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REVIEWS

The United States and Arms Control: The Challenge of Leadership

Allan S. Krass, Praeger Publishers, Westport, CT, 1997, ISBN 0-275-95947-3

Although the pace of arms control has slowed since 1993, there has been some good news: The weapons reductions under START, the indefinite extension of the Nonproliferation Treaty (NPT), the Russian and U.S. ratification of the Chemical Weapons Convention, and the agreement of the five nuclear weapons states to sign a Comprehensive Test Ban Treaty (CTBT) banning all nuclear tests. But beyond these bright spots there is a sense that both the Congress and the Duma have other agendas on their minds. Krass's book comes at a good time to help us sort our way through the reasons for inaction.

The United States And Arms Control is organized around several themes: A history of arms control during 1946-86, developments since 1986, the U.S. arms control bureaucracy and its problems, costs and benefits of implementing treaties, persistent noncompliance problems, implications for the stability of existing arms control regimes, and prospects for new agreements.

The first four decades of arms control treaties did not have on-site inspections (OSIs) but instead relied on national technical means, such as satellites, to determine compliance. The book covers all treaties, but for brevity we will confine ourselves to nuclear strategic arms treaties, nuclear testing treaties, and the NPT. Krass emphasizes the implementation aspects of the treaties, a topic usually avoided because of its mind-bending complexity.

First the strategic treaties: The 1987 Intermediate Nuclear Forces (INF) Treaty paved the way for on-site inspections, allowing inspectors to be more intrusive. As part of this increased scrutiny, the criteria for the quality of verification changed from "adequate" to "effective." During INF Treaty ratification, Ambassador Paul Nitze defined "effective" by stating: "...if the other side moves beyond the limits of the Treaty in any military significant way, we would be able to detect such violation in time to respond effectively and thereby deny the other side the benefit of the violation." During the ratification of START, Secretary of State James Baker added "the verification regime should enable us to detect patterns of marginal violations that do not present immediate risk to the U.S. security." Of course, more verification can lead to more trust, leading to more verification, and so on. At some point the U.S. and Russia must determine how much verification is enough. If one calculates "draw-down curves" to determine the survivable forces, it is clear that the U.S. nuclear force will survive. Nobody seriously disputes the invulnerability of the Trident force.

But having cops on the beat sets a tone for safer streets. In my opinion, the political atmosphere pushes us towards overly complex verification regimes that dampen possibilities for further cuts. Krass's earlier book on verification nicely discusses this issue. There are wise verification measures and their are superfluous ones. An excellent one in the START treaty is the re-entry vehicle OSI. The idea of actually counting the number of warheads on SS-18s and Peacekeepers was and is a great breakthrough. If, indeed, we are to go to lower numbers of warheads, this will be the most important compliance tool.

Nuclear Testing Treaties: The expensive Corrtex measurements for the Threshold Test Ban Treaty (TTBT) allowed the U.S. and the former Soviet Union to calibrate their opponent's test sites for tests at 150 kilotons. This act was more political than technical, since the charges of "likely violation" of the TTBT were known to be untrue by the seismologists and others--a fact that the Reagan policy community didn't want to believe. With the 1996 signing of the CTBT at the U.N., new verification and implementation tasks will need to be fulfilled. Most understand that the CTBT is both an arms control treaty and a non-proliferation treaty. But implementation will be difficult because of the requirement for 44 nations to ratify and because of the complex data gathering and analysis. Nonetheless, it is worth this hassle to strengthen the NPT regime, as many non-nuclear weapons states see the NPT regime favoring the five nuclear-weapons states.

Nuclear Nonproliferation: The NPT was indefinitely renewed in 1995. As part of the bargain, the nuclear weapon states stated they will commit to the CTBT. These five nations also gave assurances not to use nuclear weapons against non-nuclear states, which we now know has some possible exceptions for some actions against some chemical weapon states. The International Atomic Energy Agency cannot be blamed for the failure to detect Iraq's nuclear program since the IAEA inspectors were confined to declared sites. However, in the wake of the 1991 findings on Iraq, the IAEA has instituted challenge inspections, inspections of North Korean nuclear facilities, and environmental inspections looking for clues. All these new tasks, plus the increasing number of facilities in the former Soviet Union and elsewhere, makes for a tight IAEA safeguards budget. The challenge will be to save money by shifting the more mundane inspection tasks to automated technology.

The "Bureaucratic Evolution" of the U.S. arms control process: The wiring diagrams between the various U.S. leadership bureaus is complicated greatly by the many component parts of each agency. The dynamic seems "anti-synergistic," because the whole can be less than the sum of the parts. Of course, one needs "effective" verification, but the verifiers often raise arguments against a provision that goes beyond mere logic. By and large, the process is made up of good people, but then with a clever flip of the wrist the issue is stalled. Only with a hard-driving NSC that uses a science-court approach of hard-hitting questions and answers is there going to be a smoother and happier process. Krass lays out the internal process of data exchanges, notifications, inspections, analysis, compliance decisions, and more.

Estimated costs of arms control treaties: The General Accounting Office estimated inspection costs for the INF Treaty at $7.5 M, and for the two continuous perimeter-portal monitoring at Magna and Votkinsk at $12 M per year. These costs are trivial when considering that the former Soviet Union destroyed 1,846 missiles and the U.S. destroyed 846 missiles. These and other costs will ultimately add up to a billion dollars, and are certainly much less than the annual savings of more than $100 billion from lowered post-Cold-War defense budgets.

I found this book to be both a welcome analysis of the current crop of arms control treaties, and some of the troubled implementation areas that will probably constrain arms control in the future. Only by getting into the pesky details on treaty implementation can we learn to overcome the pitfalls of the past. The book is well written, even lively for such a drab, but important subject. If *The United States And Arms Control* comes out in a paperback version, I will use it as a required text on arms control matters. If it remains expensive, I will assign it as library reading.

David Hafemeister

Physics Department

California Polytechnic State University

dhafemei@calpoly.edu