of all, those Governments know what they have; that it is secure; that if they do not have the money, the United States and others may work with them, and likewise with the security apparatus, which has become a part of our experience and, to a great extent, the Russian experience.

And finally, we encourage, whenever possible, and maybe even help finance, the destruction of this material or those weapons.

The opening up of those societies may not be easy. So as people talk about the next step, the next step is essentially attempting to define who will cooperate. I have no way of knowing whether our new friendship with India and Pakistan will lead us to believe they might be more cooperative than they would have been prior to September 11, but that is possible.

The stories about Pakistan's own striving to bring about security, its placement, as press reports give it, in six different locations, even a very far stretch of the imagination that the Chinese might be entrusted as trustees for it to get it out of harm's way in the event Pakistan was in harm's way, indicates how serious this is.

The question comes: What about situations in which there may be less cooperation? We do not know for certain what Libya has or if the Syrians are involved. We have strong beliefs that Iran and Iraq have been very active. And what if there is not cooperation with the international community, either the United Nations inspections teams or anybody else's inspections teams?

This is why the war against terrorism is likely to have some life to it beyond Afghanistan because there clearly is, in my judgment, a need to make certain this intersection does not occur. It is easy enough to read the paragraph I have just read, but clearly I think it has come into the purview of our policymakers that mutually assured destruction may or may not have been the guiding post between the United States and Russia. It apparently is not going to be the way we will proceed in the future, and the President and others have said we are on a different course of cooperation. But it did serve as a deterrent for a long time as thousands of nuclear warheads were aimed at us, and we had thousands aimed at the Russians.

Now the problem is, as we take a look at the aircraft going into the World Trade Center and into the Pentagon, mutually assured destruction does not seem to pertain to that kind of arrangement. Suicidal missions do

not take into consideration mutually assured destruction, in part because those who committed suicide destroyed themselves.

There are no assets back in a home country of governmental buildings, headquarters, utilities. What is there to destroy? What is the downside? This, of course, is the problem, that those with the suicidal tendency who have their hands on the materials, the weapons, for whatever reasons—religiously based, zealotry—decide to create havoc in the world and could do so in a monstrous way.

I continue with a bit more of Mr. Kitfield's analysis. It appears to me when he says the consequences of being wrong or not paying attention to these matters is catastrophic—we have been down the trail in various ways. Take a look at suitcase bombs. General Lebed of Russia came over and suggested that it may or may not confirm his point of view. But never the less, the Los Alamos people are taking a look at Lebed's contentions and those of others who have said "nuclear materials and expertise are much harder to account for" than bombs, even suitcases, anything encased. That is why "concerns about Russia are focused on fissile material and its scientists."

The problem is now it appears Russia produced a great deal more fissile material than we anticipated. So much more that the destruction of it or even the securing of it has gone well beyond all of our best attempts. Mr. Kitfield's article mentions the 5,700 nuclear warheads, 434 ICBMs, 484 air-to-surface missiles, bombers, submarines, and what have you, destroyed. However, he goes on to say, "attempts to consolidate and safeguard the much larger Russian stockpile of fissile material—the essential ingredient of these doomsday weapons—have had a more checkered record. Indeed, the first indication that Russia might be leaking lethal nuclear material from the decreasingly decrepit inventory is as early as 1992." He goes through each of the well-known documented cases and attempts to pilfer kilograms here, pounds there, of weapons-grade uranium.

The Russians still contend that all of these situations have been stopped, that the perpetrators were caught, whether in Prague or St. Petersburg or elsewhere.

"Today, U.S. experts at Los Alamos estimate that roughly 570 tons of Russia's total 850 tons of weapons-usable material are more secure," but this leaves 280 tons that are not. They believe at Los Alamos that clearly more than 200 tons of fissile material remaining largely unsecured are in 104 of the 252 nuclear sites in which U.S. officials have yet to gain access.

From my own personal experience, it is not easy to gain access to areas in which the officials of the country do not wish you to gain access. It is a bar-

gaining process, trip by trip, site by site—whether nuclear or biological or chemical. It is the first comprehensive figure I have ever seen, however, that details there are 252 known sites where there is fissile material—not warheads or ICBMs—and we have yet to gain access to 104 of these, almost 40 percent.

To make my point again, while I counsel we approach Pakistan and India with the thoughts of accessibility, accountability, and security, we have a great deal of work still to do with friends in Russia with whom we have been working for 10 years. The 10th anniversary of the Nunn-Lugar Act occurred 2 days ago, and in this body. It was late in that session in 1991 when the legislation was passed. For 10 years, we have been at work, these two countries, Russia and the United States. Yet even at this point, extraordinary amounts of material remain perhaps less secure than they ought to be, and unavailable, at least for our inspection even in this cooperative program.

Finally, the problems with the scientists are always speculative. From the beginning, the thought has been, in addition to the material, as Mr. Kitfield points out, there has to be one individual who has the expertise with the program to bring it together if a weapon actually is to be usable. The hope has been, through the International Science and Technology Committee—and this body has appropriated funds, again, from the State Department appropriation process—of a generous contribution to that effort. In the past, there have been contributions by Japan, by European countries, by Saudi Arabia and others.

In my own business, at their headquarters, I found our contribution now unfortunately has risen to 60 percent. I say unfortunately because it means others may have dropped off of the program. But with good diplomacy, others may drop back in.

Under this program, over 20,000 Russian scientists have been paid stipends to furnish them money to do other work—work in commercially viable propositions in Russia that do not involve weapons of mass destruction. I cannot overstate how vital this has been in sustaining the interests of those scientists in continuing to live in Russia as they wanted to do, provided there was any work—at a time that the Russian military establishment was winding down. Obviously, programs producing fissile material have been virtually stopped.

I have no idea how many scientists there are in Russia who at any one time were involved as experts in weapons of mass destruction. We have no way of knowing whether 20,000 represents most of them or a majority. We have, according to Mr. Kitfield and the experts at Los Alamos and Sandia, luck that the coincidence of scientists,

cell groups have not quite come together yet.

The point of this statement at this late hour today is to say that we cannot count on that. America has been staggered and shocked and grieved by September 11. Horrible circumstances.

Testimony before a committee I chaired involving those deeply involved in this subject and who knew a great deal about it, brought a witness who had the proverbial thin suitcase. He laid it down on the witness table. At the appropriate time, he opened it and there was a machined piece of metal, something like a pineapple in both its shape and size. He assured us this was not highly enriched uranium. Nevertheless, there were materials in this particular piece that a counter would register.

At this point, many in the audience backed away from the table. This hearing was turning into somewhat more of an interesting situation than some asked for. He made the point this was probably equivalent in size to 16 pounds of highly enriched uranium.

The article states some scientists say you need 55 pounds of highly enriched uranium in order to have a nuclear weapon. Some would say it is more like 100 pounds. So 16 pounds would not get the job done, nor did he purport that it would. He suggested, however, enlarging this pineapple with a few more layers would get you to that point.

This came just after the tragedy at Oklahoma City and the bombing of the courthouse by McVeigh and whoever was involved with him. That would now be classified, in many circles, as sort of the forerunner of the dirty bomb situation. That is, you have some materials, at least, that have properties that are nuclear but they are not at the highly enriched level. But you use common or garden variety explosives and you create a mess. McVeigh, as far as we know, was not attempting to combine the explosives with nuclear material at any level.

So I cite this example as only illustrative, in two ways. One was that half of that Federal courthouse was destroyed, along with a number of Americans, innocents, who were in that courthouse at the time.

The witness made the point, however, that if you had the proper expertise and you had the suitcase and the 55 or 100-pound weapon in this same pineapple shape, this would have had the effect of taking out 4 square miles of Oklahoma City, not just half of the Federal building.

Others have made the point that even without highly enriched uranium, the so-called dirty bomb, which does include some nuclear material but simply with an explosive device, could render the same territory in New York City uninhabitable for a fairly sizable period of time after the destruction of many lives in the process of the fallout

of this material, much like the effects down range from the Chernobyl explosion in Ukraine where hundreds of thousands of acres will not be farmed for our lifetime and many after that, or, if they are farmed, may have devastating health consequences, given the spoiling of the soil, the trees, the animals—everything that was involved. In short, this is the danger.

I think our officials understand this. But I am hopeful that as we proceed in subsequent years with our military appropriations, and our Department of Energy appropriations, and our State Department appropriations—because all of these efforts are divided in several ways, each one of them vital to the overall objective—that we have an understanding of how large a proposition this is.

This does not for a moment negate the need for the very best trained and paid American troops we have, and support of them, and all of the instruments of conventional warfare that are now being produced. But I am saying that once again the bottom line of the war, as I perceive it, is that even as we are very successful with these so-called conventional means, and with remarkable, talented American service personnel, on the homefront, here in the home defense situation, we need to understand the vulnerability we have in the same way that we explained it to those in Moscow and London and Rome and other beautiful capital cities of our world that are at risk if in fact this intersection between cells of terrorism and materials and weapons of mass destruction should develop.

There are people who say this is so pervasive and so comprehensive that school is out, it is beyond remedy. The numbers of terrorists, the numbers of countries, numbers of programs, regimes all believing they must have weapons of mass destruction or at least the threat of these to stave off whoever—and I understand that, as the Presiding Officer does. But our objective, at least, as policy leaders in this country, has to be a “go to it” spirit.

If at this point we simply accept it is there, we have to accept that at some point a very large part of one of our cities or our basic institutions could be under attack and this time could disappear, with absolutely devastating results for our country or any other country that was victimized in this way.

If we ask the basic questions we would have asked before September 11—Who could possibly do this? And for what reason?—we are staggered as we watch the tape of Osama bin Laden or listen to interviews with people who seem to be committed to a very different course of action that most of us find even remotely conceivable, morally or as human beings.

Unless we are prepared simply to forget September 11, roll the clock back

into a simpler time, then we will have to deal with more complex times.

I thank the Chair for allowing me to proceed in morning business with a message that I believe is important.

I yield the floor.

Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. DASCHLE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### PROGRESS ON THE FARM BILL

Mr. DASCHLE. Mr. President, I come to the floor for a couple of minutes prior to the time we finish our Senate business for the week to, first, compliment the Presiding Officer who has been our floor manager on the farm bill now for 1 entire week.

This afternoon marks 1 complete week of deliberation on the farm bill. I know this has not been easy on many, nor easy on the ranking member, as they have attempted to deal with the bill itself.

I compliment the Chair for his outstanding leadership and patience and the extraordinary effort he has made to manage this bill in a way that accommodated virtually every Senator.

I am disappointed that we weren't able to achieve cloture on the bill. I have indicated that we are going to keep trying to reach that point where we can bring debate to a close. I know there are a number of other amendments. We accommodated those on the other side of the aisle who wish to bring up an alternative to the committee-passed bill, the so-called Roberts-Cochran bill.

I believe we have had a good debate. I hope we can complete our work this coming week. I would not want to have to come back after that, but we will entertain the possibility of coming back additional days after Christmas, if need be, to get this job done. There is nothing that says we can't keep coming back until the 23rd of January, if necessary. We will look at all the options. But we need to bring this bill to a close. As I have said on other occasions, we need to do it for a number of reasons. Some of us have outlined those reasons throughout the week.

I think as we close out the week and mark the fact that we have now spent a week on the bill, we remind all colleagues that we have a budget window that may close. If that budget window closes and we are precluded even by a few billion dollars from dealing with all the needs in this bill, what a mistake that would be. What a moment of admission of failure that would be. I hope we can avoid doing that and avoid that scenario.

Secondly, I know, based on many conversations the managers and I have had and others have had with regard to the continuity, of the need to have a clear roadmap on how we transition from Freedom to Farm to whatever it is that Congress ultimately passes, something that every farmer and rancher would like to know.

I think that is the reason I got calls again this morning from farmers and ranchers in South Dakota who said: Please pass this legislation as quickly as you can because we need to know. We need to plan.

There is so much uncertainty in farm legislation as it is. There is so much uncertainty with agriculture as it is. To exacerbate that uncertainty by refusing to act, or not acting as quickly as we should, is compounding the problem unnecessarily.

We have seen a 75-percent reduction in farm prices since 1996. That is a remarkable demonstration of the need to do something now.

I hasten once again to note the importance of completing our work. I also say that as complicated as farm administration is, it is important that the Department of Agriculture be given as much lead time to make the transition as smoothly as they can.

There is no question, from a farm income point of view, from a farm certainty point of view, from the smoothness in transition point of view, and from the budget point of view, one could add more and more reasons that it is important for us to finish our work. No one has said it more eloquently or passionately than the chairman of the committee, my friend from Iowa, Senator HARKIN.

I simply come to the floor to again reiterate that we are determined to finish this bill. We are determined to do all we can to finish it not only on the floor but in conference. We will do whatever it takes to stay, to work, to cooperate, and to find ways to compromise. But it has to be a two-way street.

We have to continue to keep the pressure on. That is certainly my intention. I know it is the intention of the distinguished chair of committee. It has been 1 week. If necessary, it will be 2 weeks. And, if necessary, it will be 3 weeks, or more. But we are going to get this bill done.

I am just reminded that while we have been on the bill for a week, we actually made the motion to proceed 2 weeks ago. One could argue that we have been on the bill in one form or another for 2 whole weeks already. I do not know what the record is, but, clearly, we have a lot of work to do. With the holidays coming up, it certainly warrants putting all the time and effort we possibly can into getting this job done. I know there is interest in doing that.