MEMORANDUM FOR: Assistant to the Secretary of Defense  
(Special Operations)  

SUBJECT: "The Nature of Modern Armed Combat and the 
Role and Place in It of the Various Branches 
of the Armed Forces", by General of the 
Army P. Kurochkin

1. Enclosed is a verbatim translation of an article entitled "The Nature of Modern Armed Combat and the Role and Place in It of the Various Branches of the Armed Forces", by General of the Army P. Kurochkin which appeared in a special TOP SECRET issue of the Soviet military journal Voyennaya Mysl (Military Thought).

2. This article was acquired by a Soviet official who has provided reliable information in the past.

FOR THE DEPUTY DIRECTOR, PLANS:

RICHARD HELMS

Enclosure

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Original: The Director of Central Intelligence

cc: Military Representative of the President

Special Assistant to the President for National Security Affairs

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Following is a verbatim translation of an article entitled "The Nature of Modern Armed Combat and the Role and Place in It of the Various Branches of the Armed Forces", written by General of the Army Pavel A. Kurochkin, Chief of the Military Academy in Frunze.

The article appeared in the 1960 Second Edition of a special version of Voyennaya Mysl (Military Thought) which is classified TOP SECRET and is issued irregularly. The month of publication of the 1960 Second Edition is unknown. According to the preface, this edition contains articles never before published and some speeches which have been delivered prior to being published in this form. It is distributed only within the Ministry of Defense down to the level of Army Commander.
The Nature of Modern Armed Combat

and the

Role and Place in It

of the

Various Branches of the Armed Forces

by

General of the Army P. Kurochkin

The concept of creating a special Collection of articles of the journal Military Thought (Voyennaya Mysl), for the purpose of presenting an opportunity to the leaders of the Armed Forces to exchange ideas freely and to discuss the most important problems of modern (military) art is timely and unquestionably useful. This is confirmed, at least, by the worthy and keen analysis of questions, and the decisiveness, with which the first authors of the Collection are coming forward. A discussion that starts in this fashion is headed for sharp and fundamental disputes, promising a fruitful denouement.

In the articles found in the first Collection, many new positions on the nature of modern warfare are brought up, as well as methods and forms of conducting armed combat, and regarding the employment of the branches of the armed forces in it. We shall dwell upon individual questions brought up by Colonel-General A. Gastilovich in his article, and also in the articles of Lieutenant-Generals I. Tolkonyuk and V. Baskakov that touch upon the same questions in many ways.

Is Soviet Military Art Undergoing a Crisis?

Common to the articles of Generals Gastilovich, Tolkonyuk, and Baskakov is their position that there is a discrepancy between our military art and the new conditions of nuclear warfare; regarding this, they state that it is necessary to make a bold reappraisal of our entire military doctrine, strategy, operational art, and tactics in particular. The authors of the
article speak unequivocally of a crisis which they claim
Soviet military science and military art are undergoing.

"We", says General Gastilovich, "are undoubtedly trying
to squeeze missile-nuclear weapons into the framework of the
old, habitual position of our military doctrine, only modern-
izing the latter slightly, and we forget that this doctrine
was formulated on the basis of the employment of means of
armed combat that are basically different from present-day
means and cannot be compared with them" (page 6). "The
matter does not go beyond the adaptation of the old forms and
methods to the new conditions, while it should be a matter
of completely new categories in military affairs. Apparently
the time has come to sacrifice, boldly, many of the positions
on which the basic principles of operational art and tactics
are based" - in this way, General Tolkonyuk supports Gastilovich.

"This is a clear contradiction of the theory of operational
art and can be called a crisis without exaggeration", - thus
General Baskakov would summarize the matter.

These are not just words; the posing of the question is
sharp and, at first glance, basic. However, upon deeper exami-
nation one finds that the authors put things on the agenda that
have been raised already and even partially settled. In our
opinion, there is no basis for speaking of a fundamental re-
asessment of Soviet military doctrine, or of a crisis in
military art. For our military doctrine has already been re-
examined with the introduction of atomic weapons, and that
which is viewed as a "crisis" in military art is nothing more
than the natural expression of the contradictory and surging
development of military affairs.

Indeed, of which attempts to squeeze missile-nuclear
weapons into the framework of the old positions of our military
doctrine, of what "slight" modernization of this doctrine,
are they talking about, when the very opportunity for the state-
ment of Comrade Gastilovich arose only as a result of the
formulation of new doctrine, completely different from the old
one. It is paradoxical that Comrade Gastilovich bases his
judgements on the re-examination of doctrine on the positions
of the new doctrine formulated in addresses and speeches of
N. S. Khrushchev, and in the speeches and orders of the USSR
Minister of Defense, Marshal of the Soviet Union Malinovsky,
and other government and military leaders.

Soviet military-scientific thought did, for a certain period of time, follow the path of partial modernization of the old doctrine, in order to lessen to some extent the impact of nuclear weapons on the established forms and methods of armed combat. But this evolved naturally from the objective conditions prevailing at the time, determining the possibilities of military-scientific thought. However, it should be stated that, to a certain extent, everything that was done during this period helped to develop Soviet military science and military art, and laid the groundwork for going on to the next higher step of their development for the creation of a new military doctrine.

The establishment of a completely new doctrine based on the employment of missile-nuclear weapons in armed combat was a comparatively long and complicated process. The final formulation of this doctrine could be put on the agenda only after the creation of the actual materiel prerequisites, which determined not only the development of the axes of the use of missile-nuclear weapons, but also the assurance of qualitative advances in its development, in the form of achieving unlimited range and accuracy in the destruction of targets, as well as the quantitative accumulation of nuclear weapons and the means of delivering them.

The stockpiling of nuclear-missile weapons in adequate quantities affected the characteristics, methods, and forms of modern armed combat profoundly. This was reflected in the new Soviet military doctrine and "the novelty of modern warfare and its dissimilarity with past wars".

Led by the new military doctrine and corresponding directives of the Party, the Government, and the higher military command, Soviet military-scientific thought began to clarify and define the laws and principles which have to be incorporated into the basis of armed combat at its present stage, and to search for new methods and forms of this combat, taking into consideration the nature of the political goals of the opposition's coalitions and the existing materiel base.

This process is nothing more than a re-examination of the theoretical views that have accumulated regarding the conduct
of a war and military actions of all dimensions, training, organization, and equipping of the armed forces. But this is not a bald and pointless repudiation of all previously accumulated experience of armed combat. In Lenin's philosophical notebooks the dialectical nature of repudiation is brought out as follows: "Not a bald repudiation, not a random repudiation...is characteristic and essential in dialectics...but a repudiation, as a feature of communication, as a feature of development, with the retention of the positive...." (V. I. Lenin. Filosofskie tetradi, 1947, page 197).

To speak of a crisis of military art in these circumstances--willingly or unwillingly, signifies the downgrading of the importance of a huge amount of work already carried out in this direction, and closing one's eyes to the actual situation, in other words, misunderstanding the crux of the process which is going on.

Without a doubt, the completion of a new qualitative advance, and the elevation of Soviet military science to a new level of development which answers modern requirements, involve certain "growing pains". What is required is a reappraisal of the old with a decisive rejection of everything that is of no value, and the blazing of new trails. All this is connected with overcoming the occasionally stiff resistance of various kinds of conservatives, who actually are inclined to substitute the renewal and modernization of old experiences, above all the experience of World War II, for a decisive turn to new endeavors.

The problem before the leading representatives of Soviet military-scientific thought is to clarify the new military doctrine and mobilize all our forces to fulfill the programmed directives of the Party, the Government, and the Minister of Defense to assure a new advance in the development of military science. This problem is within reason and, without a doubt, will be fulfilled in a very short time. During this struggle unprincipled conservatism will be defeated, as will harmful talk of many kinds about stagnation and crisis in Soviet military science.

Against a One-Sided Approach to the Solution of the Question of the Nature and Forms of Modern Armed Combat.

The basic thesis of the articles of Generals Gastilovich, Tolkonyuk, and Baskakov is the affirmation of the paramount
role of nuclear-missile weapons in all aspects of the combat activity of the armed forces. General Gastilovich writes: "Under modern conditions, groupings (obedineniye) of missile troops of the Supreme High Command (VGK) with their unlimited range of action and the tremendous force of their firepower have become the main and decisive branch of the armed forces... The efforts of all other branches of the armed forces...have to be directed towards the most rapid and effective utilization of strikes by the missile groupings of the VGK. Besides, the basis for planning the actions of each branch of the forces is also based on their use of their own missile-nuclear weapons, and not on the number of divisions, ships, aircraft, etc." (page 7). On page 11 he comes to the conclusion that in his "concept, the main, leading role belongs to the operations of the missile groupings of the VGK, but not for the purposes that we usually visualize them now. This is not combat with the nuclear means of the enemy, nor the weakening of his economic potential, nor combat against the reserves, etc., but the complete destruction of the enemy with nuclear weapons of megaton range against a vast territory, eliminating entire countries from the war."

I. Tolkonyuk states: "There is good reason to believe that often the will of the enemy to resist can be suppressed only by strikes of nuclear-missile weapons" (page 21). We find this in General Baskakov's article: "Nuclear weapons should be considered and employed as independent and decisive means for destroying the enemy" (page 32). It should be noted that the statements of the first two authors refer largely to the general strategic aspect, and the third--to the field of operational art. But this does not change the substance of the formulation of the question.

If we follow the concepts developed by the authors of the articles mentioned, and doubtless agree that nuclear-missile weapons should have the decisive role in assuring the possibility "of conquering in a short time", in a way, on the whole, or to achieve success in any operation, everything else seems relatively simple. It is only necessary to supply the missile troops with adequate means, provide the necessary nuclear-missile means to the ground forces and other branches of the armed forces, review certain aspects of our military strategy and operational art, and thus are created the conditions for successful resolution of the course and outcome of all armed combat.
Guided by this premise, General Gastilovich offers a fairly simple plan of action (a variation of the concept for the European theater). In this plan a countering nuclear-missile strike is made against two or three NATO countries with the purpose of "total destruction of the enemy" and the elimination of these countries from the war. In order to utilize the results of this strike, the ground forces are put into operation; thirty to forty various ground forces division quickly "finish off" the remaining forces of the enemy in the border area, and at a rapid rate they conquer the zones that have to various degrees been destroyed and contaminated by radiation produced by the massive strike of the strategic missiles, and occupy the country.

Besides, "if after the conquering of the territory of the countries that were subjected to the first massive nuclear strike, the enemy does not capitulate, then a similar all-destroying blow may be repeated against the next country." The substance of the variations of actions proposed by the author amounts on the one hand, to the complete destruction of the enemy and withdrawal of a country from the war, and on the other hand, to the conduct of operations of the ground forces in order to overrun the destroyed and contaminated zones, the suppression of any remaining resistance, and the occupation of the country.

In our opinion, the concept presented has many contradictory features. In the first place, the concepts "total destruction of the enemy" and "eliminate a country from the war" mean the end of all resistance, and capitulation of the countries. But once this is so, what major operations by significant elements of the ground forces can we talk about under these conditions? Why throw in thirty to forty divisions with the purpose "mainly of conquering rapidly the zones that, in varying degrees, have been destroyed and contaminated by radiation"? One does not need much of a flair for fantasy to imagine what these troops will encounter in a country that has been subjected to a nuclear-missile strike "for complete annihilation". Panic, chaos, masses of dead and mutilated persons, and the ruins of the destroyed cities will exert a deleterious influence on the troops. The same conditions will oblige the troops to undertake the incredibly complicated tasks of establishing order, carrying out rescue - rehabilitation (spasatelno - vosstanovitelny) work, organizing relocation, rendering medical assistance, and providing rations for large
masses of people. At the same time, the troops themselves will be exposed to irradiation and contagion and many complicated problems affecting them can arise, which will not be so simple to solve. The questions of billeting, supply, medical and sanitation services, and others will become extremely complicated, and sometimes they will simply be insoluble.

Having taken the concept proposed by the authors as a basis, we cannot avoid falling into an insoluble argument concerning the place they assign to nuclear-missile weapons, and the role of the ground forces and the other branches of the armed forces. This conception leads to the repudiation of any significant place for the ground forces, and in fact abolishes all branches of the armed forces except missiles; it abolishes strategy, operational art and tactics, and joint actions by the branches of the armed forces and the arms of troops composing them which have been studied and established.

What are the reasons why the conception developed by Generals Gastilovich and Tolkonyuk is groundless?

First of all, it is impossible to combine the incompatible. One cannot speak of the possibility of "total destruction of the enemy", of the possibility "of crushing his capability and will to resist", of the elimination of entire countries from a war by nuclear-missile weapons alone, on the one hand, and the necessity and possibility of conducting on the territory of these countries large-scale and vigorous operations of the ground forces on the other hand.

Second, and most important, the solution of the problem must be sought only through a thorough evaluation of the situation, which is possible only by taking the political factors into account along with the materiel factors. The content of the new Soviet military doctrine orients our military thought towards exactly this kind of approach to the solution of questions.

In fact, our new military doctrine is based on the paramount role of nuclear-missile troops and provides for the carrying out of decisive nuclear-missile operations. Our nuclear-missile troops are capable of erasing from the face of the earth any country or countries attacking us or other Socialist states.
However, this basic premise stems only from the possibility of such a destructive war being unleashed by a frantic clique of imperialist lunatics who are in power. In this case, we have to be ready to deliver the most destructive blows against the instigators of the war.

Herein we cannot escape the fact that the bastion of those who inspire this policy of playing with fire is beyond the confines of the European continent; so, in the event of the unleashing of a war, the main efforts of our Armed Forces, first and foremost of the chief component - the missile troops - will be directed primarily against the decisive element of the enemy coalition. Here too, however, the question can only lie in the plan to defeat the enemy quickly and completely and eliminate his capability to continue active military operations. This is the basic and the most complicated task facing our missile troops. It has to be solved in the shortest possible time, with maximum use of the effectiveness of nuclear-missile weapons.

The success of the outcome of this operation (operations) of the missile troops will depend on a series of circumstances, above all, on the selection of the proper moment to inflict a strike on the most vitally important enemy centers, primarily on his centers of nuclear-missile weapon production: and intercontinental-missile launching bases. The result of the operation must be the ruination of the military and governmental machines of the aggressor. A blow of exactly this type can also cause other partners of the enemy coalition to give very careful thought to the advisability of entering the war. But an indispensable condition of complete victory must be the readiness of the missile troops to carry out one or more operations against some of the countries of Europe and other continents. We have in mind the countries that will undertake to follow their senior partner into the war. The intensity of the reaction must fluctuate, depending on the nature of the actions of the armed forces of one country or another.

In the determination of the degree of reaction it is necessary to consider that nuclear-missile weapons must be used in a decisive and purposeful way, but only within the limits of expediency. The forsaking of this requirement can lead to a situation wherein a war unleashed by aggressors will involve such
large human and material losses on both sides that the consequences may be catastrophic for mankind.

In one case it may be necessary to conduct operations for the complete destruction of the means of retaliation, and in another—to destroy the strategic nuclear weapons bases. It is clear that in a strategic situation of this type it may be possible to find a place for the utilization of the other branches of the armed forces of the Soviet Union, and of the forces of other countries of the Socialist camp.

We are also inclined to think that, in some cases and in some directions, the primary role will belong to ground forces equipped with nuclear-missile weapons. This can occur in the unfolding of events when, after execution of the countering nuclear-missile operation against the main bulwark of the imperialist bloc, or simultaneously with it, a strike is delivered against a group of objectives in the countries which allowed the use of their territory by their senior partner for the launching of the first blow. This strike will not have the purpose of "complete annihilation of the enemy" in the sense that General Gastilovich uses it. The strike is calculated to disorganize the governmental control and destroy the main strategic and operational nuclear weapons bases, as well as the main formations of enemy troops. In order to achieve the results desired of the operation, the ground forces will carry out joint operations with the air forces and the navy for the complete destruction of the armed forces of the enemy and the achievement of the ultimate goals of the war. The ground forces, with their mobility and tremendous firepower, are aiming in decisive directions - the seizure of key positions of a country, possession of which will decide the outcome of the campaign in a given theater.

The directions of troop actions are stipulated in the overall scheme of a campaign. In addition, an effort should be made to avoid troop operations in areas where the terrain is highly contaminated by radioactivity arising as a result of our own strategic nuclear-missile strikes. The troops should use their own nuclear-missile weapon capabilities to support their operations. The expenditure of these means should be strictly limited and aimed at the destruction of enemy formations capable of disrupting or slowing down the successful development of attack in decisive
directions.

When necessary for the assurance of a correlation of forces favorable to our troops, the forces and means of VGK missile large units (soyedineniyе) may carry out strikes upon receipt of requests for fire from a front and an army.

Thus, we consider that the dominant role in an operational-tactical plan will quite often belong to the ground forces, by dint of their being equipped with nuclear-missile weapons, and above all, to the highly mobile motorized rifle and tank large units.

In regard to the size of the Armed Forces, we consider that a large part of the adult population, capable of active participation, will be mobilized and used as needed to guard and defend the entire territory of the country. Among the special organizations, the rescue-rehabilitation detachments will play an important role.

Obviously, self-defense and guard units and large units, as well as rescue-rehabilitation detachments, have to be created in accordance with territorial criteria and be prepared in advance to fulfill their tasks.

However, the size of the regular ground forces will undoubtedly be large; in other words, without a massive army it is impossible to have rapid and definitive victory in a future war. It is particularly necessary to consider the colossal losses that the ground forces will suffer, which will require sizeable reserves trained for operations.

In connection with the great probability that under certain conditions of the situation it will be necessary for the troops to fulfill the tasks of occupation, we consider it necessary to give special emphasis to the importance and responsibility of this function of the troops and to the advisability of carrying out at least the most elementary training of the troops in this sphere. In the past there have been serious difficulties in this regard. Now, under the conditions of the wide use of nuclear weapons, it is necessary to surmount the serious complexities of the situation. The command of field troops is confronted with the necessity not
only of maintaining order among the troops themselves, but also of implementing measures for the organization and supervision of huge masses of people in a state of panic. It will be necessary to clear roads, to organize the evacuation of people from contaminated areas, and to provide huge masses of people with medical aid and food. To ignore these measures may lead to very drastic consequences.

Several Aspects of Operational Art

A new assessment of a number of questions of operational art by the authors of the special Collection is indicated, timely, and necessary. In the vanguard of these stands the solution of such questions as the place, role, and conduct of nuclear-missile operations in modern warfare, questions about the scale of modern front and army operations, regarding new principles of planning offensive operations, regarding the principle of concentrating the main efforts to destroy the enemy's nuclear means and main troop formations, regarding the creation of rescue-rehabilitation troops, and the working out of operations within military districts. A profound elaboration of these questions, on the basis of mass employment of nuclear weapons, will be a resounding contribution to the development of Soviet military science.

In this connection, it must be noted that the formulation of some of the questions, especially in the articles of Generals Gastilovich and Baskakov, in our opinion, are faulty. This applies particularly to the question of operational offense and operational defense, which we shall dwell upon.

The substance of the statements of Generals Gastilovich and Baskakov on this question amounts to the following: nuclear weapons eliminate the boundaries between operational offense and operational defense (page 37); in modern conditions offensive and defensive operations will be distinguished from one another mainly by the number of nuclear weapons allotted them (pages 12 and 15), in these operations the methods of troop operations will be identical (pages 15 and 37); defense, in the former meaning of the term, can only occur on a tactical scale (pages 14 and 37); the creation of defensive zones is impractical—any large unit executing defense in place will be destroyed by nuclear strikes by the enemy or will merely be bypassed by him (page 15); on an operational scale,
defense cannot be stable (page 15).

Can we agree with such assertions? We feel that we cannot, primarily because these assertions do not conform with, and at times clearly contradict, Marxist dialectics in general, and the new conditions of conducting armed combat in particular.

In actuality, mass employment of nuclear weapons does change the nature of modern offensive and defensive operations radically. Large-scale maneuvering, aggressiveness, and decisiveness are now inherent to both an offensive and a defensive operation. Under modern conditions, an offensive operation will have more elements of defense and the defensive operation will have more elements of an offense. However, this has not made, and will not make, a defensive operation an offensive operation.

It does not follow that we turn our main attention to the similarity of offense and defense if we want to understand the substance of this contradictory phenomenon, but to their differences, to the study of the specific peculiarities of the opposing aspects, to the exposition and study of the major and minor aspects of this contradiction, without which it is impossible to develop the correct approach either to operational art or to tactics.

Obviously, we should not speak here of erasing the dividing line between operational offense and operational defense, but of the new nature of these conflicting aspects of armed combat, caused by the mass employment of nuclear weapons, and of the need to develop qualitatively new methods of conducting modern offensive and defensive operations. Talk of "erasing the dividing line" only leads us away from the solution of urgent problems of modern offense and defense.

It is likewise impossible to agree with the authors' declaration that modern offensive and defensive operations will be distinguished from one another primarily by the number of nuclear weapons allotted them.

The forces and means of the sides, whatever their quantity and quality, cannot in themselves determine the specific peculiarities of one or another type of combat operation. It is one thing to have plenty of forces and means (including nuclear weapons), but
quite another to defend oneself and, on the other hand, to start offensive actions when these forces and means are considerably less. An example of this is the battle at Kursk, where we had plenty of forces and means but were on the defensive, while on other fronts, where the forces and means were significantly less, we were taking the offensive.

The offense, as a rule, usually has comparatively greater forces and means than the defense. But who would say that in modern conditions it is impossible to attack and win with equal or even smaller forces?! Nuclear weapons indeed create more favorable conditions for the triumph of this concept of military art. But if this is so, the quantity of forces and means in general, and of nuclear weapons in particular, cannot serve as a criterion of the type of operation, because it cannot determine the characteristic and specific traits of one or another type of combat operation.

In our opinion, it is not the quantity of nuclear weapons which is the factor determining the identifying features of operations, but the targets and the nature of the combat operations, and the methods and ways in which they are carried out, insofar as they alone allow us to see the specific peculiarities of attack and defense, their substance. The authors ignored these factors and took as a foundation the incidental and transient, which led them to incorrect conclusions.

General Gastilovich, alluding to the fact that part of the forces of an army or front may take the offensive during a defensive operation, declares that defensive operations of a front and an army will resemble an offensive operation in their operational methods. General Baskakov adheres to more or less the same opinion, asserting that "the difference between the conduct of an offense and a defense....remains in the tactics alone" (page 37).

It is impossible to agree with such assertions. We always had elements of offense in our defense, but we never considered the operational methods of troops on offense and defense as a sign of equality. This must not be done now, as this will lead unavoidably to the glossing over of the specific traits of offense and defense, and to a one-sided and superficial scrutiny.
of the complex phenomena of armed combat, with all the consequences that arise therefrom.

Defense has a clearly defined goal—to disrupt or stop (hold up) the enemy offensive, inflict sizeable losses on him, and create favorable conditions for going over to the offensive. And if it does not succeed in withstanding the offensive, it does not achieve this goal. The question arises as to why we have a defense which is incapable of stalling an enemy offensive, inflicting losses upon him, and effecting favorable conditions for our troops to go over to the offensive?!

Consequently, the defense has to be stable if we wish to achieve the goals; nuclear weapons cannot alter this requirement. It is a different matter that the stability of the defense under modern conditions need not be bound rigidly to holding whatever has become of the main line of resistance and the forward area. But this is a question of the development of new methods for conducting a defensive battle and operation.

The fact that the enemy, having nuclear weapons, is able to destroy the defense, break through the defensive line, or bypass the troops that occupy it, does not mean that defensive lines or areas are not needed, or that the defense cannot be stable under modern conditions. To speak of defense without defensive lines or areas is like talking about an offensive without an attack, without forward progress. If we approach this from the standpoint of the possibilities of nuclear weapons, it will be even easier for the offense to destroy or bypass enemy troops if they are in assembly areas.

Obviously, we should speak of another thing: what defense should be like under modern conditions, what the characteristics of a defensive line or area should be; how, where, and in what time periods defensive installations must be created, how to ensure the stability of the defense, how to safeguard personnel and combat equipment in the defense, and what methods of conducting a defensive battle and operation should be adopted in order to attain the goals of the defense.

In his article, "Mountain Warfare Then and Now," F. Engels, pointing out the validity of views on the impregnability of the so-called Swiss mountain redoubt, wrote: "Does this mean that
the defense of a mountainous country is completely useless? Of course not. It means only that the defense must not be merely passive, but should draw on its power and mobility, and operate offensively whenever an opportunity arises" (F. Engels Selected Military Works, Voyenizdat, 1957. page 99).

In other words, in conditions when the offense becomes stronger than the defense, the problems of the latter must be solved, not by abolishing the defense, but by developing new, more advanced methods of conducting it. Nuclear armament gives us every opportunity for doing this. In the hands of the defense it increases the stability of the defense immeasurably. Of course this will be a real defense, not one backed by some sort of thin defensive line of troops under cover, as General Baskakov recommends. It stands to reason that neither this line nor the defensive zone is capable of containing an enemy that is equipped with powerful nuclear weapons. Modern defensive battles and engagements will take place in large areas, along the front and in depth, and often in separate directions. For this reason, operational defense must be deep, and capable of resisting the powerful, dispersed strikes of the offense. This can be achieved by creating a system of defensive areas echeloned in depth, and also by dispersed disposition of the reserves along the front and in depth.

The basis of modern defense will apparently consist of holding defensive areas firmly in conjunction with obstacles, operating offensively wherever the slightest opportunity presents itself, and anticipating the enemy in the delivery of strikes. It is not difficult to imagine the gravity of the situation of the offense if the defense is able to stop it. Even a small number of nuclear strikes, against fairly dense, openly deployed combat arrays of the offense, can inflict such losses that the offense will not be able to win even by large-scale nuclear strikes against the defense. This is an important advantage of modern defense, the basis of which has to be a combination of holding firmly defensive areas which are separate, not clearly defined, but interrelated from the standpoint of firepower by decisive counterattacks from different directions by the reserves and the defending troops, carried out right after the delivery of nuclear strikes.
Proceeding from this, we consider it possible to indicate the fundamental directions in which, in our opinion, problems of modern defense must be solved.

1. Increase the firepower of the defense, the basis of which will be nuclear weapons and the firepower of antitank means; these means must permit the defense to win the battle of firepower against the offense and force the latter to give up the attack or delay it. The solution of this problem must follow the path of extensive shifts of trajectories of nuclear-missile weapons, as well as the path of creating in the defense, areas of resistance by fire, based on the utilization of systems of long-range control of antitank and rifle fire. The creation of areas of resistance by fire has very great significance in increasing the stability of the defense, as these areas are capable of resisting the nuclear strikes of the enemy much better than the conventional defensive areas can, and they can operate practically without limitations in an area that has been contaminated by radioactive materials.

2. Increasing the mobile capabilities of the defense and its aggressiveness, in order to stop an enemy drive by building up troops quickly in the threatened areas, and to destroy him by nuclear strikes, and bold counterattacks and counterblows. The solution of this problem must take the path of creating powerful mobile reserves dispersed along the front and in depth, and of developing new methods of conducting a defensive battle and operation, as well as the path of widespread use of portable obstacles, especially proximity-controlled minefields. A well-thought-out system of quickly installed obstacles is capable of inducing confusion in the offense and inhibiting its progress at a point which is favorable for delivering nuclear strikes and executing counterattacks.

3. Increase the capabilities of the defense for protection against the nuclear blows of the offense by means of a system of improving and developing new, high-efficiency engineer apparatus, of creating compact, portable designs of defensive installations that can be assembled and dismantled, of providing apparatus with hinges for entrenchment, of developing explosive devices for making individual foxholes and of carrying out other measures, directed at the fulfillment of tasks of engineer support of anti-atomic protection (PAZ) for several hours of units and large units, as well as the improvement of individual means of anti-chemical protection and of the protective qualities of combat equipment, directed
toward the assurance of the feasibility of conducting defensive operations in an area contaminated by radioactive materials.

The solution of these problems will be a qualitative advance in the organization and conduct of a defensive battle and operation, a new stage in the creative development of modern defense.

* * *

We have touched upon only a few questions of strategy and operational art, the correct interpretation of which, in our opinion, has profoundly important meaning for the solution of all other questions of military art. Not claiming that our judgements are infallible, we hope that a wide exchange of opinions in the pages of the special Collection regarding these questions will help to find their best solutions.