COUNTERING PROLIFERATION
Insights from Past ''Wins, Losses, and Draws''

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Over the past decades, the United States has had wins, losses, and draws in a continuing attempt to prevent a world of many nuclear powers. A review of that record suggests lessons or insights for future efforts to counter proliferation as well as for thinking about the 2016 proliferation future. Those lessons range from a need to adapt to the fact that critical U.S. security guarantees are no longer a nonproliferation ''free good,'' through the recognition that ''buying time'' is a good in itself, to the importance of a successful nonproliferation policy that builds partnerships with other countries. Perhaps the most important insight from the proliferation policy past for thinking about the 2016 proliferation future, however, is that, repeatedly, fears of runaway proliferation have energized the United States and other governments to act together to make those fears a self-denying prophecy. With hard work and luck, this may yet happen again.

KEYWORDS: U.S. nonproliferation policy; U.S. counterproliferation policy; Nonproliferation strategy; Arms control; NPT; U.S. alliances; IAEA; CTR; Proliferation dynamics

To foster discussion of the insights to be learned from past proliferation policy for thinking about nuclear weapons proliferation in 2016, this article first sets out a tally of proliferation policy ''wins, losses, and draws.'' It then proposes a baker's dozen of insights or lessons to be drawn from that record. In particular, the article examines what U.S. proliferation policymakers have done well and what they have done badly—and why. Is there evidence of underlying patterns, predispositions, or mindsets that recur across the years and across U.S. presidential administrations? What other lessons stand out that could influence nuclear proliferation over the next decade?

The Proliferation Policy Record

For our purposes, U.S. efforts to counter nuclear proliferation are taken to cover the full range of policies pursued since 1945 to prevent the further spread of nuclear weapons and their means of delivery as well as policies to manage the consequences of such spread. Counterproliferation policies (to use the current parlance) cover the full spectrum of measures from traditional diplomacy to the deployment of robust military capabilities in formal alliances. Those policies have evolved over time. At different points in time, moreover, relative priority has been placed on some policies rather than on others.

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Against this backdrop of many different policies pursued over many decades, Table 1 sets out a somewhat idiosyncratic assessment of U.S. proliferation policy "wins, losses, and draws." This assessment reflects today's state of play. It also reflects the following working definitions:

TABLE 1
Nuclear Proliferation Policy Wins, Losses, and Draws

Wins	Losses	Draws
• Establishment of NATO • International Atomic Energy Agency set up • Negotiation of the NPT and its steady expansion of membership • Establishment of the Zangger Committee • Decisions by South Korea and Taiwan to give up pursuit of nuclear weapons • Establishment of the Nuclear Suppliers Group and the eventual expansion of the NSG's mandate and membership • Establishment of the Missile Technology Control Regime • Decisions by Argentina, Brazil, and South Africa to roll back nuclear weapons programs • Cooperative Threat Reduction (CTR) with Russia (including DOD and DOE programs) • China's increasing acceptance of nonproliferation norms • Reductions of U.S. and Soviet nuclear arsenals, consistent with NPT Article VI • Indefinite extension of the NPT • Establishment of the Proliferation Security Initiative and successful interdictions • Roll back of Libya's NBC weapons programs • The non-use of nuclear weapons since 1945	• Acquisition of nuclear weapons by the Soviet Union followed by the UK, France, and China • Israel's acquisition of nuclear weapons capabilities • India's 1974 detonation of a so-called peaceful nuclear explosive • Pakistan's acquisition of nuclear weapons • North Korea's failure to abide by the Agreed Framework and its development of nuclear weapons • North Korean and Iranian noncompliance with the NPT • United Nations Security Council inaction on North Korea and very limited action on Iran • Testing of nuclear weapons in 1998 by India and Pakistan with both countries emerging as open nuclear weapon states • North Korean sales of ballistic missiles • Precedent set by the A.Q. Khan nuclear proliferation network • Failure to find evidence of NBC weapons program in Iraq after the 2003 war • Breakdown of the 2005 NPT Review Process	• Slowdown in reprocessing and use of plutonium in civil nuclear programs in 1980s and 1990s • Acknowledgment by U.S. defense community of the defense implications of NBC weapons proliferation, with some increased capabilities • Deployment of missile defenses • IAEA safeguards 93+2 • Programs to eliminate use of HEU in research reactors • Implementation of CTR and other cooperative threat reduction programs with Russia and other former Soviet countries • End of the negotiated nuclear arms control process • Terrorist efforts to acquire nuclear weapons materials or a nuclear weapon • United Nations Security Council Resolution 1540 • United Nations Security Council engagement on Iran • U.S.-India Nuclear Cooperation Agreement • Increasing availability of nuclear technology and know-how in an era of globalization • Increasing latent nuclear capabilities

- *Win*: rollback of proliferation; action, initiative, or development widely acknowledged to strengthen efforts to decrease proliferation incentives, increase proliferation disincentives, impede technical progress to the acquisition of nuclear, biological, and chemical (NBC) weapons or missiles, or contribute to a perception that runaway proliferation can be avoided
- *Loss*: emergence of additional nuclear proliferators; actions or developments that increase incentives or decrease disincentives, make it technically easier to progress, or heighten perceptions that runaway proliferation may no longer be avoidable
- *Draw*: "jury still out" on what the impact will be of a particular development or policy, how well an initiative will be implemented, or on whether a particular adverse change or development can yet be reversed.

It is important to recognize that there can be shifts from category to category: Wins may be eroded or proved false; losses may be reversed; draws may eventually fall one way or the other. Readers may disagree with one or another ranking and almost certainly will identify other possible entries. Nonetheless, taken as a whole, this tabulation provides a rich foundation on which to consider the policy community's past performance.

Twelve Proliferation Policy Insights from Wins, Losses, and Draws

Even a brief examination of past proliferation policy wins, losses, and draws suggests a variety of insights or lessons. Without trying to put these insights into any overarching baskets, this article considers only some of the most important ones and speculates on the implications of each particular insight or lesson for the nuclear proliferation environment in 2016.

Key U.S. Security Policy Actions Have Been a Nonproliferation "Free Good"

U.S. security alliances with other countries arguably have been the most important nonproliferation actions taken over the past five decades. The North Atlantic Treaty Organization (NATO) alliance—with its nuclear guarantee—provided an alternative to national nuclear weapons programs that most of NATO's members found fully sufficient. The security shadow provided by NATO contributed as well to Sweden's ultimate decision not to acquire nuclear weapons. Similarly in Asia, the U.S. security guarantee was—and remains—critical to Japan's decision not to acquire nuclear weapons, and also to Taiwanese and South Korean decisions to abandon their nuclear weapons programs in the 1970s.

However, each of these security payoffs was essentially a "free good" for nonproliferation. The dominant motivation behind these alliances was not fear of proliferation but fear of the Soviet Union. In effect, the U.S. policy community never really confronted the question of "how much to pay" to prevent proliferation. Indeed, in other circumstances when that question arose, the United States proved unwilling to invest significant resources "simply" in an attempt to put in place security guarantees directly linked to reducing a particular nation's proliferation incentives.

Looking ahead, the scope and pace of future nuclear proliferation will continue to be closely intertwined with the robustness and credibility of U.S. security alliances. If those alliances continue to be seen to meet the security needs of critical countries—from Japan in Asia to Turkey in the Middle East—the likelihood of ever-widening proliferation would decrease significantly. Conversely, if U.S. actions—whether intentional or not—erode that credibility, the prospects for widening nuclear proliferation will jump. At the same time, success in containing the spread of national nuclear weapons programs almost certainly will require a greater readiness to pay a price on nonproliferation grounds.

Policy Has Excelled at Institution Building

From the establishment of the International Atomic Energy Agency (IAEA) in 1957 to the launching of the Proliferation Security Initiative (PSI) in 2003, U.S. proliferation policy has perhaps been best at building institutions broadly defined. The benefits, but also the limitations, of institution building are exemplified by the decades-long U.S. campaign to expand the membership of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) so that today only three countries stand outside it (not counting North Korea, which now has a very complicated relationship with the NPT).

On the one hand, for the greatest majority of NPT members, their commitment not to acquire nuclear weapons is an important legal and political constraint. The NPT's provisions also support the IAEA's inspection mechanisms, legitimize the activities of the Nuclear Suppliers Group (NSG), and provide obligations that can be used to hold to account countries of proliferation concern. Not least, this process of ''rounding up members'' has helped create a perception that runaway nuclear proliferation still can be avoided. On the other hand, the presence of NPT members with questionable nonproliferation bona fides threatens to undermine the treaty from within. Given the NPT's ''two cultures,'' moreover, for many members the most important purpose of the NPT is to foster nuclear disarmament for all, not arms control for the nuclear ''haves'' and nonproliferation for the nuclear ''have nots.'' This divergence has made it harder to confront those internal compliance challenges, while weakening the treaty.

Future prospects for nuclear proliferation will be shaped partly by how this ongoing tension between the pluses and minuses of institution building works out. Failure to confront successfully Iran's and North Korea's noncompliance would further erode the NPT's credibility and place a greater burden on U.S. security relationships to check proliferation incentives in the Persian Gulf region and in Asia. Over time, unless the differences between the two cultures in the NPT can be bridged, the treaty also may lose its normative and legitimizing value.

Policy Has Been Less Effective at Sustaining Institutions

U.S. policy has been less effective, however, in sustaining strong support for nonproliferation treaties and institutions. In large part, this reflects the underlying differences of interests, ideology, and perspective that play out in the internal workings of various nonproliferation institutions, whether via board meetings, review conferences, or more

ad hoc activities. At some points in time, the relative emphasis placed on multilateral and international institutions by different U.S. presidential administrations clearly has made it harder to work out those underlying differences in a mutually acceptable manner. In turn, skepticism about American intentions and positions also has impeded efforts to muster widespread support for effective implementation of new initiatives, such as the IAEA's Additional Protocol and the United Nations (UN) Security Council (UNSC) Resolution 1540.

Looking ahead, sustaining key institutions and treaties is likely to remain difficult. In particular, as already noted, the future vitality of the NPT is fundamentally linked to whether it is possible to roll back North Korea's bomb program and head off an Iranian bomb. More broadly within the NPT, unless the United States becomes more prepared to address the issues of concern to most other non-nuclear NPT parties, the support of those NPT parties for the treaty is likely to erode further. It also likely will be more difficult to gain international support to address issues of most concern to the United States, including NPT compliance.

Problem Countries Are a Real Problem

The record of over a half-century's efforts to prevent ''problem countries'' from acquiring nuclear weapons is relatively poor. In particular, with some exceptions, once a country's leadership had committed itself to acquire nuclear weapons, little could be done to reverse that decision. Attempts to make it technically harder, diplomatic and political jawboning, threats and imposition of sanctions, tougher inspections, legal constraints, and/or conventional arms placebos all often proved too little, too late. France, China, and Israel in the 1960s, India and South Africa in the 1970s, Pakistan in the 1980s, and North Korea in the 1990s all are nuclear cases in point. Having crossed the ''proliferation Rubicon,'' these countries were not to be turned back (except of course South Africa, which later disarmed after producing half a dozen nuclear weapons).

The nuclear experience especially suggests that political proliferation preemption—not simply military preemption—should become part of the proliferation policy lexicon. In effect, the U.S. policy and intelligence communities should look over the horizon to detect the next potential nuclear proliferators, the so-called second- or third-tier countries of potential concern, before they have gone too far to be turned back. A more fine-grained understanding of those countries' incentives and disincentives to acquire nuclear weapons also should be developed, recognizing that this mantra has been heard many times before. Having done so, it then would become possible to pursue a multifaceted approach to influence their calculations while time remains to do so.

Other Strategic and Political Interests Trump Nonproliferation

Across many decades of U.S. proliferation policy, other strategic and political interests have repeatedly trumped nonproliferation interests—if the ''country of concern does not blink.'' To take but three examples, the United States has: argued against but ultimately supported informally France's decision to acquire nuclear weapons; warned Pakistan's President Zia ul-Haq against taking steps to the bomb, but then found itself unprepared to

make good on its warning in the midst of the campaign to oust the Soviet Union from Afghanistan; and finally 30 years after India's "peaceful nuclear explosion," has come to terms with both India and Pakistan as nuclear weapon states. In each case, other political-strategic interests dominated the decisionmaking process. In other cases, however, the aspiring proliferator has blinked first. The leaders of neither South Korea nor Taiwan in the 1970s were prepared to test the choice that they were given: acquisition of nuclear weapons or an American alliance relationship.

This basic reality also applies to other countries, including not least the other four nuclear weapon states that comprise the permanent five members of the UNSC (P-5). No more than the United States have these countries been prepared to subordinate their other political-strategic interests to preventing nuclear proliferation. The reluctance of China and Russia to support Security Council sanctions against Iran constitutes the most recent example.

Other things being equal, this political-strategic reality is unlikely to change in the future. But other things might not be equal in the aftermath of a next use of a nuclear weapon whether by a state or by a terrorist group. An aborted terrorist nuclear attack or other interdiction of terrorist access to nuclear materials or a weapon could have a comparable impact. The very shock of such an event could lead the United States and other P-5 states, as well as many other countries, to reassess the priority of nonproliferation.

Buying Time Is a Good in Itself

It is oft-times remarked that efforts to make it technically more difficult for a country to acquire the materials, components, equipment, and know-how to build nuclear weapons are at best able to buy time. Similarly, diplomatic and political pressures may serve only to drive a country's program underground, again at best limiting its scope, sophistication, and pace. Traditionally, it has been suggested that such efforts to buy time should be pursued because "it provides time for diplomacy to act." On occasion, this may be so—though it is difficult to think of a convincing past example. Rather, buying time is worth doing as a means of waiting for "something to turn up." Indeed, the rollback of nuclear programs in Argentina, Brazil, and South Africa from the mid-1980s to the mid-1990s all exemplify this lesson. In each case, U.S. policymakers sought to buy time, whether by encouraging suppliers' restraints, diplomacy, or other actions. Virtually out of the blue, domestic political changes fundamentally reshuffled the proliferation deck.

This lesson may yet come to apply in shaping the 2016 situation. Chinese experts, for instance, argue that the ultimate solution to North Korea's nuclear weapons program will be that regime's political and economic transformation. From China's perspective, therefore, the purpose of the six-party talks is to establish a diplomatic process to buy time. Somewhat similarly, the only hope for avoiding a nuclear-armed Iran may be to slow its progress, constrain its activities, and hope for domestic political change. More generally, the importance of buying time adds to the reasons for heightened efforts to help other countries to implement UNSC Resolution 1540.

Leveraging Shocks and Surprises Is Essential

Past nuclear proliferation shocks repeatedly have been key to gaining support for strengthened proliferation policy initiatives at home and abroad. At home, India's 1974 nuclear explosive test initiated the second big flurry of attention to the nuclear proliferation challenge, with the first wave of interest coming in the mid 1960s after China's nuclear test and in the context of great fears of a world awash in nuclear materials from growing use of nuclear power. (The shock of discovery after the 1991 Gulf War of the scope of Saddam Hussein's NBC weapons programs led to another period of heightened interest, reinforced and redirected by even more intense concern about terrorist access to nuclear weapons material after the September 11, 2001—9/11—attacks.)

Abroad, China's test helped generate support for the NPT; India's 1974 test provided needed impetus to nuclear suppliers' controls (the Zangger Committee and the Nuclear Suppliers Group); Saddam's mini-Manhattan Project contributed directly to new dual-use nuclear export controls; and the 9/11 attacks generally have reinforced international cooperation to strengthen controls on nuclear weapons and materials in Russia and the other former Soviet states.

Future proliferation shocks will impact significantly the state of nuclear proliferation in the 2016 timeframe. To speculate, a list of possible shocks could include: a successful or aborted use nuclear weapons by terrorists, a nuclear weapon accident in India or Pakistan, a confirmed theft of nuclear materials or a weapon, an escalation to nuclear use between India or Pakistan, an NPT breakout by Iran, the Pakistani deployment of nuclear weapons to Saudi Arabia under a "NATO-like" dual-key arrangement, a U.S.-China-Taiwan crisis with threats or actual use of nuclear weapons, or open Israeli deployment of nuclear weapons. Proliferation policy planning should consider such shocks as "normal events" and plan ahead to leverage them in support of new initiatives.

Nonproliferators Innovate, Proliferators Innovate

The proliferation process can be characterized as a continuing cat-and-mouse game between the nonproliferation communities and the proliferators. Many of the "wins" entailed actions to strengthen existing institutions, norms, or constraints. Innovative nonproliferation actions also have been taken to deal with unexpected but major changes in the proliferation environment, perhaps best typified by the overall Cooperative Threat Reduction program with Russia and the other former Soviet states. The actions of the UN Special Commission on Iraq (UNSCOM) also were an important innovation.

Conversely, the countries of proliferation concern have continually sought new ways to work around constraints, to beat the existing system, and to move forward in innovative ways. There are many examples of such proliferator innovation from the emergence of the nuclear gray market in the late 1970s and early 1980s to A.Q. Khan's decision to go into business as a nuclear technology and material supplier. In turn, newer proliferators have learned lessons from older proliferators.

How this process of innovation on both sides continues will be another factor shaping the 2016 proliferation environment. A key step for nonproliferation supporters will be successful implementation of UNSC 1540 as well as whether it is possible to build toward effective cooperation among the P-5 countries on the Security Council. Innovative security actions may be needed as well to contain the regional impacts of Iran's pursuit of nuclear weapons. At a different level, the success or failure of technology innovation to put in place more effective means of interdiction and detection is likely to have an important impact on whether the nuclear terrorist threat can be contained. For their part, proliferators will continue to seek newer ways to beat the system, from moving nuclear weapons programs offshore to engaging in proliferation joint ventures. Past examples of isolated assistance by new proliferators to at least one other country may give way to more extensive assistance relationships.

Keep Your Eye on the Bubble

Successful pursuit of nonproliferation policy interests may sometimes require compromising other U.S. interests lest no deal be possible. The George W. Bush administration's success in rolling back Libya's NBC weapons programs is a good example. In effect, the administration gave priority to that goal, while setting aside concerns about Libya's support for terrorism as well as its poor human rights record. To some degree, the United States faces a comparable dilemma in seeking continued Russian support for strengthened security over nuclear materials and weapons in Russia.

Looking ahead, among the implications of this occasional dilemma, two stand out: Successful policy may require that only a very few persons within the government know that a deal may be in the works (as was the case with Libya); plus there may be considerable second-guessing after the fact (as for the most part did not happen with Libya). Should a deal with Iran ever prove possible (itself far from clear), it may well call again for giving priority to U.S. nonproliferation interests over other foreign policy concerns.

It's Never Over Until It's Over

U.S. proliferation policy first confronted the threat of a North Korean nuclear weapons program in the early 1980s. In 1985, the Soviet Union, encouraged by the United States, pressured Pyongyang to join the NPT. The North Korean nuclear threat had been "solved"—for the first of five times. (The next four solutions involved: North Korean receipt of an IAEA full-scope safeguards agreement but for technical reasons implementation of full-scope safeguards was delayed for several years; North Korean implementation of full-scope safeguards; the 1991 South Korea–North Korea agreement to denuclearize the Korean Peninsula; and the 1994 Agreed Framework.) Repeatedly, the conclusion that the North Korean nuclear threat had finally been dealt with has been proved wrong by North Korea's defiant actions.

Conversely, suffice it to suggest without elaboration that there also have been situations in which patient and persistent proliferation policy efforts brought results. Continuing upgrades of the nuclear suppliers' obligations are one example. Diplomatic

contacts with Argentina, Brazil, and South Africa through the 1980s may well have facilitated the decisions of those countries to roll back those programs—once the initial rollback decisions were taken. Though not known to the United States, the combination of UNSCOM inspections backed by U.S. and UK readiness to use force ultimately forced Saddam Hussein out of the NBC weapons business. From that perspective, as well, it is never over until it is over.

Drawing the right lessons from that recognition for future nonproliferation negotiations with countries of concern, however, is not quite as simple as it may first appear. Skepticism and caution clearly are warranted. But excessive caution and an unwillingness to join negotiations—whether because the country in question is a proven cheater or because of a desire to do better than preceding attempts—can result at worst in opportunities lost and at best giving the proliferator a relatively free hand. In turn, even the brief list of proliferation policy "draws" set out in Table 1 makes clear that there is a great deal of work still to be done to turn promising initiatives into institutionalized successes, including, to take only one example, leveraging UNSC Resolution 1540 to enhance national controls and responsibility to prevent proliferation.

Defense Planning Essential but Hard to Institutionalize

Beginning in the early 1990s, the U.S. defense community—civilian and military—began to acknowledge that possession of NBC weapons by regional adversaries might not be a "lesser included case" of responding to the threat posed by the former Soviet Union. The impetus was discovery in the aftermath of the 1991 Gulf War of Saddam Hussein's mini-Manhattan Project. After 9/11, attention shifted increasingly to the threat of non-state actors gaining access to NBC materials or weapons as the top national security threat.

Nearly a decade and a half after the start of this era of counterproliferation, significant progress has been made in adapting U.S. defense planning and posture to confront regional adversaries with nuclear weapons. To take a few examples, military war plans and concepts of operations have begun to adapt, missile defenses slowly are advancing both in the theater and for the American homeland, and enhanced U.S. attack capabilities have been fielded. Progress also has been made in fielding new capabilities to counter the terrorist threat, with top priority being placed on enhancing nuclear materials controls and on new steps to prevent terrorists from successfully smuggling a nuclear device into the United States. Nonetheless, significant action still is needed, for example, to shut down terrorist sources of NBC materials and to improve capabilities to interdict or defend against a terrorist nuclear device. Thinking also has only just begun on how to shape the overall calculus about the acquisition and use of NBC weapons by Islamic extremists, their supporting infrastructure, and any potential state supporters—or put otherwise, on whether or how to try to deter terrorist nuclear use. Many questions remain as well about the most effective strategies to deter or otherwise respond to regional adversaries with nuclear weapons.

Effective U.S. defense capabilities to contain new powers armed with NBC weapons can influence the characteristics of the proliferation environment in 2016. For example, a perception that acquiring such capabilities would not enhance but instead would

decrease Iran's security at best could provide an incentive to stop short of possession of nuclear weapons. At the least, concern about those security implications might well constrain Iran's program, making it less threatening to neighbor countries as well as to the United States. Robust U.S. defense capabilities to counter proliferation in the region also could make it more possible to build proliferation firebreaks should Iran not be stopped before acquiring nuclear weapons.[1]

Building Partnerships Is Essential

U.S. leadership contributed to many of the nonproliferation successes of the past decades. Building international partnerships of many different sorts was an essential element of that leadership. In some cases—for example, negotiation of the various international nonproliferation treaties—those partnerships encompassed very large numbers of countries. In other cases—such as the PSI—partnership building began small and gradually took in more countries willing to participate. In still other cases—for example, nuclear arms reductions with the Soviet Union and then Russia—building a partnership meant working bilaterally with another country.

Conversely, the failure or inability to build partnerships—or to do so at the right moment—underlies some of the losses and draws. The lack of effective international response to treaty noncompliance, the breakdown of the 2005 NPT Review Conference, and the difficulties creating Security Council consensus among the P-5 countries on tough proliferation problems are three significant examples. Nonetheless, as the Security Council example reveals, building partnerships is not simply a U.S. one-way street. Other key countries sometimes have been reluctant to cooperate with the United States in working a proliferation problem. That reluctance has been rooted in their own interests and agendas. Absent long-standing habits of cooperation, it has proved too difficult to square the different interests and agendas in play.

U.S. effectiveness in building partnerships will be as important in the future as it has been in the past. From ultimately shutting down Iran's pursuit of nuclear weapons to preventing nuclear terrorism, international cooperation is needed. The different interests and agendas of the P-5, however, are likely to continue to impede such cooperation. Perhaps continuing diplomatic engagement among these countries on proliferation issues may yet build stronger habits of cooperation. Among the wider group of countries, cooperative implementation of UNSC Resolution 1540 might provide a means to build wider partnerships. The cooperation of more than 60 countries under the PSI may already be having such a spillover effect. For the United States, however, building partnerships may depend heavily, as already suggested, on U.S. readiness to acknowledge that if Washington wants other countries to work its issues, it needs to do better at working their issues.

Being Right, Being Lucky Counts

The failure to find chemical and biological weapons or evidence of a renewed nuclear weapons program in Iraq after the 2003 Gulf War has taken its toll on the credibility of

U.S. intelligence. Washington's nonproliferation credentials and the credibility of American judgments on pressing proliferation challenges are now more readily questioned in many capitals. This is most evident in the skeptical reception given to U.S. statements on Iran's nuclear weapons program even among some allies.

Equally important, past experience—and especially the non-use of nuclear weapons over the past decades—also points to the importance of being lucky. Many factors undoubtedly contributed to the non-use of nuclear weapons during the Cold War confrontation: U.S. and Soviet investments in safety and control technologies, lack of geographical proximity, cautious leaderships and bureaucracies, the emergence of survivable deterrent postures, and negotiated pursuit of measures to stabilize the arms competition following the scare of the Cuban Missile Crisis. But taking into account the confirmed reports that there were 87 Soviet nuclear weapons in Cuba during the missile crisis—with the authority to launch in the hands of a battery commander, a major—it is difficult not to conclude that being lucky counted. Consequently, more than five decades of non-use of nuclear weapons became the norm, with all that non-use implies for countries' perceptions of the use and usability of nuclear weapons, as well as for their incentives and disincentives to acquire those weapons.

It is likely to take quite some time to rebuild that American reputation for being right in depicting emerging proliferation challenges. How soon that credibility is restored could well impact the ability of the United States to create partnerships to meet future challenges. As in the past, luck also will partly shape the 2016 proliferation environment. Its effect could well be seen most in whether nuclear weapons are used again in the years ahead—whether by a terrorist group or new state proliferators. Any such use could dramatically impact the proliferation future in uncertain and unpredictable ways.

Past as Prologue

Over the past decades, U.S. proliferation policymakers have had major wins, losses, and draws in their continuing attempt to prevent a world of many nuclear powers. This brief review has sought to identify some of the insights or lessons from that proliferation past as well as the potential implications for the 2016 proliferation future. Perhaps the most important insight from the proliferation policy past, however, has not yet been mentioned. Repeatedly, fears of runaway proliferation have energized the United States and other governments to act together to make those fears a self-denying prophecy. With hard work and luck, this may yet happen again.

NOTE

1. For background on this point, see Lewis A. Dunn, Peter R. Lavoy, and Scott D. Sagan, ''Conclusions: Planning the Unthinkable,'' in Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz, eds., *Planning the Unthinkable: How New Powers Will Use Nuclear, Biological, and Chemical Weapons* (Ithaca, NY: Cornell University Press, 2000), pp. 23–57.