POSSIBLE COUNTERFORCE ROLE FOR THE TYPHOON (U)

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A POSSIBLE COUNTERFORCE ROLE FOR THE TYPHOON

A recent (August 1981) article by Vice-Admiral K. Stalbo, one of the most eminent Soviet naval spokesmen, merits interest for revealing what appears to be a new role for the Soviet Navy's ballistic-missile submarines (SSBNs). In our judgment this is a significant statement by Stalbo, all the more credible for being esoterically expressed. It strongly implies, given the modalities of Soviet discourse, that their SSBNs have a strategic counterforce role over and above that assigned them in the past.

In this connection, attention is aroused by a recent press report crediting the new Soviet Typhoon-class SSBN, now undergoing sea trials, with the capability of pushing up through the Arctic ice cover and launching its missiles against military targets in the U.S. from a range several thousand miles shorter than presently expected. This might significantly impair the chances for U.S. warning.

If we are correct in our interpretation of the counterforce implications of the Stalbo article, and if the Soviet Navy's new counterforce role is linked with Typhoon, this would be consistent with the Soviet historical record of revising force-employment doctrine, not necessarily on the basis of capabilities already at hand, but on the basis of capabilities expected to emerge during the current five-year planning period. The Russians tell us that their doctrine looks no further than five years ahead. Practice indicates that the five-year doctrinal periods run concurrently with the five-year economic plans, with major doctrinal reviews (which may or may not issue in doctrinal innovations) normally taking place at the turn of the five-year planning periods. Since the Soviet authorities will know what hardware is scheduled for introduction over the next five years, they can assign missions and plan the training of the armed forces accordingly.

In what follows we will first treat the 1960s background and then the 1970s background necessary for a proper understanding of Stalbo's August 1981 statement. Finally, we will analyze Stalbo's statement itself, together with its implications and the requirements for further research in other fields.

THE 1960S BACKGROUND

In discussing strategic action (strategicheskie deystviya), that is, action which has a strategic objective (as opposed to an operational or tactical objective), the Russians always make a distinction between the types (vidy) of action on the one hand and the forms (formy) assumed by this action on the other hand. Before the nuclear era Soviet theoreticians recognized only two basic types of strategic action—the strategic offense and the strategic defense in ground and sea or ocean.
theaters of military action. These took either the form of strategic operations (strategicheskie operatsii) in ground or sea (ocean) theaters of military action when the action had a strategic objective and was organized and conducted by the strategic leadership of the armed forces (the Stavka of the Supreme High Command and its working organ, the General Staff), or the form of naval operations (morskie operatsii) when the action had a strategic objective but control was exercised, not by the strategic leadership, but by an operational leadership (fleet, flotilla) in line with the rules of the "operational art".

Here a word of explanation is in order. In the West we speak of any kind of organized military action as an operation, whether at the level of tactics or strategy. In the USSR, on the other hand, the operation proper (operatsiya) pertains only to the form of coordinated action directed by an operational formation (ob"edinenie), i.e., armies and fronts (army groups) on land and flotillas and fleets at sea. Western military thought does not recognize this intermediate level of the military art; it acknowledges only strategy and tactics. Soviet military thought, however, distinguishes three independent levels of the military art—strategy, operational art and tactics—and in their view the operation proper (including the naval operation), pertains only to the middle level, the sphere of the operational art. However, when the Supreme High Command/General Staff organizes a series of simultaneous and consecutive operations in the theaters of military action or on a strategic axis (strategicheskoe napravlenie) in a ground theater, this higher, strategechesky action is considered to take the form of a "strategic operation".

As the Soviets see it, this relatively simple structure for strategic action in the pre-nuclear era was complicated by the emergence of strategic nuclear weapons and the means for defense against them. This added a new kind of strategic offense (simultaneous counterforce-countervalue action by strategic nuclear forces "throughout the depth of enemy territory") and a new kind of strategic defense (protection of the country's rear by the National Air Defense Troops, i.e., the Troops of PVO strany). In the Soviet view, the action of strategic nuclear forces and air-defense troops does not fit neatly into the old categories of strategic offense and strategic defense as types of strategic action. The upshot was that they ended by recognizing, not two types of strategic action, but four: (1) offensive action by strategic nuclear forces against economic, political and military targets throughout the depth of enemy territory, beyond the limits of the theaters of military action (TVDs); (2) offensive and defensive action in ground (continental) TVDs by all branches of the armed forces, including elements of the strategic nuclear forces; (3) defensive action by PVO strany in protecting the country's rear; and (4) offensive and defensive action in sea and ocean TVDs by all branches of the armed forces, again including strategic nuclear forces.
The question we have to resolve now—and it is an extremely important question—is the form assumed by these two new types of strategic action. Action by PVO strany caused the Soviets little or no problem of nomenclature. This action would not take the form of a "strategic operation", apparently because it was not directly controlled by the Supreme High Command/General Staff. It would take the form of "air-defense operations" (protivovozdushnye operatsii), presumably because control was at the level of the operational art (individual air-defense district headquarters). These air-defense operations would have integrated anti-aircraft, anti-missile and anti-space components.

Much more trouble was encountered in defining the form taken by the mixed counterforce-countervalue action of strategic nuclear forces. When strategic missile forces were first introduced in the early 1960s, it seems to have been taken for granted that they would conduct "operations", the same as other types of armed forces. However, after behind-the-scenes debate, the notion was explicitly rejected. The organized action of operational formations of these forces, it was said, would never take the form of an operation. Uniform usage shows, without a single exception, that it was not considered to take the form of a strategic operation either, even though it avowedly came under the direct control of the strategic leadership. In each and every case from 1962 through 1970, the form assumed by the action of these forces was designated as a "strike" (udar), which had previously been considered only a tactical and (occasionally) an operational form of action but now was a strategic form as well.

It is true that the action of strategic forces against targets within the TVDs, although this action itself took only the form of "strikes", could be an integrated component of a larger "strategic operation" within a theater. However, this was not the case for their action beyond the limits of the theaters, because in that sphere there was no higher form of organized action. The highest and only form of strategic counterforce-countervalue efforts "throughout the depth of enemy territory" was the "strike". It is extremely important to grasp this firmly; otherwise we will fail to appreciate developments in the 1970s, when a different type of action by strategic nuclear forces was introduced, which took a different form.

In summing up our understanding of the 1960s (both for the doctrinal period 1960-65 and the doctrinal period 1966-70), we conclude that the Soviets recognized only four types of strategic action, each taking a specific form:

- simultaneous action against economic and military targets "throughout the depth of enemy territory", which took the form of strikes;
• action in ground (continental) TVDs, taking the form of strategic operations;
• action in defense of the national rear, taking the form of air-defense operations;
• action in sea and ocean TVDs, sometimes taking the form of strategic operations, sometimes the form of naval operations.

It is especially important to remember that, at the time, there was only one type of action recognized for strategic missile forces (Strategic Missile Troops and SSBNs) outside the theaters. This was a mixed counterforce-countervalue effort that only took the form of a "strike", never the form of a strategic operation. Strategic operations were merely the form assumed by the combined action of various branches of the armed forces, under the aegis of the strategic leadership, within (1) ground and (2) sea and ocean TVDs.

THE 1970s BACKGROUND

In the first half of the 1970s the Soviets made two especially significant hardware innovations that were complementary in their general thrust. One was the testing and deployment, in 1973 and 1975 respectively, of MIRVs for a new generation of ICBMs, which for the first time made the Soviet Union's first strike stronger in principle than the American second strike. A second innovation (around 1973) was the Delta-class SSBN armed with the SS-N-8 missile; its long range permitted hitting the U.S. from the relative safety of home waters, where the Soviet Navy's general-purpose forces could provide protection for the missile platform. The two innovations together gave the USSR a potential for conducting its initial strikes primarily against military targets, while withholding an SLBM countervalue reserve for intrawar deterrence of U.S. strikes against Soviet cities. Although both hardware innovations took place rather late in the 1971-75 planning period, Soviet military writers at the turn of 1970-71 began to discuss strategic matters in such a way as to suggest that Moscow's intentions matched the capabilities that would soon emerge. We have learned to recognize this as the typical pattern. Soviet force-employment doctrine often anticipates (but not by much) the generation of the capabilities on which it rests.

Paralleling the appearance of these capabilities and intentions, the Soviets added a new, fifth type of strategic action, which at the same time amounted to a second type of strategic action by strategic nuclear forces against targets in the depth, beyond the limits of the TVDs. Marshal Kulikov, when still Chief of the General Staff, described it as action for "repelling" an opponent's "aerospace attack". Whereas in the 1960s the counterforce and countervalue tasks had been
lumped together into a single mission, in the 1970s the counterforce "strategic task" of "repelling an opponent's aerospace attack" was treated separately from the countervalue task of "demolishing highly important war-industry targets." According to General-Major Cherednichenko of the General Staff Academy, this new type of action takes the form of a "strategic operation", the same form assumed by the action in ground and ocean TVDs.

A strategic operation is the aggregate of coordinated strikes, operations and combat action by operational and tactical formations of various branches of the armed forces, interconnected with respect to objective, place and time and carried out for the purpose of achieving strategic objectives; it is one of the forms of strategic action by the armed forces....

In the context of nuclear weapons use, a strategic operation can be carried out in accordance with a single design and plan in continental or ocean TVDs, under the direct leadership of the Supreme High Command....A strategic operation to repel an aerospace attack...will be conducted to repel an opponent's strikes from the atmosphere and from space....

Colonel P. V. Ivanov of the Frunze Military Academy lists the same three forms of action at the strategic level:  

The basic form of combat action at the tactical level is the engagement (by); at the operational-tactical and operational-strategic levels the operation; at the strategic level the strategic operation in a continental TVD, the strategic operation in an ocean TVD, and repelling an opponent's aerospace attack.

The first apparent reference to this last kind of strategic action appeared in a work by the eminent military theoretician, General-Major Anureev, which was sent off for galleys in December 1970 and signed off to the press in April 1971. Anureev, adopting the standard tactic of attributing his own government's intentions to the U.S., described the "aerospace operations" of the war's initial period as a type of offensive action, to be carried out by "strategic means of attack." As one would expect from action designed to repel an opponent's aerospace attack, Anureev singles out counterforce targeting against "strategic
nuclear forces" outside the theaters for this aerospace operation, and strongly implies that the Soviet response would be in kind, eschewing escalation to all-out war.

In the view of a number of Western military theoreticians, there can be two periods in a nuclear war: an initial period lasting several days, and a subsequent period of indeterminate duration.

In the initial period, in their opinion, the most intense combat action will be conducted on a grand scale....

The main content of this period, in the estimate of Pentagon leaders, will be a global nuclear offensive, which they intend to carry out by conducting independent aerospace operations [vzduhno-kosmicheskie operatsii] using strategic means of attack (strategic aircraft and missiles and military space systems) located on U.S. territory, in the oceans and in space, and by conducting operations of the armed forces in the theaters of military action.

In using missile-space means of attack, the boundary between front and rear...will be completely erased and the center of gravity of military action will shift over to the territory of the belligerent parties. In this connection, those tasks which in the past were accomplished in months and years, in a nuclear-missile war will be accomplished, in the opinion of foreign military theoreticians, in a matter of minutes, hours, several days....

American military specialists take for granted that, in this period, maximum destruction must be inflicted on an opponent's strategic nuclear forces.

At the same time, aggressors across the ocean realize ever more clearly that, if war is unleashed against the Soviet Union and the other socialist countries, they will not succeed in using their own armed forces with impunity.21

Although Anureev mentions strategic means of attack located "in the oceans" as well as on land and in space as participants in this aero-
space offensive operation, Soviet discussions during this period pointed only to ICBMs as the counterforce instrument outside the TVDs. The "main mission" of the Soviet Navy during this period was specified, in its most general form, as a "national-defense task" (zadacha oborony strany). This indicated an assignment by the state military-policy leadership rather than the strategic leadership, which sets strategic tasks rather than national-defense tasks. The Navy's new national-defense task apparently had three components, each of which was independently declared to be a "main" mission: countervalue strikes ("undermining the potential of an opponent's war economy"); deterrence in peacetime and as a "role in modern war" (intrawar deterrence); and sea control by general-purpose forces ("command of the sea"), primarily in support of submarines carrying withheld SLBMs.

It is true that SSBNs did have a counterforce role but this was first of all considered a task in the TVDs and, moreover, while a "main" task (along with combatting SSBNs) in the theater context, it was accounted only an "important" task in the overall naval mission structure; it was not a "most important," much less a "main" task, as was the case with the "national defense," deterrence-countervalue mission. This TVD counterforce task was normally referred to innocuously as simply one of delivering strikes on "ground targets," but several authors let the cat out of the bag by specifying "military targets" as the objective.

THE STALBO ARTICLE

Whereas the Soviet Navy did not appear to have a major counterforce role outside the theater mission context in the 1970s, they may very well have acquired one for the current 5-year doctrinal period 1981-85. In this connection, the following passage appeared in an August 1981 Red Star article by Vice-Admiral K. Stalbo (emphasis mine):

Nuclear-powered submarines armed with ballistic missiles having nuclear warheads now constitute the fundamental element in the American strategic "triad," that is, they make up most of the country's nuclear potential. Patrolling the oceans, they transform them into vast launch areas for hurling missiles against targets of the utmost importance belonging to the Soviet Union and the other socialist countries. In line with these new material means for waging the armed struggle, Pentagon strategists have worked out a theory of large-scale operations for a nuclear offensive from oceanic aerospace axes [okeanskie vozduushno-kosmicheskie napravleniya] against a potential opponent.
Such a statement is unprecedented. The author is obviously speaking of offensive action by SSBNs, which he attributes (as Anureev did) to the United States. This action takes an operational form, almost certainly a reference to the “aerospace operations” mentioned by Anureev, since the action is treated by Stalbo as emanating from “oceanic aerospace axes.” This in turn is of necessity a counterforce operation, because the only kind of action by strategic missile forces taking the form of a large-scale (strategic) operation is that for “repelling an opponent’s aerospace attack.” The all-out action of missile forces, today as in the 1960s, only assumes the form of “strikes.”

Several questions immediately come to mind about this, one being the intended target of this aerospace operation by SSBNs. Of the three legs of the American triad, one—U.S. SSBNs—would seem to be ruled out on the basis of our understanding of Soviet terminology, even though one Soviet author has recently published material implying that a breakthrough in strategic ASW cannot be excluded after the mid-1980s. We would, at least tentatively, rule out U.S. SSBNs as the target, since in Soviet usage sea and ocean “axes” are only indicated as the geographical source of naval action when this action is directed against the land, whether in the form of missile and air strikes or amphibious landing operations. I have never encountered a reference to attacks on the enemy fleet at sea (which would include attacks on SSBNs) as emanating from sea and ocean “axes.”

Another question involves the capabilities that the Soviets could introduce during this 5-year plan to account for what appears to be a novelty in doctrine. In this connection, there might be some relevance in a report by William Parham on the Soviet Typhoon-class SSBN now said to be undergoing sea trials.

There is increasing speculation in Naval intelligence circles that the Soviet Navy’s giant new Typhoon ballistic missile submarine may have been designed to operate under Arctic ice....

Typhoon’s high rise hull when surfaced, stubby sail, large water cushion between inner and outer hull and retractable bow diving planes are thought to give the 558-foot-long, 25,000-ton nuclear-powered submarine the possibility of rising beneath the Arctic ice, breaking through, and leaving its 20 vertical missile hatches high and relatively free from ice chunks.

Clear of ice, the hatches could be opened immediately after the huge submarine surfaces, and the 20 missiles could be quickly launched.
Beginning sometime in the mid-1980s, the Typhoon class...will carry the SS-NX-20, 12-warhead, 5,180-mile-range missiles now undergoing development testing.

Such Arctic launch capability would have strategic advantages.

The advantage of being able to launch intercontinental missiles at U.S. targets from Arctic areas is that the missile paths to target, or "range arcs," would be thousands of miles shorter—-and thus quicker—-than if they were fired from usual Soviet SSBN protected bastions in the Barents Sea behind Scandinavia or in the Northwest Pacific near Petropavlovsk-Kamchatskiy.

Quicker flight times mean shorter U.S. warning times. Such polar-launched missiles could catch many U.S. intercontinental bombers and cruise-missile launchers still on U.S. runways in a first strike.

We have no way of verifying the accuracy of Parham's account. He may be right that the threat from Typhoon and its SS-NX-20 is to soft targets, such as SAC bomber bases. However, in monitoring tests of the SS-NX-20, if we find this missile approximating hard-target accuracies, this is unlikely to be the fruit of any accident in design. Given the apparent thrust of the Stalbo article, it would almost surely be the product of deliberate calculation.
Footnotes

1. The role of one of the principal ghost-writers of Admiral Gorshkov's 1976 book, Sea Power of the State, is widely attributed to Stalbo; this role may have been responsible for his subsequent promotion from Rear- to Vice-Admiral.

2. In discussing Soviet military doctrine, which differs in scope from our own, one must appreciate the distinction the Russians draw between military policy (presumably the responsibility of the Politburo), the reflection of that policy in military doctrine (the responsibility of the Defense Council, a state committee chaired by Brezhnev), and the reflection of both, in uncertain measure, in Soviet policy for R&D&E and weapons production, that is, military-technical policy (the source for which is unknown but which undoubtedly bears on the activity of the Military-Industrial Commission [VPK] headed up by L. V. Smirnov).


4. For a discussion of the apparent innovations in each of the four doctrinal periods extending from 1960 through 1980, see McConnell, The Interacting Evolution of Soviet and American Military Doctrines (CNA Memorandum 80-1313.00, Alexandria, Va., 1980), passim.

5. Of course, just as in the case of economic plans, the Soviets can (and do) revise doctrine on an irregular basis.

7. M. A. Mil'shteyn and A. K. Slobodenko, O burzhuaznoy voennoy nauke (2nd ed., Moscow, 1961), p. 163. For Westerners who rely upon translations, the problem is complicated by the fact that the Russian word deyastviya (action) and the Russian word operatsii (operations) are both normally translated as "operations."


18. M. I. Cherednichenko, "The Strategic Operation," ibid, pp. 551-552. Cherednichenko, it will be recalled, frequently collaborated in the 1960s with the late Marshal V. D. Sokolovskiy.


20. General Staff Academy Professor Anureev was a co-editor, together with N. A. Lomov and M. I. Galkin, of an influential work in the Officers' Library Series, Nauchno-tekhnicheskiy progress i revolyutsiya v voennom dele (Moscow, 1973), which was subsequently translated by the U.S. Air Force.


25. In the last article of his series under the general title of "Navies in War and Peace" (*Morskoy sbornik*, No. 2, 1973, pp. 18ff), Gorshkov treats three separate missions—peacetime and intrawar deterrence, countervalue strikes and command of the sea in support of submarines—while apparently still in the context of the main national-defense task with which the discussion began (pp. 18-21), and then goes on to discuss components of the Navy's "basic" mission (pp. 21-24), identified fairly conclusively elsewhere as tasks in the theaters of military action (see the references in footnote 29 below). The structure of this passage, which is not at all obvious, has been treated in my paper, "Gorshkov's Doctrine of Coercive Naval Diplomacy in Both Peace and War," in J. M. McConnell, R. C. Weinland and M. K. McQwire, *Admiral Gorshkov on "Navies in War and Peace"* (CNA CRC 257, Arlington, Va., 1974), pp. 96f. Since that time, other authors have seemed to be drawing the same distinction between the Navy's "national-defense" task and its tasks in the theaters of military action, for example, Admiral V. M. Grishanov (ed.), *Pod flagom Rodiny* (Moscow, 1976) pp. 6-7, and General-Lieutenant M. Gareev, "Always on Guard over the Gains of October," *Voenno-istoricheskiy zhurnal*, No. 11, 1977, p. 24.


27. For deterrence as a "main task" of the Navy—and part of its "national-defense" task—compare Captain 1st Rank E. I. Rodionov, *Protivolodochnye sily i sredstva flotoy* (Moscow, 1977), p. 6, with the model on which it was clearly based, that is, Gorshkov, *Morskoy sbornik*, No. 12, 1972, p. 21. That the Soviet armed forces have an intrawar deterrence role is convincingly demonstrated in an article by Colonel A. A. Shirman, "The Social Activism of the Masses and the Defense of Socialism" in A. S. Milovidov and V. G. Kozlov (eds.), *Filosofskoe nasledie V. I. Lenina i problemy sovremennoy voyny* (Moscow, 1972), pp. 171-174. That this role is probably assigned to the Navy is indicated by Admiral Gorshkov's reference to "deterrence" based on countervalue capabilities as a "role in modern war" (*Morskoy sbornik*, No. 2, 1973, pp. 20f) and by his favorable historical treatment of the value of withholding naval forces (see his *Morskaya moshch' gosudarstva*, pp. 249f). I have discussed the Gorshkov and Shirman statements in McConnell, Weinland, and McQwire, *op. cit.*, pp. 80f and in my *Interacting Evolution of Soviet and American Military Doctrines*, pp. 56ff.


31. See A. V. Basov, V. I. Achkasov et al., Boevoy put' Sovetskogo Voенно-Морского Флота (3rd ed., Moscow, 1974), p. 491, where two of the Navy's "basic" tasks in ocean TVDs—hitting ground targets and combatting the strike forces of the enemy fleet, including SSBNs and attack carriers—are designated as equally "important" tasks. On the other hand, Gorshkov (Morskaya moshch' gosudarstva, p. 360) has characterized the mission of combatting the enemy fleet, mainly SSBNs, as "secondary" to the overall Navy mission of strategic strikes against the shore, which would include strikes outside the TVDs as well as within them.

32. See Zheltikov, Bazanov et al., op. cit.; Rear-Admiral S. Filonov, "The Naval Operation," Morskoy sbornik, No. 10, 1977, p. 24; and M. Gareev, op. cit. The only military targets I have seen mentioned in the 1970s were "troop groupings;" cf. V.I. Zemskov, Vidy Vooruzhennykh Sil i roda voysk (Moscow, 1975), p. 49f.


34. Since 1977 the Soviets have denied that either side could achieve "superiority" in the foreseeable future, defined as the ability to prevent unacceptable damage in a strategic exchange by a combination of offensive and active and passive defensive means. In surveying the potential for achieving superiority, Trofimenko of the Institute for the USA in Moscow recently deemed it unlikely that an effective ABM would be created "within the next 10 to 15 years," argued that both East and West would be able to compensate for any offensive counterforce innovations "until the end of the century," and contended that "no civil defense can counteract the disastrous nature of a nuclear war." In the case of targeting the SSBN leg of the triad, however, he concluded (my emphasis) that "even the most far-flung ASW system cannot be especially efficient at the current stage or in the near future." (See Henry Trofimenko, Changing Attitudes Toward Deterrence, ACIS Working Paper No. 25, Center for International and Strategic Affairs, UCLA, 1980, pp. 30-36.) As we have already noted (footnote 3 above), the present and near future is a code expression for the period up to 5 years away. It is curious that Trofimenko would exempt strategic ASW from the general lack of a breakthrough perspective within the foreseeable future. We are used to thinking of the SSBN as the most invulnerable leg of the triad.

36. William Parham, "A Soviet Threat from the Arctic?" Bulletin (Norwich, Connecticut), 29 Nov 1981. I am indebted to Kirk McConnell, who knew my interest in explaining the Stalbo article, for bringing this item to my attention.


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PP 220. Maurer, Donald E., "Diagonalization by Group Matrices," 26 pp., Apr 78, AD AO54 443


PP 227. Bell Telephone Laboratories, Inc.

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