

Renovating Arms Control through Reassurance

Security policy has traditionally focused on the threat of deliberate aggression with a clarity and emotional intensity that presumably derives from the far recesses of time. For most of history, it was appropriate to be primarily concerned with intentional aggression since the destruction human beings could inflict on one another had to be consciously organized if it was to occur on a major scale. It is increasingly evident, however, that advanced technology and the sheer magnitude of human activity are generating a different form of threat. Today, an unanticipated chain of spontaneous effects might rival or exceed the destructiveness of intentional war. This sort of accidental war might erupt, ironically, from the military operations designed to protect against the risk of classic aggression itself.

The danger of accidental war was demonstrated in World War I and was recognized in its aftermath. The experience of World War II, however, obscured the lesson and powerfully reinforced the traditional concern of intentional aggression. Over the ensuing decades, as the instruments of warfare acquired capacities for rapid and massive destruction, the military forces that wielded them were configured to deter or to defeat deliberate attack. Precautions were taken to assure that their enormously destructive power would not be employed without legitimate authorization, but those precautions were clearly subordinated to the purpose of deterrence. That effect was achieved and is plausibly credited with preventing at least the largest forms of deliberate aggression, but the accomplishment has enabled a massive accident to occur. Overwhelming deterrence entails some inherent risk of inadvertent catastrophe.

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The political consciousness of the Cold War that inspired the commitment to overwhelming deterrence is distant history, but its major legacy has survived essentially intact and largely uncontested. The main protagonists—the United States and Russia—are now attempting to work out an amicable relationship, but each still maintains thousands of nuclear weapons continuously prepared to initiate a massive assault on the other within a few minutes. The destructive capacity of these forces poses the greatest physical threat to both societies and to the rest of the world. In the absence

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of an ideological quarrel, however, there is such abiding faith in deterrence that the risk of potential destruction is accepted as assuring protection rather than as presenting an imminent danger. There has been no serious attempt to terminate mass deterrent operations. Even reducing forces to levels that have been provisionally agreed upon will not remove the ability to inflict damage far beyond any historical experience.

By contrast, the arms control process designed to contain the capacity for destruction has been subjected to a barrage of querulous objection. The Russian Duma has not ratified the second Strategic Arms Reduction Treaty (START II), even though the ceilings it imposes are substantially higher than the deployment level Russia is likely to be able to sustain over the long term. The U.S. Senate has voted against ratification of the Comprehensive Test Ban Treaty (CTBT) even though it would lock in a large technical advantage for the United States and is considered by much of the world to be an established obligation essential for the prevention of proliferation. In both instances, it appears overwhelmingly obvious that the two countries are far better off with the spurned treaties than without them, but vigorous arguments to the contrary have been advanced as an apparent extension of domestic politics.

In the case of the CTBT, U.S. opponents claimed that the treaty could not be verified. The range of plausible uncertainty, however, is well below the minimum explosive yield for any test that could be expected to produce useful weapons-design information.¹ Similarly, opponents argued that the reliability of the U.S. weapons stockpile could not be assured over the longer term, even though all nonnuclear components of the weapons could and would be tested under the terms of the treaty. Any suspected problem with the fissionable material could be resolved by remanufacturing them to their original specifications.² The fact that central provisions of legal restraint

can be held hostage to such arguments advanced at the extreme edge of rational judgment is a symptom of pathology in the arms control process.

Although it is difficult to determine at this point just how serious the apparent pathology might be, it is certainly prudent to be concerned. It is unlikely that ratification of START II or of the CTBT will be accomplished before new presidents take office in Russia and the United States. Meanwhile zealous advocates of national missile defense in the United States can be expected to stage an assault on the ABM Treaty, which they would like to declare obsolete, and there is a substantial chance that the effort will succeed. The Clinton administration has promised to make a specific deployment decision in July 2000. It has proposed amendments to the treaty that would legalize the limited deployment immediately intended, but Russia has stated quite firmly that it will not accept those amendments or any variation that would validate the U.S. program. If the United States proceeds with a deployment effort in admitted violation of the treaty, as it has threatened to do, then the Russians have promised to declare all offensive force limitations invalid and might choose to violate agreed restrictions on multiple warhead deployments. At that point, with India and Pakistan on the verge of overtly deploying nuclear weapons, a reverberating series of potential reactions could conceivably shatter the Nuclear Non-Proliferation Treaty (NPT) and collapse the entire framework of legal restraint on nuclear weapons deployment.

Since the basic principle of legal restraint is widely considered to be indispensable, the acknowledged failure of major treaties would presumably generate a protective political reaction. It is questionable, however, whether the existing agreements could be restored once they had been violated by authorized deployment programs. It is even more questionable whether they could be replaced through the tedious and largely unproductive process of adversarial negotiation that has prevailed over the past decade. In fact, the current arms control regime is likely to require major renovation, responding to dramatically changed circumstances, regardless of whether there is an acute crisis over U.S. national missile defense.

The Argument for Renovation

In considering what a major renovation might attempt to do, it is natural to begin by rehearsing the familiar characteristics of the existing arrangements and the basic reasons why they developed as they did. The principal legal restrictions on nuclear weapons deployments evolved through bilateral negotiations between the United States and the Soviet Union. The central agreements were formulated to impose, first, ceilings and, then, a schedule

of reductions on the deployment of delivery vehicles capable of carrying nuclear weapons over relatively long ranges. The intent was to distinguish a strategic level of threat, where the common interest in mutual restraint was judged to be stronger, from other, more localized forms of military engagement considered to be more contentious. The focus of control on delivery vehicles was chosen since they were more easily verifiable by remote means of observation. The underlying presumption was that the two countries would continue to be hostile adversaries. The basic purpose of establishing formal agreements was to regulate the balance of opposing capability in order to render it less burdensome and less dangerous to both sides.

From the outset, both governments and military establishments understood that the agreements would protect the deterrent capacities of both parties. Offensive and defensive forces would be regulated in relation to each other. Similarly, the 1963 Limited Test Ban Treaty, a multilateral document imposing comprehensive restrictions on nuclear weapons testing, and the NPT, imposing selective restrictions on the development of nuclear weapons by other military establishments, were understood to be supplemental to the bilateral treaties and contingent upon their further development. Although segmented into separate legal documents, the overall arrangement has been, in effect, a global bargain to regulate use of the world's most destructive technology. Without these agreements, the 44 countries that operate nuclear reactors today could theoretically deploy nuclear weapons. All these agreements are intertwined and the underlying logic is a simple and virtually inevitable rule: if anyone is to be constrained in the application of this technology, then everyone must be.

The surrounding circumstances have changed substantially, of course, since the original arms-control treaties were formulated. Quite apart from questions of ideology and political intention, Russia is not, and is never likely to be, a replacement for the Soviet Union as the balancing correspondent to the United States in the core bilateral arrangement. Russia does not have the economic capacity to assume that role and cannot plausibly develop it anytime soon. Moreover, Russia has fundamentally different strategic imperatives. The society is undergoing extensive internal regeneration, the urgent purpose of which is to connect productively to the globalizing international economy. Its considerable importance to the outside world is contingent upon the outcome of that regeneration. The fate of its military establishment is also entangled in that process, but the central question is not the capacity for strategic bombardment, but rather its internal managerial coherence.

Russia must exercise responsible control over what is believed to be the largest nuclear-weapons inventory. It must also preserve the basic elements

of civil order on its own territory. The ability of a beleaguered government caught up in internal transformation to do these things cannot be presumed. What can be presumed is that Russia will need substantial reassurance if it is to manage its inherited nuclear arsenal safely. That reassurance will have to be extended to all the legitimate missions its military is responsible for performing, not merely those considered strategic by the outside world.

Although the internal transformation of Russia is proving to be especially difficult, the international security implications are not unique. With the military predominance of the U. S. alliance system now arguably the greatest in history, all countries outside of that system suffer a corresponding disadvantage. Hege-
monic power often imagined in popular rhetoric does not automatically come with that military strength, but military preponderance does create issues of inequity. For those countries concerned about a potential military confrontation with the U.S. alliance system for reasons not necessarily under their control, this is a major security problem. Since it is not feasible for any country or group of countries to match the military capacity of the U.S. alliance system for the foreseeable future, there is a strong incentive to pursue asymmetrical deterrent strategies. In other words, these countries are being driven to identify vulnerable hostages they could threaten in order to fend off intimidation. If advanced technologies are adapted for that purpose and critical assets targeted, the resulting arrangement would be very dangerous indeed. The priority for the United States and acknowledged friends is to reassure the disadvantaged to prevent these asymmetrical deterrent strategies. The central purpose of arms control in the new situation, then, is not to deter but to reassure. Deterrence has become too large and too inequitably distributed for its own good.

As the word implies, a renovation of this sort would not eliminate but rather reconfigure the existing international security structure. So, presumably, nuclear weapons would continue to be deployed for an indefinite period and would exercise their inherent deterrent effect. Limitations on deployed numbers and on development testing would be preserved, a schedule of judicious reductions would be set, and proliferation controls would be maintained. The main emphasis would shift, however, from restrictions on the number of deployed weapons to restrictions on their operational practices. Because adequate deterrence is more easily achieved in today's international security environment, formal agreements would be designed to maximize reassurance by establishing high standards of operational safety.

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The purpose would be to prevent accidental, unauthorized, or inadvertent use of the deployed weapons more reliably.

In advanced form, such an arrangement would remove all weapons from an alert status in which they are immediately available for use, and would verify that condition by collaborative monitoring techniques that could not be bypassed, blinded, or fooled. Official doctrines of nuclear weapons use would be restricted by legal agreement exclusively to “no-first-use,” meaning retaliation only against attack by another nuclear weapon and only then in proportion to the original attack itself. Corresponding restrictions would be imposed on the first use of conventional weapons as well in order to regulate their use for purposes of retribution as in Iraq, Afghanistan, and Sudan recently. It is not only the imposing nuclear deterrent of the United States that creates a need for reassurance, but its increasingly intrusive and inherently more usable capacity for precise conventional attack as well.

Admittedly these provisions would be a major extension of existing arms control arrangements and would probably incite even more vehement objection from the traditional critics. Since they respond more directly to the emerging problems of international security, however, that greater relevance might generate more robust support from others. At any rate, the stark imbalance in capacity that has developed today will assuredly not be accepted as equitable, and the implications of inequity are likely to be relentless.

Exploratory Applications

The arms control regime does not have a reigning architect in the sense that a building does. As a matter of practical politics, it is unlikely that anyone who would want to redesign arms control based on the principle of reassurance would ever be granted the authority to do so. Major adjustments of that sort usually occur in a series of seemingly incremental steps, with a shift in organizing principle recognized only after the fact. The fate of legal restraint will predictably turn on specific issues, the most important and immediate instance being the impending collision of policy over the U.S. national missile defense (NMD) program. As with any incipient crisis, that situation offers opportunity as well as danger; the practical question is how the opportunity might be used to begin to apply the principles of renovation.

The tendency to gloss over, or obfuscate, disagreements is the first problem that should be addressed. Despite rising nationalist resentment on the Russian side—a reaction that a truly objective observer presumably would find understandable under the circumstances—the two governments are clearly not eager for a full-blown confrontation on the NMD issue. They will probably strain to put an accommodating spin on whatever decisions they

make. On the whole, of course, that reflects a constructive attitude necessary for any desirable outcome, but it makes it difficult to bring the sharp contradiction in underlying policy into focus.

The hard fact is that Russia cannot responsibly accept the current U.S. position. The limited NMD deployment being projected would establish the foundation for a much more extensive and more capable system over time. Since relative offensive capabilities can be expected to diverge under even the most advanced treaty limitations that have been officially discussed, the net result would pose an extreme threat to the viability of the Russian deterrent force. The United States would gradually acquire a potentially decisive capacity to destroy the Russian force without suffering significant retaliation. The United States has not offered or even seriously contemplated the drastic offensive force restrictions that would be necessary to preclude that development. It will not be possible to address this problem until it is admitted.

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There is a corresponding problem with China that is even less visible. China has deployed only about 20 ballistic missile launchers that could reach the United States and does not routinely operate them on alert status. On any normal day, the United States could destroy those launchers in a preemptive attack. China, long aware of this, has chosen to tolerate the risk. The Chinese deterrent force directed against the United States could have been made larger and more robust long ago if China wanted to. Beijing has apparently judged the overall risk of a deliberate first strike by the United States to be less than the risk inherent in the high-alert deployments long maintained by Russia and the United States. A completely renovated arms control arrangement based on reassurance would follow that example.

China has warned, however, that it would reconsider its posture if the United States were to deploy either an NMD or a theater missile defense (TMD) system designed for broad-area protection in Asia. Because the Anti-Ballistic Missile (ABM) Treaty is strictly bilateral between the United States and Russia, China does not have legal standing to raise its concerns. In real strategic terms, however, Beijing's concerns are as legitimate as Moscow's and comparably important as well, although the specific implications may be somewhat different. This problem will also not be addressed until it is acknowledged.

What might be done, then, if both these problems were to be admitted? A natural first step is to address the surveillance of ballistic missile trajectories, a major operational problem that links the traditional arms-control

agenda with a renovated one. Under existing security practices, which are designed principally to deter, continuous surveillance combined with highly alert force operations provides a principal method of protection against pre-emptive destruction. But it also provides a critical element of reassurance necessary to prevent the practice of deterrence from becoming a self-defeating provocation to war. By continuously observing the missile trajectories that the opponent would use to conduct an attack, Russia and the United States continuously demonstrate to themselves that a major attack is not immediately underway and that retaliation is not immediately required. It is

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vital to the United States that Russia never make any misjudgment in that regard and similarly for Russia that the United States not do so.

Unfortunately, although their interests are symmetrical, the capacities to prevent a catastrophic misjudgment are not. The U.S. surveillance system has comprehensive, state-of-the-art coverage of possible attack

corridors, which protects Washington from falsely concluding a Russian attack has been launched. The Russian surveillance system, in contrast, has major gaps in coverage, both in space and in time, and is believed to be slipping in quality. That creates a risk that an attack will be falsely attributed to the United States.

At a summit meeting in September 1998, Russia and the United States agreed in principle to establish a joint center for missile surveillance. Implementation of that initiative is probably the single most effective step that might immediately be taken both to stabilize the traditional deterrent relationship and to introduce the broader concept of reassurance. If the United States provided missile flight information upon which Russia was willing to rely, it would be a much more advanced form of security collaboration than any during the Cold War. Presidents Bill Clinton and Boris Yeltsin proposed this initiative at a time when neither enjoyed commanding political authority, and the idea had not been developed by the U.S. and Russian security bureaucracies in sufficient detail. Subsequent efforts to implement this idea were suspended by the Russians in reaction to the Kosovo crisis.

To assure reliance on such a vital matter and to prevent suspicion that would only compound the problem, Russia would have to be deeply and irreversibly integrated into the U.S. missile-tracking system—so deeply, in fact, that Russia would have to be treated as nearly a coequal partner. That would require revising attitudes on both sides to an extent not currently considered feasible. Nonetheless, if a constructive breakthrough is to occur

in the shadow of an incipient NMD crisis, then joint missile surveillance is one of the more prominent possibilities. In principle it could even be extended to China.

Broader Ideas

For venturesome souls, joint missile surveillance can also be seen as a leading item on a much broader agenda involving how information would be gathered and disseminated under a renovated security arrangement. In the Cold War practice of verification, reassuring information is exchanged under strictly limited and exhaustively negotiated terms designed to demonstrate compliance with specified agreements. Under the START agreements, for example, the parties declare their ballistic missile inventories and promise not to interfere beyond specified limits with the national surveillance systems used to independently observe those inventories.

A renovated arrangement would exchange information more openly, conceivably including daily operational practices, in order to demonstrate not only legal compliance but much broader intent. Thus, in addition to documenting basic weapons inventories, the parties would assertively seek to demonstrate the integrity of their managerial control systems and would begin to harmonize and ultimately integrate the operations of those systems. A common accounting and physical security system would be devised for exercising strict control over fabricated warheads and fissionable materials, and discussion of joint operation would begin. More accurate accounting than is currently possible under traditional rules of verification will be required to reduce active deployment to levels ranging in the hundreds of weapons. Joint operation of the system would probably be necessary to establish high-quality reassurance about the state of nuclear weapons inventories.

In anticipation of that eventual requirement, all of the nuclear weapons states should be involved in the design of such an arrangement. As yet, however, such a system does not appear to have been seriously discussed in bilateral terms, let alone as the multilateral arrangement it would ultimately have to be. Since it is likely to take several decades to develop such a system with high standards of accuracy and protection, it is important to begin the design immediately. Similarly, the notion of bilateral cooperation between Russia and the United States on missile surveillance could include joint military-air-traffic control. That seems categorically unacceptable if the dominant purpose is to prepare for imminent war. It is desirable, however, if the dominant purpose is to reassure others that war is not imminent and cannot be rapidly prepared.

If reassurance were to be the guiding spirit, as it largely is among the

members of the U.S. alliance system, then a great deal of operational information currently considered sensitive presumably would be shared among those accepting the terms of exchange. That could include budget projections, investment plans, training schedules, and deployment exercises. Undoubtedly, there would still be prudent limits to such exchanges, but in a renovated arrangement, those limits would be much narrower than under current practice.

In the latter stages of the Cold War, the stabilizing effect of voluntarily disclosed information came to be recognized, and a number of confidence-building measures were formally introduced. In the aftermath of the Cold War, it is important to extend that tradition and upgrade its priority. Since it is unlikely that equitable force balances can be established anytime soon, it is all the more important that the idea of confidence and the underlying principle of reassurance be elevated from subordinate status to the main priority. That is how arms control should be renovated.

Notes

1. It is generally accepted that weapons tests with nuclear explosive yields of ten tons TNT equivalent up to a few hundred tons might evade reliable verification. Not even the United States, with the most extensive store of test data at its disposal, would rely on tests in that range for the design of weapons in the much higher yield ranges used for the deterrent forces. All other countries would be very substantially less able to do so. Moreover, the enhanced verification provisions that would be enabled by the Comprehensive Test Ban Treaty (CTBT) would make it increasingly difficult to conduct a test series in the very low range of uncertainty without eventually being detected.
2. See Sidney Drell, *The JASON'S Report on Nuclear Testing: Summary and Conclusions*, August 1, 1995, available at <http://www.stimson.org/rd-table/jasons.htm>.