

SOVIET STRATEGIES FOR MILITARY COMPETITION

by

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There are indications that the Soviets may be assessing their prospects for the long-term competition rather pessimistically. They seem to see in recent US behavior (the Strategic Defense Initiative, stealth technology, high-tech conventional weaponry) both the threat of revolutionary improvements in technology and also an eagerness to exploit those improvements. Because they see no really effective unilateral options for countering these developments, they probably feel that their goals of increasing control over the competition and prevailing in the long term are now in more jeopardy than has been the case for several years.

One option, and certainly one element of the Soviets' response, is *direct head-to-head competition*. But the Soviets know that they are hampered by their incremental approach to force development and by the inefficiency with which they introduce innovations (even when they acquire the requisite technology). They will probably continue to have confidence in their ability to build few-of-a-kind, high-technology components. While this capability can be quite helpful, it cannot begin to meet the Western challenge posed by the widespread use of such components in deployed, operating forces.

Moreover, such direct technological competition would place a considerable burden on the economy as a whole at a time when the civilian machine industry and agriculture need massive infusions of technology and the scarce, highly skilled technical experts who can apply it. Some in the Soviet leadership are apparently concerned that a

competition-induced diversion of resources now to the military-technical sector might seriously undermine technological development in nonmilitary sectors. As a result, moderate short-term gains in military competition could result in long-term losses brought on by a seriously neglected technological infrastructure in the economy as a whole (i.e. not just "guns vs. butter," but "guns now vs. guns later" as well).

A second alternative may be increasingly to rely, in the event of war, on *preemptive massive use of nuclear weapons* to neutralize or greatly reduce the effect of the US technological advantage. The Soviets could make rhetorical use of this option, if needed, as we have seen them do in the past. But acceptance of this as the primary alternative would constitute a major failure of Soviet policy, since the Soviets have been seeking for years to develop a strategy and a force structure that would expand their choices in the event of crisis or war, while limiting the options available to the enemy. They would strongly resist being backed into a nuclear corner by US superiority in C³I and weapons technology. Moreover, advances in US launch detection capability might greatly lower the Soviet estimate of the likelihood of success of a preemptive launch.

A third alternative is essentially to do more of the same, but more effectively. That is to say, they could continue to try to compensate for technological inferiority with *superiority of numbers and mass* and with combinations of inferior technologies in various development and employment schemes. Of the choices open to Soviet

planners, this is probably the least unsatisfactory although certainly inadequate to meet their long-term goal of establishing and maintaining overall military superiority vis-à-vis the West. Soviet planners may even be concerned that these measures will not be sufficient to meet what may be an intermediate objective of not falling behind militarily while they try to catch up with the West in the nonmilitary sector of industry.

The Soviets would hope to compensate for the inadequacies of the "more-of-the-same" alternative with a *long-term political strategy of detente and negotiation* designed to preclude full realization by Western powers of their potential advantage in military-technical competition. The Soviets believe that detente undermines the Western public's will to compete, thereby preventing their governments from taking full advantage of the military potential of technological superiority. (Their experience with the ABM treaty reinforces this approach.) Moreover, the Soviets have come to the conclusion that under conditions of detente, Western technology and, perhaps more important, technical know-how (bringing technology from research and development into production and application) become more readily available to the Soviets. This helps Soviet military programs both directly, through incorporation into military hardware, and indirectly, by enriching the technology base and productivity of the economy for subsequent exploitation by the military sector. In addition, as the Soviets see

it, detente creates an environment in which the Soviets can continue to compete politically and militarily "on the margin" for the allegiance and support of states in the process of "national liberation," thereby expanding their opportunities for military basing and creating the impression of a Red shift in the worldwide "correlation of forces." The Soviets would probably prefer to avoid a long-term policy of overall vigorous confrontation unless they are severely threatened by a major military technological breakthrough by the West (comparable in scale, perhaps, to US nuclear superiority in the 1950s) or by extremely threatening Western behavior.

If this assessment is correct, the Soviets will be alert to exploit opportunities to "recapture" detente even in the face of ambiguous or somewhat negative signals from the United States. In the military sector the Soviets are likely to make a very strong effort to prevent US investment in space weaponry, even if it means making somewhat radical compromises in other areas, such as global or theater offensive weapons. The Soviets apparently believe that vigorous US programs in space weapons (anti-satellite [ASAT] and the broader SDI) could open a gap in strategic military competition comparable perhaps to that which existed twenty years ago. The Soviets will pursue energetically their own, probably somewhat different, approach to space warfare, of course, but they can have little assurance of success in the face of US advantages in signal

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processing, microelectronics, and other sophisticated technologies.

The outlines of the Soviet approach now seem to be emerging. US negligence of heavy-lift capability and manned orbital space research has given the Soviets a lead in these areas. Our continued failure to compete seriously in manned space programs will enable them to develop the manned space platforms and space transportation capability that later could be turned to direct military application with little modification. A large manned Soviet presence in orbital space would then facilitate Soviet research and development of a simpler, but perhaps no less effective, "man-in-the-loop," total-system solution to the problem of space warfare in anticipation of US weapons that might be individually superior. The US manned space program, if funded, will lag behind that of the Soviet Union for some time and, in any case, probably will not be anywhere near as important to our future space weapons program as the Soviet manned program would be to theirs. In seeking to prevent competition in space weaponry now, the Soviets are trying very hard to buy the time they need to develop the infrastructure in space that *they* would require to at least hold their own. Even if they should sign a treaty prohibiting weapons in space, they would continue research and development on weapons compatible with their future orbital systems, since Soviet military and political leaders are necessarily convinced that in the long term the continued struggle for military domination of space is a historical inevitability.

This assessment suggests that the United States probably has available important opportunities in long-term strategic competition with the Soviets. The way in which we approach this competition, however, may seriously interfere with our ability to fully exploit our advantage. For while there are many areas in which we could break out technologically and outflank the Soviets, we are in danger of losing our edge, if not the competition, because we have been outflanked in the area of strategic and operational thinking. Our focus on hardware development and hardware competition in

the absence of any long-term comprehensive plan for employment not only inhibits our own strategy development, but also our ability to discern the strategies of an opponent who is unaccustomed to thinking about weapons and technological competition outside the full operational context in which they would be used.

This is an important perceptual limitation on our part because the Soviets tend to rely on the synergism achieved by combining technologically inferior weapons in somewhat elaborate strategic schemes to offset or overcome Western technological superiority in specific weapon systems. In the last two decades this practice has been extended and refined in what the Soviets call the "systems approach" to operations and force development. While Western defense planners normally apply the term "system" somewhat narrowly to a specific weapon and its ancillary equipment, Soviet military planners use the term to describe all the elements required to achieve a given objective. This includes the forces, the hardware, the C³I and logistics, *and the operational plan to include timing* by which all of these components are to be brought to bear to achieve the given objective. This leads to establishment of a hierarchy of long-term objectives served by a hierarchically organized set of interrelated operational subsystems.

This perspective leads the Soviet planner to view both Soviet and opposing forces as systems and to look for systemic strengths and weaknesses on both sides. In a peacetime planning environment such analysis helps him to develop operational plans for future conflict that will take maximum advantage of his own future strengths and forecasted enemy shortcomings. This, in turn, guides Soviet force development and long-term deception in ways that will maximize the effectiveness of Soviet operational planning for future conflict. The product of this process is almost always surprising for Western planners because the Soviet systemic approach is not recognized for what it is and the Soviet response to a given type of superior Western hardware is rarely, if ever, predominantly a race to develop even better Soviet hardware of the same type.

Several examples of US misinterpretations of Soviet competitive behavior can be drawn from past and present experience. Two examples, one strategic, the other theater-related, should be sufficient to illustrate the point.

With regard to strategic forces, the Soviets used the extended range (4900 nautical miles) of the Delta SSBN/SS-N-8 missile system (nuclear missiles launched from submarines), in effect, to defend better their seaborne strategic nuclear forces against superior US antisubmarine warfare (ASW) capability—all in behalf of the larger objective of enhancing the security of their strategic nuclear reserve. They achieved this not by deploying the longer-range subs in large expanses of ocean where superior US ASW could be brought to bear more easily. They used the capability, instead, to hide the SSBNs under or near arctic ice near the Soviet Union and thereby greatly complicate their detection and destruction by three of the four major components of the US ASW system—air- and surface-based ASW platforms, and the SOSUS (sound surveillance systems) fixed surveillance sensors. Protection against the fourth threat, US SSNs (nuclear attack submarines), was provided by integration of the Delta SSBN into a system of defenses comprised of Soviet SSNs, ASW surface ships, land-based ASW aircraft, and land- and sea-based air defenses. The Soviets advanced toward the objective of improved security of their strategic nuclear reserve in a systemic way by integrating enhanced offensive capabilities (the SS-N-8/Delta) into a defensive capability that was largely already in existence. It is almost certain that this was the intended Soviet deployment scheme all along. It should be noted that the extended range of the SS-N-8 was made possible by Soviet superiority in an “inferior” liquid missile fuel technology which the United States had abandoned earlier in favor of solid fuel. (The United States did not deploy sea-launched ballistic missiles [SLBMs] of comparable range for another decade.)

The US appreciation of this change was narrow, weapons-oriented, and mirror-imaged: the Soviets had a long-range, sea-based missile and they would probably use

the capability to hide in the world’s oceans (as would the US Navy). This perception inhibited understanding of the overall effect of the Soviet achievement and retarded development of effective countermeasures against SSBNs hidden under arctic ice.

In the theater case, it was evident to the Soviets in the mid-1960s that in the event of war in Europe, NATO superiority in tactical air would seriously threaten the success of the Soviet offensive. The Soviet response was development of the theater air operation which brings together conventionally armed theater missiles, artillery, special purpose forces, airborne and air assault troops, and electronic warfare, as well as tactical, strategic, and in some instances naval aviation. These forces, under a single commander, are to execute an integrated plan for massive preemptive conventional strikes against superior NATO aircraft before they can be launched. The air operation seeks to make superior use of time (preemption and coordination) to solve the problem of the inferiority of Soviet pilots and aircraft against airborne NATO aircraft. The integration of surface-to-surface missiles (SSMs) into the air operation was critical to the success of the operation as a whole, since they could quickly and preemptively (from garrison, if necessary) disrupt NATO air defenses, airfields, and associated C³I centers, thereby buying time for inferior Warsaw Pact aircraft to neutralize or destroy these same targets. The Soviet response to superior NATO aircraft and pilots did not rely, therefore, on competitive development of superior Soviet aircraft and pilots, but on development of a system of relatively inferior subsystems, some of which were aircraft, which when used together in a well-timed operational scheme could effectively counter NATO superiority.

The US appreciation of the Soviet theater operation has been persistently incomplete, and this has led in turn to inadequate and inappropriate responses both in terms of force development and operational planning. We tend to expect a single type of weapons platform to solve an entire operational problem, and hence the level of perfection of that single platform type

against the standard of total mission accomplishment is how we measure our own progress as well as the probable effectiveness of the threat. Moreover, US analysts and operators make an almost exclusive association of missiles with nuclear delivery, and our own strict division of roles and missions among the services (tactical missiles—Army; tactical air—Air Force) greatly inhibits our thinking about a single major operation that closely integrates both capabilities. The close integration of additional elements, such as naval air and special purpose and airborne teams, is simply so foreign to our thinking that it is not understood in a way that is useful for developing a response.

The major purpose of citing these examples is to illustrate that important differences in the US and Soviet approaches to the development of strategy and forces (in terms of objectives, planning horizons, and operational combinations of means) can greatly inhibit US understanding of Soviet competitive behavior. This, in turn, can lead to inappropriate, sometimes costly, US responses that are as much the product of differences in general analytical frameworks as they are of active Soviet perception-manipulation efforts. The major differences are summarized in the accompanying chart.

The Soviets' negotiating strategy reflects and supports their goal-oriented, long-term approach to strategy development and strategic competition. In the negotiating process the Soviets seek to constrain us where we appear to have a technological advantage (ballistic missile defense, ASW, ASAT) and maintain their freedom of action in areas where they can do well (land mobility, hardening, manned space). More specifically, it is very likely that those reviewing and guiding negotiations have established a fairly complete hierarchy of force development objectives in terms of what post-agreement combinations of active and passive capabilities need to be able to do against the enemy in the context of certain types of operations. The requirements might change if the opponent gives up a capability and the Soviets may, in negotiating, trade off various weapons and means (e.g. ABM traded for

mobility and concealment) that help to support the same objective. The United States can be at a disadvantage when confronted with this behavior, since our negotiating approach reflects our way of thinking about developing strategy and forces. We tend to focus rather narrowly on weapons, on hardware, when it would be much more important for us to understand probable Soviet long-term and intermediate strategic objectives that might be served by various combinations of weapons and other capabilities, and to understand the most likely Soviet operational scenarios for employment of these capabilities in a future war. The resulting agreement should then be more likely to retard or confound the Soviets' achievement of their objectives rather than to limit the development or deployment of a particular kind of weapon, which may not greatly interfere with Soviet attainment of long-term goals.

To achieve this, US negotiators and others concerned with strategic competition probably need additional support from those who specialize in Soviet military affairs. Specifically, the most important task of the intelligence and defense analytical communities is to determine Soviet assessments and forecasts of the strategic competition and likely Soviet objectives in light of these assessments. They could then, perhaps, make more accurate assessments and forecasts of how various Soviet weapons and capabilities would be brought to bear to achieve the goals that have been determined or postulated. This should help, at least, to devise questions that would lead more directly to understanding Soviet strategies and the forces required to support them. The need for a broader approach of this kind becomes more urgent as we embark on a new round of competition and negotiations in which dramatic advances in weapon technology will be a major factor. This might help us to make more appropriate interpretations and generally better use of the somewhat narrowly framed technical-measure-and-countermeasure estimates that are coming out of the intelligence, academic, and defense contractor communities in ever-increasing volume.

Comparison of US and Soviet Frameworks for Development of Strategy and Forces

SOVIET

- Optimize total system (strategy, forces, hardware directed toward established objective).
- Accept and compensate for suboptimal subsystems (weapons, weapon systems, operators).
- Competition/ Conflict is viewed as system vs. system.

(Resultant competition: Soviet system vs. US hardware)

- Systemic strategic objectives serve clearly defined, long-term goals.
- Strategic planning is characterized by a hierarchy of strategic objectives served by a hierarchy of systemically interrelated strategies and substrategies.

GENERAL

- Optimize subsystems (weapons, weapon operating activities).
- Concept of total, objective-directed system is undeveloped in defense planning.
- Competition/ Conflict is viewed as hardware vs. hardware.
- Long-term goals are unclear or too general to be meaningful.
- Objectives are often ill-defined and subject to frequent change (every 12 months to 2 years). A hierarchy of objectives is not clearly established and agreed upon.

US

IMPLICATIONS FOR FORCE DEVELOPMENT

- Own and opponent's present and projected force postures are analyzed for total-systemic strengths and vulnerabilities. Force development supports a systemic response that exploits opponent's weaknesses and own strengths. Primary system response is almost never weapon-on-weapon or countermeasure-on-weapon, since the weapon being countered usually represents the opponent's strength. Response is typically a combination of different kinds of relatively inferior weapons in an operational strategy that exploits Soviet systemic advantages. (Well-established institutions such as the General Staff system, the VPK, and the combined-arms academies provide strong support for a systems view that tends to override administrative parochialism of the five services.)
- Weapons and C³I hardware are designed to perform as well as possible at a low level of technical risk rather than to perform the best that is technically possible at a high level of risk and uncertainty. The total system (forces brought to bear to achieve an objective) is designed to compensate for the safe, suboptimal subsystems through numbers, timing, special combinations, etc.
- Own and opponent's defense postures are viewed as inventories of manned hardware sorted and assessed in categories that correspond to the institutional (programmatic) and analytical interests of the assessor (Army, Navy, Air Force, Defense, State, technical, political, etc.). Institutional fragmentation and narrow program orientation strongly inhibit thinking about responses in terms other than weapon-on-weapon or countermeasure-on-weapon. As a result, our own and opponent's total-system vulnerabilities are overlooked and may be unattended even when they are apparent because our programmatic responses would have to cut across several institutional boundaries. For the same reasons we often fail to see or to exploit our own systemic advantages.
- Weapons and other hardware are designed to perform as well as is technically possible. Risk is reduced through technical perfection rather than through compromise. Total system compensation for suboptimal hardware systems is not considered because of the absence of a total-system approach in strategic planning.

DISADVANTAGES

- Soviet planners may erroneously see and build against a total systemic design in US weapons development and operations when no US total-system concept or strategy exists. This may lead to unnecessary or misplaced investment.
- US planners fail to see US and Soviet forces in a total-system perspective. Thus they fail to understand the most important characteristic of how the Soviets assess US force development, strategic planning, and strategic competition; and they fail to ask the right questions to discern Soviet strategies and force requirements.