RESPONDING TO PROLIFERATION:
A ROLE FOR NONLETHAL DEFENSES?
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Iraq's invasion of Kuwait and the ensuing U.S.-led multilateral military response dramatically demonstrate that regional threats pose formidable challenges to the United States in the 1990s and beyond. While the old Soviet threat to the West has disappeared with the Soviet Union and a fundamental transformation of East-West relations has occurred, new threats, direct and indirect, are developing. The ethnic, religious, political, and military rivalries in the Middle East, South Asia, East Asia, and perhaps other regions are being, or have the potential to be, aggravated by the acquisition of advanced weapon systems.

The post-Gulf War revelations of the advances achieved in the Iraqi nuclear-weapon program, as well as questions about the nuclear inheritance of the former Soviet Union, have highlighted the threat of spreading nuclear capabilities. The proliferation of advanced conventional weapons (including missiles) and weapons of mass destruction will continue over the next decade, becoming militarily more significant, and posing a threat to U.S. interests, friends and allies, and power-projection forces, but not to the continental United States. Such developments as growing opportunities for nuclear terrorism or increasing instability in the former Soviet Union could fundamentally change this situation for the worse. But the military significance of proliferation will be more challenging in any event.
The proliferation of advanced weapons capabilities gives developing nations the means to pose serious threats to U.S. interests and armed forces, to allies and friendly nations, and perhaps eventually to the continental United States. The United States and its allies must be able to respond to regional conflict, and to such contingencies as terrorism, hostage-taking, drug trafficking, and interference with navigation and shipping. Yet there may be constraints on such responses, and perhaps far higher thresholds for intervention, if nuclear and other weapons of mass destruction have proliferated in the regions of concern. This growing proliferation danger in the context of post-Cold War regional conflicts has enhanced the priority of nonproliferation efforts, and raised questions of unilateral military responses. Clearly, this issue is now on the agenda in the context of managing or containing nuclear proliferation, and will have to be addressed.

Military action can never provide the basis of nonproliferation policy, and the prospects for military actions that genuinely remove a proliferation threat without creating an international backlash, an environmental disaster or some other unintended consequence are in any event limited. But options must be available. Among the more promising of the options are those presented by a suite of technologies known as "non-lethal defenses" or "disabling technologies," which could create a new aura for action and, if proven technically feasible and appro-
appropriately used, could ameliorate some of the problems associated with military responses without being any less effective.

Military responses and nonlethal defenses in particular must be understood in the context of the proliferation threat and broader nonproliferation efforts. Accordingly, the following discussion will consider first the new threat environment and then new responses. It will then turn to a discussion of the difficulties of utilizing military measures and nonlethal defenses as a means of addressing those difficulties.

**New Threats**

In contrast to perceived wisdom, the problem of the proliferation of weapons of mass destruction is not spiralling out of control. While we may be surprised in the future about one or another country's interest or achievement, there are only a few countries with an undisputed nuclear-weapon capability, and a limited number of countries with programs or interests. Of these states, those whose possession of nuclear weapons would be most destabilizing and most threatening to U.S. interests are farthest away from developing nuclear weapons either because their indigenous capabilities are virtually nonexistent (e.g., Libya and Iran) or because of international pressures or actions (e.g., Iraq). In this context, persistent rumors of Iran's acquisition of former Soviet weapons and Chinese willingness to assist proliferators are especially problematic and could fundamentally change this calculus.
In recent years there has been more interest in chemical weapons (CW) and biological weapons (BW), especially among states viewed as potential adversaries. But CW capabilities do not appear as threatening as they did prior to the Gulf War, and BW, while a frightening prospect, is difficult to weaponize and employ effectively. It is clear that BW/CW programs complicate the nuclear proliferation issue, as do the proliferation of delivery systems and other advanced conventional capabilities. The linkages among the types of proliferation are an obstacle to dealing with the proliferation problem in the Middle East and other conflict-prone regions, and the mix of these capabilities is making proliferation where it is occurring more militarily significant, as weapons of mass destruction are mated to delivery and support systems.

In the years before developments in Iraq and the former Soviet Union renewed and reinforced concerns about the urgent dangers of nuclear proliferation, the growing interest in nonproliferation was being primarily fed by fears of chemical and biological weapons as well as missile proliferation. Of course, the longstanding interest in nuclear nonproliferation, which successive U.S. administrations have regarded as a fundamental national security and foreign policy objective, had not disappeared. On the contrary, it was generally assumed that the problem was relegated to a few rogue states that refused to accede to the Treaty on the Nonproliferation of Nuclear Weapons (NPT) and to comprehensive International Atomic Energy Agency (IAEA) safeguards, and
that a mature, functioning nonproliferation regime had succeeded reasonably well in stemming the problem elsewhere.

What is new is the nature of the challenges to the regime evident in the Iraqi and post-Soviet nuclear developments, and an assumption among many observers that the regime will be unable to handle them. First, it is held that the regime is too narrowly focused, and thus not responsive to states that are proceeding toward nuclear weapons on the basis of dedicated programs. Such programs are not covered by verification mechanisms under the NPT, that is, by IAEA safeguards, to the extent that they are undeclared and based upon a sophisticated, indigenous defense industrial base and imports (legal and illegal) of dual-use items that are far removed from direct nuclear uses. Second, it is assumed that the regime, which was designed during the Cold War and reflects the mutual interests and influence of the United States and the former Soviet Union, is ill-equipped to deal with problems arising from the breakup of the Soviet Union. These assertions cannot be dismissed, but they do not foreshadow the demise of the regime.

The regime is being challenged in a dramatically changing world. However, and in the next years we shall see whether it meets its challenges. Key issues in the nuclear arena are:

- Whether the international community continues sanctions and long-term monitoring of Iraq's military-industrial infrastructure;
what lessons will be drawn by potential proliferators from
Iraq's behavior and its consequences in the next year or
two;

whether the international community's response to problems
that have arisen in North Korea over IAEA adherence and the
implementation of IAEA safeguards will be strong and sus-
tained;

the perceived credibility of safeguards in South Africa,
given inherent uncertainties about stocks of weapon-useable
materials in the country and the difficult problem of assur-
ing that South Africa's nuclear weapons and associated
facilities have been destroyed or are no longer operable;

and

the behavior of Israel, India, and Pakistan, as well as
other problem countries.

These are believed to be the most pressing of the tradi-
tional proliferation challenges now facing the international
community. Nuclear weapon tests by proliferators; overt weapons
declarations; further safeguards violations; and nuclear theft,
sabotage, or terrorism could also challenge the regime, as could
differences on Article VI of the Nonproliferation Treaty, which
could undermine the Treaty as it faces extension on 1995.

One emerging challenge that has the potential to undermine
the regime more severely than any that has commanded attention in
the last four decades is the collapse of a powerful nuclear-weapon state, the Soviet Union. Nuclear weapons, nuclear scien-
tists, engineers and technicians, and other nuclear capabilities, may spread to other countries. Further unrest in the Soviet successor states, including the possible disintegration of Russia, may result in nuclear theft or sabotage, and terrorism or use cannot be ruled out. Chinese willingness to export advanced military capabilities has been a serious irritant in the past, but the prospect of the disintegration of China when the leadership changes could result in problems like those now possible in the former Soviet Union. These dangers are serious but remain largely prospective.

If these dangers are not realized, as suggested the near-term proliferation threat will largely be limited to those developing countries of concern over the last ten to twenty years, especially problem countries in the Middle East, South Asia, and Northeast Asia. Indeed, there are already signs that the list may be declining rather than growing due to positive developments in areas such as Latin America and Southern Africa. In the longer term, the "delegitimization" of nuclear weapons along with developments in the international security environment and in the international arms and high-technology markets could lead to an expansion or contraction of this level of threat. These longer-term trends, if they continue, will reduce the perceived utility of nuclear weapons (with the possible exception of regions with intractable conflicts), but also undermine even further the barriers to their acquisition.
Responses: Old and New

It seems clear that the new threats are different from those that have appeared in the past, and more difficult to deal with. The United States will continue to rely on both multilateral and unilateral approaches to nonproliferation. The United States will continue to use political incentives, technological constraints, bilateral export controls, and multilateral treaties, institutions and arrangements, which include the NPT and safeguards. But the funding levels of these approaches can be expected to increase in coming years, with a view to strengthening them and expanding their scope.

U.S. nonproliferation policy will be pursued through efforts to support and strengthen the international nonproliferation regime. In particular, the United States will strongly support strengthening the IAEA-administered system of safeguards and support the indefinite extension of the Nonproliferation Treaty. U.S. nonproliferation policy will also be pursued through diplomatic efforts. Demarches to, and bilaterals with, major suppliers (and allies) dominated the diplomatic agenda in the past. Building a nonproliferation consensus, especially during and after regional crises, may dominate the agenda in the future.

The United States has been and will remain committed to reducing states' motivations for acquiring nuclear explosives. To this end, the United States will continue to seek to improve regional and global stability, to strengthen alliance systems, and to promote the legitimate security interests of states, in
some cases through economic and security assistance, and by other means. Of course, each of these objectives has other defense and diplomatic rationales, which at times work at cross-purposes with nonproliferation.

Export controls will remain an essential element of U.S. nonproliferation policy. For the foreseeable future, export controls will continue to play a role in nonproliferation strategy, and multilateral controls are being strengthened in the aftermath of revelations about the Iraqi programs to develop weapons of mass destruction and means to deliver them. Yet the significance of export controls is already eroding as technologies inevitably spread, new suppliers emerge, and the like. This is presumably the case more in the chemical and biological than the nuclear spheres, but this process will continue across the board. Moreover, the control of dual-use items has economic costs and can pose serious impediments to developing economies, which could undermine commitment to implementing these controls and raise North-South tensions, among other consequences.

The United States will continue to seek to strengthen such traditional elements of U.S. nonproliferation policy. Especially in light of the Gulf War and its lessons, however, the United States will be committed to an incremental improvement of these traditional responses to the nuclear-weapon proliferation threat, along with efforts in CW, BW, and missile nonproliferation, including:

- strengthening the NPT and IAEA safeguards;
rapidly bringing into force and implementing the Chemical Weapons Convention, and strengthening the Biological Weapons Convention;

promoting regional arms control and openness, transparency, and confidence-building measures;

enhancing enforcement and compliance mechanisms by building on the UN experience in Iraq (e.g., sanctions, inspections);

strengthening and expanding export control measures, particularly in dual-use areas, including the Missile Technology Control Regime; and

improving intelligence and increasing intelligence sharing.

In the new threat environment such traditional responses, ranging from diplomacy and intelligence to export control arrangements and treaties, are no longer wholly adequate, even if strengthened. New approaches, from arms control to military options, are being considered. The United States is undertaking further limitations on nuclear testing and has announced a cutoff in fissile materials production, in part in the belief that these actions will enhance nonproliferation efforts. A nuclear no-first-use policy, more formal negative and positive security assurances, and other such actions may also be explored as means to inhibit proliferation.

These "arms control" approaches to nonproliferation have primarily been put forward in the context of strengthening the NPT. Whatever their security rationale, and it is now different than it was before the fall of the wall, such trade-offs are
unlikely to affect the behavior of proliferants. They will not have a decisive impact on the future of the NPT, but there is a widespread belief that they will.

The United States will also explore the difficult avenue of unilateral or internationally-sponsored responses to proliferation. What might such responses entail?

There are potentially wide-ranging options for military and other responses to various proliferation contingencies. At one end of the spectrum are possible covert actions or special operations to prevent certain exports or assistance, to delay a proliferant's program or to eliminate nuclear weapons and other weapons of mass destruction or related facilities and capabilities in the proliferant's possession. Conventional military actions could be undertaken to preempt weapons or capabilities, or to respond preventively to the threat or use of nuclear weapons or other weapons of destruction. It has been argued that nuclear responses are necessary here, but this is unlikely, and given current and prospective threat levels, unnecessary. Developing and deploying defenses against missile attacks with nuclear and other unconventional payloads may also be required, along with creating capabilities for U.S. forces to operate in a proliferated environment.

At the other end of the spectrum are responses to nuclear accidents or use to mitigate environmental consequences and the like. A first-order requirement would involve strengthening and expanding the role of existing U.S. capabilities, including the
Nuclear Emergency Search Team (NEST) and the Accident Response Group (ARG), to ensure that they are responsive to emerging threats. NEST and ARG offer capabilities that might possibly be used, for example, to disable a proliferant nuclear device or to respond to a nuclear accident in a proliferant country. One of the most likely detonation scenarios for nuclear weapons in the near future, it is frequently argued, is a proliferant's accident producing a nuclear yield.

This range of responses would reduce the threat, increase the costs of proliferant behavior, and reduce the military benefits of possessing weapons of mass destruction. Such responses could actually mitigate the consequences of the threat or use of these weapons.

The precise response would depend on a host of circumstances, including, first and foremost, the question of whether the perpetrator can be identified by intelligence available to the United States or the international community. The scope, nature, and level of development of the program, and the regional and global security environment will also be critical in determining the response. A key factor may be whether the response was undertaken during a conflict or occurred in peacetime.

Counterproliferation?

The undeniable problems of undertaking military actions in response to proliferation, or counterproliferation in contrast to nonproliferation, have often been raised. Unless military
responses undertaken in unequivocal self-defense or are sanctioned by the United Nations Security Council, they constitute challenges to national sovereignty and raise questions of international law. Certainly, unless they are undertaken against a pariah state or a state that has engaged in an act of naked aggression or whose weapons program presents an overwhelming, urgent and recognizable threat, they will be criticized in the "court" of world public opinion. It is true that after the Gulf War and the implementation of UN sanctions and inspections in Iraq on nonproliferation grounds it is possible to have military actions against proliferators approved if they constitute a direct threat to peace and security.

Yet the Iraqi case, which was not originally a nonproliferation action and which has provoked negative responses in the developing world, demonstrates how difficult it is to reach consensus on such matters. Most proliferation programs do not pose clear and present dangers, such as recent U.S. efforts to control the transfer of sensitive technologies to Iran highlight. Without a sense of urgency deriving from the proliferant activity itself or from other related objectionable international behavior, there will be no international consensus for responses such as warnings, embargoes, or the like, let alone military action.

If no UN action is feasible, will the great powers act in concert, or the United States or another state consider unilateral action? The great powers are the Perm-5 of the United Nations Security Council; it is unlikely that if UN action is not
possible that they could agree to take action outside the United Nations. Some of them may agree to action, but it will not be seen as legitimate. The Israeli strike on the Osirak reactor in 1981 was one of the few cases in which unilateral actions have been taken. But the legitimacy of the Israeli action was widely assailed, even though many of Israel's critics may have quietly approved of the action's result.

The bombing of targets of proliferation concern during the Gulf War would seem to suggest that during a widely approved conflict there are opportunities for military nonproliferation measures. The difference between the negative reaction to the Osirak attack and the silence or support greeting similar actions during the Gulf War is astounding. Yet there has been some criticism over the appropriateness of these actions, and they have a North-South dimension that is critical of the regime.

Any military action, even if sanctioned by the United Nations, has effects on the international nonproliferation regime. Such action indicates the regime has failed and highly publicizes that failure, giving succor to domestic and international opponents of the regime. Moreover, because such action is likely to be carried out, for the foreseeable future, by the United States, its Western allies, or by a U.S. or Western-led multilateral force, it will have an air of serving the interests of these states and thereby enhance discrimination. Military action can be undertaken in these circumstances, but it must be done only in extreme cases, and only rarely if it is not to
bring down a regime that has been criticized in many quarters. It must be noted that the regime effects of inaction may be as damaging.

Not only are military measures difficult in political terms, they are also difficult in military terms. The intelligence requirements for acts against proliferant programs are particularly demanding, whether those actions are designed to disable or to destroy R&D and production facilities, or weapons and materials, while minimizing collateral damage. The attacks on suspected Iraqi BW and CW facilities during the Gulf War apparently did not result in any significant releases of agent into the atmosphere, and in any event the targeted facilities were not located near large population centers. Nonetheless, strikes against such facilities in the future will require extensive intelligence to ensure that buried or other concealed facilities are located, and that the design, status, and other information is known to ensure both that the facility is no longer operational and that release of chemical and biological agents and the exposure of the population is limited.

Precision-guided and other smart munitions will have to be improved, and perhaps specially-tailored for such tasks. Even the use of smart weapons against targets such as a nuclear material production facility can have unintended consequences, resulting in the deaths of noncombatants, damage to colocated and other civil facilities, and adverse environmental consequences. The challenges of theater or strategic ballistic missile defenses
are well known, but the ability of systems to deal with tactical ballistic missiles carrying weapons of mass destruction is particularly daunting. If, for example, a CW warhead was intercepted in the lower atmosphere, atmospheric conditions (e.g., precipitation) could result in most of the agent being unintentionally dispersed near the original target.

The very presence of nuclear weapons complicates the projection of U.S. power, but arguments that suggest it would necessarily prevent U.S. actions are not compelling. Operational challenges from detection to destruction of special nuclear materials and weapons are critical. It will be necessary to undertake these actions in a manner that minimizes the prospect of effective retaliation against the United States or U.S. interests; limits adverse political effects, particularly international criticism or condemnation that could undermine the nonproliferation regime; minimizes human casualties; and avoids or limits serious collateral damage or environmental effects.

A full response capability will require developments in advanced conventional ordnance, as well as defenses, but an opportunity to meet the political and military challenges of responses to proliferation that have a military dimension may be offered by nonlethal defenses.

Nonlethal Defense

"Nonlethal defense" or "disabling measures" go well beyond efforts to prevent or respond to proliferation. In the view of
proponents, they may be applicable across a continuum ranging from pre-conflict to high-intensity conflict at the strategic level. In all of these areas, nonlethal defenses may be able to play a significant role by enhancing current capabilities and perhaps creating new ones, especially in the area where diplomacy and military force meet. The highest payoffs would probably be prior to the engagement of major lethal force.

Nonlethal defenses, as they are now being discussed in the policy and academic communities, involve a suite of technologies designed to disrupt, degrade, or destroy a wide set of targets, with minimum physical damage and no intentional casualties. Electromagnetic, acoustic, materials, information and other technologies are being explored for nonlethal applications. Those potential applications would respond to wide-ranging military contingencies. They might, for example, involve disruption of information, communications, command and control, and other systems by advanced computer viruses, electromagnetic disturbances, and deception; disruption of advancing forces by jellifying fuel and inhibiting combustion in the engines of tanks and armored personnel vehicles, crystallizing the tires of military vehicles, and stalling them with antitraction polymers and lubricants; and destroying air forces by embrittling or otherwise weakening airframes, spraying polymer adhesives on runways, and the like. Certain technologies being considered for these and related nonlethal applications are proven and available; others will require long-term research and development.
While the concept of nonlethal defenses is not new, the maturation of critical technologies along with new military requirements at the end of the Cold War has created new interest in the academic and policy communities, as well as in the military. Former Undersecretary of Defense for Policy Paul Wolfowitz reportedly called for increased research and development of non-lethal technologies, stating to then-Secretary of Defense Cheney at the end of the Gulf War, "A U.S. lead in nonlethal technologies will increase our options and reinforce our position in the post-Cold War world."

As Wolfowitz's statement suggests, nonlethal defenses are in principle applicable to a wide range of emerging contingencies. Counterproliferation, along with many other new military scenarios that may be confronted in the post-Cold War world, will require controlled execution and minimal force. With a decline in the importance of formal alliance structures and the emergence of ambiguous threats and a more complex and unpredictable environment, changes in force structure and forward presence (to enhance flexibility) and greater reliance on crisis response are inevitable. Power projection is critical in this environment, and more options to project power are required, especially for contingencies short of open warfare, including crisis management, peacekeeping operations, and hostage rescue operations, as well

as such operations as counterdrugs, counterterrorism, and counterproliferation.

In such contingencies, nonlethal capabilities, perhaps along with precision-guided and other "smart" munitions, would be desirable to conduct "surgical" strikes where the deaths of noncombatants and combatants are minimized and massive destruction of property is avoided to ensure that the operation does not undermine the effort for which the United States is fighting, and in some cases, for example nonproliferation, the U.S.-supported international regime.

If required, the preemption of proliferation programs with minimal cost and the least amount of damage is critical. Amid global changes, there may be the requirement to disable or recover nuclear weapons or weapon-usable nuclear materials, for example, that are stolen from the former Soviet Union, either after a request from Moscow, Kiev, Minsk, Alma Ata or another authority, or on a unilateral basis. But preemption can occur at any stage along the various routes to nuclear weapons: from exports to deployed weapons themselves. And it must be understood that preemption may be undertaken overtly or covertly, and by the United States alone or in concert with other powers, or regional or international organizations.

In light of the wide-ranging aspects of this potential mission, substances to corrode or change the chemical composition of the various materials used in weapons or mass destruction, or to undermine the tensile strength of metals in the weapon or the delivery system could conceivably fulfill military requirements. In similar fashion, the introduction of a computer virus in, say, the process control system of a nuclear weapon production facility or any number of electronic disruptions could also be useful in achieving certain nonproliferation objectives. Operations at high explosive (HE) testing sites could be delayed if the HE stores were detonated by microwaves or other means.

Another preemptive application may involve interdicting or degrading nuclear capabilities before or during a possible conflict, which would presumably create new conditions for action that may not exist during peacetime. Storage and launch sites could be effectively neutralized during a crisis or in conflict if the electronics were disrupted or destroyed by non-nuclear pumped electronic pulses or microwaves. The electronic triggers of weapons themselves may also be destroyed. Such actions might effectively neutralize an adversary's small, centralized nuclear forces, making them unavailable during a conflict. A larger mobile force would pose more formidable challenges, as our difficulties during the Gulf War in destroying mobile SCUD launchers demonstrates. Intelligence requirements would be high. Even if one had flawless intelligence, certain actions would be nearly impossible to execute. Others may be viewed by policy-makers as
too risky, especially if they involved the possibility of detonating a weapon and producing significant yield.

In addition to preemption per se, nonlethal defenses can be used to support various operations, including incursions into a proliferant country to emplace undetected sensors designed to monitor nuclear or other weapon activities, to disable or destroy facilities or sites for the production or storage of weapons of mass destruction, or to seize or neutralize weapons, nuclear materials, or chemical or biological weapons or agents. It is believed, for example, that such measures might deal with the adversary's security system and forces (e.g., optical munitions to blind sensors) or delay the arrival of military forces (e.g., combustion engine inhibitors, antitraction polymers and lubricants for railroads, adhesive polymers for runways) and allow the U.S. forces to perform the mission and leave the country without a major engagement.

All of these potential uses of nonlethal defenses have received some attention and discussion in various quarters, including the military services and the Joint Staff. But these possibilities are not the only ones, and may not ultimately prove to be feasible or appropriate. While any such action holds dangers, the physical impact of an action using direct lethal force would be far more damaging. Moreover, the regime implications might be expected to be greater in the event of the use of lethal force.
If the benefits appear greater than the costs, such approaches as have already been put forward and other promising approaches will need to be extensively addressed. This must be done by nonproliferation officials and military planners, along with the intelligence community, on a high-priority basis and within appropriate communities, if the promise of nonlethal technologies to become a part of U.S. efforts to prevent and manage proliferation is to be realized in the future.

Conclusion

New nonproliferation and counterproliferation measures, from arms control to military responses, would if realized augment the old approaches that remain the foundation of current nonproliferation efforts. None is truly an alternative to those approaches; such truly alternative measures are unlikely to be posed as such unless there were some extraordinary event, such as the collapse of the NPT in 1995, when the Treaty's extension is to be reconsidered. Even now, the revival of the Baruch Plan (which proposed a rigid international control regime for all nuclear activities), the conclusion of some overarching nonproliferation treaty, and other grandiose concepts are being put forward. However, the very appearance of lesser measures suggests that the old regime has problems and loopholes, and that these are being increasingly recognized.

Clearly, direct military activity, even if it can be undertaken by nonlethal means, is only a matter of last resort. It
shows the regime has failed in some aspect, and challenges regime structures in the best case. But there may be no choice. The Osirak attack and the Gulf War demonstrate that military responses can be used without apocalyptic consequences. While any response capabilities in the future may be largely constituted on national bases, they may be used in the context of multilateral action, perhaps even under international authority.

Are we moving exclusively to multilateral or international approaches to proliferation? U.S. nonproliferation policy has long relied on both unilateral and multilateral approaches, although the balance (or imbalance) between them has changed over time. Today, to develop domestic and international support for nonproliferation actions, reduce costs, and the like, multilateral efforts are desirable in principle, but not always possible. The capability to act alone, if necessary, is essential. It is necessary to have options. Few countries will be able to develop, for example, interdiction capabilities. One can imagine many scenarios where unilateral action will be supported domestically (and perhaps welcomed internationally).

In the future, as in the past, unilateral capabilities would augment multilateral approaches, and both will be important to U.S. nonproliferation efforts. Growing interest in and possibilities for multilateral action, along with declining opportunities for unilateral action, appear likely in the new world we are entering. However, the last resort to proliferation dangers may well be U.S. military capabilities. In order to address military
proliferation challenges of the future in a manner that best serves the interests of overarching nonproliferation policy, it will be necessary to investigate nonlethal defenses for counter-proliferation contingencies. If some technologies prove feasible, they should be included with other arrows in the country's nonproliferation quiver.