MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT: "New Developments in Operational Art and Tactics", by Lieutenant-General V. Baskakov

1. Enclosed is a verbatim translation of an article which appeared in the TOP SECRET Special Collection of Articles of the Journal "Military Thought" ("Voyennaya Mysl") published by the Ministry of Defense, USSR, and distributed down to the level of Army Commander.

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RICHARD HELMS

Enclosure

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30 JUN 1992
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Following is a verbatim translation of an article titled "New Developments in Operational Art and Tactics", by Lieutenant-General V. Baskakov.

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New Developments in Operational Art and Tactics

by

Lieutenant-General V. Baskakov

In recent times the assertion has been growing continually more definite and more persistent, and is now deeply rooted, that the fundamental tenets of strategy, of operational art, of tactics, and of the structure of the armed forces, based on the experience of the last war, cannot ensure victory under modern conditions, and need radical revision. The reason for this is the wealth of material that has been accumulated by testing nuclear weapons - the basic and decisive means of routing the enemy in a future war - and also the experience of command-staff exercises, games, and drills with troops and from military-scientific research on the organization and conduct of an operation and of a battle. All this permits a practical review of the tenets that existed previously, and working out and basing new positions in military art in accordance with modern conditions.

In this respect, Marshal of the Soviet Union V. D. Sokolovsky's article, in which a serious and profound analysis is given of the nature of a future war, taking into account the employment of nuclear, chemical, and bacteriological weapons, has especially important significance, many tenets of the past are decisively reconsidered; and concrete problems in working out the strategy of the next war are advanced.

It is essential to recognize that although atomic weapons have already been studied for many years, we often still continue to employ former tenets in theoretical operational studies and to apply them to modern conditions. If one compares the concepts of certain operational studies and exercises, and the decisions made according to them
for a front and an army, with the concepts and decisions for an operation adopted by commanders of troops of fronts and armies in the last war, it is not difficult to be convinced that these concepts and decisions often coincide almost completely in their aims, forms of operational maneuver, and methods and means of defeating the enemy, and are very similar to one another. There is some difference only in the tempos of offensive, in the width of zones, and in the fact that now the absence of a continuous front is permitted.

So, on the one hand, we acknowledge quite definitely the decisive role of nuclear weapons and other means of mass destruction in the organization and conduct of an operation aimed at the complete defeat of the enemy; on the other hand, we continue to organize and plan an operation according to the methods of the last war. This obvious contradiction in the theory of operational art may, without exaggeration, be called a crisis. A correct evaluation of the role of nuclear weapons enables this contradiction to be resolved through discovering new forms and methods of armed combat and operations, and of the conduct of battle under modern conditions.

In connection with the radical alteration already recognized in the role of the types of armed forces and arms of troops in bringing about the complete defeat of the enemy, let us consider the aims, nature, and essence of a modern operation, the principles of using nuclear weapons, and other, in our view extremely important, problems.

Thus, before the appearance of nuclear weapons the main role in defeating the enemy belonged to ground troops, and as their basic operational-tactical form of organization - to divisions. In the last war, the infantry and armored divisions of ground troops were the striking force for defeating the enemy in an offensive and the basis of combat stability in defense. The destruction of divisions generally meant the complete defeat of the enemy, so the purpose of each operation was the encirclement and destruction of his main groupings of ground troops.
After the defeat of the divisions, neither the aviation nor, even less, the artillery of the enemy, could have a decisive influence on the operations of the troops.

In connection with what has been stated, the well-known appreciation of the decisive significance of divisions of ground troops, advanced by I. V. Stalin, as one of the main constant factors deciding the fate of a war, was absolutely correct only for the last war. That is, "the quantity and quality of divisions" of ground troops at that time basically determined the military power of the opposing sides.

Under modern conditions, nuclear/missile weapons are the main means of destroying atomic weapons, ground troops, and other forces and weapons of the enemy. Therefore, one of the main aims of an operation in a future war must be, as the first priority, to deprive the enemy of nuclear weapons, the destruction of nuclear warheads and the means of delivering them to the target, but not the destruction of his divisions. This aim may also be attained by employing nuclear weapons alone.

Today, to defeat the enemy completely means wresting nuclear weapons from his hands, depriving him of nuclear power, or decisively undermining the possibility of restoring it. An enemy, having lost his nuclear weapons, irrespective of whether or not he has a sufficient number of divisions of ground troops, will already be unable to organize his defense, much less organize decisive offensive operations, and will be forced to capitulate before the threat of total destruction.

The proposition set out here is so important and basic that it can radically change not only the aims and tasks, but also the nature, of operations, and requires a quite different solution to all other problems of the organization and conduct of operations and of battle in the future. While operations were conducted previously by the forces of two or three, or even of one, front, now they will have a much wider scope and most likely will be conducted simultaneously on several strategic axes or theaters of military operations with all
the forces and weapons at the disposal of the opposing sides. Operations will be carried on until all enemy forces on a given continent have been totally defeated. Therefore, the scale of an operation will have nothing in common with the scale of operations in the last war. The depth of operations will not be limited to four, five, or six hundred kilometers, but will increase to at least twice this amount.

On a number of axes, where by employing nuclear weapons great destruction and devastation will be achieved, the tempo of advance of ground troops will be determined by the movement capability of the troops and will approximate the length of a day's march. However, it is extremely necessary to take into account constantly that for ensuring movement in these areas, measures will need to be taken for surmounting vast zones with high levels of radioactive contamination of terrain and with great destruction. On other axes, where the scale of employing nuclear weapons will be less, the tempo of advance may be correspondingly somewhat lower.

The essence of operations will amount to the following: organizing and delivering nuclear strikes by the forces of missile troops and aviation for carrying out strategic, operational, or tactical tasks; the employment of chemical and bacteriological weapons; moving divisions, corps, and armies of ground troops forward on selected axes into enemy territory, with the purpose of exploiting the results of nuclear strikes, completing the defeat of the remaining enemy forces not destroyed by nuclear weapons, and the final disruption of his attempts to continue the delivery of nuclear strikes; and organizing the protection of friendly troops from strikes of enemy nuclear weapons.

In connection with the above, the basic content of planning and preparation for operations will amount to organizing the employment of nuclear weapons. It is pertinent to define the general principles and to consider the concrete forms of organization of the operational employment of nuclear weapons.

The basic principle of employing nuclear weapons, in our view, must follow from the fact that they cannot and must not be used any...
longer as a means of supporting the operations of divisions of ground troops. Nuclear weapons must be considered and used as an independent and decisive means of defeating the enemy.

Up to the present time, in theoretical studies and command-staff exercises, nuclear weapons have been planned and employed just as a means of support. For example, in the exercise in the autumn of 1959, the "East" employed 82 percent of its atomic warheads in direct support of the conduct of combat by divisions of ground troops, and only 18 percent for the destruction of means of nuclear attack and for hitting other enemy objectives. Can such employment of nuclear weapons really be considered advantageous? Does it answer the problem of depriving the enemy of the capability for employing nuclear weapons? Of course not. More than that, such employment is harmful, as essentially it means squandering the most powerful weapons of the present time on targets of secondary importance and permits the enemy to preserve the means of nuclear attack.

It is not for supporting a partial advance of this or that division and neutralizing an ordinary strongpoint that these weapons must be used, but for defeating the main forces of the enemy, and first and foremost the means of nuclear attack. Very much will depend on how far this basic proposition is perceived and understood. According to our profound conviction, this is the guarantee of success in operations.

Nuclear weapons must be used purposefully and en masse. This means that, first of all, for the total annihilation of enemy nuclear means, and then of the main grouping of his ground troops, aviation, and naval forces, an absolute majority of the nuclear warheads must be employed.

It is hardly necessary to prove that with nuclear weapons it is possible not only to annihilate individual objectives and targets but also to carry out tactical, operational, and even strategic tasks. With nuclear weapons it is possible to rout entire formations and the main forces of the operational groupings of
enemy ground troops, including their own nuclear weapons and airfields which are located over a considerable area and in great depth. Nuclear weapons must be employed suddenly, effectively, and economically, i.e., so that each burst should inflict maximum losses on the enemy and so that all the destructive properties of the burst itself and radioactive contamination of the terrain are used in the most advantageous manner.

Based on the general principles of employing nuclear weapons, with the object of obtaining a common understanding of the methods of their operational use and a simplification of planning methods, it would be advisable in our view to establish a separation of nuclear strikes into concentrated and individual nuclear strikes; in this, the former, depending on the importance of the tasks and goals they carry out, should be subdivided into strategic, operational, and tactical nuclear strikes.

A strategic concentrated nuclear strike is a series of most powerful nuclear bursts, directed at carrying out strategic tasks such as: the neutralization of ballistic missile bases, the annihilation and destruction of the main economic and political centers of the enemy, the crushing of his atomic industry, military bases, and other objectives.

An operational concentrated nuclear strike must be a series of nuclear bursts, delivered simultaneously or in succession by several salvoes with the purpose of carrying out operational tasks. These tasks may be: the disruption of the enemy's concentrated nuclear strike and the annihilation of his means of delivery, assembly bases, and reserves of nuclear warheads in the immediate zone of the front; the rout of a strike grouping of the ground troops, the destruction of aircraft and naval forces of the enemy; the destruction of second echelons or large operational reserves of a group of armies of the enemy and, as first priority, the annihilation of their nuclear weapons; the disruption of control and the work of the rear, the destruction of communication lines, ports, enemy bases and so on. Depending on the situation, an operational concentrated nuclear strike may coincide in timing with a strategic nuclear strike, which will be a characteristic...
A tactical concentrated nuclear strike may be delivered with the purpose of routing immediate reserves, neutralizing the tactical depth of defense and the enemy nuclear weapons located in it, destroying airborne forces landed in our rear area, and also carrying out other tasks of a tactical nature.

An individual nuclear strike consisting of single or of group nuclear bursts is intended for the annihilation, neutralization, or destruction of individual enemy targets or objectives from day to day during the course of an operation, as the need arises.

A concentrated nuclear strike must be planned as an independent and most important stage of an operation, and its organization and execution are very complex and responsible matters. Such strikes, depending on the situation, may be differentiated according to the purpose of their delivery, yield, and duration, and may have the most varied plans or schemes. Military operations will start, as a rule, with concentrated strikes. It is convenient to call the one with which an operation starts the initial strike. Strikes will also be carried out during the course of a war up to its final conclusion. In connection with the considerable special features in the organization and execution of concentrated strikes, it is advisable to divide them into preemptive and counter strikes.

Such a division of nuclear strikes, in our view, is convenient for solving problems connected with the operational use of nuclear weapons. The concept of a "missile operation", on the other hand, it seems to us, fails to express fully the operational aims of this measure. The concept of a "strategic nuclear strike" would define its content considerably better. The fact is that the missile is only a means of delivering nuclear weapons to a target. In a number of instances, apart from missiles, the carrier of an atomic charge may be aircraft. In any case, the heart of the matter is not in the missile or the aircraft but in the charge itself and the burst emanating from it.
The next problem that has arisen in the operational art, in our opinion, lies in a categorical rejection of the basic principle of the operational art of the past - the principle of determining the main strike and selection of its axis, and the concentration on that axis of the main part of the forces and weapons of the front and the army.

In the last war, when complete defeat of the enemy lay in the destruction of divisions of his ground troops and was carried out in the main by the combat of our divisions, it was impossible to achieve success, either in the offensive or on defense, without selecting the axis of the main strike and concentrating the main forces on it. This had special importance when breaking through the enemy's defense, when opposite one defending division the efforts of two, and sometimes even three, divisions were concentrated, and manifold superiority in artillery, tanks, and aircraft was built up. Such a concentration of forces on the axis of the main strike, together with the extremely weak overall maneuverability of troops at that time, naturally ensured a breakthrough of the enemy's defense in the selected sector, and made it inconceivable, as a rule, for the enemy to hold zones and lines on other axes.

In this way, the principle of concentrating the principal efforts on the axis of the main strike, selected so that this axis should lead to the enemy's most vulnerable point, and the provision on this axis of double or triple superiority over the enemy in forces and weapons, was the basic principle of operational art in the past, and corresponded to the level of development of armament and combat equipment and ensured the successful execution of operations.

But can this principle remain basic in modern operational art? Does it conform to the nature of an operation and of battle being conducted under conditions of the massed employment of nuclear weapons? In our view it cannot, for two main reasons.

Firstly, nuclear weapons will play the main role in defeating enemy troops. Even to talk of concentrating the main efforts of nuclear weapons, i.e., of the employment of a neutralizing
quantity of nuclear bursts on an axis, even on the main one, is not only incorrect but simply absurd. With this method of delivering strikes, a considerable number of enemy troops, his corps, and divisions located beyond the boundaries of the selected axis will remain unaffected, and in the area of the burst there will not be a target deserving attention.

As an example one may cite the decision taken by the commander of the 18th Army of the "West" in the war game conducted in February 1959 in the Military Academy I/n M. V. Frunze. According to the situation on the morning of 20 July (diagram 7 of the critique materials of the game), the main forces of the 3rd Tank Army of the "East", composed of two tank and one heavy tank divisions, were in one limited area, a fourth division, operating on a broad front, covered the left flank of the Army, and the right flank of the Army was covered by an airborne division. In this situation it seemed quite clear that a large portion of the nuclear warheads should be brought down on the main grouping of the tank army with the purpose of routing it. In practice, however, the very opposite occurred. By decision of the commander of the 18th Army, all 11 warheads were employed against the divisions on the flanks of the 3rd Tank Army, and not one strike was delivered against the main grouping of its forces. As a result of this, the main forces of the tank army, not having come under the enemy nuclear strike, continued to develop their offensive without hindrance and carried out their assigned task.

This, to say the least, strange decision, was taken, obviously, because we still underestimate the role of nuclear weapons and their capabilities, while, at the same time, we overestimate the role of divisions of ground troops in a modern operation. In this decision there was very clearly reflected the tendency to employ nuclear weapons simply as a means of supporting an offensive by ground troops, and the main hopes were evidently put on the results of their operations. Adherence to the principle of concentrating the main efforts on strikes on selected axes, which, in the example given, the ground troops of the "West" were preparing, played a considerable, if not the main, role here.
Secondly, to concentrate the main part of the divisions of a front, army, or even a corps and the means of their reinforcement, on no matter what axis, including the main one means taking a risk, and not only taking a risk, but simply from the start giving the opportunity for these troops to be defeated, as the enemy will certainly endeavor to take advantage of such an opportunity for the effective employment of his nuclear weapons against the grouping most threatening to him.

The example cited by us is undoubtedly a minor one, but it has been taken because it clearly reflected the failure of the principle of concentrating efforts on axes to conform with the means of conducting modern operations and battle, and the recognized harmfulness of employing this principle in the training of our cadres for a future war. Therefore, modern operational art, in our opinion, can no longer employ as a basis the principle of the main strike, selection of its axis and concentration on it of the main efforts of the troops, as this principle no longer conforms either with the level of development of the armed forces or with modern military theory.

Undoubtedly, the principle of concentrating the principal effort on the main axis resulted from a most important tenet of dialectical materialism - the doctrine of the main element - and was, as it were, its interpretation in the theory of operational art. Therefore, it cannot simply be rejected, but must be replaced by a new principle, which, in our view, must become the principle of concentrating the main efforts for destroying the nuclear means and main grouping of troops of the enemy. This principle takes into full account the present level of development of the means of armed combat. It not only permits, but even compels the use of the main mass of nuclear weapons for the annihilation of enemy nuclear weapons and the route of the strongest main grouping of his ground troops, naval forces, and aviation. The divisions of the ground troops have every opportunity of bringing up their units from various axes to the area where the main forces of the enemy are; and of committing them to battle in those sectors where it seems appropriate in a particular case, in order to achieve success and not to expose friendly forces to a destructive enemy nuclear strike.
Recently, we have frequently been considering the problem of where to deliver the main strike - on a strong or a weak point of the enemy defense. This problem, absurd in itself from the point of view of conducting operations in the age of nuclear weapons, in view of keeping the outdated principle of concentrating the principal efforts on the main axis, has now led to an impasse. Indeed, if one is to deliver a strike on the strongest point of the enemy defense, then it is possible to employ nuclear weapons successfully, but the ground troops are placed in an unfavorable position. But if one delivers a strike on the weak point of the enemy defense, then conversely, the divisions of the ground troops can select favorable flanks, and generally more successful, axes, but nuclear weapons will have to be employed on targets and objectives of minor importance. What is better then, what should one sacrifice - the advantages of using nuclear weapons or the convenience of operations of ground troops?

In our view, neither one nor the other can be acceptable. One ought not to sacrifice either the advantages of employing atomic weapons or the convenience of the operations of divisions of ground troops. The only thing one should really sacrifice is the principle of selecting the axis of the main strike and concentrating on it the main efforts of fronts, armies, and even divisions. The necessity has arisen for introducing clarity into this question, lest our commanders and staffs be completely disoriented.

The problem of removing the sharp distinction between the concept of operational defense and operational offensive deserves consideration.

Previously, when divisions of ground troops were the main combat force of the two sides, defense and offensive were fundamentally different methods of operations, in each of which definite independent tasks were carried out. Defense ensured holding large fronts and territories with comparatively insignificant forces, and made it possible to free the necessary forces for an offensive. The offensive, as the main type of combat operations, was the principal means of decisively defeating the enemy and of seizing the initiative.
Under conditions of the massed employment of nuclear weapons, obviously the purely classical type of defensive and offensive operation will disappear. The success of an offensive operation, for example, will depend not only on the correct organization of the offensive itself but on how skilfully are decided the problems of cover and protection of friendly troops and means of mass destruction from destruction by enemy nuclear weapons. Elements of defense, such as security of the flanks and points at which flanks meet, consolidation of occupied lines during the course of an offensive operation were already being practised in the last war, and began to penetrate into the offensive particularly vigorously in the postwar period. The system of modern antiaircraft defense appeared and is being improved all the time.

It is quite clear that it is now impossible to plan an offensive operation without providing at the same time for measures for the defense and reliable protection of the main forces and weapons of the offensive troops from enemy nuclear weapons up to the beginning of the offensive, and consolidation of lines and repelling counterstrikes during the course of it. These measures must become one of the main component parts of the general operational plan of offensive.

It is also the same on defense. Its object will consist in the concealment of the main forces of nuclear weapons, ground troops, naval forces, and aviation, and providing for their protection from enemy nuclear weapons. Stability of defense under modern conditions is based on the massed employment of nuclear weapons with the decisive purpose of defeating the main grouping of enemy troops and the means of enemy nuclear attack. Without this, the defense is powerless and cannot carry out its tasks. But at the same time, insofar as nuclear weapons will be employed, and the destruction of the attacking strike force achieved, it is senseless not to make use of these results and to continue to go on sitting on occupied lines. It is natural, under these conditions, to go over to the offensive, even with very limited forces of ground troops, immediately after nuclear strikes have taken place. Operational defense, which counts on the maximum use of nuclear weapons, cannot now be considered without going over to the offensive.
All this points to the fact that nuclear weapons are eliminating the distinction between operational offensive and operational defense. There will no longer be clearly defined breakthrough sectors, offensive zones for operational formations, and defense with a developed system of solid positions and zones on a front of considerable width.

The difference between the conduct of an offensive and the defense, in our opinion, will persist only in tactics. Divisions and regiments will, as before, receive tasks for the offensive and the defense and carry them out, taking into account the special features of operations when nuclear weapons are being employed.

A feature of no small importance in modern operations will also be that the rear areas of fronts and the rear of the country as a whole, with its economic and political centers and manpower resources, will be subjected from the very beginning of the war to the most powerful effects of enemy nuclear, chemical, and bacteriological weapons, which will seriously complicate the process of mobilizing troops and conveying them to the front, and also material support for operations. It follows from this that border military districts will have to initiate military operations with those forces and weapons which they had at the beginning of the war and which they can save from enemy action.

As far as internal military districts are concerned, their role and the nature of their activities are being abruptly changed in comparison with the last war; under these conditions they will be forced to take part immediately in active combat to frustrate enemy strikes and eliminate their consequences. For this purpose, they must have all necessary means at their disposal; in particular there must be concentrated in their hands all the means of antiaircraft defense (PVO), local antiaircraft defense (MPVO), etc. Dispersal of these means in various organizations can only make the situation worse.

We feel that a special type of operation must be developed - operations of an internal military district. For training generals, officers, and staffs of internal military districts in the conduct of such operations, appropriate command-staff exercises and games.
must also be carried out, in which the problems of troop operations must be worked out under conditions of an enemy attack employing nuclear, chemical, and bacteriological weapons on the territory of the district.

The next problem in operational art, in our view, consists in the employment and the nature of operations of the ground troops themselves. As we have already ascertained, their role will amount to the most advantageous and effective exploration of the results of employment of nuclear weapons, and will be completely in line with the general concept of routing the opposing enemy forces. The tasks of large units of ground troops and the means of reinforcing them will now result from the aims of completing the rout of an enemy being subjected to nuclear strikes, advancing into and capturing enemy-held territory, conclusively depriving him of his capability to employ nuclear weapons, and maintaining the stability of the operational situation of friendly troops. At the same time, the achievement of the necessary surprise and effectiveness of the nuclear strikes being delivered and the endeavor to exploit the results of them to the maximum with ground troops and aviation must be made fundamental in organizing coordinated action.

At the same time, the massed employment of nuclear weapons cannot fail to result in changes in the operational structure of troops and a revision of the role of echelons and the methods of increasing efforts for routing the main forces of the enemy.

In the last war, an absolute majority of the troops of armies and fronts was in their first echelons. Can this position be maintained now? No, it cannot. Nuclear weapons make it possible to neutralize effectively the troops of the enemy's first echelon in certain sectors, and in a short time to break through the defense in these sectors, with a powerful first echelon which is smaller numerically. Therefore the tendency is growing immeasurably of deploying operational echelons of ground troops deeper, to have more forces and weapons in the depth, and to reinforce second echelons and reserves considerably in order to be able to increase the efforts of the first operational echelon.
In our view, the method of intensifying efforts in an operation on those axes where the most favorable or the most difficult situation has arisen, must also be fundamentally changed. The intensification of efforts must now be carried out by small groups of troops not larger than a division. In this connection, second echelons of armies must consist of tank and motorized-rifle divisions, and the second echelons of fronts - of corps and divisions. It is not advisable now to create second echelons of fronts in the form of a combined arms or tank army, as it is simply impossible to commit to battle a whole army (and still more a reserve front) without incurring serious losses, which the enemy is now able to inflict by employing nuclear weapons.

Let us take as an illustration an example from the same war game carried out in the Academy in M. V. Frunze. By the time that the "West" knew about the concentration and movement of the 3rd Tank Army of the "East", the "West's" 18th Army alone had 40 nuclear warheads with a total yield of up to 1000 kt, and no less than 15 warheads could be used rapidly on the "East's" 3rd Tank Army. In addition, the group of "West" armies also had a large number of nuclear warheads at that time, of which only 23 warheads were used for delivering strikes on the area of the hills of the "Thueringen Forest", with the aim of creating there zones of high radioactive contamination. If all these warheads had been used with a definite purpose on the troops of the "East's" 3rd Tank Army, especially when it had not moved up to the "Thueringen Forest" hills, then this army would undoubtedly have been completely routed and could not have been committed to battle. The exercise could have been concluded at this point.

In defense, divisions of the first operational echelon which are in direct contact with the enemy, will as a rule be better reconnoitered by the enemy. Therefore commanding officers of and commanders of armies will undoubtedly also endeavor to conceal from the enemy their main forces operating in the first echelons, having at every slightest available opportunity concentrated their efforts on positions deployed in depth, on the strength of which even the first operational echelon will be considerably more dispersed in depth.
In our opinion, evaluating the power of atomic weapons and their possible operational use, it must be considered that second echelons and reserves of armies and of a front must now consist of more than 50 percent of all their component forces and weapons. In connection with this, the overall density of troops in first echelons will also be many times less than it was in the last war.

In order to evaluate better the effect of employing nuclear weapons and other means of mass destruction on the nature of operations and combat, let us consider several basic problems of the organization and conduct of a defensive and an offensive operation.

In principle, defense, in our opinion, must be constructed in the following manner: divisions of the first operational echelon cover the main axes and ensure observation on the remaining axes. Reconnaissance subunits are in direct contact with the enemy, then come the troops detailed for combat in the security zone, further the units defending the forward position, and, finally, the main line of resistance.

The question arises, is such cover adequate or should one not also, under modern conditions, organize such a multi-zone echelon-in-depth defense as there was in the past? Could the enemy, even without nuclear weapons, unexpectedly turn to the offensive with ground troops, break this sparse cover and successfully develop an offensive in depth?

In our view, such a structure of cover is adequate. If the enemy really tries to deliver a strike without having neutralized the nuclear weapons of the defense, i.e., without having thoroughly organized the operation, then he will receive a counter-nuclear strike of such strength that it will not only paralyze any offensive of his, but may bring about the total loss of troops assigned for it. On the other hand, will the reliability of the cover be increased much if a "normal" defense is organized, as it was in the last war, with an average density of 10 to 15 kms per division? Are there really no weapons now, capable of neutralizing any sector in this defense that is essential for a breakthrough at any place and at any time?
The success of covering operations of troops will now depend not on how many divisions of ground troops are defending the main zone of defense, or whether there is such a zone at all, but to what extent the attacker will succeed in neutralizing the nuclear weapons of the enemy. If this task is not carried out by the attacker, then comparatively small forces, reinforced by the maneuver of tactical and operational reserves, are quite adequate, by the massed use of nuclear weapons, to frustrate the development of an offensive by enemy ground troops into the depth of the defense.

Such an organization of cover, in our view, will now be typical in all cases preceding the beginning of active combat operations. Such cover will replace the operational defense of the past.

Let us turn to the problems of the offensive. The organizational beginning of an offensive operation of a front is a General Headquarters (Stavka) directive in which the tasks, composition of forces and weapons, and the time of carrying out the operation are defined. In contrast with the past, there is now no need to define in the General Headquarters directive the axis of the main and other strikes, or to stipulate the amount of forces to be allotted to these axes. At the same time, the necessity of indicating the following arises: which nuclear strikes will be delivered by the means of General Headquarters on the axis of operations of the front, when and how the long-range enemy nuclear means which are beyond the range of the means of the front will be neutralized, and whether the means of the front will be called upon to carry out the indicated strategic tasks.

In our view, the content of the decision of the commander of troops of the front (army) for carrying out an operation must be changed materially. A resolution of the following problems must be included in it: - determining the maximum required number of nuclear warheads and the selection of their most advantageous yield, determining the points of concentration and time periods for readying nuclear warheads for use; - establishing methods for neutralizing and destroying nuclear means and also for routing the main groupings of ground and naval forces and aviation of the enemy; determining the number of operational and tactical concentrated nuclear strikes, their tasks, compo-
sition of forces, and time of delivery; a detailed working out of the initial concentrated nuclear strike; - determining the lines of the immediate and subsequent tasks arising out of the planned nuclear strikes; - making the decision to use ground troops (and naval forces on a maritime axis) and aviation for completing the rout of the enemy, and the time of their move to the lines of the immediate and follow-up tasks; - determining the tasks of the airborne forces and troops designated to be dropped in the rear of the enemy from the air; - establishing methods of cover from enemy strikes for friendly troops and weapons, above all nuclear weapons; - allocating tasks to operational formations and large units.

As is evident from the list given here, the basic content of a decision for a modern offensive operation must include determining the problems in employing nuclear weapons, and of these one of the main and most complex is the organization of the initial operational nuclear strike, the main purpose of which is to destroy the nuclear means and neutralize the main grouping of ground forces and aviation of the enemy.

The destruction of enemy nuclear means is the most important and, at the same time, the most difficult of the tasks. The fact is that with the means of reconnaissance available at the present time it is difficult to discover the location of enemy nuclear weapons. Attempts to develop a special device which would permit determining at a considerable distance the location of depots of nuclear warheads, assembly workshops, positions of missiles, and delivery aircraft, have not yet, according to data in journals, given favorable results. However, this does not mean that with the available ... line missing. In our view a thorough analysis of all intelligence data received from all sources can ensure the discovery of the location of the main part of the enemy's nuclear means. But this study must be very carefully and thoughtfully organized. For such a study and analysis of reconnaissance data, it is essential right now to have special groups for evaluating targets in the staffs of fronts and armies. In addition, it is necessary to continue persistently to search for new methods of getting intelligence on enemy nuclear means. In this, the
main direction must be taken not toward piloted reconnaissance aircraft, but to the use of pilotless aircraft-missiles (samolet-raketa) for this purpose, and also in the creation of a device which transmits an image during flight, determining the coordinates of objectives, precisely expediting the development of film and photographs greatly, etc., i. e., wholly answering the requirements given for reconnaissance of the enemy's nuclear weapons.

Nuclear means and missiles must be located only in well-prepared areas before the beginning of an offensive. Commanding officers of all levels must remember that if it is possible to weaken the consequences of the effect of the shockwave by means of dispersion of troops, it is possible to save the troops from penetrating radiation only by giving them cover in shelters and blindages. All movements must be carried out in the shortest possible time, at high speed, and with a considerable dispersion of troops.

The beginning of an offensive must be timed to the execution of the initial operational nuclear strike. Divisions of the first echelon must begin their move forward from shelters and areas which are completely prepared from the engineering standpoint under the cover of the initial nuclear strike or after the delivery of such a strike by the enemy. The attacker must strive to guess the enemy's intention to carry out a concentrated nuclear strike, and to frustrate or weaken it as much as possible.

During the course of an operation the reinforcement of appropriate sectors of the front must now be carried out by employing nuclear weapons and maneuver by trajectory (manevr trayektoriyami) and to a lesser degree by transferring the reserve of the front or the reserves of neighboring armies, to complement one or another army. An offensive by divisions of ground troops will be carried out along the whole zone of the front on individual axes in accordance with the requirements of the Field Service Regulations. The axes of operations of a division must be selected so that they ensure an adequate dispersal of forces and of the movement of units toward corresponding enemy groupings of troops, and should also lead into the operational depth of his defense.
In conclusion, it is desirable to emphasize once again the idea that the success of an offensive operation will, in the final analysis, depend on whether the attacker is able to neutralize substantially the enemy's nuclear weapons. If he is unable to ensure this, the offensive will be frustrated no matter what measures he may undertake. That is why it is now impossible to conduct operations with the forces of a single front, as neighboring enemy armies or groups of armies can ensure a concentration of nuclear strikes that will stop any offensive by maneuvering means of delivering nuclear weapons. For these same reasons, offensive operations of a group of fronts must be secured by the conduct by General Headquarters of a strategic nuclear strike or a missile operation with the object of neutralizing the enemy's strategic nuclear weapons means.