Conventional Arms Control and American Policy in the 21St Century

Jeffrey D. McCausland



INSS OCCASIONAL PAPER DECEMBER 2010 **67**

US AIR FORCE INSTITUTE FOR NATIONAL SECURITY STUDIES USAF ACADEMY, COLORADO

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INSS Occasional Paper 67

December 2010

USAF Institute for National Security Studies USAF Academy, Colorado

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FOREWORD

We are pleased to publish this sixty-seventh volume in the *Occasional Paper* series of the United States Air Force Institute for National Security Studies (INSS). While earlier Occasional Papers addressed a full range of national security issues, we have now determined that these Papers will be limited to those of most utility in the classroom in support of strategic security education. Selected INSS-sponsored papers dealing with significant national security issues will be posted online on our website as part of our *Research Papers* series, and the *Occasional Papers* will be both posted on the website and published in hard copy in limited numbers to support the education mission.

This paper by former Major General Robert E. Linhard Outstanding INSS Researcher Award winner Jeff McCausland was chartered by INSS to highlight the critical role of conventional arms control, specifically in Europe, as an integral component of strategic arms control positions adopted by the United States and Russia during and beyond the recent New START Treaty negotiations. Strategic security focuses on the total security calculus of the state, and conventional dimensions are integrally linked to decisions on the size and composition of nuclear arsenals. The conventional issues addressed here, and the Treaty on Conventional Armed Forces in Europe directly, played a role in the recent nuclear weapons reductions negotiations, and the conventional as well as the total nuclear balances will be central to the next round of strategic nuclear weapons reductions talks. Jeff McCausland provides a valuable primer and analysis of conventional arms control and its role in these broader decisions.

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The mission of the Institute is "to promote national security research for the Department of Defense within the military academic community, to foster the development of strategic perspective within the United States Armed Forces, and to support national security discourse through outreach and education."

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JAMES M. SMITH Director

CONVENTIONAL ARMS CONTROL AND AMERICAN POLICY IN THE 21ST CENTURY

Jeffrey D. McCausland

INTRODUCTION

Thucydides noted in his history of the Peloponnesian Wars that one of the primary motivators of Athenian foreign policy was "interests." This remains as true in the 21st century as in ancient Greece. As a result modern policymakers would all agree that the national strategy of any country must be consistent with national interests and built on three variables. First, what are the "ends" of strategy or the goals the nation is trying to accomplish alone or in concert with friends and allies? Second, what are the "ways" or policies that are formulated in order to move the nation in the direction of a better future? Finally, what are the "means" or resources available to the government of any nation that can be devoted to securing these objectives, and how can they be husbanded in a fashion to maximize their potential?

Arms control is a "way" or tool to accomplish strategic objectives or "ends." Throughout history national leaders have sought to negotiate arms control agreements with potential opponents that placed limits on the size of respective arsenals, military activities/operations, or an outright ban on particular weapon systems. These efforts sought to both reduce the possibility of conflict and limit destruction if war occurred.

Thinking about arms control has continuously evolved and several key points are clear to modern policymakers. First, arms control can never be an "end" or objective of policy. Consequently, an arms control accord is neither good nor bad when examined in isolation. Each treaty or agreement only has value as a policy "way" when there

are underlying security concerns that, if mitigated, might reduce the possibility of conflict or limit its consequences. This is why arms control agreements have rarely if ever been discussed or promulgated between countries that had friendly relations. It is also why some agreements have lapsed when security conditions changed. Second, at its very core any arms control agreement depends upon a "harmony of interest" among the signatories. This "harmony" is based on careful analysis by all potential parties that the benefits to be gained from entering an arms control regime outweigh the risks associated with reducing military forces and accepting a transparency regime that normally has included data exchanges and verification inspections. Third, it is often easy to dismiss the success of arms control, since we lose sight of its focus. A successful agreement is one that contributes to the prevention of conflict and enhances stability. But it is hard to correlate completely the cause and effect of policies and apply metrics against something that didn't happen. Consequently, it is important to remind ourselves that the level of transparency achieved by conventional arms control agreements in Europe (such as the Treaty on Conventional Armed Forces in Europe or the Vienna Document) is extraordinary when one considers the security situation twenty-five years ago. In many ways these agreements that will be discussed in greater detail have made the extraordinary routine.

With the advent of nuclear weapons at the end of World War II policymakers were confronted with perhaps the ultimate dilemma. War as a tool of national policy now appeared to many policymakers to be unthinkable since the destruction associated with a nuclear conflict might make it impossible to discern the victor from the vanquished. As East-West tensions mounted during the Cold War and nuclear arsenals

on both sides grew, policymakers sought new methods to reduce the possibility of a Third World War that could potentially imperil the planet. As a result arms control became a central policy tool, and both strategic nuclear as well as conventional arms control negotiations were conducted to reduce the possibility of conflict at any level that might escalate to central nuclear exchange. But even though "conventional" and "nuclear" arms control were conducted in separate forums the central link of reducing the possibility of conflict that might lead to an escalatory spiral remained. Furthermore, both sides made adjustments to their respective nuclear and conventional forces either to reflect changes by the other or to compensate for perceived inferiorities.

This paper examines conventional arms control as an element of contemporary American foreign policy. This includes an examination of the following questions: First, what can we learn from the history of arms control that might be instructive as we consider the emerging security environment? Second, what is the state of current conventional arms control agreements/treaties and negotiations? This will include not only those agreements/treaties that the United States is a signatory to but also other arrangements (i.e. the Ottawa Treaty on the elimination of landmines) that the U.S. has decided not to sign. Third, what are the issues surrounding the current impasse over the Treaty on Conventional Armed Forces in Europe (CFE) between the United States, Russian Federation, and other signatories? A close examination of the CFE Treaty is essential to any discussion of American conventional arms control policy since it is the largest and most important. Fourth, what is now the connection between "nuclear" and "conventional" arms control? This is a particularly pressing question in the aftermath of the signing of the so-called "New START Treaty"

between the United States and Russian Federation as well as the imperiled state of the CFE Treaty. Finally, this study will consider lessons learned as well as emerging arms control issues that may affect future conventional force postures and American foreign policy.

DEFINITIONS OF KEY TERMS

Arms Control is any legally or politically binding agreement between

Definitions are fundamental in any analysis of arms control policy.²

sovereign states which (1) provides transparency and predictability of military activities; (2) constrains or prohibits certain military operations; or (3) limits the holdings of military equipment and/or personnel. Overall arms control agreements that the United States is a signatory to place restraints on the use, possession, or size of conventional, biological, chemical, and nuclear weapons. **Transparency** is the act of making known the organization, composition, activities, and holdings of a state's armed forces to include its budget and military doctrine. This is usually accomplished through notifications, exchanges of information, and military-tomilitary contacts. **Predictability** is the ability of a participating state based on transparency measures to understand the pattern of military activities of another state participating in the agreement. Many military experts might well argue that this aspect is essential in determining the value of any arms control agreement during a crisis. **Constraints** include restrictions on the frequency, size, duration, and location of military activities. Limits are ceilings or maximum levels of holdings/inventory of categories of military equipment or personnel that a participating state has committed itself not to exceed. These limits can be specified in terms of national, territorial (applying to

specified region that includes multiple states), or geographic locations. A **military operation** includes any military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission. This includes conducting combat, movement into and within a theater, supply, and any other maneuvers required to achieve the objectives of a battle or campaign.³

It is also important to establish a clear distinction between "arms control" and "disarmament." "Arms control" (as suggested above) refers to agreements between two or more sovereign states to limit or reduce certain categories of weapons or military operations in order to diminish the possibility of conflict. Consequently, a fundamental tenet of arms control remains the principle of reciprocity. While an agreement may restrict military operational flexibility, these same restraints apply to all signatories. As a result all the military and intelligence organizations of the participating states receive a significant amount of information about the size, character, equipment, doctrine, and deployment of other nation's armed forces. This "intelligence" is part of each state's calculation of the "value" of any accord.

"Disarmament" is normally unilateral or imposed by a state or group on one or more states at the conclusion of a war. Costa Rica determined many years ago to unilaterally disband its army, and Ukraine announced it would not retain nuclear weapons when it became independent following the dissolution of the Soviet Union. Examples of imposed disarmament include the limits imposed on Germany at the end of World War I and II, or the restrictions placed on Iraq by the United Nations at the conclusion of the Gulf War. This distinction is important. While an arms control regime is maintained by

a harmony of interests among the participants, disarmament often requires external pressure to ensure implementation and compliance. Some of the agreements discussed in this analysis (i.e., the Dayton Accords) may have a distinct disarmament context. In some cases the United States may actually seek to maintain such accords or even have the disarmament of a particular group as an objective of military operations.

Furthermore, arms control does not occur in a policy vacuum. Though the focus of any negotiation is the details of the prospective agreement, the arms control process must always be consistent with the direction of national or alliance security strategy. Consequently, arms control is a political activity and cannot be divorced from other aspects of a nation's security or foreign policy. Domestic events, other issues between states, and the bureaucratic process of the participating parties have a direct bearing on how they are negotiated and complied with.

Finally, arms control is only one aspect of the relationship between states and may be affected by improvements or problems in other areas. During the Cold War arms control was placed in the context of the confrontation between the United States and the Soviet Union. It was viewed as a means to prevent conflict and assist in crisis management, but the possibility of the success or failure of any agreement or ongoing negotiation was often affected by other aspects of the overall relationship. This is important to remember as we consider existing agreements and the future within the framework of the emerging European and global security architecture. Careful consideration must be made of how existing agreements should be modified and what future accords are not only possible but also desirable in an

environment that may now place greater emphasis on cooperative security as a means to prevent conflict and deal with its aftermath.

A BRIEF HISTORY AND LESSONS LEARNED

The desire to use arms control to "smother war with diplomacy" (Eugene Rostow's memorable phrase) has deep historical roots, but it became a central aspect of American policy as tensions mounted during the Cold War. With that in mind, the famous Western strategic thinkers, Thomas Schelling and Morton Halperin, observed in 1961 that "arms control is a promising, but still only dimly perceived, enlargement of the scope of our military strategy." In this regard, it is critical to consider arms control well within the wider context of the national security strategy of any state. This serves to remind us that the arms control process involves both competitive as well as cooperative dimensions. States have historically engaged in arms control to seek at a minimum to preserve (if not improve) their security. This section provides a brief history of arms control through the onset of the Mutual Balanced Force Reduction talks and initial meetings of Conference on Security and Cooperation in Europe or CSCE. Subsequent negotiations that resulted in arms control treaties that are now in existence are discussed in detail in the subsequent section.

A brief look at arms control history prior to the 1980's underscores the continuing truth that arms control has always been a tool used by states to improve their overall security. The earliest example of arms control appears to have occurred in during the reign of Ramses II in Egypt (1279 to 1213 BC). Ramses signed a "non-aggression" treaty with Khetassar, ruler of Kheta. In roughly the fifth century BC the Spartan city state sent delegates to Athens to seek an agreement "not

only to abstain from building walls for herself, but also to have join...in throwing downed the remaining walls of the cities outside the Peloponnesus." While the Spartans argued that they were directing this measure against invasions by barbarians, in reality they were attempting to undermine the growing power of Athens while preserving their own clear advantage in land power should a conflict occur. Athenian leaders realized this, but wanted to buy time. Consequently, they agreed to negotiations while mobilizing the Athenian population to construct more walls as rapidly as possible. Modern students of arms control will easily recognize this tactic of using of arms control negotiations as a means to delay choices or reduce tensions without a real attempt to seek an agreement.

Attempts have also been made throughout history to eliminate particular classes of weapons or establish norms. Still many of these proposals are replete with lingering issues of double standards. This has been an issue for many arms control negotiations in past and is still prevalent today. For example, in the 12th century, the Catholic Church attempted to ban the use of crossbows. Church leaders were quick to point out, however, that this ban was only by Christians against Christians. Crossbows could still be used against other civilizations.⁷

Most historians date the beginning of modern arms control to the Hague Conferences of 1899 and 1907. These were initially proposed by the Russian Czar Nicholas II, and many scholars believe he was motivated by a concern that has frequently propelled leaders to consider arms control as a policy option. Nicholas believed that Imperial Russia could not afford to continue to increase its spending on military armaments to keep pace with the other major powers of Europe. Scholars of the Cold War era might ascribe similar

motivations to Mikhail Gorbachev. These two conferences were noteworthy as they included non-European powers and addressed such things as limitations of armaments and defense budgets; prohibitions on the use of certain types of weapons or military practices; revisions/extensions of the laws of warfare; and institutions for mediation, arbitration, and other methods of preventing war. A third conference was planned but was overcome by the outbreak of World War I.

In the war's aftermath, the Washington Naval Conference was convened in November 1922 in an attempt to prevent a naval arms race between the United States, Britain, and Japan. The resulting treaty placed limitations on the tonnage and armaments of battleships. The US and Britain were, however, permitted larger fleets than Japan as their navies possessed multi-ocean responsibilities. The glaring weakness in the agreement was its lack of verification provisions. Consequently, while the two leading naval powers economized in ship production during the 1920's and 1930's, the Imperial Japanese Navy built up to and secretly exceeded the treaty constraints. Historians have also argued that this agreement was focused too narrowly on one piece of technology and associated military capability. As a result it served to stimulate the development of other weapons—most notably the aircraft carrier and submarine. 10 This would clearly not be the last example of an arms control agreement serving to focus ensuing weapons development. Japan renounced the agreement in 1934 following its invasion of China in 1931 and as tensions mounted in Asia.

During the Cold War the first attempts at serious constraints on conventional arms were the negotiations on Mutual and Balanced Force

Reductions (MBFR) that began in Vienna in January 1973. Many scholars have argued that both the United States and the Soviet Union were motivated by other concerns than solely seeking a reduction in armaments. The Soviets believed that these negotiations might serve to divide and weaken NATO. American President Richard Nixon wished to block an initiative by Senator Mike Mansfield to reduce unilaterally American forces from Europe. The President urged congressional leaders to oppose the so-called "Mansfield Amendment" and not undermine his administration's ability to effectively negotiate with the Soviets in the MBFR talks.

While no MBFR agreement was achieved, these talks did underscore the need to examine military "capabilities" as opposed to particular pieces of armament. On 16 December 1975 the West tabled a proposal to reduce American tactical nuclear forces and withdraw 29,000 soldiers in return for a Soviet withdrawal of 68,000 soldiers and 1,700 tanks. 11 This proposal clearly reflected the capabilities and associated strategies of both sides. NATO had almost from its onset depended on nuclear weapons to compensate for the Soviet Union's and Warsaw Pact's overwhelming numerical superiority in conventional forces. In addition to the continued development of American strategic nuclear forces the European members of NATO had requested and accepted the deployment of thousands of tactical nuclear weapons on the continent. American policymakers viewed these weapons as part of the overall "flexible response" strategy designed to give the President options if war broke out between NATO and the Warsaw Pact. Consequently, their deployment served to better link American forces deployed to European with the US central strategic response.

This proposal reflects an important point that deserves further consideration for the future. Arms control agreements place limits on the numbers or size of particular weapons. But the total agreement (to include transparency arrangements or verification) is primarily focused on the military "capabilities" of the states involved which is a much more subjective evaluation. While the quantity and quality of military hardware are important considerations, they are only part of the calculation of overall force capability. But the overall importance of "capability" was neither a new nor temporary phenomenon. Strategists had often commented that any analysis focused primarily on technology was too narrow. Furthermore, they have argued for decades that decisive technological breakthroughs while important are rare and often temporary.¹²

The Conference on Security and Cooperation in Europe or CSCE (later renamed the Organization for Security and Cooperation in Europe or OSCE) convened in 1973. This negotiation was a Western concession to the Soviet Union in return for their participation in the MBFR talks, as it closely approximated an earlier Warsaw Pact request for a European-wide security conference. It also embodied the idea of detente that had been enunciated in the 1967 Harmel Report that placed political efforts on par with NATO military activities. Belgium Foreign Minister Pierre Harmel conducted this study for the alliance to examine the "future tasks which face the Alliance, and its procedures for fulfilling them in order to strengthen the Alliance as a factor for durable peace.¹³ The report's conclusions stressed that NATO had two main functions as an alliance. First, it sought to "maintain adequate military strength and political solidarity to deter aggression" and defend the territory of member states if they were attacked. Second, the alliance

also pursued the "search for progress towards a more stable relationship" with the East in order to seek solutions to underlying political issues – most notably the division of Germany. ¹⁴ The report concluded that NATO would consider both disarmament and arms control measures that might include balanced force reductions in order to enhance détente between East and West. ¹⁵ This combination of strong defense with improved diplomatic relations with the nations of the Warsaw Pact was central to the overall détente approach. Though the effort was stalled by the Soviet invasion of Czechoslovakia in 1968, the Harmel Report paved the way for the Helsinki talks and the creation of the CSCE process. ¹⁶

The 35 CSCE participating states signed the concluding document or Helsinki Final Act on 1 August 1975. This launched the so-called "CSCE process" that sought balanced progress in three areas: security; cooperation in science, economics, technology, and the environment; and human rights (often called "Baskets One, Two, and Three" respectively). Basket One resulted initially in modest agreements on "confidence- and security building measures" (CSBM's) that are also referred to as the "Vienna Document." CSBM's were designed to reduce the "dangers of armed conflict and of misunderstanding or miscalculation of military activities which could give rise to apprehension." 18 CSBM's were a significant shift from technical arms control focusing on reductions to an emphasis on transparency in military operations. The successful conclusion of this agreement was in many ways a compromise by the Soviet Union. The USSR had long insisted that restrictions on military activities could not be agreed upon until reductions had first taken place, while the Western position had always been to seek such CSBM's before reductions.

The first of these CSBM's was a commitment to provide 21 days advance notification to all signatories of any military exercise involving more than 25,000 troops. It was agreed as part of the Helsinki Final Act in 1975. The measure also encouraged voluntary notification of smaller military training events, major military movements, and the invitation of observers to maneuvers. These provisions evolved by 1986 into the Stockholm Document and in 1990 became the initial Vienna Document. These agreements established mutually complementary confidence-building measures that included mandatory ground or aerial inspections of certain specified military activities. The 1990 agreement also sought to improve communications, contact between the various militaries of the nations involved, and verification. Thresholds were reduced subsequently and now include additional provisions that are discussed in detail in the next section. OSCE members also agreed to a Military Code of Conduct in 1994. This code reaffirmed the principles in the Helsinki Final Act and established norms regarding the role of armed forces in democratic societies.

Lessons Learned

A historian once remarked that "history does not repeat itself, but it may rhyme...." This is a good admonition in any effort that seeks to glean insights from the past. While similar events throughout history may be instructive, the lessons learned have to be continually evaluated against the current context. Still several points from this historical background are worthy of enumeration.

Carl von Clausewitz observed that "war is politics by other means" in his monumental work, *On War*. Consequently, arms control has been and continues to be a highly political process. Without the necessary political will on all sides, the process itself is less likely to be

productive, and will not come to closure. The MBFR talks that began in 1973 and stalemated in 1979, are an example. This stalemate occurred due to a lack of political will on both sides as well as the asymmetries of the respective military forces. The principle of establishing force ceilings at equal numbers was only accepted much later. Consequently, changes of position that go to the heart of a military's size and posture require the will of political leadership to take tough political decisions and the right political context.

Second, the prospects for the successful conclusion of any arms control agreement are significantly affected by the state of change in military technology. States have at times attempted to use arms control as a means to slow down the development of certain weapon systems, slow their perceived growing inferiority with respect to a potential competitor, or focus efforts away from those areas where they believe they enjoy a comparative advantage. Negotiations are more likely to be started and more likely to succeed when military technology is perceived to be relatively stable, surprise-free and developing slowly. Periods of great technological uncertainty are normally not conducive to the negotiations of meaningful arms control agreements. ¹⁹

Third, it is helpful, if not essential, to have a commonly agreed set of understandings about the boundary conditions for the negotiations at the onset of any negotiations. Having a mandate becomes more important when arms reductions are on the table and the stakes are higher in terms of force balance and levels. European arms control and confidence-building measure negotiations have commonly utilized agreed "mandates" to set these boundary conditions, which can include the types of forces subject to negotiation, area of application, and standards for the negotiated measures. Sometimes painful to negotiate,

they have proven essential to keeping the negotiations on track and avoiding or ruling out proposals that are flatly unacceptable. They are also invaluable reference points as any agreement is reviewed or adapted.

The use of mandates was developed later in the process of European arms control, and they paved the way for some of the more complex agreements. The 1983 Madrid mandate, for example, specified that CSBMS would be militarily significant, politically binding, verifiable, and applicable to the whole of Europe. The mandate provided for negotiations that produced new measures in 1986, when the Soviet Union accepted the notion of on-site inspection measures. In 1989 a mandate was agreed for the CFE negotiations, in which the objectives for the negotiations were specified (reductions to equal levels of forces), as well as the specific geographic boundaries and the types of forces that were to be included (land, but not naval).

Fourth, those nations whose interests are affected must have a full voice at the table. As a consequence, arms control is often referred to as indivisible. That is to say, the security interests of all states are equal. Still, in European multilateral negotiations, the United States, through NATO, played a leading role throughout the twentieth century. This role was a reflection not only of American political interests, but also the size of American forces present in Europe. This may, in fact, now be changing due to the dramatic reductions in US force presence in Europe and the ongoing conflicts in Afghanistan and Iraq.

Fifth, multilateral arms control is far more difficult than bilateral negotiations, and conventional arms control has almost always been conducted with a number of players at the table. The historical experience in Europe suggests that frequently the most difficult

negotiations have been between allies in a negotiation, as the respective interests of even alliance members may diverge. Consequently, it is essential to create and maintain common allied positions during any negotiation.

Once agreed alliance positions are achieved the search for the "harmony of interests" between the participating adversarial states and alliances begins. Again history demonstrates that differences have arisen across fora and on issues ranging from the intrusiveness of inspections and data requirements, to appropriate force levels. Currently, some have argued that Europe should commence a European wide security conference in order to address emerging issues and rationalize existing arms control agreements. While this might be useful, history suggests that the magnitude of such an undertaking cannot be minimized.

Sixth, there exists a degree of connectivity between arms control agreements. It is essential that all participants strive for full implementation of existing agreements before negotiating new ones. Furthermore, the success of arms control as a tool of policy must be measured against the standard of improved security. At various points in European security negotiations, some European nations have appeared to want to pursue arms control for "arms control's sake." They have argued that the "process" is more important than any specific outcome. At times, this attitude has risked taking the focus away from pressing for full implementation of agreements already approved. This position, if adopted by all, would undermine the very confidence that the agreements are intended to instill.

Seventh, on-site observation and inspection are at the core of the success of arms control. The failure of the Washington Naval

Conference suggests to many that absent a comprehensive verification process any arms control agreement is doomed to failure. One of the important early breakthroughs in the CSBM negotiations was the provision for on-site inspection, to provide a means of verifying that the other side was complying with its agreements. This set forth a principle on which negotiators were able to build for developing later CSBMs and for subsequent conventional arms control negotiations.

Finally, arms control is not without risks. Policymakers must consider to what extent the talks themselves may create problems in force design, defense strategy, and alliance politics. Some states will participate while others will not. Some weapons, modes of deployment, or geographic regions will be considered and others will be ignored. Such simplifications are necessary in order to make the problems associated with any negotiation manageable, but they also tend to distort military reality which is more a web of interactions than a matrix of weapons, operations, or nations.²⁰ The failure of any negotiation or agreement can jeopardize other elements of the diplomatic relationships between nations.

EXISTING CONVENTIONAL ARMS CONTROL AGREEMENTS

The first phase of European conventional arms control, between 1972 and the late 1980s, included (as previously mentioned) the initiation of the pan-European Conference on Security and Cooperation in Europe, as well as separate NATO-Warsaw Pact Mutual and Balanced Force Reduction talks, which, after stalling in 1979, officially ended in 1989. Although CSCE and MBFR efforts produced only modest measures, they helped lay the groundwork for the next phase of

cooperation by initiating a process for exchanging military data and creating some basic "rules of the road" for subsequent negotiations.

The division of the CSCE talks into various discussion "baskets" provided a means for participants simultaneously to pursue their respective political agendas. The Soviet Union sought a European-wide conference as a means to enhance its influence in Western Europe, legitimize existing borders in Central and East Europe, create a framework for controlling contacts between East and West, and gain greater access to Western technology and economic exchange. East Europeans sought more flexibility in their external relations and an enhancement of their political, cultural, and economic dialogue with the West. The Western European states, especially the Federal Republic of Germany, were also looking for ways to remove the barriers that divided Europe and "unify" the continent. Through these talks, the United States also pressed the East on issues of human rights, democracy, and the rule of law.

The second phase of European arms control, in 1988–1992, coincided with the political transformation in Europe, which included the fall of the Berlin Wall, the unification of Germany, and the collapse of the Warsaw Pact and the Soviet Union. This phase began with mandate negotiations for the complex and politically difficult CFE Treaty, and it eventually included the Treaty's signature and entry-intoforce. The final agreement required the Soviet Union to make extensive asymmetrical cuts in major military equipment. The Organization for Security and Cooperation in Europe, which had replaced CSCE, also promulgated a new generation of military confidence-building measures (CBMs) during this phase known as the Vienna Document.

Finally, from 1992 until the present, European negotiations have adapted the CFE Treaty to reflect the end of the Cold War, and, through the OSCE, produced new sets of regionally focused measures to deal with new tensions that emerged with the end of bloc-to-bloc confrontation. This third phase reflects a Europe that still values arms limitations and the assurance provided by its associated verification measures, but is also marked by a dramatically transformed set of political relationships and continued instability in some regions such as the Balkans and North Caucasus.

The Vienna Document

The Conference on Security and Cooperation in Europe convened in 1973. This negotiation was a Western concession to the Soviet Union in return for their participation in the MBFR talks. It also embodied the idea of détente that had been enunciated in the Harmel Report that placed political efforts on par with NATO military activities. The 35 participants signed the concluding document or Helsinki Final Act on 1 August 1975.²¹ This launched the so-called "CSCE process" that sought balanced progress in three areas: security; cooperation in science, economics, technology, and the environment; and human rights (often called Baskets One, Two, and Three).

Basket One resulted initially in modest agreements on CSBM's. CSBM's were designed to reduce the "dangers of armed conflict and of misunderstanding or miscalculation of military activities which could give rise to apprehension." CSBM's were a significant shift from technical arms control focusing on reductions to an emphasis on transparency in military operations. The successful conclusion of this agreement was in many ways a compromise by the Soviet Union. The USSR had long insisted that restrictions on military activities could not

be agreed upon until reductions had first taken place, while the Western position had always been to seek such CSBM's before reductions.

The first of these was a commitment to provide 21 days advance notification to all signatories of any military exercise involving more than 25,000 troops. It also encouraged voluntary notification of smaller military training events, major military movements, and the invitation of observers to maneuvers. These provisions have evolved and the thresholds reduced subsequently and now include the following as described in the Vienna Document 1999:

- Annual exchange of military information
- Consultation regarding unusual military activities
- Provisions for military contacts and cooperation
- Prior notification for exercises
- Observation of military activities
- Exchange of annual calendars for military exercises
- Compliance and verification measures
- Direct communication network between capitals
- Annual implementation assessment meetings
- Stabilizing measures during crisis situations
- Principles governing arms transfers

OSCE members also agreed to a Military Code of Conduct in 1994. This code reaffirmed the principles in the Helsinki Final Act and established norms regarding the role of armed forces in democratic societies. The United States and its European allies formally cited Russia for violations of this code during its operations in Chechnya and requested observation of military activities there in accordance with the Vienna Document. Russia steadfastly resisted an observation but did

allow a very limited visit by the German military. Since 2001 Western states have not renewed requests for such visits.

Though the Vienna Document was created largely to prevent conflict, it also served a role in crisis management during the Kosovo crisis in 1999. During this conflict NATO forces conducted airstrikes against the forces of the Federal Republic of Yugoslavia (FRY) in response to attacks by Belgrade's forces against the Albanian population living in Kosovo. In addition, the United States and its NATO partners positioned ground forces in both the Former Yugoslav Republic of Macedonia (FRYOM) as well as Albania that many perceived as a preparation for a ground offensive against Serbia. On 30 March 1999 Belarus requested clarification from the United States, Britain, France, and others about military operations in and around the former Yugoslavia consistent with Chapter 2 of the Vienna Document. These countries as well as the host states of Albania and Macedonia also provided required reports when NATO forces operating on their territory exceeded certain prescribed levels at the end of April. On 5 May Russia formally notified all OSCE members of its intention to send observers to Macedonia and subsequently Albania to view the activities of NATO forces in these two countries under Chapter 8 of the Vienna Document. This was accepted on 6 May by the government of the Former Yugoslav Republic of Macedonia, and the inspections were conducted from 7 to 9 May. Inspections in Albania were conducted by Moscow from 16 to 19 May.²³

NATO (largely at the insistence of the United States and General Wesley Clark, NATO Supreme Allied Commander) severely restricted the area the observers could enter in Macedonia. General Clark stated that he feared these observations would be a serious violation of NATO

operational security. He believed that "...Russian observers could report sensitive locations back to the Serbs, who could then use their long-range rocket systems to strike us inside Macedonia." Moscow formally demarched the NATO countries for this as a violation of the Vienna Document and argued that access had been so limited that in reality the observation had in fact not occurred.

The Macedonian observation also caused serious disagreements within NATO, as many European allies indicated their willingness to allow thorough observations. A German federal official publicly blamed the difficulties in Macedonia solely on the American military.²⁵ During the visit by Russian military observers in Albania it was clear that allied forces were directed to follow the instructions provided by their national capitals and comply with the provisions of the CSBMs as opposed to orders coming from SACEUR. As NATO forces grew to exceed an additional threshold established under the Vienna Document the Macedonian government invited all OSCE states to an observation of deployed forces on 7 June and this was conducted from 5 to 8 July.

Clearly the role that the Vienna Document played during the Kosovo crisis had mixed results and left a number of questions unanswered. In the case of the observations, it did not fully achieve its purpose of eliminating tensions with countries that were not immediately involved in the crisis. This event also revealed a serious disagreement between the United States and its allies over the role of arms control as part of cooperative security. In its aftermath American policymakers have continued to argue that Vienna Document reporting and observations do not apply during periods of "armed conflict." Application of this revised policy will remain subject to interpretation, particularly absent a clear declaration of war or if applied to forces in

transit. These agreements also had no direct bearing on preventing the conflict between NATO and Serbia, since Belgrade was neither a signatory to the CFE Treaty nor an active OSCE member at that time and, therefore, not susceptible to the Vienna Document. Furthermore, some American experts have expressed a concern that signatories to the Vienna Document could request observation of American military air bases used by the US or its NATO allies in Kyrgyzstan or Uzbekistan under the terms of these agreements, since all of these Central Asian states are signatories.

The Treaty on Conventional Armed Forces in Europe (CFE)

The 22 members of NATO and the Warsaw Pact signed the Treaty on Conventional Armed Forces in Europe on 19 November 1990. It established limits on the aggregate total of conventional military hardware for the two blocs, required substantial reductions in each nation's conventional arsenal, and created an intrusive regime of inspections and verification.

The talks commenced in January 1988. The agreed mandate for these negotiations established the goals of strengthening stability and security in Europe through a conventional force balance while seeking to eliminate the capability for surprise attack. The final agreement required alliance or "group" limitations on tanks, artillery, armored

Table 1: CFE Alliance Equipment Limits

Treaty Limited Equipment (TLE)	Group Limit
Tanks	20,000
Artillery	20,000
Armored Combat Vehicles (ACV's)	30,000
Attack Helicopters	2,000
Combat Aircraft	6,800

combat vehicles, combat aircraft, and attack helicopters—known collectively as Treaty-Limited Equipment (TLE)—in an area stretching from the Atlantic Ocean to the Ural Mountains. Each bloc was allowed the numbers listed in Table 1.

Bloc limitations for NATO and the former Warsaw Pact were further restrained by a series of five geographic nested zones for land based TLE. Limitations on helicopters and attack aircraft applied to the entire area of application due to their ability to reposition rapidly. This zonal approach was a derivative of the mandate's intent to reduce the possibility of surprise attack by precluding excessive force concentrations by either side. Subsequent national limits for each treaty signatory were determined in negotiations among the members of the two organizations. The successor states of the Soviet Union (within the area of application) determined their respective limits from the total allocated to the Soviet Union in May 1992.

New negotiations focusing on personnel strength of armed forces began after the signing of the treaty. This resulted in the Concluding Act of the Negotiations on Personnel Strength of Conventional Armed Forces in Europe (referred to as the CFE-1A agreement). It was signed on 6 July 1992 and established limits of the personnel strength of military forces with the exception of sea-based naval units, internal security forces, or those assigned to UN duties. CFE-1A (unlike the CFE Treaty) is a politically binding arrangement as opposed to a legally binding treaty. It provided that the ceilings announced by each signatory would take effect 40 months after entry into force and further contained provisions for information exchange, notification, and verification.

CFE Area of Application Area 4.4 Area 4.3 Area 4.2 Area 5.1

Chart 1: CFE "Nesting" 26 i

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The numbers for the areas refer to articles in the CFE Treaty. Area 4.4 is the area shaded in red – Benelux, Germany, Denmark, Poland, the Czech Republic, Slovakia and Hungary – and has the strictest sublimits. Area 4.3 includes the states in Area 4.4 plus the area shaded in orange: the United Kingdom, France, Italy, Kaliningrad, Belarus and most of Ukraine (the Baltic states were covered as part of the USSR, but they never signed the CFE Treaty). Area 4.2 comprises of Area 4.3 plus the area shaded in green: Portugal, Spain, and parts of Russia and Kazakhstan. Area 5.1 comprises the flank areas. Area 4.1 is the entire region, from the Atlantic to the Urals.

ⁱ The CFE Treaty's "area of application" is divided into four nested zones. The term "nesting" refers to the fact that, beginning with the states in the center, each successive zone subsumes all of the preceding zone, plus adjacent states and military districts. Cumulative limits are assigned on the holdings of treaty-limited ground equipment in each zone, permitting the movement of forces away from, but not toward, the central region of Europe (Area 4.4). to address concerns about potential force concentrations on the rim areas, known as the "flanks," the treaty assigned separate, unitary sublimits there.

Though the reduction agreement was signed in 1990, implementation was delayed until 1992 by the end of the Warsaw Pact, demise of the Soviet Union, and problems associated with Soviet TLE. Despite this delay, a total of over 58,000 pieces of TLE were destroyed and approximately 2,700 inspections conducted to insure compliance by November 1995 (the end of the implementation period).²⁷ The Russian Federation had the greatest burden for destruction—roughly 20 per cent of this total. By the end of 2000, over 70,000 pieces of TLE had been destroyed and 3,500 inspections conducted.²⁸ Curiously. though the CFE Treaty resulted in large-scale reductions in equipment by both NATO and the Warsaw Pact, the residual forces of both were overall of a higher quality. This resulted from the "cascading" of equipment within each group. Countries were allowed to destroy older equipment and accept newer replacements from other members of their respective alliance as part of overall reductions.²⁹ Despite these facts, many experts believe the inspection regime may have contributed more to reducing tensions than was accomplished by the actual reductions.

Full and final compliance with the CFE Treaty was endangered in late 1995 due to Russian insistence that it could not comply with limits on its forces in the so-called flank zone—an area that includes both the Leningrad and North Caucasus Military Districts. As early as September 1993, Russian President Boris Yeltsin sent a letter to Western leaders saying that "the cessation of the existence of the USSR, the adaptation of the Treaty to a new composition of membership—the dramatic development of several local conflicts and the large-scale withdrawal of our troops to the Russian interior" have created an entirely new situation. "In these circumstances," Yeltsin continued, "the flank limitations acquire a unilateral and discriminatory

character for Russia."³⁰ A final compromise was achieved at the first Review Conference (May 1996) that permitted Russia higher force levels in the flank zone, established a May 1999 deadline for Moscow to meet these adjusted levels, and reduced the overall size of the flank zone.³¹ Despite this effort the flank "problem" has continued to be an issue of concern particularly in the eyes of Russian policymakers. It was exacerbated by Russian military operations in Chechnya (which is in the flank region), and Moscow's desire to maintain influence over the North Caucasus states.

The West indicated its willingness to consider additional adjustments to the treaty during the 1996 Review Conference. Actual discussions began in the winter of 1997 and progressed slowly throughout the next year. As spring 1999 arrived it was clear that adaptation would be affected by ongoing developments in European security. In this regard the period from 12 March through 24 April 1999 was a watershed in NATO history due to four significant events. First, on 12 March three new nations (Czech Republic, Hungary, and Poland) entered the Alliance. From the Russian perspective an adjusted CFE Treaty provided legal assurances about the size and deployment of NATO forces critical to Moscow's assessment of regional security.³² Consequently, while treaty modifications were warranted based on the dramatic change that had occurred since 1990, the enlargement process gave this effort an additional resonance. Second, the Alliance began the bombing of Yugoslavia on 26 March due to the crisis in Kosovo. Third, on 30 March the states participating in the negotiations to adapt the CFE Treaty reached a major political agreement despite the ongoing hostilities.³³ This was particularly noteworthy as Moscow had severed or suspended its other political ties

with NATO (such as the NATO-Russia Council) once hostilities began. Furthermore, these ongoing negotiations were focused on the conventional force balance in Central Europe during the first actual conflict involving all NATO members and the largest air campaign in Europe since World War II. Finally, NATO had also issued its new Strategic Concept during the Washington Summit that was held 23-24 April.

On 19 November 1999 (the ninth anniversary of the CFE Treaty) the 30 national leaders of signatory states signed an adapted treaty.³⁴ It confirmed a new structure based on a system of national and territorial ceilings to replace the zonal approach as well as bloc limits. This adjustment was a clear reflection of the greater multilateral character of the emerging security environment. The adapted treaty further noted that the presence of foreign forces on any state's territory was only allowed consistent with the principle of "host nation consent." This was critical to newly independent democracies throughout Eastern Europe and the former USSR.

NATO also declared unilateral limitations on force deployments early in the enlargement process. The Alliance announced that it saw no need to station significant forces permanently on the territory of new members. This acknowledged the emerging security situation and attempted to ease Russian disquiet. Still the new members (Hungary, Czech Republic, and Poland) were concerned that the Alliance goal of military sufficiency could be undermined. They worried that should they be threatened in the future, NATO would not be able to come to their aid without violating the treaty. Consequently, NATO negotiated operational flexibilities such as the right to deploy equipment temporarily on the territory of an ally during a crisis.

The accord also made changes to the flank regime in order to reconcile this portion of the original treaty to a revised structure. It noted that the existing flank regime remained legally binding on all parties but allowed Russia modest force increases in this area. Moscow also began bilateral discussions on the reduction of its forces from Georgia and withdrawal from Moldova consistent with the principle of host nation consent. Finally, the adapted agreement concluded key verification enhancements and contained important national statements. For example, Russia pledged to restrain its force levels adjacent to the Baltic Republics and Poland. Overall the United States accepted a reduction of over 45% in the amount of ground TLE it was authorized to have in the region. While this would appear to be a significant reduction, in reality American forces deployed in Europe had undergone enormous cuts in the period following the end of the Cold War. As a result, the United States could accept these adjusted force levels without having to make any additional reductions. Finally, each state accepted a moderate increase in its annual inspection requirements and commitments to pursue continued reductions.

The final negotiations and eventual ratification were complicated by Russia's failure to meet the revised flank totals agreed at the Review Conference by the June 1999 deadline.³⁵ While Moscow remained within its overall national limits for all categories of TLE, it exceeded its allocation in the North Caucasus area significantly. This was further exacerbated as hostilities recommenced in Chechnya in October 1999. Moscow did, however, formally announce its deployment to the region in excess of treaty limits to meet the emerging crisis that demonstrated some commitment to the agreement.³⁶ Russian failure to comply with

treaty provisions, coupled with its continued presence in Georgia and Moldova, made final ratification of the adapted treaty problematic. President William Clinton announced at the conclusion of the summit that he would not submit the agreement for ratification by the Senate until Russia had fully complied.³⁷ All NATO members supported this action, and Senator Jesse Helms (then Chairman of the Senate Foreign Relations Committee) forwarded two letters to President Clinton recommending strongly against signing the adapted agreement or submitting it for ratification due to continued Russian non-compliance.³⁸ This continued to be the position of the United States and its NATO partners for the ensuing decade.

Russia's inability or unwillingness to resolve these issues continued in 2001. This issue was raised during the Review Conference (28 May 2001) by the United States as well as Georgia and other Caucasus states. Some observers believed that due to the uncertain situation in Chechnya, Russian military leaders resisted complying with force limitations that might have to be violated subsequently if hostilities escalated. Russia's continued presence in Georgia (roughly 7000 troops deployed on two bases) beyond the 1 August 2001 deadline they had announced indicated a desire to maintain influence over the Georgian government and contribute to securing their border with Chechnya. Some experts also believe the Russian military was concerned that NATO or some other third party might occupy these bases if they were vacated. These apprehensions and the overall question of Russian and foreign troop presence more generally in Georgia has continued to take on greater significance. Following the attacks of September 11th, 2001, the United States deployed small military forces to Georgia to train and equip local units

to combat a growing terrorist threat in that country. Military-to-military cooperation between the United States and Georgia has continued to expand to include the deployment of a brigade of Georgian troops to Iraq.³⁹

Final ratification of the Adapted CFE Treaty would institute a new system of national and territorial ceilings consistent with post-Cold War geography. It would also establish the concept of "host nation consent" as legally binding on all signatories while seeking to reduce Russian anxiety over its conventional inferiority. Still, Western military planners would have to contend with the fact that the adapted treaty could subject forces deployed to NATO territory or in transit through Europe to additional potential inspections and associated transparency measures. These new requirements would permit inspections of 20 percent of "objects of verification." This would include military equipment down to regimental level as well as any additional Treaty-Limited Equipment in storage, repair, or reduction locations. In addition, all signatories are required to submit annual and quarterly reports of their equipment allocations and locations in the treaty area of application. Any changes that exceeded 30 tanks/ACVs or 10 artillery weapons on the territory of any state must also be Any increase of 18 or more combat aircraft or attack helicopters in a country's holdings throughout the entire area of application must also be reported to all signatories. Issues of transparency for American forward-deployed forces in Europe and those transiting the continent have assumed a greater saliency due to the fact that power projection has been a key mission since the end of the Cold War, and this requirement received renewed emphasis following the attacks of September 11th.

Obviously, the treaty in its current or adapted form must be consistent with the decisions NATO leaders take on enlargement. Clearly the adapted treaty is more in line with an enlarged NATO and the altered geography of Europe following the collapse of the Soviet Union. It allows for accession and this could have positive ramifications for both the Baltic and Balkan regions. Lithuania, Latvia, and Estonia announced they were not party to CFE upon regaining their independence in 1991. This was primarily an issue of sovereignty as Baltic leaders argued that they were neither signatories to the original agreement nor successor states to the Soviet Union. Consequently, they were unwilling to participate in the Tashkent Conference that negotiated residual national ceilings from the entitlements of the USSR. It seems logical that their accession to an adapted CFE regime could underscore their respective sovereignty, offer additional security reassurances, and be clearly consistent with their entry into NATO. The Baltic States have all carefully analyzed the impact of accession and conducted thorough discussions with the Alliance. 40 In the Balkans the arms control agreements that were derived from the requirements in the Dayton Accords were modeled after CFE and the Vienna Document in order to afford these states the opportunity to accede to the CFE Treaty at a future date. Now that Slovenia and Croatia are NATO members they could also accede to the CFE Treaty once the adapted agreement enters into force.

Finally, questions continue to be raised in the Joint Consultative Group (JCG) in Vienna over whether new weapons technologies should be included in the categories of military equipment limited by CFE. The JCG consists of representatives of all signatories to the agreement. Under the terms of the agreement this body reviews and

monitors the execution of the treaty. In its current form the CFE Treaty provides clear technological advantages to the United States and the West in general. The limitations are solely "quantitative" and not "qualitative" in character. As a result, the oldest tank in the inventory of any of the former Soviet states is counted as the equivalent of the most modern tank in the NATO arsenal. This could change in the future, however. For example, some European arms control experts believe that remotely piloted vehicles (RPVs) or drones should be included in the category of combat aircraft limited by the treaty. This issue arose in the JCG during the fall of 2000. This attempt to include the armed RPVs under the category of "combat aircraft" resulted in an angry public letter at the time from Senator Helms to President Clinton that such an examination was "premature" and potentially inconsistent with US national security.

It is very likely that the Russian Federation or even some European states will continue to raise this issue as the wars in Afghanistan and Iraq continue since the RQ-1 Predator has been armed with Hellfire missiles and used to attack various targets in Afghanistan and Pakistan. Some experts have even suggested that unmanned aerial vehicles equipped with both sensors and missiles have emerged as the leading "transformational" weapon system. There are also reports that the United States has now dropped more ordnance from drones on Pakistan than the total number of bombs it dropped on Serbia and Kosovo in 1999. As a result of the success of drone attacks, Secretary of Defense Rumsfeld requested additional funding for the procurement of drone aircraft in 2002, and drone acquisition funding has increased steadily in every subsequent defense budget request. Recently, it was reported that President Barack Obama's administration is seeking to

expand the number of drone attacks in Pakistan. Since January 2008, 80 missile attacks from drones have killed more than 400 enemy fighters. Still at this point the use of drones as "attack" aircraft is reported to be under the control of the Central Intelligence Agency and, consequently, not subject to treaty restrictions until they become part of deployed military formations.

Open Skies

The Treaty on Open Skies was proposed by then President George H.W. Bush in 1989, though the idea had been discussed during the Eisenhower administration in 1955. The members of NATO and the former Warsaw Pact signed the treaty in Helsinki on 24 March 1992. Following the demise of the Soviet Union the governments of the Russian Federation, Belarus, Georgia, and Ukraine acknowledged their support for the agreement and submitted it for review and a vote of ratification by their respective parliaments. The treaty was scheduled to enter into force 60 days after the last state deposited its instruments of ratification. The United States ratified Open Skies in 1993, but the treaty languished in parliamentary committees in Belarus and Russia. These last two signatories finally ratified it, and they deposited their instruments of ratification in November 2001. As a result the treaty entered into force on 1 January 2002.

Open Skies is of unlimited duration and the United States has no right of refusal to overhead flights allowed under the treaty. The agreement covers the national territory of all signatories, including territorial waters and islands. The treaty has four primary objectives. First, it seeks to promote greater openness and transparency of military activities. Second, the treaty is designed to improve the monitoring of current and future arms control arrangements. Third, Open Skies is

intended to strengthen the capacity of crisis prevention and crisis management. Finally, it provides aerial observation based on equity and effectiveness for all signatories.

Each participating state has the right to conduct, and the obligation to receive, flights over its territory based on an established quota. 46 The United States has a quota of 42 over flights per year; however, during the initial three years only 31 were permitted in any single year. Any signatory to the treaty may receive the data that results from any flight. Such flights are to be conducted by unarmed fixed-wing observation aircraft. They are authorized to carry still and video cameras, infrared scanning devices, and side-looking radars. Since signing the agreement many countries have developed appropriate aircraft in accordance with the limitations in the treaty. Numerous "practice flights" over the territory of participating states have also been conducted in order to insure all were fully prepared for implementation. Of these "practices," 54 involved American territory, and 30 of these efforts were joint trial flights that included foreign participation. During the hostilities in Kosovo, for example, Ukraine requested to conduct a "practice" Open Skies flight over Italy. Obviously, this caused significant anxiety among NATO military planners since Italian airfields were some of the principal bases used to conduct air attacks against Serbia. Fortunately, the flight was cancelled at the last moment due to problems with the Ukrainian aircraft.

The treaty also provided that for the initial six months after it entered into force any OSCE member could apply for accession This expanded the area of application enormously and included countries in areas with unique security problems such as the Baltic States, the Balkans, and Cyprus. After 1 July 2002, any country could request to

accede to the treaty. Still, no country can accede to this agreement if any existing signatory objects.

The treaty finally entered into force on January 1, 2002. All of the treaty's initial 27 signatories have ratified the accord and are now states-parties. Since the treaty entered into force, Bosnia and Herzegovina, Croatia, Estonia, Finland, Latvia, Lithuania, Slovenia, and Sweden have also become states-parties. Russia conducted the first observation flight under the treaty in August 2002, while the United States carried out its first official flight in December 2002.⁴⁷

Obviously, the Open Skies Treaty has the potential to provide significant transparency of American military forces and operations on US soil as well as the territory of any member state. This could even include, for example, a location such as the island of Diego Garcia (British island territory) which has played an important role in the conflict in Afghanistan, forces preparing for deployment in the United States or abroad, as well as formations enroute to a foreign destination. Still, the American intelligence community has provided an assessment that Open Skies is manageable if timely and accurate notifications of over flights are provided and training is conducted by US forces to increase their awareness levels.

The Ottawa Treaty

The Ottawa Treaty establishes a global ban on anti-personnel landmines (APL). The so-called "Ottawa process" reflected a feeling by some states and non-governmental organizations that insufficient attention was being paid to the problem of landmines. This resulted in a "fast track" arms control approach led by Canada and a coalition of non-governmental organizations (NGO's). The umbrella organization for this effort was the International Campaign to Ban Landmines

(ICBL) that consisted of six NGO's that had launched an effort for a global ban on anti-personnel landmines beginning in 1992.⁴⁸

In 1996 a conference of 70 countries and 50 NGOs took place in Ottawa. Participants agreed to sign a treaty the following year in order to ban all anti-personnel landmines by 2000. The Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-Personnel Mines and Their Destruction is commonly referred to as the Ottawa Treaty and was signed in 1997. It entered into force in March 1999. By June 2001, 140 countries had signed the agreement and over 100 had ratified it. All NATO members, with the exception of the United States and Turkey, are signatories to this agreement. While the treaty prohibits states from possessing anti-personnel landmines, it places no restraints on anti-tank mines or their associated handling devices. As of September 10, 2009, there are 156 States Parties to the Treaty. Thirty-seven countries have not signed the treaty. The most notable countries not to sign include the People's Republic of China, United States of America, India, and Russia.⁴⁹

Obviously, supporters of the agreement would argue that it has significant strengths. The treaty and associated publicity have galvanized attention to a problem that they believe is of global significance. This was particularly important for states that had not been affected by previous conventions limiting APL such as Cambodia, Mozambique, Bosnia, and Croatia. Since it entered into force enormous stockpiles of mines have been destroyed. According to the ICBL over 20 million mines have been destroyed from the arsenals of over 50 countries. Several NATO countries to include Britain, France, and Germany have completely destroyed all of their anti-personnel landmine stockpiles. ⁵⁰

The agreement does, however, have significant weaknesses. Most notable is the fact that the largest military powers—the United States, Russia, and China—are not signatories to the agreement. American opposition to the Ottawa Treaty is in large measure due to US security responsibilities, particularly on the Korean peninsula. Anti-personnel landmines play a crucial role in the defense of South Korea and its capital of Seoul that lies only 27 miles from the Demilitarized Zone that separates North from South Korea. Due to the deployment of massive North Korean conventional forces along the DMZ American military planners rely on pre-planned and emplaced minefields to counter and slow any possible North Korean offensive. The Clinton administration stated that the United States would seek to find suitable alternatives to current anti-personnel landmines and mixed anti-tank systems by 2006. In 1999, \$23.2 million dollars was appropriated for research on alternatives and an additional \$38.1 million dollars was included in the fiscal year 2000 proposal. In addition, the United States has destroyed over 3.3 million non-self-destructing mines since 1996, but not those emplaced in Korea. The Bush administration conducted a review of American landmine policy. In its aftermath, Administration officials stated that the United States would not sign the Ottawa Treaty under any circumstances but would continue research on alternatives.

The Ottawa Treaty has several key provisions in addition to each signatory's commitment never to use anti-personnel mines. Each also agrees never to "develop, produce, otherwise acquire, stockpile, retain, or transfer, directly or indirectly antipersonnel mines." Furthermore, the treaty prohibits assisting, encouraging, or inducing any activity prohibited under the convention. This has caused serious problems for NATO military planners. At the time of its signing the United States

stockpiled mines in five NATO countries: Norway, Germany, Italy, Spain, and the United Kingdom. A strict legal interpretation of the treaty might suggest that the 17 signatory states from NATO could not cooperate with or assist the United States or Turkey (which has also not signed the Ottawa Treaty) to plan for the use of such weapons during a combined operation or to allow such stockpiles on their territory.⁵¹

In June 1998, French Minister of Defense Morin declared that his nation would "unreservedly enforce the Ottawa Treaty." He added, "France will prohibit the planned or actual use of anti-personnel mines in any military operation whatsoever by its military personnel. Furthermore, France will refuse to agree to rules of engagement in any military operation calling for the use of anti-personnel landmines."52 Even Great Britain (arguably America's closest ally) noted that being on opposite sides with Washington on this issue caused a "profound operational problem for the Alliance."53 As a result, the United States removed its APL stockpiles from the territory of its allies. Though several states appended memorandum when signing the Ottawa Treaty which would allow them to conduct military operations with "nonsignatories," the planning for the use of these weapons has been restricted during all NATO combined exercises, training, and computer models. It was also reported that several European nations expressed concern that the United States might use APL during the conflict in Kosovo, and it has likely been a question during operations in Iraq and Afghanistan.

Arms Control in the Balkans—The Dayton Accords

The Dayton Accords were signed in November 1995, ending the conflict in Bosnia. Annex 1A of the agreement included ambitious arms control and confidence-building proposals for the signatories to

be negotiated under the auspices of the Organization for Security Cooperation in Europe. Under Article II states agreed to commence immediately negotiations on confidence- and security building measures. They also agreed (Article III) to restrictions on the importation of light arms for 90 days and heavier weapons for 180 days, and (under Article IV) to begin negotiations to establish reduced levels of armament and military manpower. Article IV also established a deadline of 11 June 1996 to achieve compliance with this agreement. Finally, the agreement called for subsequent negotiations (Article V) with the goal of establishing a regional balance in and around the former Yugoslavia.

Surprisingly, the parties achieved agreement on a package of Confidence- and Security Building Measures by 26 January 1996. The accord used existing CSBMs contained in the Vienna Document as a model, and these measures were effective upon signature. All of the states of the former Yugoslavia were also subject to the CSBMs listed in Vienna Documents as well as the Military Code of Conduct upon achieving membership in the OSCE. Eventually this applied to all parties with the exception of the Federal Republic of Yugoslavia. Belgrade's OSCE membership was suspended in July 1992 as the war in the region intensified and not restored until the demise of the Milosevic government in 2000.

While success in achieving an agreement on confidence-building measures was significant, final settlement of the Article IV reduction accord proceeded slowly. If the states parties failed to agree by the established deadline, the Dayton agreement established limits based on population that would automatically apply. The allocation for Bosnia and Herzegovina was further subdivided between the component

entities (the Federation of Bosnia and Herzegovina and the Republika Srpska). Consequently, the arms control process could not occur in isolation. Success for this negotiation was dependent upon the outcome in other areas of the accord and the emerging political climate between the former warring parties. Failure of the NATO Implementation Force (IFOR), for example, to implement the physical movement of forces required, or a breach in the agreement to conduct elections, would have made these negotiations moot. As a result, though these agreements placed no restraints on the peacekeeping force, IFOR became involved in the actual implementation and maintenance of these agreements much to the chagrin of many European and American military leaders. IFOR continued to be the best source of information on the size and disposition of the three armies that remained in the Bosnian Federation (Bosniak, Croat, and Serb) as well as conducting supervision of any military training exercises by these forces. In many ways the arms control agreements in the Balkans suggested a new approach that moved from using arms control as a tool for conflict prevention (as during the Cold War) to becoming a tool for post-conflict resolution.

During these discussions a serious disagreement existed among the Contact Group (representatives from United States, United Kingdom, France, Germany, Russia, and Special Representative of the EU) over the American plan to assist in the training and re-equipping of Croatian and Muslim forces for the Federation Army. European participants argued that this effort could potentially undermine the negotiations and was akin to pouring "gasoline on smoking embers." American negotiators argued that Bosnian Muslim leaders would have refused any treaty until "train and equip" was well underway. Furthermore,

continued US congressional support for the overall effort was dependent upon "leveling the military playing field" among the various protagonists. Consequently, Washington was successful in using "train and equip" as leverage to force particularly the Sarajevo government to fulfill certain political obligations. This divergence between the United States and its allies demonstrated not only a differing approach to cooperative security in this case, but also the beginning of a more united European security perspective. This development has continued with the advent of the European Security and Defense Identity (ESDI).

An agreement was achieved in the final moments prior to the deadline in June 1996. The parties eventually accepted the default ratios described in Article IV. They also made "politically binding" pledges to reduce military manpower not unlike CFE-1A.⁵⁶ These troop reductions were, however, more a reflection of economic necessity than strict military analysis. Furthermore, while this had great political significance, the verification and definition of actual military manpower levels (particularly in states with large paramilitary forces) are virtually impossible. Implementation proceeded slowly with widespread complaints by all about cheating and the costs associated with destruction. These efforts as well as the preceding negotiations also underscored some of the essential coordination difficulties based on the structure of the Dayton Accords that required cooperation between the OSCE, European Union, and the UN. This caused a certain degree of friction between OSCE representatives that were involved in the verification of arms control agreements and IFOR who had intelligence and oversight of the forces remaining in Bosnia as previously mentioned.

All parties held a Review Conference in June 1998 following the verification of reductions. At this meeting the states parties declared the agreements successfully implemented and began discussions for an Article V mandate.⁵⁷ Article V prescribed that the OSCE should assist the parties to achieve the goal of "establishing a regional balance in and around the former Yugoslavia" and included states (i.e., Hungary and Romania) that had not been directly involved in the wars in Yugoslavia.⁵⁸ No agreement, however, was achieved due to the onset of hostilities in Kosovo and the desire by some Balkan states to eventually accede to CFE. With the entry into NATO of several states from the Balkans and the possibility at least of the adapted CFE Treaty entering into force, American planners need to consider whether or not they wish this region to be part of the CFE area of application. If countries accede to the treaty, it would place additional restrictions on the size of American forces that could operate in the Balkans and subject them to additional transparency measures. Russian military experts have complained, for example, that American and NATO forces in Kosovo were not limited or subject to any transparency measures.

THE SPECIAL CASE OF THE TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE

The objectives of the negotiation shall be to strengthen stability and security in Europe through the establishment of a stable and secure balance of conventional armed forces, which include conventional armaments and equipment, at lower levels; the elimination of disparities prejudicial to stability and security; and the elimination, as a matter of priority, of the capability for launching surprise attack and for initiating large scale offensive action. 59

--Agreed Mandate for the negotiations on the Treaty on Conventional Armed Forces in Europe (CFE)

The Treaty on Conventional Armed Forces in Europe (CFE) remains the largest and, therefore, the most important conventional arms control treaty ever negotiated. The following map shows the signatories to the treaty.

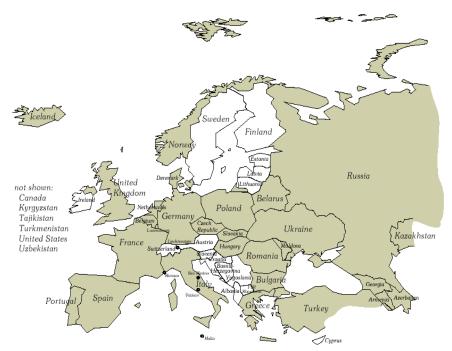


Chart 2: Map of CFE and Non-CFE countries in Europe⁶⁰

The European non-CFE states (shown in white) are concentrated in two areas with the exception of Malta, Cyprus and Ireland. One area lies in the North East of Europe and consists of the Baltic States, Sweden, and Finland and the second area is in the South East of Europe (Austria and Switzerland are considered a part of Central Europe.) As earlier discussed, the Adapted CFE Treaty would allow these states to enter the agreement and shift the focus from blocs to national totals. Still, at this moment the future of this accord has been placed at risk by

the Russian Federation's decision to suspend its participation in the agreement.

Contributions of the CFE Treaty

The CFE Treaty has long been referred to as the "cornerstone of European security." But in light the dramatic changes in European security architecture that have occurred since 1990, many wonder if it will continue to be the case and, if so, for how much longer? Obviously this question looms large in the aftermath of the Russian suspension and subsequent conflict between Georgia and the Russian Federation in August 2008. Can this agreement assist in reestablishing a sense of cooperative security, or has its credibility and utility been undermined permanently?

Many diplomats and military leaders believe the treaty continues to be of vital importance to European security. Some argue, however, that its vitality is dependent upon all states parties accepting the following: (1) the 1990 CFE treaty, with its 1996 flank adjustments, must continue to be fully implemented; and (2) the 1999 Adapted Treaty must be brought into force. Only upon that foundation can the CFE statesparties take a forward-looking approach to any additional changes that must be made to continue to ensure the Treaty's viability.

In retrospect the agreement can only be truly evaluated against the backdrop of changes in European security. Oddly, the treaty was signed to prevent or at least reduce the likelihood of conflict between NATO and the Warsaw Pact. Shortly after it was signed, the Warsaw Pact and the Soviet Union both disappeared. Consequently, the true value of the treaty must be considered in the context of the dramatic transition that ensued. In fact, some have argued that the "cornerstone" metaphor is misplaced. The CFE Treaty has not been a static

agreement. Europe has weathered many changes, and the treaty has been successfully adapted to accommodate those developments.

The treaty clearly proved important in assuaging concerns about German reunification and provided transparency during the withdrawal of massive Soviet forces from Eastern Europe. These withdrawals occurred following the signing of the Treaty on the German Reunification (12 September 1990) by the Federal Republic, German Democratic Republic (East Germany), France, the United Kingdom, the Soviet Union, and the United States. 61 This agreement also contained significant additional restraints on military operations. Germany agreed to deploy only territorial units that were not integrated in the NATO command structure on the territory of the former East Germany. Bonn further agreed that no foreign troops would be stationed in its eastern states or "carry out any other military activity there" while the withdrawal of Soviet forces was ongoing. Finally, the reunification treaty also specified that "foreign armed forces and nuclear weapons or their carriers will not be stationed in that part of Germany or deployed there" though Germany did insist on the ability to interpret the precise meaning of "deployed."62

In terms of the actual reductions of military equipment associated with the implementation of the original treaty, the numbers are truly impressive. Over 69,000 Cold War era battle tanks, combat aircraft, and other pieces of military equipment have been destroyed in the now 30 countries stretching from the Atlantic to the Ural Mountains. In many ways the treaty changed the face of European security by "establishing new, cooperative political-military relationships." More than 5,500 on-site inspections have been conducted, creating a new sense of political-military cooperation and openness.

The true value of the treaty and the associated transparency measures was also demonstrated during the various conflicts in the Balkans. Short-notice inspections in accordance with CFE were conducted of United States forces in Germany by Russian inspectors as the American troops prepared to depart for Bosnia in 1995. As a result these military operations were conducted without a significant increase in tensions. The Dayton Accords that ended the initial conflict in the former Yugoslavia in 1996 also contained an annex that established a "CFE-like" agreement between the contending states. The treaty was crafted to be nearly identical to the CFE Treaty in terms of limits, definitions, transparency measures, etc. All of the Balkan states participating in this agreement have expressed a desire to accede to the full CFE Treaty at some point in the future.

The Russian Federation also requested so-called "challenge inspections" of NATO airbases in Italy and Hungary during the conflict in Kosovo in late May 1999 under the provisions of the CFE Treaty. This included the NATO base at Aviano, Italy, one of the primary facilities in mounting the air campaign against Serbia. While this was difficult given the circumstances of an ongoing air offensive, NATO accepted these requests as legally binding under the treaty, and military officials complied appropriately. Many observers believe this helped allay to some degree Russian concerns about US force deployments during this crisis.

In fact, many experts believe the overall inspection regime may have contributed more to the reduction of tensions and crisis prevention during this dramatic transition in European security than the actual reductions. Some argue that the agreement's greatest value may be the entire CFE system that encourages confidence through transparency.

In the final analysis, the existing treaty (as well as the adapted agreement) provides a forum for the major European states to debate, agree, and maintain a set of rules about conventional military power on the continent that is critical to overall stability.⁶⁴

The Russian "Suspension" of the CFE Treaty

On 12 December 2007, the Russian Federation officially announced that it would no longer be bound by the restrictions of the 1990 Treaty on Conventional Armed Forces in Europe and suspended its participation. 65 Moscow took this action due to the fact that the 22 NATO members bound by the 1990 agreement had not ratified the 1999 Adapted Treaty by that date. This was not a surprise. During the June 2007 extraordinary conference Russia provided a detailed list of the "negative effects" of the conduct of NATO states. 66 These included overall NATO force levels, the flank limits, and other unspecified demands for additional transparency. In addition to these concerns, it was clear that Prime Minister Putin and Russian leaders in general were angry over a series of issues, including NATO enlargement, the independence of Kosovo, and plans to install American anti-ballistic missiles on Polish territory. Nonetheless, Moscow reassured the other treaty signatories that it did not intend to dramatically increase its force levels in the territory adjacent to their borders. Russia has apparently continued to abide by that decision. Russian President Medvedev underscored Russia's seriousness about its Treaty concerns when he described the existing agreement as both "unfair" and "non-viable." At the same time Russian leaders have been quick to describe the contributions made by the treaty as valuable and further acknowledge the spirit of both trust and cooperation that it has engendered.

In terms of ratification, NATO members have argued since the 1999 Istanbul Summit that their ratification remained contingent upon Russia complying with obligations it freely accepted when the Adapted CFE Treaty was signed. The most contentious is the full removal of all Russian military forces from the territory of the former Soviet republics of Georgia and Moldova. Russia has adamantly resisted this linkage and Russian Prime Minister Vladimir Putin has publicly argued that "there is no legal link" between the Adapted CFE Treaty and these commitments.⁶⁷

Consequently, the Treaty is beginning to unravel. Russia has not provided data as part of the bi-annual data exchange since it suspended participation in 2007. Nor has Russia provided required information on changes to the location of ground treaty limited equipment, and it is no longer accepting (nor participating in) the Treaty's routine and challenge inspection regime. The implications of this situation for the future health of the CFE Treaty are serious. Although other parties continue to implement the treaty in full, a situation in which Russia is not implementing core treaty provisions cannot be sustained forever. At some point, this state of affairs will cause other states parties to begin re-evaluating their own treaty participation. If that becomes the case, the treaty will truly cease to be viable. This will have unforeseen implications not only for the ability to deal with other issues on the bilateral and European security agenda, but also possibly with respect to the defense postures among the states parties as well as other arms control agreements. Even President Medvedev, in his speech, seemed to have indicated his preference for avoiding the treaty's "complete and final collapse."

In response to Moscow's suspension of treaty participation, NATO members published a "parallel actions package" in March 2008 in an attempt to avoid the treaty's demise. NATO's statement on the package notes that, "NATO allies will move forward on ratification of the Adapted CFE Treaty in parallel with implementation of specific, agreed steps by the Russian Federation to resolve outstanding issues related to Russian forces/facilities in the Republic of Moldova and Georgia."68 The package represented a serious shift in the NATO position, as it called for NATO countries to begin the ratification process (which in some countries such as the United States might take several months) while Russia commenced its withdrawals. Once Russian forces had been removed from Georgia and Moldova, NATO countries would strive to complete ratification of the Adapted Treaty quickly. NATO members also pledged to address many Russian security concerns once the Adapted Treaty was in place. For example, all new NATO members that are not treaty signatories (Slovenia, Croatia, Estonia, Latvia, and Lithuania) have agreed to accede. NATO also announced that following final ratification it would be willing to discuss Russian concerns about future weapon ceilings and limitations placed on Moscow in the "flank zones" that border Turkey, Norway, and the Baltic Republics.⁶⁹

Unfortunately, the negotiations made little to no progress. They have now been largely undermined by the deteriorating relations between NATO countries and the Russian Federation in the aftermath of the conflict in Georgia. In fact, one expert observed that the Russian-Georgian War violated the principles contained in both OSCE documents as well as the preamble to the CFE Treaty. These documents call for states parties to refrain from "the threat or use of

force against the territorial integrity or political independence of any State," as well as the commitment to peaceful cooperation and the prevention of military conflict anywhere on the European continent. This situation has been further complicated by the Moscow's subsequent decision to recognize South Ossetia and Abkhazia as independent nations.

What Would Failure Mean?

Russian leaders have been increasingly critical of the treaty for several years and suggested that it may actually perpetuate adversarial relationships. In July 2007 Prime Minister Putin suggested that the agreement contradicted reality, and Foreign Minister Lavrov said the regime was "hopelessly outdated, the adherence to which makes no sense and means one has no self-respect". But this opinion is not shared by most treaty members and security experts. A group of distinguished Western diplomats, military leaders, and academics prepared a letter in 2008 that argued that the collapse of the CFE Treaty would "...undermine co-operative security in Europe and lead to new dividing lines and confrontations."

Obviously, the potential demise of the CFE Treaty or "cornerstone of European security" would beg several serious questions. What would be the impact in future if the flow of routinely provided information on conventional equipment, inspections to verify that information, and constraints on the levels of that equipment were to disappear? What would Russian and Western perspectives be on a situation in which there were no limits at all on the level or the location of conventional weapons deployments or the overall force levels of treaty signatories? What would the European security picture look like

if the habits of cooperation developed through the CFE Treaty were undone?

Sadly, it is not too far-fetched to imagine that this could cause a dramatic realignment of European security. The loss of information and undermining of predictability would set the stage for historic animosities to resurface and lingering crises to potentially worsen. For example, there have been suggestions that Azerbaijan is counting on the failure of the treaty to provide it an opportunity to increase its military forces. Such a development would clearly exacerbate tensions between Azerbaijan and Armenia. These two countries remain embroiled in a long-simmering conflict over Nagorno-Karabakh.⁷³ This struggle has resulted in over 15,000 casualties since 1988 and over 800,000 Armenian and Azeri refugees. Furthermore, Russia would also lose any transparency over the military forces of existing or future new members of the NATO alliance as well as the deployment of NATO forces on the territory of new members. Finally, the Baltic republics would not be allowed to accede to the existing agreement and, consequently, there would be no mechanism to affect transparency about military forces on their territory.

Many believe these developments might encourage an expansion in military forces or damage to other agreements. For example, some experts believe Russia might reconsider its participation in the Intermediate-Range Nuclear Forces Treaty (INF) in an effort to improve its security posture. Russian President Putin threatened such action in a statement in February 2007. Loss of CFE would also remove a valuable crisis management tool from the security architecture and damage arms control as an instrument to enhance overall European stability. In this regard, Balkan observers believe the

demise of the CFE Treaty might mean an end to the arms control arrangements contained in the Dayton Accords. Obviously, such a development could contribute to renewed violence in that troubled region.

The demise of this agreement could also have a serious impact on other important aspects of European security. Moscow and Washington have periodically had serious disagreements over the past decade and their bilateral relations have at times been worse than any time since the end of the Cold War. 74 Despite the fact that the new administration of President Barack Obama has called for hitting the "reset button" in their relations, serious issues remain that may be affected by how the CFE imbroglio is resolved. For example, CFE's collapse could undermine the cooperative European security structures that have been built over the last fifteen-plus years. These efforts include the NATO-Russia Council, the OSCE, and prospects for building or enhancing future cooperation in other areas. Finally, if CFE is abandoned, its benefits would be difficult if not impossible to replace. It is hard to imagine how to build new arrangements if there is no foundation remaining upon which to construct them. Beyond that, if CFE is no longer a viable agreement, and the confidence-building aspects of the regime are destroyed completely, over time it is entirely possible that some states parties will seek alternative arrangements that will replace the security benefits they now derive from the treaty.

What Are the Options?

As we look to the future, Russian and NATO strategists must carefully consider the deadlock over the CFE Treaty and how conventional arms control can help reestablish a sense of cooperative security in the aftermath of the Russian-Georgian conflict. Michael

Wyganowski, a former Polish diplomat who headed Poland's delegation to the CFE Treaty negotiations in 1999, underscored the importance of the CFE Treaty following the conflict between Russia and Georgia in August 2008. He observed that the accord was being relegated further to the sidelines by a conflict that actually underscored the importance of limiting conventional arms holdings.⁷⁵

With respect to the future of the CFE Treaty, there appear to be in principle three possible options. The first option would be the status quo: Russia continues its suspension, and efforts to resolve these issues remain deadlocked. In this scenario, the treaty over time will collapse. Other states parties are unlikely to continue to implement a treaty while Russia continues to avoid its treaty obligations.

The second option is that NATO agrees to address Russian CFE demands and ratifies the Adapted Treaty despite the continued presence of Russian forces in Abkhazia, South Ossetia, and Moldova. This is also unlikely to happen. In July 2007 (one year prior to the Russian-Georgian War) the United States Senate passed Resolution 278. This document reaffirmed the Senate's support for the treaty, described the Russian suspension as "regrettable," and further warned that this was a "step that will unnecessarily heighten tensions in Europe." In this environment it is very unlikely that the Obama administration would seek Senate ratification of the adapted treaty absent Russian compliance with the Istanbul commitments.

The third option is to take the framework endorsed by NATO in the form of the parallel actions package and work the details conscientiously. In this package NATO shifted its position on ratification, suggesting that countries can move forward with the ratification process *in parallel* with final resolution and implementation

of the Istanbul commitments, as well as movement on other aspects of a package. But this requires some resolution of the outstanding issues between Russia and both Moldova and Georgia. Even if Western states were to agree to Russian demands and ratify the treaty, the agreement cannot enter into force without the support of these two states, and both remain most directly affected by the unrealized commitments made in Istanbul a decade ago. The Russian delegation has provided its comments on the NATO Parallel Action Plan, but no real progress has been made to resolve the existing impasse.

Clearly, a number of the core Russian concerns can best be addressed not by abandoning CFE, but through entry into force of the Adapted Treaty. The Adapted Treaty provides the means through which Russia can ensure predictability in the levels and locations of NATO forces, as well as a means of inspecting these forces against the information that NATO provides. Consequently, a decision by Moscow to move in the direction of compromise would not be based on altruism, but rather on a careful calculation of Russian national interest. Russian Foreign Minister Lavrov seemed to reflect this in remarks at the Council on Foreign Relations in New York on 24 September 2008. He observed, "the only thing we want internationally is cooperation on the basis of full equality and mutual benefit."⁷⁶ Still it is unclear whether all of the Russian concerns can be resolved within the context of the CFE Treaty, and Moscow has also pushed for a new Pan-European Security agreement that would include arms control as an essential component. Consequently, it would seem more likely that resolution of the disagreement over the CFE Treaty might be a valuable precursor that would allow for serious negotiations on a number of European security issues to occur.

A Western arms control expert once remarked that he felt like he was watching 300 years of European hostilities unfold during the course of CFE negotiations. Critics of this process are frequently captivated by the technical details of definitions, counting rules, stabilizing measures, and inspection regimes, and often overlook the connection between these points and larger security issues. Still while the "devil may lie in the details," this accord is rooted in the collective attempt of over 30 sovereign states to improve their respective security. Consequently, historical antagonisms have an impact as well as contributing to the agreement's enduring value, as Europe seeks a new architecture based on cooperative security.

With the rising threat of transnational issues such as nuclear proliferation and terrorism, the fate of conventional weapons in Europe may not top the priority agenda of NATO or Russian leadership. But while the original purpose of the treaty—to reduce the risk of conflict and short-warning attacks between two blocs—may be a thing of the past, the CFE Treaty continues to contribute to Europe's security in crucial ways. Perhaps most importantly, the transparency and predictability that it provides serve as an important stabilizing element, as European relationships continue to evolve and military forces are modernized.

CONVENTIONAL AND NUCLEAR WEAPONS AND ARMS CONTROL

The integration of nuclear and conventional forces was a key aspect of both the Western and Soviet military strategies throughout the Cold War, and this was reflected in subsequent arms control strategies. US strategy focused at its core on "deterrence." The end states or goals of this strategy were clear—deterring Soviet aggression and assuring

allies of American support. The military component focused on raising perceived costs for the Soviet Union and its allies by communicating a capability and a willingness to respond. In theory, at least, any deterrent strategy like this consists of two parts: (1) the material means (military weaponry and formations) which will be used to inflict pain on that attacker, and (2) the demonstrated resolve (announced policy) to do so if certain closely held values are threatened or violated.⁷⁷ Consequently, future American policy with respect to its conventional and nuclear forces deployed in Europe as well as arms control efforts must acknowledge the past as well as current requirements.

Conventional and Nuclear Forces and Arms Control during the Cold War

Almost from the onset of this struggle, however, the NATO allies were confronted by the overwhelming conventional superiority deployed by the Soviet Union and the Warsaw Pact. In the 1950's Washington responded to this threat through a strategy of "massive retaliation." The American monopoly in nuclear weapons provided credibility for this approach. The Soviets would have to calculate that any conventional attack on Western Europe would involve American forces from the onset and, consequently, NATO would threaten a response that could include US and British strategic nuclear weapons. American resolve to extend its nuclear guarantee over the NATO allies was underscored by conventional and nuclear force postures as well as official pronouncements by American leaders. For example, Secretary of State John Foster Dulles (who served throughout the administration of President Eisenhower) declared that American defense strategy depended "primarily upon a great capacity to retaliate instantly, by means and at places of our choosing."78

"Massive Retaliation" was formally adopted as NATO strategy 14/2 in December 1956. By that point, however, it had become increasingly clear that the United States was placing greater and greater reliance on nuclear weapons to deter an attack on Europe. The first series of so-called "tactical" or "non-strategic" nuclear weapons had been developed and deployed to meet this emerging requirement. This arsenal included "missiles, rockets, and artillery capable of striking only those targets in the general region of the battlefield" as well as longer range weapons (missiles and bombs delivered by tactical aircraft) that when launched from the NATO territory could strike targets throughout the continent. This strategy and the role of these forces were further communicated in alliance policy. The NATO Council announced in December 1954 that military commanders were authorized to plan for the use of nuclear weapons in a defensive war regardless of which side had actually used them initially. 80

By the late 1950's, the ability of the United States to reassure it allies of its steadfast intention to come to their assistance as well as the overall credibility of its strategy were being rapidly undermined. The Soviet Union continued to improve its nuclear and conventional forces as well as conveying an increasing capability to hold the American homeland at risk. This fear was perhaps best summarized in a seminal article entitled, "The Delicate Balance of Terror" published by Albert Wohlstetter in *Foreign Affairs* in 1959. European fears that the United States was "decoupling" from Europe were further intensified by the publication of General Maxwell Taylor's book, *The Uncertain Trumpet*, in 1959 as well as Senate confirmation hearings for the new Secretary of State, Christian Herter. Both men proclaimed publicly that given the strategic situation at that moment they could not foresee any

American president authorizing the use of nuclear weapons except in the direct defense of the American homeland. 82

It was under this atmosphere of increased European concern about American policy that the administration of President John Kennedy took office in 1961. Under the leadership of Defense Secretary Robert McNamara the new administration sought to replace "massive retaliation" with a new strategy that would offer the president the maximum number of policy options during a time of crisis or war. This new approach also sought to reinforce "extended deterrence" in the eyes of our European allies as well as the Soviet Union. The new strategy would be summed up by its title—"Flexible Response." It was formally adopted as NATO Strategy 14/3 in December 1967 and remained agreed alliance policy until the end of the Cold War. Over time three interlocking elements of military forces were designed to provide the military capability for this new strategy. These were eventually referred to as the "NATO Triad." They were communicated to allied governments and potential adversaries in NATO publications as consisting of "conventional forces strong enough to sustain stalwart resistance in forward areas; tactical nuclear forces to support conventional defense, and to present the aggressor the risk of escalation to all-out nuclear war; and strategic nuclear forces which provide the ultimate sanction for the whole deterrent strategy."83

Secretary McNamara recognized the close connection between conventional and nuclear forces and the announced strategy. He firmly believed that there was a place for the growing arsenal of tactical nuclear weapons as well as improvements in NATO's conventional capabilities within the context of the Flexible Response strategy. He argued that the United States had to "improve our tactical nuclear

capability to deal with an attack where the opponent employs them first, or an attack by conventional forces which puts Europe in danger of being overrun. As a result, the stockpile of about 2,500 non-strategic nuclear warheads in Europe grew to about 3,500 during the Kennedy administration.

The United States altered the size, structure, and orientation of its conventional and military forces in Europe throughout the Cold War in an effort to maintain an "extended nuclear deterrent." It would make similar adjustments with its forces deployed in Asia. The number of non-strategic nuclear weapons rose to more than 7,000 by the middle of the 1970's and then declined to below 6,000 by the end of 1980's. Reductions occurred as the United States and its allies determined that they could maintain the deterrent with fewer weapons. This often occurred during modernizations of the stockpile. For example, when the NATO allies made the very controversial decision to accept American intermediate range nuclear weapons on their soil in the early 1980's, they also decided to remove 1,000 older warheads. In 1983, the alliance announced the Montebello Decision which included both an agreement on nuclear modernization as well as the reduction of 1,400 non-strategic nuclear weapons. Reduction of 1,400 non-strategic nuclear weapons.

Also during the 1970's the United States incorporated both conventional and nuclear weapons in its newly emerging arms control strategy. On 16 December 1975 US Ambassador Resor announced a new proposal known as Option III at the ongoing Mutual and Balanced Force Reduction Talks in Vienna. The United States and its NATO partners proposed a reduction of 1000 unspecified US tactical nuclear weapons and 29,000 soldiers from Central Europe in return for a Soviet reduction of a five-division tank army consisting of 68,000 soldiers and

1700 tanks. ⁸⁸ The Soviets countered with proposals that included a combination Russian conventional and nuclear forces, but the talks bogged down. In 1979, the United States removed Option III from the negotiations as a viable proposal.

The United States would also continue to deal with the inherent contradiction of its extended deterrent strategy. How could Washington develop conventional and nuclear forces coupled with announced policy that together were sufficient to "deter" the Soviet Union while at the same time "reassuring" its European allies? The risk of uncontrolled escalation remained as long as non-strategic nuclear weapons were physically present in large numbers in Central Europe and distributed widely among allied forces. This dilemma was captured in a seminal article entitled "Deterrence and Reassurance" that was written by Sir Michael Howard, the distinguished British academic and historian, in Foreign Affairs in 1982. Howard observed that the objective of a deterrent strategy is to "persuade an adversary that the costs to him of seeking a military solution to his own political problems will far outweigh the benefits." At the same time the objective of reassurance is "to persuade one's own people, and those of one's allies, that the benefits of military action or preparation for it will outweigh the costs." Consequently, Howard argued that large-scale conventional warfare which could include escalation was at odds with reassurance because "limited nuclear options do not look very attractive if we are likely to be one of them ourselves."89

The End of the Cold War—An Evolution in Forces and Policy

As the Cold War came to an end strategies as well as force structures evolved quickly. Arms control would play a unique and important role that involved both conventional and nuclear weaponry.

In 1987 the United States and the Soviet Union signed the Intermediate Nuclear Forces (INF) Treaty that eliminated a significant number of nonstrategic nuclear weapons. These included land-based ballistic and cruise missiles with ranges between 500 and 5,500 kilometers. The Treaty on Conventional Armed Forces in Europe (CFE) was signed in November 1990, roughly one year after the fall of the Berlin Wall and one month after the reunification of Germany. While the CFE Treaty was focused solely on significant reductions in conventional forces, it also reduced the number of tactical aircraft and artillery which were capable of delivering non-strategic nuclear weapons.

This was followed in 1991 and 1992 by further reductions in nonstrategic nuclear weapons by both the United States and Soviet Union in sequential "Presidential Nuclear Initiatives" (PNI). President George H.W. Bush first promised the unilateral removal of all landbased tactical nuclear weapons with a range under 300 miles from overseas bases and American surface ships, submarines, and naval aircraft. The PNI included not only nuclear weapons deployed to Europe but South Korea as well. It was followed in late 1991 by a NATO announcement to reduce by "about half the number of nuclear weapons for nuclear-capable aircraft based in Europe." In response President Gorbachev announced in October 1991 that the Soviet Union "would destroy all nuclear artillery ammunition and warheads for tactical missiles; remove warheads for nuclear anti-aircraft missiles, and destroy some of them, destroy all nuclear landmines; and remove all naval non-strategic nuclear weapons from submarines, surface ships, and ground-based naval aircraft, destroying some of them."91 Following the dissolution of the Soviet Union, Russian President Yeltsin amplified on this unilateral declaration and announced that

Russia would destroy all war-heads for short-range missiles, artillery, and atomic demolition munitions. He further declared the removal of one-third of all non-strategic nuclear warheads from Russian ships as well as reductions in warheads for air defense interceptors and those delivered by short-range attack aircraft. In addition to promising to remove substantial numbers of nuclear weapons from forward-based units, both the United States and the Russian Federation cancelled a variety of nuclear modernization programs and reduced the number of ballistic missile submarines on patrol. This all occurred as the initial START Treaty was being prepared for signature. Many experts believe these efforts in reciprocal arms control paved the way for the START II Treaty that was signed in January 1993. This agreement reduced strategic nuclear weapons on both sides from 6,000 to a range between 3,000 and 3,500.

Alliance declaratory policies were also shifting from a nearly 40 year emphasis on deterrence towards a new concept of "cooperative security." This is perhaps best defined as "a commitment to regulate the size, technical composition, investment patterns, and operational practices of all military forces by mutual consent for mutual benefit."⁹⁴ The NATO Russia Charter (also known as the Founding Act) signed in Paris in 1997 seemed consistent with this approach. The Charter affirmed that "Russia and NATO do not consider each other as adversaries" and further confirmed the importance of the CFE Treaty as well as its adaptation. It also called for "reciprocal exchanges, as appropriate, on nuclear weapons issues, including doctrines and strategy of Russia and NATO."⁹⁵ Finally, the Founding Act included elements that were reminiscent of Michael Howard's discussion of "reassurance" as an element of policy. In this case the NATO members

attempted to "reassure" the Russian Federation of their intentions through this new declaration of policy with respect to their forces. The Alliance announced in the Charter that the NATO members "have no intention, no plan and no reason to deploy nuclear weapons on the territory of new members, nor any need to change any aspect of NATO's nuclear posture or nuclear policy—and do not foresee any future need to do so."

This was followed in 1999 with the announcement of the NATO new Strategic Concept which would replace NATO Strategy 14/3. This document followed the same general direction in alliance declaratory policy. The Strategic Concept notes that "a strong, stable and enduring partnership between NATO and Russia is essential to achieve lasting stability in the Euro-Atlantic area."97 It further underscored the importance of arms control and particularly the CFE Treaty as elements of the Alliance's overall strategy. Still, a balance had to be struck between arms control and the desire to reduce forces while at the same time maintaining security. The concept affirmed the collective desire "to enhance security and stability at the lowest possible level of forces consistent with the Alliance's ability to provide for collective defense and to fulfill the full range of its missions."98 Consequently, it called for an appropriate mix of modern nuclear and conventional forces based in Europe. Some observers might find this document contradictory as it stresses cooperation but also reiterates that "nuclear weapons make a unique contribution in rendering the risks of aggression against the Alliance incalculable and unacceptable" and consequently remained "essential to preserve peace." Thus. conventional forces and non-strategic nuclear forces would play a reduced yet still important role in NATO security policy. They would

remain part of a residual deterrent requirement to a wide range of potential aggressors and also serve as an important element of alliance cohesion.⁹⁹ The Strategic Concept is being reviewed again and a revised concept will be announced sometime in 2010.

In addition to the reductions brought about by the INF Treaty and the Presidential Nuclear Initiatives, conventional forces for NATO and the Russian Federation would also be dramatically reduced. Many of these reductions would be unilateral and beyond the legal requirements of any treaty. Table 2 shows the percentage of the authorized equipment under the CFE Treaty that NATO members maintain in their forces at three different points—at the treaty's entry into force (EIF), at the end of 1999, and as of July 2009. As one can see, NATO members only deploy roughly half of the conventional equipment that they are authorized. The United States, for example, is authorized to deploy 4,006 tanks in Europe and currently maintains only 91. 100 Table 3 is a similar chart that shows the percentage of authorized equipment deployed in Russian forces. These two tables confirm that in addition to negotiated reductions in conventional forces, both NATO and Russia have unilaterally decreased their conventional forces beyond their respective treaty obligations. Russian totals are thru 2007 which is the last data provided by Moscow.

It is also reported that the United States has reduced the number of facilities that it maintains for the storage of non-strategic nuclear weapons by over 75 percent. The *Strategic Security Blog* that is maintained by the Federation of American Scientists concludes that the United States today keeps a total of between 150 and 240 non-strategic nuclear weapons in Europe—a huge reduction when compared to the 7,000 that were deployed to Europe 30 years ago, or even the levels

announced following the PNI's. ¹⁰¹ The German coalition government that was elected in September 2009 announced as part of its "coalition treaty" that it would seek as an explicit policy goal the withdrawal of all nuclear weapons from German territory. This is the first time that a NATO government has publicly urged the removal of American nuclear weapons from its territory. It could trigger a wide-ranging debate within the Alliance about the future of its nuclear policies. ¹⁰² German Chancellor Angela Merkl of the CDU Party and Foreign Minister Guido Westerwelle from the partner Free Democratic Party

Table 2: Percentage of NATO Treaty Limited Equipment (TLE) at entry into force (EIF), 1999 and 2009ⁱⁱ

TLE Item	EIF	1999	2009
Tanks	126	69	48
Artillery	108	72	60
Armored Combat Vehicles	114	71	60
Attack Helicopters	84	59	49
Combat Aircraft	77	61	45

Table 3: Percentage of Russian Treaty Limited Equipment (TLE) at entry into force (EIF), 1999 and 2009

TLE Item	EIF	1999	2007
Tanks	146	88	80
Artillery	130	100	94
Armored Combat Vehicles	169	91	88
Attack Helicopters	113	87	52
Combat Aircraft	135	84	58

ii Data for Tables 2 and 3 from Dorn Crawford, Conventional Armed Forces in Europe (CFE)—A Review and Update of Key Treaty Elements

(Washington, DC: US Department of State, 2009), pp. 20-30.

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further announced that tactical nuclear weapons and their role in NATO defense planning would be discussed with NATO representatives during the ongoing discussions to revise the Alliance's Strategic Concept.

Russian Conventional and Nuclear Forces

Having considered the developments in NATO's conventional and nuclear forces, arms control, and announced policy, it is important to consider the largest non-NATO European military power—the Russian Federation. Ten years ago, many Western analysts argued that the Russian military was on the verge of dissolution. Having undergone the turmoil brought about by the end of the Soviet Union and removal of forces from Eastern Europe, the Russian army appeared almost on the verge of collapse. American and Russian specialists warned of an impending military calamity (such as implosion, mutiny, or coup) if trends continued. ¹⁰³

The nadir for the Russian Army may have occurred during the Kosovo crisis, in the spring of 1999, when the army was able to move an airborne battalion to the airfield in Pristina but was unable to reinforce and sustain it. As a result, Moscow was ultimately forced to withdraw these forces in humiliation. The Russian Army was more successful during the Second Chechen War, but this "success" came at a great price in terms of casualties and destroyed equipment. It further demonstrated that while the Russian military could, over time, subdue an insurgency, it was beset by widespread internal problems and would be unable to sustain large military forces beyond Russia's borders. At the official conclusion of counter-terrorism operations in Chechnya in

April 2009 the Army was left with a veteran force, but one largely schooled in counterinsurgency and counter-terrorism rather than the conduct of large conventional military operations.

There is no doubt that the Russian Army has recovered somewhat from its weakened condition at the start of this decade. It is capable of defending the nation's borders and conducting limited offensive operations along its periphery, as the world witnessed during the Russian-Georgia conflict in 2008. Still, even though Russia defeated Georgian forces quickly, there were serious logistical and command and control issues during this war. There was frequently no radio communications between units, and Russian officers were forced at times to use the mobile telephones of Russian journalists in order to establish contact with their headquarters.

Clearly, the Russian Army is confronted by a number of problems. Russia inherited a large conventional arsenal from the Soviet Union, but according to a recent study only 10 percent of the weapons are properly maintained. In March 2009, Defense Minister Anatoliy Serdyukov estimated that only 10 percent of weapons available to Russian forces were "modern." Russia still maintains the world's largest force of main battle tanks, with over 23,000, which is more than all NATO countries combined. Still, about 80 percent of these weapons were produced in the 1960's and 1970's. The remaining 20 percent consist of the T80 which was commissioned in the late 1970's and the T90 which went into production in 1993. Still, it is believed Russian maintains fewer than 300 T90s which are their most modern tanks. Flight hours for the pilots of combat aircraft have also been dramatically reduced for economic reasons. In October 2008, the Russian leadership announced plans for a significant modernization of

its military that included a large increase in funding. In the first half of 2009, however, the budget deficit resulting from the global economic slowdown resulted in cuts in defense spending, and the defense industry was hit hard due to restrictions on credit. As a result, by late 2009 the Sukhoi aerospace firm declared it was running at a loss, and it is reported that a number of defense plants were on the brink of closure. ¹⁰⁷

Manning the force remains a challenge for Russia due to widespread health problems, demographics, and the reduction in the draft commitment to one year. Corruption and waste are rampant, and some observers believe nearly half the defense budget may be lost as a consequence. There is an ongoing budget competition between the strategic nuclear forces, the ground forces, and the navy for modernization funds. Many observers believe that the strategic nuclear forces may receive greater priority for resources that are in increasingly short supply due to the ongoing economic difficulties.

As mentioned above, in terms of treaty-limited equipment as defined by the CFE Treaty, the Russians have reduced their tanks and artillery significantly, though these reductions have not been as rapid and as deep as in many other European countries (See Tables 2 and 3). Most experts agree they are currently below their CFE authorizations in tanks and artillery while maintaining their ACV total at a slightly higher level. They have further reduced their attack helicopters by one half and their combat aircraft by one third. These forces may, however, have been merely repositioned east of the Ural Mountains which would place them outside the treaty's area of application. Finally, it is important to remember that while Western analysts are fixated on Russian forces in Europe; Russia must also be concerned with its

capabilities in the Far East. In this regard there is evidence that Russian military leaders are concerned by the growing size and sophistication of Chinese conventional and nuclear forces.

Consequently, the majority of experts agree the Russian Army is at least a decade away from developing the capability to pose a large-scale conventional threat in Europe. The leadership of the ground forces speaks frequently about modernization, a new military doctrine, and a shift away from the traditional emphasis on large mechanized divisions in favor of smaller independent brigade formations. The Ministry of Defense has announced a goal of deploying 50 to 60 of these brigades, but today could probably only muster a half dozen. The recent *ZAPAD2009* military exercise demonstrated some potential but was still a relatively small exercise (only about 6,000 Russian troops participated), will only be conducted every two years, and was clearly tied to political objectives of showing improved relations between Russia and Belarus. ¹⁰⁸

Curiously, Russia finds itself in a position not dissimilar to that of NATO in the early 1960's, as Russian leaders speak frequently about their perceived conventional inferiority with respect to NATO. In many ways, Moscow's situation is further complicated by the enormous length of Russia's borders that must be secured, as well as continuing unrest in the North Caucasus. The experts participating in the Congressional Commission on the Strategic Posture of the United States noted in their report that as Russian conventional capabilities eroded Moscow placed increasing emphasis on "nuclear weapons generally, and on tactical nuclear weapons in particular." As the membership of NATO increased, Russian military writers frequently discussed the possibility of wars along their borders that might

specifically involve Russian populations living outside their national boundaries (frequently referred to as the "near abroad"). They have further stated that Moscow would not hesitate to use tactical nuclear weapons in such instances. Clearly these declarations reflect both military thinking as well as a deterrent strategy.

There is no precise idea of the extent of the Russian non-strategic nuclear arsenal. The Soviet Union had developed a vast arsenal of nonstrategic weapons in response to NATO's efforts during the 1960's and 1970's. Victor Mikhailov, Russian Minister of Atomic Energy, once commented that the Soviet Union had produced 45,000 nuclear warheads during the Cold War. It is clear from the START negotiations that approximately 12,000 of these were strategic warheads which would imply that over 30,000 of these warheads were for non-strategic systems. 110 These weapons were subsequently transferred to the control of the Russian military when the Soviet Union disappeared. In 2005, Gunnar Arbman and Charles Thorton stated in an extensive analysis of Russian tactical nuclear weapons that Russia maintained a total stockpile of 8,000 of such weapons with over 3,000 in operational units (the balance being in central storage facilities).¹¹¹ Former Defense Secretaries William Perry and James Schlesinger acknowledge a similar number in the final report of the Congressional Commission on the Strategic Posture of the United States that was released in the spring of 2009. The commission reports that the Russian Federation currently maintains 3,800 non-strategic nuclear weapons in operational units and 5,100 either in reserve or awaiting dismantlement. 112

Clearly Soviet military planners during the Cold War developed wartime contingencies for the use of such weapons on the battlefield in

support of Soviet maneuver forces and against NATO targets in depth. Soviet military journals were replete with articles that discussed the doctrinal and force structure implications. Leading Soviet military theoreticians, such as General A. A. Sidorenko and Marshal V. D. Sokolovskiy, discussed the close integration of conventional and nuclear weapons in their writings. 113

Consequently, it should not be surprising that Russian military and political leaders should place renewed emphasis on these weapons in light of their perceived conventional inferiority. In 1993, Russia announced that it was rejecting the Soviet Union's "no-first use" of nuclear weapons pledge. Moscow indicated that it "viewed nuclear weapons as a central feature in its military and security strategies." As the Russian economy continued to weaken during the 1990's, additional reports emerged that suggested more Russian military and political leaders were arguing that Russia's growing conventional inferiority demanded increased reliance on nuclear weapons. 114 In the aftermath of the Kosovo crisis it was reported that Russia had moved tactical nuclear weapons to Kaliningrad in violation of a 1991 commitment not to deploy such weapons to the Baltic region. This action was likely in response to perceived humiliation suffered by the Russian military following its withdrawal from Pristina. It also likely indicated that Moscow had few other policy alternatives to demonstrate its concerns and demonstrate its power. 115 It was also reported in 1999 that then President Boris Yeltsin and the Kremlin Security Council decided Russia "should develop and deploy tactical, as well as strategic nuclear weapons." Vladimir Putin, who chaired the Council at that time, subsequently stated that Yeltsin had endorsed "a blueprint for the development of non-strategic nuclear forces." This was followed in

2000 by the publication of a new military doctrine which stated that Russian forces could use nuclear weapons "in response to large-scale aggression utilizing conventional weapons in situations critical to the national security of the Russian Federation." President Putin publicly endorsed the new doctrine and went so far as to refer to nuclear deterrence forces as "the main foundation of Russia's national security."

Implications

There is no doubt that during the past decade the United States and Russia have had and continue to have serious disagreements. These have included Kosovo, NATO enlargement, planned deployment of air defense weapons to Eastern Europe, and the 2008 war between Russia and Georgia. Still, even at the most difficult moment, Washington and Moscow do not view themselves in the same adversarial fashion as the United States and Soviet Union did during the Cold War. Despite this fact, the Russian maintenance of a large non-strategic nuclear stockpile that, so far at least, they have refused to discuss, is cause for grave concern. There is always the possibility that these weapons could be used in a crisis or that their mere presence might encourage escalation.

Many believe that a greater concern is that Russia's lax control over these weapons, which are stored at numerous sites, could result in nuclear accidents, theft by terrorist organizations, or proliferation to third parties. As former Assistant Secretary of Defense Ashton Carter observed in a 1998 article in *Foreign Affairs*, "The danger of weapons of mass destruction being used against America and its allies is greater now than at any time since the Cuban missile crisis of 1962." These concerns have persisted despite the fact that there has been no public evidence or reports from any Western source about an

incident concerning the loss, theft, or sale of Russian non-strategic nuclear weapons. The United States Congress has also shown its concern about the potential risks associated with this large stockpile of Russian weapons. The FY2006 Defense Authorization Act contained two provisions calling for further study of these systems and the threats they might pose. The Act directed that the Secretary of Defense submit a report describing whether increased transparency and further reductions in American and Russian non-strategic nuclear weapons would be in the national security interest of the United States. A second provision mandated that the Secretary of Energy submit a report to Congress on what steps the United States might undertake to bring about greater accountability with respect to Russian non-strategic nuclear weapons. Furthermore, a bill before the United States Congress to ensure the implementation of the 9/11 Commission Report recommendations included provisions that required the Secretary of Defense to submit an additional report on American efforts to encourage Moscow to supply a detailed accounting of these weapons. It further provided \$5 million for the United States to assist Russia in completing this inventory. 121 More recently, in October 2008 Secretary of Defense Robert Gates stated his concerns that the Russians were unable to maintain an accurate inventory of these nuclear weapons at a number of locations and, as a consequence, these sites could be potential targets for a rogue state or terrorist group. 122 Russian officials responded to the reported comments by the Secretary of Defense with a public statement that all Russian nuclear weapons were secured in wellguarded facilities and that Gates' concerns were unfounded.

This situation clearly begs the question: What should US policy be towards this issue? In 1997, American President Bill Clinton and

Russian President Boris Yeltsin signed a framework agreement that stated both countries would address measure related to these weapons in a potential future START Treaty, but this framework was never fully implemented. 123 The so-called "New START" agreement between Moscow and Russia that reduces the permissible number of Russian and U.S.-deployed strategic warheads to 1,550 on strategic delivery systems could present an opportunity as well as a requirement. The Russian Foreign Ministry has stated that this new treaty should become "another milestone in disarmament and nonproliferation" and further mark a "transition to a higher level of interaction between Russia and the United States reaffirming the common goals of the two countries in the promotion of mutual and global security." ¹²⁴ Consequently, it would now seem to be a requirement to include tactical nuclear weapons in either a future nuclear arms negotiations or a parallel forum. Senior American policymakers have already indicated their desire to insure that these weapons are part of any future arms control discussions with the Russian Federation based on the reduced levels of strategic nuclear warheads mandated by "New START."

Any such negotiations will be difficult for a number of reasons. First, as previously noted this arsenal includes battlefield weapons that could be employed in support of ground forces as well as longer range weapons that could be launched from the NATO territory and strike targets throughout the continent. A definition for such weapons are at best very imprecise, and little consensus exists on this among policymakers in Washington or Moscow. Are these weapons defined by yield, range of delivery, targets, or ownership? Are they qualitatively different from strategic nuclear weapons? Obviously, this lack of an agreed definition would complicate counting rules and

verification methods which are in essence the core of any future agreement. 125

Second, the United States must also carefully define its goals and objectives for such a negotiation. In contemporary American defense planning, a careful balance must be maintained between arms control and fulfilling military requirements to provide security for the United States and its allies. The 2002 *US National Military Strategy* notes, for example, that

Nuclear capabilities continue to play an important role in deterrence by providing military options to deter a range of threats, including the use of WMD/E and large-scale conventional forces. Additionally, the extension of a credible nuclear deterrent to allies has been an important nonproliferation tool that has removed incentives for allies to develop and deploy nuclear forces. 126

Any US approach must carefully consider the implications for alliance security guarantees as they apply to both old and new NATO members as well as allies in Asia. In light of the announcement by the German government that it will seek the removal of all American nuclear weapons from its territory, this will be a topic that will be actively discussed during the ongoing negotiations for a new NATO Strategic Concept. It is widely believed the Germans will seek to either initiate a new set of negotiations with the Russian Federation that is specifically focused on non-strategic nuclear weapons, or insure they are included in any future START process. Still, some states may perceive that American non-strategic nuclear weapons are important to underscore the continuing validity of extended deterrence and alliance cohesion.

Finally, what would be the appropriate forum for any negotiation on non-strategic nuclear weapons? Since the American arsenal now

includes only a few hundred weapons while the Russian arsenal is likely ten to fifty times this amount, it will be difficult to articulate the modalities for a negotiated reduction by Moscow. It is possible that these discussions might also need to involve both the French and British who are in the process of modernizing their own nuclear forces. Their arsenals can no longer be ignored in future discussion given the likely reductions in American and Russian strategic nuclear weapons. Finally, could other reassurances be provided Moscow that might result in reciprocal unilateral reductions with accompanying transparency measures not unlike what the world witnessed with the Presidential Nuclear Initiatives in the early 1990's?

THE FUTURE

As we consider the way ahead it may be useful to examine the thoughts of Hans Morgenthau, one of the most celebrated scholars of international relations in the 20th century. Morgenthau observed the following three points when considering diplomacy and state policy. First, diplomacy must be rescued from crusading spirits. Second, diplomacy must look at the political scene from the point of view of other nations. Third, the objective of foreign policy must be defined in terms of national interests and supported by adequate power. Morgenthau's words remind us of the essential fact that arms control remains a "means" that nations employ to seek desired end states consistent with their respective national interests. In its broadest sense arms control refers to all forms of military cooperation between potential enemies in an effort to insure greater international stability. Consequently, Hedley Bull, one of early arms control theorists, described arms control as "cooperation between antagonistic pairs of

states in the military field, whether this cooperation is founded upon interests that are exclusively those to the cooperating states themselves or on interests that are more widely shared."¹²⁸

Some American policymakers and military officers might find it odd to discuss arms control at this moment. The United States has been at war for over eight years, and it sadly appears very likely that American military forces will likely be engaged in hostile action in several regions of the world for the foreseeable future. Still this discussion of arms control as a policy tool remains essential for a number of reasons.

The Bush administration placed little emphasis on arms control during its eight years in office. With the arrival of the Obama administration, however, it now appears arms control will take on a renewed interest as a tool of American foreign policy. President Obama has articulated a concerted effort to renew America's image abroad, reinvigorate alliances, and create new partnerships. Part of this has been brought about by certain impending policy realities as well as the new administration's own stated goals. The president clearly articulated this during his speech in Prague on 5 April 2009. During this address he stated his determination to "pursue constructive relations with Russia on issues of common concern" as well as stating his determination to seek the future elimination of nuclear weapons. As a result the Obama administration established a large arms control agenda during its initial year in office. It immediately sought to finalize a new START agreement with the Russian Federation that was eventually signed in April 2010. President Obama also took a leading role during the Review Conference for the Nuclear Non-Proliferation Treaty (NPT) in May, and hosted a Global Summit on Nuclear

Security. Finally, the Obama administration stated its clear intent to seek final ratification of the Comprehensive Test Ban Treaty (CTBT) by the United States Senate during its first term in office in the *National Security Strategy* that was also released in May 2010. ¹²⁹

Clearly, arms control will continue to be a critical factor in United States relations with the Russian Federation. A renewed relationship with Russia is important based on the number of issues that demand American-Russian cooperation. Conventional arms control and, in particular, a resolution to the current impasse over the CFE Treaty, can contribute to a renewed strategic relationship between America and Russia that reduces the possibility for confrontation and finds new areas for cooperation. Both sides must carefully consider the major areas of cooperation where long-term bilateral interests clearly overlap on issues such as Iran, international terrorism, North Korea, energy, nonproliferation of weapons of mass destruction, and stability in Europe. 130

Obviously, the Obama administration must carefully synergize this effort with its European partners. In the aftermath of the war between Russia and Georgia, the United States and its NATO allies must avoid emotional rhetoric and rely on careful analysis in their collective relations with Moscow. Every effort needs to be made to discover if common interests still exist with Russia that can lead to agreements concerning the implementation of the Adapted CFE Treaty. Success in this effort could assuage some of Moscow's concerns about perceived conventional threats and set a basis for future discussions that involved the large Russian non-strategic nuclear stockpile. Such an approach must remain consistent with agreed allied policy or seek to alter it. NATO members agreed in the *Strategic Concept* in 1999 that arms

control has "...a major role in the achievement of the Alliance's security and objectives in future." It will be important how NATO members deal with this question of an agreed alliance arms control "strategy" in the ongoing negotiations for a revised Strategic Concept.

In determining the proper role for conventional arms control in the emerging European security environment a new paradigm may truly be in order. Traditional approaches to security that emphasize "collective defense" or "collective security" now appear to be inappropriate. Policymakers may need to adopt the approach of "cooperative security" that seeks to introduce measures that reduce the risk of war, mitigate the consequences should conflict occur, and establish measures that assist in conflict resolution while forestalling reoccurrence. Such measures may not necessarily be directed against any specific state or coalition. 132 These efforts have now shifted in Europe, from challenging the status quo to "locking it in place." Corresponding deterrence strategies are less focused on deterring a specific adversary, and more concerned with deterring a "condition." They also seek to facilitate conflict resolution and the continued development of European security architecture. This evolution will undoubtedly include further refinement of the European security identity and its relationship to NATO in future.

Some might argue that even a revised NATO Strategic Concept is no longer relevant in light of the war on terrorism. In fact, little if any reference is made to "terrorism" in the existing document, or in the series of recommendations provided NATO Secretary General Rasmussen by the so-called "group of experts". Still, the ultimate determination of the role (if any) for arms control has longer-term strategic implications for the United States as it considers whether or

not it must depend on multilateral approaches to conflict. As David Gompert and Dick Kugler have observed, "as long as we choose not to depend on Allies, we will fail to make joint preparations needed to ensure effective coalition operations." Furthermore, Eliot Cohen has noted that a smaller military, "...will have to concede that some missions are simply too big for it to handle alone. Indeed, one of the chief strategic choices that the United States faces is that between unilateral and multilateral capabilities." The frustrations that some American leaders have at times ascribed to arms control activities were in many ways irritation with the realities of working within an alliance.

It must also be recognized that arms control will at times restrict future military operations in size, character, or transparency, as well as being a reference point for future force development. This is inherent in its very definition. As a result, American military and political leaders must be fully acquainted with the details of existing agreements and carefully analyze the role of arms control as part of national security strategy. In this regard certain realities cannot be ignored. Existing treaties and agreements must be adhered to until such time as the Congress or Executive abrogates American participation or negotiates appropriate adjustments. Article VI of the Constitution reminds us that "all Treaties made, or which shall be made under the Authority of the United States, shall be the supreme law of the Land." If the United States as a matter of policy should do otherwise it will exacerbate real or imagined concerns about American "unilateralism," undercut American credibility around the world, and complicate its relationships with friends and allies. If the United States determines after careful review that a treaty should be abrogated or changed

markedly, it must initiate that process to include action by the Senate as well as consultations with allies and other treaty signatories.

Such restrictions and a renewed emphasis on arms control in general may cause disquiet for some security experts. Contemporary American military officers have little knowledge of conventional arms control and would likely view the CFE Treaty as irrelevant. They would probably argue that changes to the existing treaty regime or expansion in confidence-building measures are unnecessary distractions while the nation is at war. This view is short-sighted. While American military requirements in Europe as measured in the number of troops and equipment were reduced, American security commitments have actually increased. In the Cold War's aftermath succeeding US administrations supported the expansion of NATO from 16 to 28 countries. Consequently, Washington has now significantly extended its Article V commitments as described in the NATO Treaty to come to the aid of any alliance member that is attacked.

The collapse of the CFE Treaty regime, for example, could result in greater demands being placed on American security commitments in Europe. NATO member states (particularly those newly admitted countries along the periphery of the Russian Federation) would press NATO planners to explain how, absent legal constraints on Russian forces, existing contingency plans could be executed if these countries were threatened. There would be expanded demands for military exercises to demonstrate NATO's capabilities and resolve. There might also be additional requests for US infrastructure on the soil of allies to facilitate future operations and underscore America's commitment. It might become a supporting argument for a more rapid

admission of Ukraine and Georgia to NATO, expanding American commitments even further.

This may also imply taking a longer view of European as well as global security. In the aftermath of the attacks of September 11th and the onset of the efforts to combat violent extremism, America finds itself involved in wars in Iraq and Afghanistan. The latter conflict has now lasted longer than the US involvement in World Wars I and II combined, and it is now the longest conflict the United States has ever fought. The associated operational tempo has stretched American ground forces to the breaking point with little relief in sight. As a result, Europe, the military focal point during the Cold War, has now become an "economy of force operation" for the United States, as attention is focused on achieving success on battlefields in South and Southwest Asia. Even a flawed and imperfect CFE Treaty undergirds for the United States this "economy of force" operation whereby American planners could anticipate relatively limited force requirements in the European theater as they focus on the ongoing conflicts in the Middle East. Given its military priorities elsewhere, the US government should seek to avoid a situation in which expanded NATO security commitments create additional military requirements at a time when the US military can ill afford to respond.

In its relations with Russia as well as its European allies, the United States may well seek to test two hypotheses through the "means" of arms control and other tools of diplomacy. First, can Europe now assume a greater responsibility for its own security and reduce its reliance on the United States? This would appear to be particularly pressing given the recent passage of the constitution for the European Union coupled with America's involvement in multiple

conflicts and its increasing focus on Asia. Second, can Russia establish a "normal" relationship with the United States and the other nations of Europe so that concerns over security are replaced by strategies of cooperation? This would, over time, make arms control less important between Russia and the rest of Europe but would still retain arms control as an important instrument of policy in those areas of Europe (such as the Balkans and North Caucasus) that have experienced recent conflicts.

Finally, it is also important to consider that though arms control as a tool of policy was central to European security for the past 40 years, it is not uniquely "European." The lessons that have been learned from this experience might have application in other parts of the world that are beset by rising security concerns. One need only consider the Golan Heights, Korean Peninsula, or the Pakistani-Indian border areas to find locations where large military formations are poised. 136 Clearly, Pakistan is critical to contemporary American security interests in Afghanistan and South Asia, as reiterated by President Obama in his speech at West Point on 1 December 2009. 137 Long-term stability in Pakistan can only be achieved through a reduction in the long-term confrontation between India and Pakistan—one that has led to several wars and that requires both countries to devote precious resources to defense that might better be devoted to pressing domestic requirements. Conventional arms control could play a future role in reducing tensions between these two protagonists.

Recommendations

As American policymakers consider how to deal with challenges and opportunities inherent in arms control as a tool for the emerging security environment, the following recommendations are appropriate:

- Arms control expertise must be more widely available, both in NATO and nationally, to ensure that such expertise can be deployed at all levels of military command. For example, US Central Command (currently involved in hostilities in Afghanistan) has no resident arms control expertise even though some of the agreements discussed here (such as the Vienna Document and the Open Skies Treaty) could affect ongoing operations.
- Clearly American policymakers must carefully consider the
 restrictions such measures enforce on American forces, but
 they must also understand that these agreements provide the
 United States a wealth of intelligence, mechanisms for crisis
 management, and contributions to conflict resolution.
- Policymakers and military planners must understand that in most cases these agreements are not "static" but are actually "dynamic." As currently designed they have and will continue to change or evolve in content and membership. For example, several states have argued for additions to the weapons restrained under the CFE Treaty. It is likely that some will propose that remotely piloted vehicles, such as those that now play a larger and larger role in American operations in South Asia, be included as "combat aircraft" under the definitions used in the CFE Treaty. If this occurred it would restrict their overall number in the treaty area of application consistent with the number of attack aircraft allowed by the agreement, and subject any transiting Europe to inspection.

- Advance generic planning should be undertaken by the United States and all NATO allies to shorten the political decisionmaking process and ensure appropriate and timely execution of Vienna Document activities relating to any unusual buildup of NATO forces during periods of increased tension or crisis.
- The application of arms control responsibilities should be included in the scenarios of command post and field training exercises. Planners should either include an arms control annex to operations orders or integrate such considerations more carefully throughout the planning process.
- Compliance with arms control responsibilities needs higher visibility within NATO and American military commands.
 Commanders should not be surprised to learn that their planned operations may be affected by treaty commitments.
 Military leaders must consider that compliance with legal obligations and political responsibilities is not incompatible with operational security and force protection requirements.
 In fact, such efforts may assist in preventing conflict or limiting the scale of a conflict in terms of scale or number of participants.
- The level of experience in arms control issues—particularly for American military officers—has atrophied in the past decade, and a dramatic reduction has occurred in the number of officers assigned duties relating to arms control on the Joint Staff and in the Office of the Secretary of Defense. This is further complicated by the rapid turnover of officers on the

Joint Staff in comparison to their civilian counterparts in the State Department and the intelligence community. This must be reversed.

• There is a growing need for immediate military advice and expertise at State, CIA, and the National Security Council in order to deal with the emerging arms control agenda, and quickly assess the impact of arms control inspections on current and planned military operations. Furthermore, such expertise is required in order to carefully analyze potential changes to existing agreements, as well as the impact of the implementation of new treaties.

Many noted historians have argued that the immediate cause of World War I in 1914 was the decision by European leaders to begin mobilizing their armies. This caused a chain reaction as potential adversaries reacted to avoid being vulnerable to attack. It is impossible to calculate whether arms control arrangements such as those discussed might have provided sufficient restraint at these tense moments and precluded conflict. Still, arms control arrangements potentially offer transparency mechanisms, force limits, and reassurances that might serve to reduce tensions between potential protagonists during a crisis. Furthermore, should conflict occur such measures might serve to confine the conflict in terms of geography or weaponry, and contribute to post-conflict resolution. This is not an issue of altruism but rather the search for an appropriate balance that continues the use of arms control for these purposes within a security environment that has dramatically changed since September 11th, 2001.

The current war is unique in US history in many ways. It is global in character and has uncertain objectives. The capture of a capital, destruction of an army or fleet, or occupation of specific territory will not define ultimate victory. American territory is directly threatened for the first time since the Civil War, and the risks are enormous due to the threat posed by weapons of mass destruction. Consequently, our strategy for dealing with this conflict must be comprehensive in nature and integrate all of the tools available to a great power (military, economic, and diplomatic) in a fashion that will be unprecedented. Arms control remains a valuable tool in America's diplomatic efforts that is both in concert with US allies in this struggle, and consistent with an approach of cooperative security.

ENDNOTES

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¹ Charles Robinson, *Greek and Roman Historians*, (New York: Holt, Rinehart, and Winston, Inc. 1957), p. 71.

² Michael Miggins, Political Affairs Division, NATO Headquarters, Brussels, Belgium, "Verification and Implementation Coordination Section (VICS)," lecture presented at the NATO School, Oberammergau, Germany, Spring 2000.

³ Joint Staff, *Joint Publication 1-02*, (Washington: United States Joint Staff Headquarters, April 2001), p. 309.

⁴ Thomas Schelling and Morton Halperin, *Strategy and Arms Control* (Washington: Permagon-Brassey, 1985, initially published in 1961), p. 1.

⁵ Robert H. Strassler, ed. *The Landmark Thucydides* (New York: The Free Press, 1996), pp. 49-50.

⁶ Michael O. Wheeler, "A History of Arms Control," in Jeffrey A. Larsen, ed., *Arms Control – Cooperative Security in a Changing Environment* (Boulder, Colorado: Lynne Rienner Publishers, 2002), p. 19.

⁷ Ibid.

⁸ Ibid, p.20.

⁹ Paul Kennedy, *The Rise and Fall of the Great Powers*. (New York: Random House, 1987), p. 301.

¹⁰ Martin Creveld. *Technology and War*. (New York: The Free Press, 1991), p. 212.

¹¹ John G. Keliher. *The Negotiations on Mutual and Balanced Force Reductions*. (New York: Pergamon Press, 1980), p. 67.

¹² Thomas Schelling. *Arms and Influence* (New Haven: Yale University Press, 1966), p. 234. See also: Martin van Creveld, *Command in War*.

¹³ See http://www.nato.int/cps/en/natolive/official texts 26700.htm. Also examine US Arms Control and Disarmament Agency, "North Atlantic Council Communiqué December 14, 1967," *Documents on Disarmament, 1967* (Washington, DC: Government Printing Office, 1968), pp. 676-677.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ John Fry, *The Helsinki Process – Negotiating Security and Cooperation in Europe.* (Washington: National Defense University Press, 1993), pp. 4-5.

¹⁷ Richard Schifter, "The Conference on Security and Cooperation in Europe: Ancient History or New Opportunities?" *The Washington Quarterly* (Autumn, 1993), p. 123.

¹⁸ U.S. Arms Control and Disarmament Agency, *Arms Control and Disarmament Agreements* (Washington: U.S. Government Printing Office, 1990), p. 319-320.

¹⁹ Joseph Kruzel, "From Rush-Bagot to START: the Lessons of Arms Control," *The Washington Quarterly*, Volume 30, Number 1, Spring 1986, pp. 195-197.

²⁰ Ibid, p. 214.

²¹ Richard Schifter. "The Conference on Security and Cooperation in Europe: Ancient History or New Opportunities?" *The Washington Quarterly*. (Autumn, 1993), p. 123.

²² U.S. Arms Control and Disarmament Agency. *Arms Control and Disarmament Agreements*. (Washington: U.S. Government Printing Office, 1990). pp. 319-320.

- ²⁴ General Wesley K. Clark. *Waging Modern War*. (New York: Public Affairs, 2001), pp. 293-294.
- ²⁵ Frankfurter Allgemeine Zeitung, "The Kosvo Crisis Is Straining Europeans," 19 May 1999, p. 9. See also: Christopher Donnelly, "Russia After Primakov," paper delivered at the Finnish National Defense College, 10 June 1999, p.4.
- ²⁶ Dorn Crawford, *Conventional Armed Force in Europe (CFE) A Review and Update of Key Treaty Elements* (Washington, DC: US Department of State, March 2010), p. 6.
- ²⁷ Organization for Security and Cooperation in Europe. "Final Document of the First Conference to Review Operations of the CFE Treaty." (Vienna: OSCE, 1996), p. 2.
- ²⁸ Department of Defense. *Strengthening Transatlantic Security A U.S. Strategy for the 21st Century* (Washington: U.S. Government Printing Office, 2000), p. 41.
- ²⁹ Jeffrey D. McCausland, "Europe," in Larsen, Arms Control, p. 205.
- ³⁰ Wolfgang Zellner, "Can This Treaty Be Saved? Breaking the Stalemate on Conventional Forces in Europe," *Arms Control Today*, September 2009, p. 2.
- ³¹ Dr. Lynn Davis. Undersecretary of State for Arms Control and International Security Policy, Testimony before the Senate Foreign Relations Committee, Subcommittee on European Affairs, 29 April 1997.
- ³² Dr.Michael Mandelbaum, *The Dawn of Peace in Europe* (New York: Twentieth Century Fund, 1996), pp. 61-63. See also: Frederick Hammersen, "The Disquieting Voice of Russian Resentment," *Parameters*, Vol. XXVIII, No. 2 (Summer 1998), pp. 39-55.

²³ Lynn Hansen, "Conventional Arms Control – Has It a Future?" paper delivered at DTRA 8th Annual International Conference on Controlling Arms, Norfolk, Virginia, 2 June 1999, p. 7.

³³ US Department of State, "Adaptation of the Treaty on Conventional Armed Forces in Europe (CFE) and the Decision of the Joint Consultative Group on Treaty Adaptation," (Washington: Government Printing Office, 6 April 1999). See also: Wayne Boese, "CFE Parties Outline Adapted Treaty; Limits to Allow NATO Growth," *Arms Control Today*, March 1999, p. 28.

³⁴ Office of the White House Press Secretary, "Adaptation of the Treaty on Conventional Armed Forces In Europe (CFE)," (Istanbul, Turkey: 19 November 1999).

³⁵ Wayne Boese. "Russian Compliance with CFE Flank Limit in Doubt." *Arms Control Today*. July 1999. p. 46.

³⁶ Bill Gertz, "Russia Tells U.S. It Will Violate Arms Pact." *Washington Times*. 7 October 1999:, p. A1.

³⁷ Office of the White House Press Secretary, "Statement by the President," The White House, Washington, D.C., 19 November 1999.

³⁸ "CFE Adapted at OSCE Summit in Istanbul," *Arms Control Today*, November 1999, p. 23.

³⁹ Sharon LaFraniere. "U.S. Military in Georgia Rankles Russia." *Washington Post.* 28 February 2002, p. A16.

⁴⁰ Klaus Bolving. *Baltic CFE Membership*. (Copenhagen: Danish Institute of International Affairs, 2001).

⁴¹ "War's Surprises Force U.S. to Shift Military and Political Strategy." *New York Times.* 8 November 2001, p. B5.

⁴² Vernon Loeb. "New Weapon Systems Are Budget Winners." *Washington Post.* 8 February 2002, p. A29.

⁴³ Scott Shane, "CIA Expanding Drone Assaults Inside Pakistan, *New York Times*, 4 December 2009, p. A1

⁴⁴ Ibid.

⁴⁵ Allen B. Williams. "Treaty on Open Skies." Briefing prepared by Science Applications International Corporation. 10 September 1992.

⁴⁶ Jeffrey A. Larsen and Gregory J. Rattray, eds. *Arms Control Toward the* 21st Century. (Boulder, Colorado: Lynne Rienner Publishers, 1996). See also: U.S. Arms Control and Disarmament Agency, *Treaty on Open Skies*. (Washington: U.S. Government Printing Office, 1992.)

- ⁴⁷ Daryl Kimball and Jeffrey Abramson. "The Open Skies Treaty at a Glance," Arms Control Association. October 2007. Web. 14 September 2009, at http://www.armscontrol.org/factsheets/openskies.
- ⁴⁸ The National Committee on American Foreign Policy. "Landmines: Clearing the Way." (New York: Huntington Associates, 2001.)
- ⁴⁹ International Campaign to Ban Landmines. States Parties. Web. 4 October 2009, at http://www.icbl.org/index.php/icbl/Universal/MBT/States-Parties.
- ⁵⁰ The National Committee on American Foreign Policy. "Landmines: Clearing the Way."
- ⁵¹ Bernard Brown. "NATO Hits a Land Mine." *American Foreign Policy Interests*. (New York: National Committee on American Foreign Policy, February 2000), p. 1.
- ⁵² Ibid. p. 2.
- ⁵³ Paul Bowers, Tom Dodd and Tim Youngs. *Research Paper 98/74: The Landmines Bill.* (London: British House of Commons Library, 1998), p. 27.
- ⁵⁴ Organization for Security and Cooperation in Europe. OSCE Press Release, "Parties Sign Agreement on Confidence and Security Building Measures for Bosnia and Herzegovina." 26 January 1996.
- ⁵⁵ Bryan Bender. "Alliance's Bosnian Train and Equip Project Will Resume." *Jane's Defence Weekly.* 17 June 1998. p. 22.
- ⁵⁶ Michael O'Hanlon. "Arms Control and Military Stability in the Balkans." *Arms Control Today*. August 1996. p. 5.
- ⁵⁷ Organization for Security and Cooperation in Europe. "Regional Stability: Article V of Annex 1B of the General Framework for Peace in Bosnia and Herzegovina." 13 November 1998.

⁵⁸ Ibid.

⁵⁹ Dorn Crawford. "Conventional Armed Forces in Europe (CFE): A Review and Update of Key Treaty Elements." Arms Control Bureau, US Department of State. (Washington D.C. January 2004), p. 5.

- ⁶¹ "Treaty on the Final Settlement with Respect to Germany," *NATO Review*, No. 5 (October 1990), pp. 30-32.
- 62 Ibid.
- ⁶³ US Department of State. "Fact Sheet -- Treaty on Conventional Armed Forces in Europe (CFE): Key Facts About the Current Treaty and Agreement on Adaptation." (Washington: Department of State 2009.)
- ⁶⁴ Sherman Garnett. *The CFE Flank Agreement*. (Washington: The Carnegie Endowment for International Peace, 1997), p. 1.
- ⁶⁵ Zdzislaw Lachowski. "The CFE Treaty One Year After Its Suspension: A Forlorn Treaty?" *SIPRI Policy Brief*, January 2009, p. 1.

- 67 Wade Boese. "Russia Unflinching on CFE Treaty Suspension." $Arms\ Control\ Today.$ May 2008.
- ⁶⁸ NATO, "NAC Statement on CFE," (2008)047, March 28, 2008, at www.nato.int/docu/pr/2008/p08-047e.html.

⁶⁰ Source of the map: Dorn Crawford, "Conventional Armed Forces in Europe (CFE): A Review and Update of Key Treaty Elements," Arms Control Bureau, US Department of State, Washington D.C. January 2004, p. 5.

⁶⁶ Ibid, p. 4.

⁶⁹ Ibid

⁷⁰ Lachowski. p. 5.

⁷¹ Mark A. Smith, *Russia and CFE* (Shriveham, England: United Kingdom Defense Academy, 25 April 2010), p. 4.

^{72 &}quot;Western Appeal 'Bring the Adapted CFE Treaty Into Force' gets support from Russia," available at http://www.hsfk.de/Newsdetail.25.0.html?&L=1&tx ttnews[backPid]=8&t x_ttnews[pointer]=6&tx_ttnews[tt_news]=574&cHash=5acd8d3a5d&no_c ache=1&sword_list[0]=cfe

⁷³ Lachowski, p. 6.

⁷⁴ Dmitri Trenin. "Thinking Strategically About Russia," Carnegie Endowment for International Peace, December 2008. p. 1.

 $\underline{http://www.cfr.org/publication/17384/conversation\%20with\%20sergey\%20}\\ \underline{lavrov.html}.$

- ⁷⁷ Robert L. Pfaltzgraff, Jr. ed., *Politics and the International System.* (New York: S.B. Lippincott Company, 1969), p. 152. See also William W. Kaufman, "The Requirements of Deterrence," in Bernard F. Halloran, ed., *Essays on Arms Control and National Security* (Washington: US Arms Control and Disarmament Agency, 1986), p. 25.
- ⁷⁸ M.W. Kanzelberger, *American Nuclear Strategy: A Selective Analytic Survey of Threat Concepts for Deterrence and Compellance.* (Washington: Rand Corporation, 1979), p. 7.
- ⁷⁹ U.S. Department of Defense. *Report of the Chairman of the Joint Chiefs of Staff*. (Washington: Government Printing Office, 1983), p. 26.
- ⁸⁰ Wolfram Hanrieder. *West German Foreign Policy, 1949-1963*. (Stanford, California: University Press, 1967), p. 44.
- ⁸¹ Albert Wohlstetter, "The Delicate Balance of Terror," *Foreign Affairs*, January 1959, pp. 211-234.
- ⁸² William Cromwell, Norman Forman, and Josef Joffe. *Political Problems of the Atlantic Alliance*. (Brussels: College of Europe, 1969), p. 409.
- ⁸³ NATO Information Service. *NATO Handbook.* (Brussels: NATO Information Service, 1975), p. 17.
- ⁸⁴ William Van Cleve, "The Tactical Nuclear Weapons Debate", in Richard G. Head, ed. *American Defense Policy*. (Baltimore: The Johns Hopkins University Press, 1965), p. 94.

⁷⁵ Wade Boese. "Georgian Conflict Clouds Future Arms Pacts." *Arms Control Today*. September 2008.

⁷⁶ Lecture by Sergey V. Lavrov, Minister of Foreign Affairs, Russian Federation, at the Council on Foreign Relations, 24 September 2008. Available at:

⁸⁵ Ibid.

⁸⁶ CSIS Nuclear Strategy Study Group. *Toward a Nuclear Peace: The Future of Nuclear Weapons in U.S. Foreign and Defense Policy.* (Washington: Center for Strategic and International Studies, 1993), p. 27.

⁸⁷ Amy F. Woolf, "Nonstrategic Nuclear Weapons," Congressional Research Service *Report for Congress*, 10 August 2009, p. 7.

⁸⁸ Keliher, pp. 99 and 147.

⁸⁹ Michael Howard, "Reassurance and Deterrence: Western Defense in the 1980's," *Foreign Affairs*, Winter 1982/83. For a further discussion see: Ashton Carter, John Steinbruner, and Charles Zraket, editors. *Managing Nuclear Operations*. (Washington: The Brookings Institution, 1987), pp. 468-469.

⁹⁰ Taylor Bolz, editor. *In the Eyes of the Experts – Analysis and Comments on America's Strategic Posture.* (Washington: U.S. Institute of Peace, 2009), p. 281.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Forrest E. Waller, Jr. "New Directions in Strategic Nuclear Arms Control," in Jeffrey A. Larsen and James J. Wirtz, eds. *Arms Control and Cooperative Security* (Boulder, Colorado: Lynne Rienner Publishers, 2009), p. 103.

⁹⁴ Ashton B. Carter, William J. Perry and John D. Steinbrunner. *A New Concept of Cooperative Security*. (Washington: Brookings Institution Press, 1992), p. 6.

⁹⁵ "Founding Act on Mutual Relations, Cooperation and Security Between the Russian Federation and the North Atlantic Treaty Organization, signed in Paris, 27 May 1997." Available at:

 $[\]underline{http://www.departments.bucknell.edu/russian/const/founding.html}.$

⁹⁶ Ibid.

⁹⁷ "The Alliance's Strategic Concept," April 24, 1999, paragraph 36. Available at: www.nato.int/docu/pr/1999/p99-065e.htm.

⁹⁸ Ibid.

⁹⁹ Ibid. See also Woolf, p. 12.

Dorn Crawford. Conventional Armed Forces in Europe (CFE) – A
 Review and Update of Key Treaty Elements. (Washington: U.S.
 Department of State, June 2008), pp. 8-28.

¹⁰¹ Oliver Meier, "German Nuclear Stance Stirs Debate", <u>Arms Control Association</u>, December 2009, p. 2.

¹⁰² Ibid.

¹⁰³ Stuart Goldman. Russian Conventional Armed Forces: On the Verge of Collapse? (Washington: Congressional Research Service, 1997).

¹⁰⁴ International Institute for Strategic Studies. *Strategic Survey 2009 – the Annual Review of World Affairs.* (London: Routledge, Taylor, and Francis Group, 2009), p. 207.

¹⁰⁵ Christian Lowe, "Georgian War Shows Russian Army Strong but Flawed," *Reuters*, 20 August 2009.

Margarete Klein. Russia's Military Capabilities – "Great Power"
 Ambitions and Reality. (Berlin; Stiftung Wissenshaft und Politik, October 2009), pp. 6-10.

¹⁰⁷ International Institute for Strategic Studies, *Strategic Survey 2009*, p. 209.

¹⁰⁸ Discussions with senior experts at the Foreign Military Studies Office, US Army Combined Arms Center, Ft. Leavenworth, Kansas.

¹⁰⁹ Bolz, p. 278.

 ¹¹⁰ Rose Gottmoeller, "Preface," in Jeffrey A. Larsen and Kurt J.
 Klingenberger, eds. Controlling Non-Strategic Nuclear Weapons –
 Obstacles and Opportunities. (Washington: Library of Congress, 2001), p. xi.

¹¹¹ Gunnar Arbman and Charles Thorton. *Russia's Tactical Nuclear Weapons*. (Stockholm: Swedish Defense Research Agency, 2005), p. 7.

William J. Perry, Chairman and James R. Schlesinger, Vice Chairman.
 America's Strategic Posture – the Final Report of the Congressional
 Commission on the Strategic Posture of the United States. (Washington:

- U.S. Institute of Peace, 2009), p. 111. See also Robert S. Norris and Hans M. Kristensen, "Nuclear Notebook, Russian Nuclear Forces, 2009," *Bulletin of the Atomic Scientists*, Volume 65, Number 3 (May-June 2009), pp. 55-64.
- ¹¹³ For a thorough analysis see General A. A. Sidorenko. *The Offensive*, translated by the US Air Force (Washington: Department of the Air Force, 1970) and Marshal V. D. Sokolovskiy, translated by Harriet F. Scott, *Soviet Military Strategy* (New York: Crane, Russak, and Company, Inc, 1975).
- ¹¹⁴ Dr. Alexander A. Pikayev, "After Yugoslavia: Shifting Russian Priorities on Arms Control and Non-Proliferation," presentation at the North Atlantic Council, 8 June 1999,p. 12. See also Richard F. Staar, *The New Military in Russia* (Annapolis, Maryland: Naval Institute Proceedings, 1996), pp. 29-37, 192.
- ¹¹⁵ PhilippC. Bleek, "Moscow Reportedly Moves Tactical Nuclear Arms to Baltics," *Arms Control Today*, January 2001, p. 33.

¹¹⁶ Bolz, p. 282.

¹¹⁷ Woolf, pp. 15-16.

¹¹⁸ Bolz, p. 282. For a further discussion see Woolf, p. 15.

¹¹⁹ John A. Nagl, "Arms Control in the Year 2025," in Larsen, *Arms Control*, p. 333.

Ashton Carter, John Deutch, and Philip Zelikow, "Catastrophic Terrorism: Tackling the New Danger," *Foreign Affairs* (November/December 1998), p. 81.

¹²¹ Woolf, p. 3.

¹²² Walter Pincus, "Gates Suggests New Arms Deal With Russia," *Washington Post*, 29 October 2008, p. A9.

¹²³ Woolf, p. 2.

¹²⁴ Cliffor Levy, "Arms Treaty With Russia Will Expire, But Not Talks," *New York Times*, 5 December 2009, p. A8.

- ¹²⁵ James M. Smith, "Non-Strategic Nuclear Weapons and Arms Control: Implications for the United States Air Force", in Larsen and Klingenberger, *Controlling Non-Strategic Nuclear Weapons*, pp. 250-251.
- Office of the Joint Chiefs of Staff, *The Military Strategy of the United States A Strategy for Today; A Vision for Tomorrow.* (Washington: Office of the Chairman of the Joint Chiefs of Staff, 2004), p. 12.
- ¹²⁷ Hans Morgenthau and Kenneth Thompson. *Politics Among Nations*. 6th edition. (New York: McGraw-Hill, 1985.) p. 165.
- ¹²⁸ Hedley Bull. *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age.* (New York: Praeger, 1961), p. xxxv.
- Office of the White House Press Secretary. "Remarks by President
 Barack Obama at Hradcany Square, Czech Republic," 5 April 2009, Web.
 September 2009, at
- http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/. President Barack Obama, National Security Strategy (Washington: The White House. 2010), pp. 23-24.
- ¹³⁰ David C. Speedie. "U.S.-Russia Relations: Under Stress, and In Need of Care." Carnegie Council for Ethics in International Affaris. n.d. Web. 18 October 2009, at
- http://cceia.org/resources/articles papers reports/0005.html. 14 November 2009.
- ¹³¹ North Atlantic Treaty Organization, *The Alliance's Strategic Concept*, Press Communique NAC S(99)65, 1999, p. 10.
- ¹³² Jeffrey A. Larsen, "An Introduction to Arms Control," in Larsen and Wirz, *Arms Control and Cooperative Security*, p. 3.
- ¹³³ North Atlantic Treaty Organization, *NATO 2020: Assured Security;* Dyanmic Engagement Analysis and Recommendations of the Group of Experts on a New Strategic Concept for NATO (Brussels, Belgium: NATO, 17 May 2010).
- ¹³⁴ As quoted in James P. Thomas, *Adelphi 333: The Military Challenges of Transatlantic Coalitions*, (London: International Institute for Strategic Studies), May 2000, pp. 29-31.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ Office of the White House Press Secretary, "Remarks by the President in Address to the Nation on the Way Forward in Afghanistan and Pakistan," 1 December 2009, delivered at the United States Military Academy at West Point. See http://www.whitehouse.gov/the-press-office/remarks-president-address-nation-way-forward-afghanistan-and-pakistan