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ARMS CONTROL'S ENDURING WORTH

by Matthew Bunn

With the walls of superpower confrontation collapsing and both East and West cutting back their military forces without benefit of agreements, arms controllers in Washington are asking: "Do we still have a job?"

The answer, in a word, is yes. Even if the current negotiations are all successful, many of the security problems raised by 40 years of armed confrontation will remain unresolvednot to mention the painful economic and political burdens of overarmament. The Strategic Arms Reduction Talks (START) treaty will still leave each side with strategic nuclear arsenals roughly the size of those they had when they began negotiations in 1982. Similarly, though a Conventional Forces in Europe (CFE) agreement could bring the dismantlement of more than a hundred thousand weapons, Europe would remain the most overarmed continent on the planet, burdened with 40,000 tanks, millions of troops, and thousands of nuclear

The revolutions of 1989 have opened unprecedented opportunities for more sweeping agreements. Arms control can now begin dismantling the East-West military confrontation—not merely moderating its risks—and thereby help shape the security structure of the post-Cold War world. Indeed, while international organizations and agreements on such issues as alliances and borders will be the critical "software" of a new European security framework, agreed restraints on military forces can provide its nuts and bolts. Arms control will also play a fundamental role in moderating the still-simmering conflicts of the developing world. It is urgent to begin considering next

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steps now; the crisis in Lithuania is a telling reminder of how quickly the doors to progress could still slam shut.

No one knows exactly what will happen next in Europe, but some trends are clear. The Warsaw Pact is effectively dead as an offensive threat. Armies of Czechoslovaks, East Germans, Hungarians, and Poles would never join the Soviet army in an attack on the West. Yet without these forces, which make up half of the first-echelon Warsaw Pact attack forces that NATO has traditionally feared, a Soviet attack on NATO is virtually inconceivable. The coming withdrawal of a substantial part or all the Soviet forces that remain in Eastern Europe will further reduce the threat. In effect, the nations of Eastern Europe are becoming a neutral buffer zone separating NATO and the Soviet Union.

At the same time, a reunified Germany will become a dominant economic and political force in Europe and potentially an enormous military power. The Two plus Four talks are likely to resolve the still-prickly border and alliance issues and renew German pledges not to acquire nuclear, chemical, or biological weapons. Much of the future military picture of Europe depends on the size and character of the remaining German forces, the question of German alliances, and the ultimate disposition of foreign troops now on German soil, all of which remain uncertain.

CFE will further reduce the Warsaw Pact threat. In many categories, as many as 10 Pact weapons are likely to be dismantled for every one from NATO; such cuts will eliminate even theoretical Warsaw Pact superiority in conventional arms. The warning time available if Soviet forces were to remobilize and rebuild will then be measured in months, not days. Finally, the two sides are taking steps to reduce the risks of misperception or surprise attack through inspection and observation measures being worked out in CFE as well as in the Open Skies talks and the confidence- and security-building measures (CSBM) negotiations.

The improvements wrought by the nearly completed START agreement will be less radical, though still substantial. In overall strategic force levels, the START cutbacks will be closer

to 10–20 per cent than the advertised 50 per cent as a result of a variety of exclusions and clever "counting rules." But a completed agreement will bring real 50 per cent cuts in Soviet missile warheads, the most worrisome part of the Soviet arsenal. And START will impose a wide-ranging regime of declarations and inspections on each side's strategic forces for the first time, providing an excellent base for deeper reductions.

The coming revolution in the military scene will challenge even the most basic tenets of NATO planning. With no Pact attack possible without months of warning, NATO might transform its readiness and reinforcement policies, shifting emphasis from active forces to reserves. No longer facing Pact numerical superiority, NATO could relax its insistence on qualitative superiority and could slow weapons modernization. NATO's nuclear first-use doctrine should be abandoned and its nuclear arsenal slashed; its "forward defense" strategy ought to be replaced by a less offensively oriented defense-in-depth. With less need to compensate for inferiority on land, some reductions can be made in forces at sea. With less need to "extend" nuclear deterrence to Europe and less fear of a Soviet surprise attack, U.S. strategic forces could be reduced further, and their modernization curtailed.

Long-time defense official and analyst William Kaufmann has argued that as a result of follow-on arms accords the U.S. defense budget could be nearly halved by the year 2000, assuming sweeping follow-on arms agreements; the savings over 10 years might be well over half a trillion dollars. Although the Bush administration has tried to limit the potential reductions to only 2 per cent a year, there is no longer any rationale for a military budget of more than \$300 billion annually. The public yearning for a "peace dividend" will create strong pressure for reductions in military spending and continued arms negotiations. This is the political context for the next steps in arms control.

Given the pace of new unilateral cutback announcements, some argue that the tedious process of arms talks will only get in the way. Unquestionably, unilateral cutbacks in conventional forces are now proceeding faster than negotiated agreements, though few have taken place in strategic forces. Given the astonishing pace of recent events, it is likely that unilateralism will continue to outpace negotiations in some areas. Moreover, many of the critics' charges are true: Negotiated arms control is slow and detail-oriented, and often justifies new weapons as bargaining chips. Nevertheless, there are several reasons why negotiated agreements remain essential complements to the unilateral process now underway.

Why Bother with Arms Control?

First, signed and ratified international agreements, by locking in reductions, make reversal less likely. As U.S. Secretary of State James Baker points out, fears of a Soviet change of heart make it more urgent, not less, to seize the present arms control opportunities; once treaties are ratified and weapons destroyed, it is far more difficult and costly for a government to change course. Postwar history confirms this point. In 1963-64, the United States and the Soviet Union undertook a series of reciprocal initiatives similar in some respects to those now underway; the only arms restraint remaining is the one preserved in a signed and ratified agreement, the Limited Test Ban Treaty. In the 1980s President Ronald Reagan was able to abandon the unratified Strategic Arms Limitation Talks (SALT) II accord with only a moderate political penalty, while his efforts to undo the unlimited-duration Antiballistic Missile (ABM) Treaty proved politically impossible.

Second, specific numerical limits and detailed verification provisions in negotiated agreements ease the task of confirming that reductions have in fact taken place; of detecting reversals in time to respond; and of predicting the future size and capabilities of potential adversaries' military forces. In contrast, unilateral measures alone can be misinterpreted, thus undermining the trust they were intended to foster. Recent confusion over exactly what the Soviets are doing with the equipment from the divisions being withdrawn from Europe is a case in point.

See John Mueller, "A New Concert of Europe," FOR-EIGN POLICY 77 (Winter 1989-90): 3–16.

Third, negotiated agreements provide a framework conducive to deeper cuts, allowing each party to justify further reductions by pointing to negotiated cutbacks in the threat it faces. The Bush administration, for example, has done its best to resist substantial cutbacks in NATO forces until a CFE agreement requiring large Soviet cutbacks is complete. Similarly, the Soviet Union's agreement to withdraw its forces from Hungary and Czechoslovakia was surely eased by the face-saving context of a pending CFE agreement requiring large-scale Soviet reductions paralleled by Western cuts. And many analysts believe that political restraints will prevent Gorbachev from making dramatic further unilateral reductions until the West accepts negotiated cutbacks—particularly with the Soviet military apparently beginning to reassert itself.

Fourth, negotiated agreements can channel reductions in directions that are most conducive to overall stability. Purely unilateral cuts are likely to be driven more by economics than by concern for the security of one's neighbors, and the most threatening weapons are not always the most expensive. Despite recent budget cuts, for example, the Pentagon is proceeding full steam ahead with a bevy of new antisatellite (ASAT) weapons, potentially restarting a dangerous space-weapon competition. Negotiation can direct the budget ax toward the forces perceived as most threatening.

Finally, building a new security system for Europe will not only require cutbacks in forces but also international organizations to manage, inspect, and report. These will only be gained through negotiation, by the sweat of diplomats' brows.

Europe will be a fertile field for arms control even after all the reductions announced or under negotiation are complete, because substantial security issues and military burdens—both economic and political—will remain. As the blocs fade in importance, the arms control process inevitably will have to become a more pan-European discussion. European arms agreements after CFE will have at least as much to do with limiting the Soviet threat to its East European allies, reassuring Germany's neighbors, and reducing the risk of conflict in the

Balkans or the Aegean as they will with adjusting the balance between NATO and the Warsaw Pact. For managing these complex and politically charged questions, permanent, pan-European organizations and negotiating forums such as the Conference on Security and Cooperation in Europe (CSCE) will be essential and will have to be further developed.

There are three main military dangers to be avoided: deliberate attack, whether by surprise or after a period of hostility and troop mobilization; inadvertent war, arising from the escalation of political confrontation into a series of ever-more-threatening alerts, mobilizations, and provocations; and armed political intimidation through menacing concentrations of forces at an adversary's borders.

A CFE II accord could help on all these counts, through a combination of limits that might be dubbed the three R's: reductions, particularly in the military hardware most suited for offensive attacks; restraints on mobilizations and concentrations of forces large enough to intimidate a neighbor or to provoke an escalatory response; and reconnaissance, a network of information exchange, inspection, and observation sufficient to provide a clear warning of any preparation for attack or substantial violation of the accords, thus giving the potential victims of such misdeeds ample time and information to respond.

Reductions. CFE II should cut much deeper, providing the substantial peace dividend that Europeans are demanding, and coming closer to fulfilling CFE's mandate to eliminate all capabilities "for . . . initiating large-scale offensive action." These follow-on reductions should focus less on the alliance-wide ceilings that are the centerpiece of CFE and more on nation-bynation restraints. As John Steinbruner of the Brookings Institution has recently suggested, the force each nation is permitted might be roughly proportional to the miles of border it has to defend.

The goal of these cuts should be to create a more defense-dominant military balance, reducing offensive forces to the point that each nation's defenses are adequate to protect against any invader. To that end, CFE II should continue CFE's practice of focusing on the key

weapons of a modern blitzkrieg-aircraft, artillery, helicopters, and tanks and other armored vehicles—while leaving more strictly defensive equipment such as air defense missiles, antitank weapons, and barriers unrestrained. As a first step, each nation's post-CFE holdings of aircraft, armored troop carriers, artillery, and helicopters could be reduced by an average of 50 per cent—a figure similar to that proposed by former NATO Supreme Commander Andrew Goodpaster, among others—while tanks, which remain the single most essential component of any large-scale invasion on the European battlefield, could be cut back even further. A limit of 1.500 tanks for the largest nations in Europe, for example, would finally bring those tank armies (including Germany's) below the size of Hitler's 1939 blitzkrieg forces. At the same time, specifically offensive forces such as mobile bridging and combat engineering equipment (the latter designed to clear minefields and other barriers to invading forces) should be almost entirely dismantled.

Restraints. Restraints on large war games and other mobilizations of forces should be another component of CFE II. The Soviet Union and the other Pact countries used large-scale exercises as a cover for preparations to invade Czechoslovakia in 1968 and to intimidate Poland in 1980–81. Going further back, many believe that the cycle of reciprocal mobilizations in 1914 was a major contributor to the outbreak of World War I.

No agreement could make such mobilizations and concentrations of forces physically impossible, but an agreed ban on large-scale "out-of-garrison activities" would raise the political threshold at which they might be undertaken. This would make intimidation more difficult and military escalation of a political confrontation less likely. CFE II might prohibit all mobilizations and war games involving more than 25,000 troops, a level too small for a substantial attack against a major power. For allowable smaller-scale maneuvers, substantial prior notification and international observation would be required, continuing and broadening the tradition of the 1986 Stockholm accord and the CSBM pact now being negotiated.

Such a ban on large war games would have

some impact on readiness, but basic troop training is done more effectively in smaller, cheaper exercises. In a reunified Germany facing little Pact threat, the annoyances of giant exercises are unlikely to be politically sustainable in any case.

Reconnaissance. A drastic increase in military openness could reassure each of the nations of Europe by letting it know exactly what its neighbors' military forces are up to, easing the uncertainties of military planning and making it impossible to undertake any threatening move without providing clear warning to the potential victim. Hence, reductions and restraints should be accompanied by data exchanges, notifications, inspections, and observations. Each nation should be required to exchange detailed data on the size, capability, and location of its military forces, as well as on military spending, weapons production, military doctrine, and plans for the future. Inspectors should have the opportunity to observe even the smallest maneuvers, and they should be stationed permanently at select ammunition and fuel depots and marshaling points: Few things are more reassuring than the knowledge that one's neighbors are not gathering their troops and loading their guns.

Nukes and Navies

The thousands of nuclear weapons still burdening Europe must also be dealt with. While NATO has resisted changing its excessive nuclear reliance, the rationale for tactical nuclear modernization or even the maintenance of much of NATO's existing nuclear arsenal has been swept away by the disappearance of the Warsaw Pact threat. Moreover, the pending reunification of Germany dooms the political future of NATO nuclear weapons deployed there, particularly as nuclear artillery and short-range missiles could only reach the eastern half of Germany and the newly democratizing countries of Eastern Europe.

NATO needs to reassess its nuclear posture from a zero base. The arguments for adopting a policy of no first-use of nuclear weapons are now overwhelming. With the primary risk of war coming not from deliberate aggression (which a nuclear first-use threat might help to

deter) but from the escalation of a regional political crisis (where early nuclear use could be disastrous), the dangers of NATO's excessive nuclear reliance are far greater than any putative benefits. A strategy acknowledging that nuclear weapons realistically could do no more than deter the use of other nuclear weapons would allow NATO to reduce its nuclear arsenal drastically. In addition, dual-capable forces should be eliminated and all NATO nuclear forces placed under a separate command. Such steps would further reduce the pressures to use nuclear weapons in a conventional war.

A tactical nuclear accord might then abolish nuclear artillery on both sides, eliminating the "use 'em or lose 'em" incentives of such easily overrun nuclear forces, and limit both NATO and the Soviet Union to no more than a few hundred warheads on aircraft (or outside Europe entirely). Both these steps would involve greater reductions by the Warsaw Pact than NATO, but the Pact appears eager to accept them. Whether and how to include or account for British and French nuclear forces could be a major complication in the talks, as both governments so far have been reluctant to take part in nuclear reductions. Verification might also be a problem, particularly in the case of nuclear artillery shells. But with other, more flexible nuclear forces remaining, the advantage to be gained by covertly retaining a small force of nuclear artillery would not be great.

Like tactical nuclear weapons, most naval forces have so far been left out of the arms control negotiations, at U.S. insistence. Protected by the two largest oceans, the United States has a substantial interest in remaining the world's preeminent maritime power. But despite the negative position taken by the Bush administration, substantial naval limitations could enhance U.S. security.

The most important is a ban on all sea-based nuclear weapons except the strategic ballistic missiles carried by submarines. By eliminating Soviet nuclear missiles designed to hit enemy ships, such a measure would improve the survivability of the U.S. fleet; by prohibiting long-range, nuclear-armed, sea-launched cruise missiles, it would address a perpetual Soviet concern that should be an even greater

worry for the United States, with its thousands of miles of exposed coastline. Such a measure would ensure U.S. access to ports in nations from New Zealand to Denmark, whose populations are increasingly antinuclear; it would also address Soviet concerns over the strategic striking power of U.S. carrier-based aircraft, which have long complicated strategic arms negotiations. The Soviet Union has reportedly proposed such an accord, and experts ranging from Paul Nitze, a former secretary of the Navy and a perennial arms negotiator, to Admiral William Crowe, former chairman of the Joint Chiefs of Staff, have recommended that the United States consider accepting.

Limits on some types of ships might also serve U.S. interests. Soviet nuclear attack submarines, for example, threaten the U.S. sea lines to Europe, while U.S. subs pose a risk to the Soviet undersea deterrent. Significantly scaling back such submarines on both sides would reduce these threats while saving money. Their defensive roles could be partly filled by beefing up other naval forces. A variety of confidence-building measures should also be considered, including limits on the location and size of exercises, along with extensive data exchanges and observation requirements for both exercises and force construction.

Arms controllers in Washington are asking: "Do we still have a job?"

The limited START reductions should provide the base for a much more sweeping START II agreement. There is simply no plausible reason why the United States needs the more than 10,000 strategic warheads it will have after START. This is more than twice the number it had in 1968, before strategic arms talks began, when Czechoslovakia had just been invaded and war with Soviet-supplied forces raged in Vietnam.

Complete nuclear disarmament is not likely to be on the agenda in the foreseeable future. Indeed, it is unlikely that either superpower would agree to reduce its strategic arsenal

below the combined total of those of Britain, China, and France, setting a likely near-term minimum still measured in thousands of warheads. Deeper reductions will likely depend on the other nuclear powers joining the process. Unfortunately, cuts to such levels would only marginally reduce the horrifying devastation that could result from a nuclear war.

Soviet negotiators have been raising START II ideas since 1989, and the Bush administration responded in March 1990 with a proposal to phase out multiple-warhead land-based missiles—those carrying so-called multiple independently targetable reentry vehicles (MIRVs). (In theory, such land-based hydras create destabilizing incentives to strike first, as each accurate MIRV could potentially destroy several of its counterparts on the other side.) But the Bush administration has so far resisted placing this deMIRVing proposal in a broader context of post-START reductions and technological restraints, raising Soviet concerns over its asymmetrical impact. The USSR has nearly 6,000 warheads on its multiple-warhead land-based missiles, while the United States has about 2,000. This U.S. reluctance is ill-founded, for there are sound strategic, political, and economic reasons to pursue a START II agreement mandating deep cuts, coupled with restraints on the most threatening new weapons.

The current strategic balance is basically stable, with each side's enormous arsenal providing a fearsome deterrent to attack, even in a moment of desperate crisis. Some national security officials are therefore arguing "if it ain't broke, don't fix it." The fear is that deep cuts could actually make the nuclear balance more precarious: With the fat removed from the arsenals, a first-strike attack on the remainder might cut into the muscle and could seem a more plausible option in an extreme confrontation.

But properly managed reductions can avoid these pitfalls and provide the best available path toward the Bush administration's goal of a more stable deMIRVed world. START will probably leave each side with some 1,500–3,000 warheads on land-based missiles, many of them MIRVed. It would be absurdly expensive to build anything like that number of sin-

gle-warhead missiles to replace them; much deeper cuts provide the only economically plausible route to a complete deMIRVing. If, as seems likely, both sides want to retain a balanced triad of forces, such land-based reductions should be undertaken as part of a larger scheme involving cuts in air-based and seabased forces, too. A 1988 study by analysts from the Brookings Institution and the Lawrence Livermore Laboratory entitled Strategic Arms Reductions found that properly designed reductions to some 3,000 warheads could virtually eliminate even a theoretical first-strike advantage. In addition, a START II agreement could reduce the possibility that threatening technological advances could undermine the balance, by constraining modernization and limiting testing of particular technologies.

Moreover, there is psychology to consider: Each superpower's view of the other is darkened by the looming threat of enormous and increasingly advanced arsenals of strategic nuclear weapons. Success in dismantling most of these weapons and restraining the most threatening new technologies would seriously call into question what remains of the image of the enemy on both sides, reducing the risks of misperceptions that contribute to crises.

While both superpowers spend far more on conventional forces than on nuclear weapons, strategic reductions can also offer considerable savings. Kaufmann's study estimates that START and START II reductions coupled with decisions to forego some planned modernization might mean savings of as much as \$30 billion a year.

Deep reductions in strategic arsenals would require a fundamental reassessment of current nuclear strategy. But that task is a blessing in disguise: Current U.S. strategic war plans are heavily focused on hairtrigger strategies of launching either as soon as reliable warning of attack is received, or just after the first nuclear weapons detonate, leaving dangerously little time for careful deliberation. While deep reductions are neither strictly necessary nor sufficient to change those plans, they would surely help in two ways.

First, reductions structured for stability

would make the current emphasis on destroying the other side's land-based missiles in their silos impossible to maintain. Eliminating the most important of the "time urgent" targets could contribute to an across-the-board reassessment of the need to respond to attack in minutes rather than hours. Second, deep cuts would inevitably shorten the lengthy menu of destruction contained in current war plans, undermining the dogma that deterrence requires incredibly complex schemes of retaliation. It is far past time to recognize that thermonuclear bombs are not simply more powerful conventional weapons but instruments of political fear. Deterrence does not require destroying every obscure oblast party headquarters in the Soviet Union.

If not 10,000, how many weapons are necessary for deterrence? The Brookings-Livermore study found that 1,500-2,000 targets represent a "plausible upper bound" on the degree of retaliation required "under even the most demanding concept of deterrence"—one that accepts the view that deterrence requires the ability to threaten a broad range of military and economic targets. Since not all weapons would be available at any given time, and some might be destroyed in a preemptive attack, ensuring an ability to destroy the bulk of those 1,500-2,000 targets might require an arsenal of some 3,000 weapons. Even a few hundred weapons would be enough to virtually obliterate the Soviet Union as a functioning society. But, as already suggested, it is likely to be politically difficult to reach agreement in the near term on a reduction to such a "minimum deterrent."

Limiting Defenses

The dismantling of all land-based multiple-warhead missiles can best be accomplished as part of a START II reduction to some 3,000 strategic warheads, distributed among land-, sea-, and air-based forces. In addition, START II or accompanying accords should address missile defenses and other space weapons, technological restraints, and provisions for limiting the warheads themselves, rather than only their means of delivery.

The ABM treaty's strict limits on missile defenses are the essential foundation for deep cuts

in offensive forces, since they ensure that the deterrent power of the remaining forces will not be undermined. The superpowers have agreed temporarily to proceed with START while remaining in sharp disagreement over the ABM treaty's meaning. The Bush administration still supports Reagan's discredited "broad" interpretation (which would conveniently exempt much of the Strategic Defense Initiative program from the treaty's restraints), while the Soviet Union has said that it would consider any violation of the traditional interpretation of the accord as grounds for withdrawal from START. Ultimately, the Senate appears likely to use the START ratification process to reaffirm the traditional view. Some additional clarification of the treaty's application to particular technologies will need to be done as particular issues arise, but with the political will to do so, that task could be accomplished with little fanfare in the U.S.-Soviet Standing Consultative Commission.

In the longer term, the treaty should be strengthened through a new "zero ABM" accord, abolishing the single ABM site now permitted—it is too small to be of any real use anyway—and the ABM testing associated with it. That would force the Soviets to dismantle their Moscow ABM system, significantly lengthening the time it would take to build an ABM system capable of interfering with the greatly reduced U.S. deterrent forces remaining after START II. Although the United States does not have a similar system to dismantle, Soviet Deputy Foreign Minister Viktor Karpov has publicly suggested that the USSR might accept such a treaty-strengthening accord.

Such a ban on systems to shoot down missiles should be coupled with a ban on weapons to shoot down satellites—a new double zero in space. The Soviet Union announced a unilateral moratorium on ASAT testing in 1983, which remains in effect, and has proposed an accord banning all ASAT testing and has offered to dismantle its existing system. The United States should seize that offer (with some haggling over details), because U.S. military forces are critically dependent on secure spacecraft for everything from early warning of attack to communications, and the develop-

ment of quick-strike threats to both sides' satellites would inevitably increase the dangers of crisis misperception and escalation.

The START agreement now taking shape in effect limits only the quantity, not the quality, of each side's strategic arsenal. START II should seek to restrain the technologies each side perceives as most threatening. There are enormous obstacles to restraining technology by agreement, but the idea of limiting certain observable types of testing has had considerable success, as, for example, in the ABM treaty's ban on testing mobile or multiple-warhead ABM systems and components.

START II should apply this approach to three ballistic missile technologies: Flight-testing of land-based MIRVs should be phased out even before the missiles are dismantled, thus undermining their reliability and the threat they pose during the dismantling period; testing of precision-guided maneuvering warheads designed for "surgical" nuclear strikes should be banned; and future testing of the shorttime-of-flight missiles best suited for surprise attacks should be prohibited. (The latter has been proposed in START but currently appears stymied.) Permitting only a small number of long-range ballistic missile flights each year would also be helpful, slowing the technological pace to allow diplomacy to keep up.

In addition the two sides should finally conclude a comprehensive ban on nuclear weapons testing, as both superpowers have long been pledged to do. In the new environment, neither side needs such tests to ensure the reliability or survivability of its current arsenal or to develop new and more deadly types of nuclear weapons. Unfortunately, since nuclear weapons technology is now so highly developed, a nuclear test ban in itself would no longer place the restraint on the arms race it once might have, though exotic new weapons such as the bomb-pumped X-ray laser could be stopped. But a test ban would have symbolic value, particularly in the nonproliferation arena, where it might even be possible to convince potential nuclear states to sign the ac-

Verification of a deep-reductions agreement would be aided by controls on the stock of uranium and plutonium in the weapons themselves, so that developing a substantial number of additional weapons in secret would require detectable production of new nuclear material. Such an accord would have three key components: a cutoff of all new production of weapons-grade uranium and plutonium; declarations of current material stockpiles, with inspections to help confirm the data; and cutbacks in the material stockpiles in tandem with agreed reductions in missiles and bombers. (Weapons material can be converted to a form in which it can no longer be readily used for weapons but can be used in civilian reactors.) Such a measure would have substantial economic and environmental payoffs because both superpowers' bomb plants are aging, hazardous, and increasingly expensive to operate or upgrade. There might also be a nonproliferation benefit, since placing U.S. and Soviet reactors under the same international inspections that nonnuclear countries face would remove one of the most glaringly discriminatory aspects of the existing nonproliferation regime.

Policing Nuclear Arsenals

Arms control can also play a critical role in the regional conflicts of the developing world. Stopping the spread of nuclear weapons will remain the most obvious and essential task. The existing nuclear nonproliferation regime, while imperfect, has succeeded in slowing the spread of nuclear weapons capabilities and in convincing the more recent members of the nuclear club (India, Israel, Pakistan, and South Africa) to keep their bombs in the basement rather than undertake large-scale public deployments. Increasing U.S.-Soviet cooperation could help implement many of the ideas that have been proposed to strengthen the non-proliferation regime.

The limited Western effort to stem the spread of chemical weapons—focusing primarily on export controls coordinated by the 20-member so-called Australia Group—has been notably less successful. But when completed, the Chemical Weapons Convention will not only create a new international norm outlawing the possession of chemical weapons, but also institute a full-time international organization

to monitor the international trade in weapons-related chemicals and technologies. That should create a significant barrier to further spread, for while chemical weapons are far simpler to produce than nuclear weapons, all of the best-known recent chemical weapons states (Iran, Iraq, Libya, and Syria) have relied heavily on outside assistance in their efforts to acquire chemical arsenals. It may be possible to apply some of the lessons of the chemical disarmament talks to adding verification and confidence-building provisions to the existing global convention banning biological weaponry.

The other primary focus of current nonproliferation efforts is the spread of ballistic missiles. A variety of countries already possess short-range battlefield missiles, and a few possess or may soon acquire intermediate-range missiles. U.S. efforts to stem the spread of ballistic missile technology have been focused on the Missile Technology Control Regime (MTCR) worked out among seven Western suppliers of rocket technologies. In February 1990 the Soviet Union pledged to adhere to MTCR guidelines, but the assurances so far received from China are less substantial. While these efforts have had some success, a broader approach is needed, including more participants, more binding provisions, and a full-time organization to monitor export controls.

At the same time, it must be recognized that most of the casualties in the regional wars of the future are likely to be inflicted by more traditional weaponry, much of which will be supplied by the major industrialized powers. Unfortunately, as defense industries in the industrialized world are threatened by declining East-West tension, there will be strong economic incentives for military exports. Where weapons are bought on credit or provided as aid—as in Soviet military supplies to Central America and Syria, which have already been cut back—economic forces will discourage exports; but wherever cold cash is available, the temptations to sell will be strong. Already, some military equipment from Western Europe is being sold to Third World countries in anticipation of a CFE agreement. In recent years, the superpowers have discussed each other's arms supplies to regions of contention at considerable length, and the Soviet Union has occasionally proposed mutual arms cutoffs for particular areas, such as Afghanistan and Central America. While regional approaches have their virtues, they should be complemented by broader restraints. It is time for the superpowers and other major arms suppliers to reopen talks on conventional arms transfers—a subject the superpowers tried and failed to reach agreement on in 1977–78. Reaching accord on substantial restraints on the arms trade will be difficult, given the number of potential suppliers and the money to be made, but it is surely worth the effort to try.

Finally, many of the arms control concepts developed in East-West negotiations could potentially be applied in other areas—an idea that is taking root across the globe. While the U.S.-Soviet experience suggests that progress will be slow when relations between the prospective parties are particularly sour, it also suggests that successful arms talks can help warm relations and build trust beyond the accord's direct military impact. In such regional negotiations, the superpowers may be able to provide technical assistance and advice much as they do now in military and economic matters.

By the end of this year, START and CFE agreements are likely to have been completed, and the arms control process will have decisively demonstrated its worth. But neither of these pacts can claim to take full advantage of the new opportunities that now beckon. The time has come to reflect the fading of political confrontation in the mirror of military dismantlement, improving security while diverting substantial savings to more urgent economic and ecological needs. For who knows how long that door will be open? It would be the greatest tragedy since the Cold War began if the two sides were to miss this chance or to stop at the first steps now being negotiated only to see the door slam shut. The critical tasks are to maintain the momentum, to nail down START and CFE, and to insist that negotiations toward sweeping next steps not be delayed. History will not forgive those who fail to act in time.