SOVIET OFFENSIVE STRATEGIC NUCLEAR FORCES:

EVOLUTION AND PROSPECTS

by

JOHN M. WEINSTEIN

A fundamental assumption of various domestic critics of US strategic force acquisitions traditionally has been that the deployment of increasingly capable systems, justified in the name of maintaining the balance of deterrence, actually produces two deleterious consequences. The first is that we fuel the dangerous upward spiral of the arms race, forcing the Soviet Union to match US deployments with still more deadly weapons.[1] The second consequence, which follows from the first, is that the acquisition by both superpowers of such capable instruments of destruction presents a virtually insurmountable impediment to arms control.[2] In the long run, these weapons undermine crisis stability and therefore deterrence.

The critics argue that if only the superpowers could break out of the action-reaction acquisition cycle, deterrence and global well-being would be the fruits of their efforts. And since, they argue, each superpower retains abundant strategic resources to deliver a devastating retaliatory blow,[3] the United States should strive for peace by doing whatever is required to halt the vicious nuclear acquisition cycle, even if it requires us to take the first step. Not surprisingly, this theme strikes a responsive chord with Soviet officials such as the late Defense Minister Marshal D. F. Ustinov, who argued that various US technological and military developments "forced" the Soviets to develop and deploy comparable weapon systems, its own purely defensive strategy and desires for peaceful coexistence notwithstanding.[4]

It is obvious that each side is often influenced by both the actual military developments and the perceived intentions of its adversary. Indeed, the requirement for new US weapons is often couched in terms of the Soviet threat.[5] However, we must be careful not to overstate the ability of one superpower, through unilateral moratoria, weapon dismantling, or additional deployments, to influence the acquisition strategy and behavior of the other. In short, while the arms race is most certainly interactive, a host of variables exist which are *unique to each side* and which exercise crucial if not decisive influence on its perceptions, strategy, and acquisition decisions irrespective of its adversary's actions.[6] In the case of the Soviet Union, one must focus upon a number of unique variables such as its military heritage and historical experiences, its geopolitical position, the political and institutional interests of selected domestic actors, and the strengths and weaknesses of its technological production base to develop a complete understanding of the development, current disposition, and future direction of the Soviet Union's strategic nuclear forces and doctrine.

The Soviet Union's experiences in the Great Patriotic War (World War II) had at least two legacies for Soviet strategic nuclear forces. The first was that in light of the numerous invasions of Russian territory

across geographically unprotected eastern and western borders, the Soviet fear of the potential threats along its borders was reaffirmed and heightened, especially when its adversaries possessed nuclear weapons. This fear provided the basis for the assignment of fundamental importance to the development of regional and variable-range (i.e. regional and intercontinental) nuclear forces.[7] The second legacy was the primary influence of ground forces in general and artillery in particular upon Soviet strategic nuclear doctrine. Specifically, the Soviets' successful wartime employment of massive artillery fire at the front to create avenues of attack by neutralizing enemy fortifications, isolating enemy troops, and undermining enemy morale insured that such an operational doctrine would influence subsequent nuclear employment concepts.[8] The crucial roles of artillery in defending the homeland, achieving the decisive defeat of the enemy, and subsequently occupying enemy territory (to deny forward bases for attack by hostile forces and to facilitate postwar Soviet reconstruction) further insured the ground forces and artillery flavor of Soviet strategic doctrine and force development.

Stalin's death in 1953, a heightened Western threat, and the advent of long-range ballistic missiles brought a revolution in Soviet military affairs, resulting in the shift to a modern strategic posture (although the influence of artillery remained preeminent). Doctrinally, the Soviet Union adopted the view that war between capitalism and socialism was no longer inevitable but that if a war between the two forces occurred, it would inevitably escalate and result in a decisive defeat of the former.[9] The Soviet Union also abandoned the beliefs that victory could only be achieved by a slow, sequential process of defeating the enemy and occupying his land, and that front-line rather than rear area attacks held the key to victory.[10] The advent of long-range nuclear missiles supported the view that massed nuclear strikes simultaneously engaging front-line troops *and* rear area logistics, command and control centers, and war-supporting economic assets could accomplish Soviet strategic objectives in the early stages of a war through the timely destruction of critical targets and the undermining of enemy morale.[11] The attractiveness of the long-range missile vis-à-vis the slower and more vulnerable bomber was enhanced by its abilities to achieve timely destruction and to be held in reserve, similar to field artillery, and then committed decisively. Moreover, this elevation of the role of missiles such as the SS-1, -2, and -3 (which were controlled by Soviet ground forces) served another purpose: the implied denigration of the bomber, which comprised the backbone of the US strategic arsenal.

By the early 1970s the Soviet Union's strategic and regional nuclear forces were massive in number and increasingly secure. Soviet strategic forces had achieved a rough quantitative parity with those of the United States, thereby establishing an effective deterrent from the Soviet perspective and according equal superpower status to the USSR. In the Soviet view, Soviet equality with the United States (confirmed by SALT I) would be greatly beneficial to the correlation of forces. Not only would the United States find it increasingly difficult and dangerous to project its military power abroad, it would be deterred from resorting to military force in a futile and ultimately suicidal attempt to reverse the inevitable march of mankind to a Soviet-led socialist order.[12]

Dr. John M. Weinstein is a strategic nuclear forces analyst in the Office of the Deputy Chief of Staff for Operations and Plans, Department of the Army. He holds a Ph.D. in international politics from the University of Florida, has taught at several colleges and universities, and has served as a visiting research professor at the US Army War College's Strategic Studies Institute. He has also studied weapons employment and effects at the US Army Chemical School, the Interservice Nuclear Weapons School, and the Strategic Air Command. Dr. Weinstein's essays on strategic policy and Soviet affairs have appeared in numerous professional publications, including *Parameters*, *Arms Control Today*, and *Russia*. Dr. Weinstein is coeditor of *The Defense of the West: Strategic and European Security Issues Reappraised* (Westview Press, 1984).

CURRENT SOVIET FORCES AND DOCTRINE

From the perspective of military effectiveness, the current fourth generation of Soviet ICBMs is the equal to its current US counterpart. Indeed, many have argued that highly accurate, large-yield ICBMs such as the SS-18 and SS-19, deployed in the mid-1970s, are much superior to the Minuteman III missile with the upgraded Mark-12A guidance system.[13] Compared to Minuteman III's three multiple independently targeted reentry vehicles (MIRVs), the SS-18 and SS-19 have ten and six MIRVs respectively. Furthermore, the high yields (550kt to 20mt) of these missiles, their latest modifications, and their large numbers (which allow multiple warheads to be aimed at each target) make them potential silo killers and therefore a dangerous threat to US land-based ICBMs and their launch control facilities, in particular, and ultimately to deterrence.[14] The high-yield, single reentry vehicle and moderate-yield MIRVed SS-18s are complemented by other ICBMs: the MIRVed SS-17 (replacing the SS-7) for area target coverage, and the MIRVed, variable-range SS-11 (mod 3) and SS-19 systems.

Being prudent planners and anticipating improvements in US strategic forces such as those mandated by President Reagan's Strategic Modernization Program, the Soviet Union has begun work on diversifying its strategic arsenal. Although still heavily dependent upon the ICBM, the Soviet Union has deployed the 16-tube Delta III SSBN (1978) armed with the longer-range, MIRVed (three to seven reentry vehicles) SS-N-18 SLBMs (approximately .76 nm CEP), and five 20-tube Typhoon SSBNs (1980) with the MIRVed (12 reentry vehicles) and more accurate SS-NX-20 SLBM, having a range of 4500 nautical miles.[15] The accuracy and range of these Soviet submarines and SLBMs enhance their reserve role and allow them to engage numerous continental US targets (e.g. a conceivable decapitation strike against the National Command Authority in Washington, bomber bases, and other soft targets). Finally, Soviet strategic nuclear capabilities are being improved with near-term deployment of air launched cruise missiles on Bear bombers, the deployment of Backfire bombers (essentially designed for theater and long-range maritime missions but capable of one-way missions against the United States with Western hemisphere recovery), and the development of the intercontinental Blackjack bomber. The regional nuclear forces of the Soviet Strategic Rocket Forces also have been actively expanded with systems other than the variable-range ICBMs, SLBMs, and Backfire bomber noted above. Aircraft (SU-24, Fencer), short-range nuclear forces (SS-21, -22, -23), more than 410 long-range SS-20 IRBMs, and development and testing of this latter system's follow-on (SS-28) round out the picture of what has been a robust force acquisition program over the last three decades.[16]

To this point, we have seen how the development of the Soviet Union's strategic nuclear forces has reflected more than a reaction to US, European, and later Chinese military developments. It has also been affected by such unique factors as technological capabilities, geopolitical considerations, wartime experiences, and the influence of ground and artillery forces. The same can be said for Soviet doctrine, which also reflects the Soviet Union's unique heritage.

Simply stated, Soviet forces are designed to maintain credible deterrence while allowing the USSR to pursue its global politico-military objectives. They are also designed to discourage the "imperialist" Western powers from attacking the USSR to reverse the "inevitable" socialist victory. The Soviets maintain that if war occurs, their forces must prevail to assure national survival and to preserve socialism. In war, Soviet objectives would be threefold: (1) defend Mother Russia while maintaining control of the party and internal power structure; (2) neutralize and defeat the military adversaries while maintaining sufficient reserve forces to exercise postwar hegemony; and (3) seize and occupy vital adjacent territory to deny forward staging bases and wartime resources to the enemy while at the same time exploiting

surviving industrial economic assets to facilitate postwar Soviet recovery.[17] Conventional ground forces play a primary role in the first and third objectives, thus reflecting and preserving their traditional importance. Intercontinental and regional nuclear forces would be key to the achievement of the second objective against the United States, Western Europe, and China. Soviet doctrine extols the unanticipated and decisive commitment of massed nuclear fire against the enemy's nuclear forces and command, control, and communications facilities to limit damage to the Soviet homeland; conventional enemy military forces to support Soviet ground force objectives; and industrial, economic, and transportation assets that provide wartime support to enemy forces.[18] Hence, one observes the complementary combined-arms roles played by Soviet nuclear and conventional forces.[19] The importance of traditional artillery concepts such as unanticipated and massed fire against critical targets is an additional dominant theme in Soviet military doctrine and is considered as a key prerequisite of victory.[20]

Soviet praise of massive fire should not be confused with indiscriminant targeting, however, especially in the case of the Soviets' regional nuclear forces. In a European scenario, where the Soviets would place much value upon a quick victory and the preservation of economic assets for postwar Soviet reconstruction, the development of highly accurate warheads such as the SS-20 and its follow-on, capable of more discriminating targeting on military objectives than their predecessors, is likely to be viewed as a necessity by Soviet political and military leaders. Moreover, the desire to minimize radioactive fallout carried by the prevailing west-to-east winds over the ethnic Russian portions of the USSR undoubtedly has played a significant role in the development of accurate regional weapons to support a discriminating target policy.[21] Let there be little doubt, however, that while Soviet leaders would like to minimize fallout over the Soviet Union and facilitate postwar reconstruction, they surely recognize that war with NATO would be no less than a battle for national survival. Therefore, the former goals would never be pushed to the detriment of the latter. Furthermore, the Soviet Union's relationship with its East European "allies" (so fundamentally different from that between the United States and Western Europe) does not mandate Soviet promulgation or advocacy of the limited war, selective targeting, and escalation control tenets of US nuclear doctrine.

Soviet military writings exhibit little faith in the ability of nuclear combatants to orchestrate escalation control or to perceive firebreaks in what would be, as Clausewitz called it, "the fog of war." Rather, according to Soviet declaratory policy, the peace-war threshold is the only one that is recognizable and realistic. In light of the horrific destruction of the Soviet homeland during World War II and the acknowledgement that nuclear war would likely bring destruction and suffering orders of magnitude greater in only a fraction of the time,[22] this public position is understandable. And when one recognizes the collocation of Soviet economic, agricultural, industrial, transportation, and military assets in the same areas inhabited largely by ethnic Great Russians who control all facets of Soviet life, we discover an additional insight into why the Russian leaders may find it difficult to discriminate between a limited countermilitary strike and societal retaliation.[23] A final reason exists as to why the Kremlin derides the Western concept of limited war: its derision is meant to undermine the confidence of the NATO allies in the US nuclear guarantee. By threatening total retaliation for even a limited strike against the Soviet Union, Moscow hopes to raise the doubt, once suggested by Charles DeGaulle and more recently by Henry Kissinger, that the United States would not risk annihilation for the sake of Europe.[24]

In keeping with such pronouncements about the inevitability of nuclear escalation once war begins, the Soviet Union has traditionally stressed the need to acquire, maintain, and decisively employ all available means to achieve victory at the outset of war.

Consequently, Soviet forces are frighteningly capable and redundant, and they will remain (until the large-scale deployment of US prompt hard-target killers such as the MX and the D-5 SLBM at the end of the decade) relatively secure. And, in anticipation of the growing vulnerability of hardened silos against these future US systems, the Soviets located their most capable (i.e. accurate and highly MIRVed SS-18) ICBMs in the southern-central USSR to lengthen flight times of US weapons (flying polar trajectories) and thus maximized the chance of a successful SS-18 launch while under attack.[25] The location of these weapons and the tight command and control afforded by land-based missiles makes this launch-under-attack strategy feasible, especially if Soviet forces have strategic warning of an attack as asserted by Soviet doctrine.[26]

SOVIET ATTITUDES TOWARD WAR-FIGHTING

A crucial question confronts the student of Soviet strategic forces and doctrine: namely, do the Soviets really believe that they could fight and win a nuclear war?[27] Since the mid-1970s, various analysts have concluded that in certain scenarios, the Soviet Union might perceive that a preemptive attack against the United States constituted its least unpleasant alternative,[28] citing the importance of surprise, massed firepower, and the expectation of victory in Soviet military and political doctrine, as well as Soviet familiarity with and tolerance to deprivation and suffering. Undoubtedly, the Moscow leadership would recognize the unprecedented destruction that might be visited upon Mother Russia in a retaliatory strike. However, some analysts speculate that Soviet active defense (i.e. anti-ballistic missile and air) and passive civil defense, combined with a successful damage-limiting SSBN attack on the US National Command Authority and an SS-18 and -19 two-on-one strike against US hardened ICBM silos, launch control facilities, and undispersed bombers and SSBNs could immobilize or deter by attrition a US response (due to larger Soviet reserve forces) or punish so severely any US attempted retaliation that the USSR would emerge from such an exchange in a better position than its adversary.[29] In any event, LTG William Odom, former Army Deputy Chief of Staff for Intelligence and current Director of the National Security Agency, has argued that the USSR's ongoing emphasis on war-fighting (rather than the Western view of deterrence which extols retaliation) increasingly permits the Soviets to control the politico-military scenario. This growth shows few signs of slowing and would, in Odom's view, facilitate that country's pursuit of its politico-military objectives in most conceivable scenarios.[30]

Soviet spokesmen would refute this line of reasoning, noting the defensive nature of their declared policy and nuclear arsenal. Inasmuch as the triumph of socialism is guaranteed by the laws of history, in their eyes, there is no incentive to strike and invite savage retaliation unless it becomes apparent that the imperialists are preparing to do so to alter the course of history.[31]

Additional and less disingenuous arguments lead one to question the validity of the worst-case scenario outlined above. It is unlikely that the conservative Soviet leaders entertain any delusions of meaningful victory in a full-scale exchange with the United States. A damage-limiting strike against the United States could not guarantee that US forces would not launch on warning, leaving incoming Soviet warheads to engage empty silos. Furthermore, if a crisis preceeded the attack as Soviet doctrine asserts, US bomber and submarine forces (the latter carrying more than 50 percent of all US strategic warheads) would have been dispersed, thereby insuring the maximum number of arriving US strategic weapons.[32] And as President Reagan's strategic modernization improves each leg of the Triad with more capable platforms and weapons; insures command, control, and communications (C^3) connectivity and accelerated operations; and explores the expansion of US defenses (thereby complicating Soviet attack planning and reducing confidence in the outcome), the certainty of this deadly calculus probably

appears even more grave in Soviet exchange calculations. This argument becomes even more compelling if, as I have argued elsewhere, Soviet civil defenses are incapable of mitigating the terrible effects of nuclear war and cannot guarantee the Soviets' most critical national objectives: the continued integrity of the multinational Soviet empire and the continued national control of the Communist Party of the Soviet Union.[33] As far as reading the tea leaves of Soviet military literature to divine Soviet intentions and philosophy, Robert Arnett, a Soviet force specialist on the Army General Staff, reminds us how difficult this exercise can be.[34] Noted Soviet military theoreticians such as Ye. Rybkin, who wrote that while "war is always the continuation of politics, it cannot always serve as its weapon,"[35] echo the view held by many in the West that beyond deterring an adversary's attack, nuclear weapons offer little utility for the achievement of more positive foreign policy initiatives.[36] While portions of Soviet military literature discuss the necessity of victory, one should not be too quick to conclude that the USSR believes it could actually win in any meaningful sense of the word. Such a cautionary note is supported by several considerations. First, the Soviets do not state what type of victory (Phyrric?) they expect. More recently, influential military leaders such as the late Defense Minister Ustinov, his successor, and the new Chief of the General Staff, Marshal Sergey Akhromeyev, have said in effect that the concept of victory in nuclear war no longer bears true meaning.[37] Indeed, convincing argumentation has been presented that an internal Soviet debate between the "war-fighters" and those leading civilian and military leaders who deny, in the words of Ustinov, the "possibility of surviving or even winning a nuclear war," or that nuclear war could remain limited, has been won by the latter. The rather abrupt and unceremonious September 1984 dismissal of General Nikolai Ogarkov, whose *Always Ready in Defense of the Fatherland* espoused war-fighting views that flew in the face of the opinions of Leonid Brezhnev, Yuri Andropov, Andrei Gromyko, and Ustinov may be viewed as evidence that the Soviet Union's senior civilian leadership (which controls military promotions at the highest level) was unwilling to countenance the more radical war-fighting views of Ogarkov and the unlimited force-building requirements they imply.[38] Furthermore, the Soviet Union's senior civilian leadership, traditionally concerned with the rise of "Bonapartism," demonstrated most forcefully by Ogarkov's removal that it is unwilling to tolerate such independent outspokenness. A second factor which must be remembered in reviewing Soviet military literature is that the discussion of victory in Soviet military literature serves certain extraneous, nonmilitary purposes (such as promoting certain bureaucratic interests). Third, various military and ideological factors (i.e. maintaining morale and discipline and not undermining socialist theory of inevitable victory or the theoretical primacy of politics over technology) mandate the constant attention to victory.[39] Finally, recent statements by numerous leaders of the Soviet scientific community to the effect that nobody would survive a "nuclear winter" induced by nuclear war are an interesting recent departure from the traditional Soviet Academy of Sciences position to the contrary.[40] In short, while selected and especially older Soviet political and military rhetoric may not endorse and may even deride deterrence by punishment, the statements of recent and current political and military leaders clearly recognize its reality. The question faced by Soviet force planners, then, is what must be acquired to maintain the deterrent balance and to support crisis stability into the 21st century.

FUTURE OFFENSIVE STRATEGIC FORCES

The introduction of this essay suggested that one should not focus exclusively on US and regional military developments when interpreting Soviet force structure decisions and doctrinal development. However, it was also acknowledged that such developments often exert a crucial stimulus upon Soviet strategic forces.

Unhappily for the Kremlin, it currently confronts numerous military, political, and economic developments that simultaneously define and yet constrain future force requirements. The most significant of these developments is the determined and substantial simultaneous nuclear modernization programs of the United States and those of the Soviet Union's regional European and Chinese adversaries.

These modernization projects are particularly frightening in the Soviets' view inasmuch as they are seen as the results of coordinated US efforts to encircle the Soviet Union with hostile nuclear states. General Ogarkov's view of this blueprint for the elimination of socialist power is illustrated in his 1982 treatise on Soviet security requirements:

> The various operations and acts of sabotage [against] the USSR and other countries of the socialist community and against the progressive forces of the world are of a coordinated nature, linked by a single design. The main goal of the U.S. imperialist is, gradually, consistently, by any means and methods, to weaken and undermine socialism as a system, and, as a result, to establish their global dominance.[41]

This same position was presented by Defense Minister Ustinov in a 12 July 1984 *Pravda* article:

> The United States is drawing other countries in different regions of the world within the orbit of its military preparations and is trying to set up new military blocs. The construction of new military bases and enlargement of the existing ones around the Soviet Union and other countries of the socialist community is being continued.[42]

After 15 years of piecemeal improvements to US strategic forces, President Reagan has committed the United States to an ambitious comprehensive program of strategic modernization. Within the next ten years, the United States plans to deploy the highly accurate and heavily MIRVed Peacekeeper (MX); the highly accurate, mobile, single-warhead small ICBM (Midgetman); two new bombers with improved penetrability and armed with hard-target-capable, air-launched cruise missiles; and at least ten additional Trident SSBNs with the hard-target-capable D-5 SLBM. Simultaneously, the United States is improving its C^3 connectivity and endurance and initiating a comprehensive program of strategic defenses. All of these improvements portend a long-term threat to the survivability of Soviet land-based ICBMs in fixed silos and to Soviet ICBM effectiveness. Because the Soviet Union chose to retain the greatest part of its strategic arsenal in these missiles (70 percent) rather than pursue the extensive decentralization and diversification of its Triad as did the United States, it is hardly surprising that the Soviet Union views these developments with such alarm.[43] Furthermore, the continued emphasis of Presidents Carter and Reagan toward a more credible war-fighting posture similar to that of the Soviet Union makes these US initiatives doubly disconcerting. Official Soviet pronouncements stress the deteriorating effect that these developments have upon the superpowers' ability to preserve peace. For instance, a February 1982 statement by Leonid Brezhnev maintained that "never before, since the end of World War II, has the situation been so serious."[44] Elsewhere, Soviet spokesmen have suggested that the current US military threat to the USSR is comparable to the Nazi threat of the 1930s.[45]

At the same time, regional developments compound the threat and guarantee that maintaining and developing forces to counter regional adversaries will also remain a high priority of Soviet force planners. Specifically, England has decided to replace its 20-year-old Polaris SSBNs with the more capable modern Trident boats armed with longer-range and more accurate D-5 SLBMs. France is expanding its SSBN fleet, deploying a new intermediate-range Pluton SSM, relying more extensively on nuclear rather than conventional forces, and seeking closer military cooperation with NATO in general and with, in the Soviet view, "neo-fascist, militaristic

and revanchist"[46] West Germany in particular. Third, NATO's support for the 1979 ministerial decision to deploy 464 ground-launched cruise missiles and 108 Pershing II missiles in the absence of progress in the INF talks resulted in a development even more distasteful to the Soviets than the timely modernization of NATO's aging systems, namely the Alliance's conspicuous display of political solidarity and support for the United States. Finally, the Chinese recently took a great leap toward making their C^3 to far-flung military border outposts and forces more reliable and secure and toward deploying a more capable three-stage booster for their ICBMs. The April 1984 successful launch of a communications satellite on a three-stage booster with a greatly refined guidance system is, without a doubt, demonstrative of propulsion and guidance capabilities very much superior to the 1980 test flight of a two-stage, 6200-mile-range ICBM. Chinese statements to the effect that PRC-USSR relations would not return to the cordiality of the early 1950s, nationalism in the Soviet Far East, and numbers of vulnerable Soviet assets east of the Urals provide additional causes for concern in the Kremlin, especially in light of the alleged conspiracy of the United States, Japan, and China to encircle the Soviets in that region: "The expansion of military-political ties between the U.S., China, and Japan, which is more and more advancing in the direction of militarization, creates a long-term military threat to peace in the Far East."[47]

These distressing military developments are occurring against worrisome political and economic backdrops. At home, the regime of Secretary Gorbachev, still including numerous gerontocrats, faces: internal squabbling pitting pro-military, pro-heavy-industry "metal eaters" against the advocates of economic reform (decentralization and greater consumerism); a stagnating economy due to a woefully inefficient agricultural system, steadily falling yields from investment, declining labor productivity rates, manpower shortages, foreign exchange shortages, and the burdens of empire; and increasing demands for a massive national redistribution of wealth from the nationalistic and demographically growing central Asian republics. Abroad, in addition to the souring of US-USSR detente and the previously described political problems with the PRC and NATO, the Soviet Union is facing increasingly restive Eastern European allies. While the Soviet Union has controlled problematic allies in the past, it finds the current situation unique in that some of its most trusted and conservative allies (East Germany and Bulgaria) are exploiting the Soviet leadership's immobilization of the last decade to assert their own greater autonomy and to maintain critically required improved economic relations with the West. Planned visits to West Germany by the GDR's Honecker[48] and Bulgaria's Zhivkov, new economic accords in return for GDR human rights concessions, GDR and Hungarian statements questioning the need for new Soviet theater nuclear deployments and expressing the need for *both* parties to return to the LRINF and START talks, continuing popularity of Solidarity in Poland combined with the Polish Workers' Party's crisis of confidence, and Romania's participation in the Olympics are more than embarrassing to the CPSU. They generate a crisis of confidence that goes to the very heart of the Soviet security equation. Thus, the Soviets see distressing signs on the horizon: expanded intercontinental and regional threats combined with increasing difficulty in marshaling the economic and political resources to deal with them.

These conditions present the Soviet Union with two strategies, both pursued either singly or collectively in the past, for maintaining national security: arms control and possibly even the reestablishment of detente on one hand, or a return to an unconstrained arms race with the West on the other.

Powerful incentives exist for the Soviet Union to improve superpower relations and to pursue arms control with the United States. The economic problems besetting that massive and inefficient economy could be alleviated with an influx of Western capital, trade, and technology. Certainly, the Kremlin

would prefer to avoid a costly arms race in light of its current economic conditions and political stagnation. Soviet spokesmen clearly recognize the dangerous economic consequences attending a heightened arms race with the United States. Oleg Bykov, deputy director of the Institute of World Economy and International Order, declared in a 1981 interview in the Italian newspaper *La Republica*, that while the USSR will do whatever is necessary to maintain its defense capability, "There is no doubt that this 5-year period and probably the next, too, will be among the most adverse in our recent history . . . . It is true that our domestic problems will become increasingly difficult the more we are forced to increase military spending."[49]

While this position is popular with advocates of greater consumerism, such as Politburo members Mikhail Gorbachev and Nikolai Tikhanov, some influential members of the military elite may also favor strategic arms control for other reasons:

> Soviet military economists themselves are raising questions as to whether the Soviet economy can stand a further diversion of resources to meet ongoing military requirements without irreparable damage to the base on which all Soviet military power depends. A. I. Pozharov, in a Ministry of Defense monograph published in early 1981 entitled *The Economic Bases of the Defense Might of a Socialist State*, linked in specific terms the relationship between the level of military spending and the rate of economic growth. He argued that excessive military expenditures "could decelerate the development of the very bases of military power—the economy—and therewith inflict irreparable damage on the defense capability."[50]

In a 9 May 1984 interview in the Soviet military newspaper *Krasnaya Zvezda*, then Chief of Soviet General Staff Ogarkov presented an additional dimension of the military spending argument. He noted that emerging-technology conventional weapons are approaching nuclear weapons in effectiveness and that advanced conventional munitions are capable of changing "established notions of the methods and forms of armed struggle and even the military might of the state."[51] His interview suggested that the Soviet Union has neglected the development of critical non-nuclear weapon technology. He also maintained that military men had to overcome inertia and conservatism to generate a shift of resources to this area. Such comments are likely to find favor within Soviet ground and non-nuclear strategic forces and are quite consistent with the Soviet combined all-arms approach to military operations. Furthermore, it is highly unlikely in a society that places so high a premium on a unified public postwar and approval of "controversial" statements by luminaries that Ogarkov's prescriptions had not been reviewed and supported by powerful colleagues within the Soviet political and military hierarchies. Indeed, Malcolm Mackintosh, a leading British expert on Soviet politico-military affairs, wrote in a recent essay:

> When we recall that all material published or quoted by serving military officers in the press, on television or at international conferences is cleared with the Chief Political Directorate, I am forced to the conclusion that while differences of opinion probably exist and style and emphasis may change, the military's public stance on these defense issues is at one with the Party's.[52]

Nevertheless, the senior military leadership is thought to oppose significant reductions of Strategic Rocket Force spending levels and to favor the continuation of priority spending on traditional "heavy metal" items such as tanks and artillery.[53] Thus it is unclear what actual acquisition strategy is to be pursued by the Soviet military. To the extent that the views of the traditionally powerful advocates of ground force modernization find favor in the Politburo, and if it is true (as argued above) that the advocates of war-fighting in its more radical and optimistic form are out of favor with the Soviet Union's ruling civilian and military leadership, we may

observe Soviet arms control negotiators finding it easier to accept some reductions in their ICBM force as a *quid pro quo* for US bomber or SSBN concessions, a reduction in US regional (European) forces, or a reduction in US SDI initiatives.

On the other hand, the Soviet Union may decide to embark upon a major new arms buildup as a result of significant domestic arms control considerations. Regarding the former, Soviet economists have suggested that as a result of certain domestic developments (e.g. budget deficit and social welfare disruption) and international economic developments, the United States may be unable to stay the course of an arms race with the Soviet Union:

> Staking their plans on exhausting others with the arms race, increasing tension, threatening to change the cold war to a hot war, the U.S. leaders have obviously exaggerated and are beginning to feel the results. Without dramatization and without using excessive epithets, all the burdens of such a course have led to more difficulties in the U.S. economy. The United States, of course, remains the most powerful country in the capitalist world. It is a very rich country. However, everybody, and not just professional economists and analysts from computer centers, can see that this arms race is too expensive even for the rich United States.[54]

As far as arms control considerations are concerned, the Soviets may feel either that the President cannot assure Senate passage of an arms control treaty, as in SALT II, or that the United States has embarked upon a course to regain strategic superiority and is uninterested in arms control. In either event, the Soviet Union probably feels that the US technological advantage and ongoing force modernization do not allow the Kremlin the luxury to wait to see whether the negotiations are successful. In any event, deterioration of US-Soviet relations, substantiated by a new arms race, could have a useful domestic effect. A heightened sense of threat would rationalize continuing consumer deprivation and possibly rally domestic support around the CPSU and the military in a time of potential crisis. The recent growth of ostentatious public support for the late tyrant Josef Stalin is interpreted by many as a public desire for discipline instead of corruption and getting things done instead of immobilization. Such a public attitude would be conducive to the "rally round the Party" strategy suggested above. Indeed, there have been numerous statements advocating the need to "psychologically steel" the population through increased and more effective indoctrination and the need for stimulating "hatred" for the enemy.[55]

The actual course to be chosen by the Soviet Union probably lies somewhere between these two extremes. Domestic exigencies and a fear of another costly and potentially destabilizing arms race will make arms control attractive while the substantial influence of the military in the political arena, the continuing influence of the metal-eaters and the design bureaus, and the necessity of rationalizing social shortcomings (rather than making more explosive economic reforms) will insure that Soviet strategic nuclear modernization continues. The question is, what are the likely characteristics of future Soviet forces?

The Soviet Union's attempt to deal with the long-term threat to ICBM survivability is likely to incorporate numerous palliatives. To insure that Soviet systems which would provide lucrative targets for US "use or lose" forces in a crisis are not caught in their silos, improvements in Soviet early warning and C^3 as well as higher missile alert rates would be prudent Soviet responses. Hardening its fixed-site ICBMs to improve survivability against the United States' forthcoming more accurate and higher-yield MX and D-5 ballistic missiles is another likely candidate. Although the Soviet Union seems to prefer the lower operating costs, superior accuracy, and tighter command and control afforded by fixed-site missiles, the Soviets will continue to develop mobile single and MIRVed ICBMs such as the old SS-16 and the SS-24 and SS-25 currently undergoing deployment and development.[56] A final likely direction in

the Soviet ICBM force is the continuation of variable-range missiles to satisfy regional and intercontinental requirements.

An additional means of improving strategic force survivability will be undertaken in the SSBN and anti-submarine warfare (ASW) areas. The deployment of the new Typhoon-class SSBN and the longer-range, MIRVed SS-N-18, SS-N-20, and SS-NX-23 SLBMs, though still problematic for command and control, will improve SSBN coverage of the United States. Furthermore, the Soviets can be expected to pursue ASW improvements, not only to improve their heretofore dismal coverage of the US SSBN threat, but more importantly, to protect their own strategic submarines. Toward this end, strategic choke points, an obstacle to Soviet SSBN operations in light of SLBM range limitations, will be turned to their benefit as a means of helping to keep US ASW assets from their prey.

As prudent military planners, Soviet strategists and force developers are loathe to consider strategic offensive nuclear forces in a vacuum. The USSR's military history and its doctrinal perspective that seeks the synergism of all military forces make it likely that research and development on strategic defenses, both active and passive, will continue to receive generous support and high-level attention. This attention is designed to maximize US perceptions of unacceptable exchange calculations that would attend a failure of deterrence and thus maximize the USSR's ability to translate its military power into leverage supporting its political objectives.

In short, future Soviet offensive strategic acquisitions are likely to be characterized more by continuity than by radical change. Economic constraints, a missile design process geared to modifying and improving existing systems, and the continuing primacy of the artillery tradition within the preeminent Strategic Rocket Forces all support this assessment. While the Soviet Union will continue to respond to the United States as well as the regional force developments of its adversaries, its own programs will continue to reflect a set of unique domestic factors. US arms control initiatives will be pursued when advantageous, but the West is well-advised not to overestimate the extent to which it can determine Soviet force decisions. The strategic regional and intercontinental nuclear forces of the USSR will remain modern and potent, irrespective of the desires and actions of the United States.

NOTES

1. D. F. Ustinov, "To Avert the Threat of Nuclear War," *Pravda*, 12 July 1982, p. 4.
2. Soviet statements on this subject are found in *Whence the Threat to Peace* (Moscow: Military Publishing House, 1982) and *How to Avert the Threat to Europe* (Moscow: Progress Publishers, 1983). A consistent statement of this view in the United States is found in the Center for Defense Information's *Defense Monitor*, a newsletter published approximately ten times a year.
3. See Fred M. Kaplan, *Dubious Specter: A Skeptical Look at the Soviet Nuclear Threat* (Washington: Institute for Policy Studies, 1980), pp. 4, 40-48, for a persuasive refutation of the "window of vulnerability" thesis.
4. Ustinov.
5. For the most explicit statement linking US defense requirements to the Soviet threat, see *Soviet Military Power*, 4th ed. (Washington: GPO, April 1985).
6. Robert P. Berman and John C. Baker, *Soviet Strategic Forces: Requirements and Responses* (Washington: Brookings Institution, 1982) offer an excellent analysis of the unique factors affecting Soviet nuclear force development. Also see Thomas W. Wolfe, *Soviet Power and Europe, 1945-1970* (Baltimore: Johns Hopkins Press, 1970), pp. 32-42; and Fritz W. Ermarth, "Contrasts in American and Soviet Thought," *International Security*, 3 (Fall 1978), 146-48.
7. Berman and Baker, pp. 2, 14.
8. Ibid., pp. 22-23.
9. See Ermarth.
10. See V. D. Sokolovskiy, *Soviet Military Strategy*, ed. Harriet Fast Scott, 3d ed. (New York: Crane Russak, 1975), p. 242; and N. A. Sbitov, "The Revolution in Military Affairs and Its Results," in William R. Kintner and Harriet Fast Scott, eds., *The Nuclear Revolution in Soviet Military Affairs* (Norman: Univ. of Oklahoma Press, 1968), pp. 28-29.
11. Sokolovskiy, pp. 11, 193-94; Berman and Baker, p. 25.
12. John Collins, *US-Soviet Military Balance, 1960-1980* (New York: McGraw-Hill, 1980), p. 116.
13. *Soviet Military Power*, 1985, pp. 29-30.
14. *Can the US Catch Up? The US Soviet Military Balance* (Washington: Committee on the Present Danger, November 1984), pp. 14-17.
15. Berman and Baker, pp. 106-07. Also see *The Military Balance, 1984-1985* (London: IISS, 1984), p. 134.
16. *Soviet Military Power*, 1985, pp. 36-41; *The Military Balance, 1984-1985*, p. 134.
17. William T. Lee, "Soviet Targeting Strategy and SALT," *Air Force Magazine*, 61 (September 1978), 121-25. Also see Sokolovskiy, pp. 282, 285.
18. Sokolovskiy, pp. 13, 284; Berman and Baker, pp. 19, 32-33.
19. Berman and Baker, p. 10.

20. For an excellent discussion of the role of surprise and the use of all weapons in Soviet military doctrine, see J. A. Stevens and Henry S. Marsh, "Surprise and Deception in Soviet Military Thought: Part I," *Military Review*, 62 (June 1982), 2-11. Noted Soviet military theorist V. Savkin notes that "use of surprise brings success in a battle or operation . . . . As a result of the stunning effects of surprise . . . and decisive defensive operations by Soviet troops, the enemy's capabilities are sharply lowered and the correlation of forces changes immediately. He may panic and his morale [be] crushed." *The Basic Principles of Operational Art and Tactics* (Soviet View), translated under the auspices of the US Air Force (Washington: GPO, 1972), pp. 230, 232-33.

21. Berman and Baker, p. 29. Also see Lee, p. 124.

22. Ye. Rybkin, "On the Nature of a Nuclear Missile War," *Kommunist Vooruzhenukh Sil*, No. 17 (September 1965). Also see Arkady Shevchenko, *Breaking With Moscow* (New York: Knopf, 1985), pp. 286-87; G. Arbatov, "The Impasse of the Policy of Force," *Problemy Mirai Sotsializma*, No. 2 (February 1974); and V. M. Berezhkov, "Detente Prospects and Soviet-American Relations," *SShA: Ekonomika, Politika, Idelogiya*, 21 August 1975, pp. 3-14, who notes that "universal war can no longer be regarded as a means of policy because of the destructiveness of the weapons."

23. John M. Weinstein, "The Strategic Implications of Civil Defense," in Robert Kennedy and John M. Weinstein, eds., *The Defense of the West: Strategic and European Security Issues Reappraised* (Boulder, Colo.: Westview Press, 1984), pp. 89-93.

24. Henry Kissinger, "The Future of NATO," *The Washington Quarterly*, 2 (Autumn 1979), 6-7. Also see M. Dobbs, "French Debate Role of Atomic Force," *The Washington Post*, 24 April 1985, p. 27.

25. See *Soviet Military Power*, p. 26.

26. Kaplan, p. 28, cites the low alert rates of Soviet strategic submarines and bombers as evidence that the USSR expects to receive sufficient strategic warning to generate its forces. Also see Berman and Baker, p. 37.

27. For an affirmative answer, see Richard Pipes, "The Soviet Strategy for Nuclear Victory," *Commentary*, 64 (July 1977), 21-34. Shevchenko, pp. 286-87 suggests the opposite. Also, for numerous Soviet statements to the contrary, see Mose L. Harvey, Michael Deane et al., *Developments in Soviet Nuclear and Other Policies Relating to United States Security During the First Eighteen Months of the Reagan Administration, January 20, 1981-July 31, 1982*, a report submitted to the Director, Defense Nuclear Agency under Contract Number DNA-OR1-81-C-0239 (Washington: Advanced International Studies Institute, 30 November 1982). Hereinafter, *AISI Study*.

28. Shevchenko, p. 369. "Nuclear war could only be a last resort, to be initiated solely if the Soviets were fully convinced that the very existence of the nation was at stake, and if there appeared to be no alternatives."

29. Pipes; Collins, p. 117; Raymond Garthoff, "Mutual Deterrence and Arms Control in Soviet Policy," *International Security*, 3 (Summer 1978), 114.

30. William E. Odom, "The Soviet Approach to Nuclear Weapons: A Historical View," *Annals* (AAPSS), 469 (September 1983), 117-34. Also see *AISI Study*, p. 35.

31. Shevchenko, p. 369. Also *AISI Study*, p. 25, and Ustinov.

32. Desmond Ball, "Counterforce Targeting: How New? How Viable?" *Arms Control Today*, 11 (February 1981).

33. Weinstein, pp. 88-93.

34. Robert L. Arnet, "Soviet Attitudes Towards Nuclear War: Do they really think they can win?" *The Journal of Strategic Studies*, 2 (September 1979), 172-91.

35. Rybkin.

36. The essence of deterrence is the prevention of a situation. It is an example of "negative power" as opposed to positive power, in which weapons facilitate the achievement of gains such as territory or the resolution of disputes.

37. G. Weickhardt, "Ustinov vs. Ogarkov," *Problems of Communism*, 34 (January-February 1985), 80-81.

38. Ibid. Also see "Ogarkov demotion could affect arms talks," *Free Press International*, 16 January 1985, p. 1.

39. Kaplan, pp. 18-20. Arnet, pp. 175-77.

40. "Soviet Study Says Weapons of 1 Sub Could End All Life," *Baltimore Sun*, 27 July 1984, p. 2.

41. Cited in *AISI Study*, p. 89.

42. Ustinov.

43. Kaplan, pp. 55-58.

44. Quoted in *AISI Study*, p. 7.

45. Ibid., p. 35. For instance, a cartoon in a 1984 issue of *Krokodil* (No. 17, 1984), the Soviet humor magazine, is captioned "Seance at the Pentagon" and shows a Hitler-like specter holding a banner that reads "Anti-Communism." See H. Gelman, "Rise and Fall of Detente," in *Problems of Communism*, 34 (March-April 1985), 64.

46. *AISI Study*, p. 35.

47. Quoted in ibid, p. 89.

48. What was particularly noteworthy about the Honecker visit to the FRG was not its cancellation under Soviet pressure but, rather, the two-month duration of the East German's resistance to Soviet pressures.

49. Quoted in *AISI Study*, p. 86. Also see John M. Weinstein, "All Features Grate and Stall: Soviet Strategic Vulnerabilities and the Future of Deterrence," in Kennedy and Weinstein, pp. 39-76.

50. *AISI Study*, p. 86.

51. Nikolai V. Ogarkov, "The Defense of Socialism: Historical Experience and the Present Day," *Krasnaya zvezda*, 9 May 1984, pp. 2-3.

52. Malcolm Mackintosh, "Power in the Kremlin: Politics and the Military," *RUSI*, 129 (December 1984), 11.

53. Weickhardt.

54. *AISI Study*, p. 74.

55. "The Vigilance Bequeathed by Lenin," *Kraznaya Zvezda*, 29 September 1983, p. 2. This article promotes the psychological preparation of Soviet troops and the population in light of a renewed and heightened threat emanating from the US attempt to achieve military superiority over the USSR. Also see *AISI Study*, p. 94.

56. This development has required the development of a ballistic missile of physically smaller dimensions, thus encouraging the major missile design bureaus to develop solid fuel propulsion systems (to improve missile efficiency, mobility, hardness, and safety while lowering operating costs) and smaller, more accurate reentry vehicles.