MEMORANDUM FOR: The Director of Central Intelligence

FROM: William W. Wells
Deputy Director for Operations

SUBJECT: MILITARY THOUGHT (USSR): Certain Questions of Soviet Military Art

1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". This article describes the probable nature of future war and the methods of conducting it. Major emphasis is placed on the role of nuclear weapons, with conventional means assigned a subsidiary role. The actions of the Ground Forces are the main topic, with the focus on the offensive. Ground Forces rocket troops deliver missile/nuclear strikes; these are followed up by tanks breaking through and penetrating with motorized rifle troops accompanying in combat vehicles, these forces then destroying enemy troops in deep rear areas. The meeting engagement is discussed and the roles of airborne and helicopter-borne units are touched upon. This article appeared in Issue No. 1 (681) for 1963.

2. Because the source of this report is extremely sensitive, this document should be handled on a strict need-to-know basis within recipient agencies. For ease of reference, reports from this publication have been assigned

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The following report is a translation from Russian of an article which appeared in Issue No. 1 (68) for 1963 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is a former Chief of the General Staff, Marshal of the Soviet Union Matvey Vasilyevich Zakharov. This article describes the probable nature of future war and the methods of conducting it. Major emphasis is placed on the role of nuclear weapons, with conventional means seemingly assigned the subsidiary role of exploiting the results of these weapons. The actions of the Ground Forces are the main topic, with the focus on the offensive. The usual scenario has Ground Forces rocket troops deliver missile/nuclear strikes; these are followed up by tanks breaking through and penetrating with motorized rifle troops accompanying in combat vehicles; these forces then destroying enemy troops in deep rear areas. The meeting engagement is discussed and the roles of airborne and helicopter-borne units are touched upon. The latter part of the article extols the value of Marxism-Leninism as a guide for military affairs.
Certain Questions of Soviet Military Art  
by  
Marshall of the Soviet Union M. Zakharov

Recently in the press, and in our academies as well, certain statements have appeared which take an incorrect view of many principles of military art. In this article we should like to dwell upon certain principles of Soviet military doctrine and set forth our opinion on a number of questions of tactics and of operational art.

I. THE POSSIBLE NATURE OF A FUTURE WAR AND THE METHODS OF CONDUCTING IT.

The Communist Party and the Soviet government persistently pursue a policy designed to prevent war and to preserve and strengthen peace. This peaceful policy, which serves the interests of peoples of all countries, is based on the Leninist precept of peaceful coexistence and economic rivalry between the socialist countries and the capitalist countries, and of the inevitable victory in this rivalry of the forces of socialism.

But despite the long and persistent struggle of the Soviet Union, the other socialist countries, and all peaceloving states for universal and complete disarmament, the aggressive imperialist states not only are unwilling to disarm, but on the contrary are constantly building up their armed forces, using the slightest pretext to aggravate the international situation. The nature of imperialism has not changed. It remains as before rapacious, inherently bent on aggression and war. International imperialism -- especially American -- represents the chief threat to the cause of peace. American imperialism has established a gigantic war machine, a system of aggressive military blocs, has subordinated the economy of many capitalist states to the arms race, has entered into criminal collusion with the West German militarists and revanchists, and threatens humanity, and especially the socialist countries, with devastating thermonuclear war.

Assessing the situation realistically, our government is taking all measures to prevent any weakening of the defensive
might of the Soviet Union. Our main task is to preserve the greatest vigilance and maintain constant combat readiness for immediate action to disrupt [two words missing] and the delivery of [three words missing] strikes.

A future war, if it cannot be prevented, [two words missing] will be a decisive armed conflict between the two opposing world social systems -- capitalist and socialist. [five words missing] nuclear war, whose principal means of destruction will be nuclear weapons possessing tremendous destructive power and speed of effect, with the basic means of delivering them to the targets being missiles, especially strategic missiles.

Naturally, in addition to nuclear weapons, conventional weapons -- aviation and artillery -- will also be used in a future war. They will be used in all types of combat activity by troops to accomplish a great variety of tasks, both independently and in cooperation with nuclear weapons.

The power of nuclear weapons is also a factor in the plans of our probable enemy, especially the United States of America, which heads all the aggressive imperialist blocs. It is preparing for the surprise use on an enormous scale of nuclear weapons against our country and the other socialist states, a fact openly admitted by US governmental figures, including President Kennedy.

We are certain that in a war between the two opposing social systems victory will be won by socialism, that the war will inevitably lead to the destruction of capitalism as a social system. A third world war will be exceptionally severe, destructive, and ruinous, and this fact must be thoroughly and realistically considered in preparing for such a war.

An extremely urgent question is that of the duration of a future world war. We must take into account the fact that modern means of combat make it possible in a short time -- literally within a few hours -- to wipe entire states from the face of the earth, especially small ones. It is therefore necessary to prepare to achieve victory over the enemy in the shortest possible time -- this to be determined by the degree of use of all the morale, economic, and military capabilities of the state.
The possibility of achieving the goals of a war in a short period does not in any way mean that all preparation of the country and the Armed Forces, and of our command personnel, should be oriented toward an easy victory. The task of training the armed forces for immediate decisive actions to achieve the strategic goals of a war in a short period of time is not simple. Accomplishing it requires daily and persistent work on the part of all personnel in peacetime to improve their combat skills and increase their combat readiness.

In his address at a meeting of the Main Military Council, Marshal of the Soviet Union Comrade R. Ya. Malinovskiy pointed out: "We must plan on achieving the goals of war in a short period of time, we must train personnel and prepare both the armed forces and the country as a whole toward this goal. To fight a long battle is to fight poorly, to fight with heavy losses or ineptly exploit new equipment -- this is the lot of those who are behind the times, and we do not wish to be among them."

We cannot agree with statements in the press by certain comrades to the effect that under modern conditions we cannot count on a short war, or as they put it, on a "nuclear blitzkrieg". We cannot ignore [five words missing] means of combat at our disposal, but on the contrary [one word missing] do that in order to make equal use of all capabilities for the rapid and [one word missing] destruction of the enemy.

Preparation [four words missing] requires the practical solution of many highly complex problems. We must [one word missing] understand the nature of a future war and its forms, and determine the [three words missing] of the armed forces in the qualitative and quantitative sense.

Of special importance in the training of our armed forces is the initial period of a war. Under modern conditions the successful development of military actions -- and possibly even the outcome of the entire war -- depends to a decisive degree on how well the country and the armed forces are trained for war, and on their ability to use decisively, from the very first moments of the war, all their fire power and all means of armed combat to destroy the enemy.
A great deal has already been said on the content of the initial period of a war. It will depend on the conditions under which the war is unleashed and on its nature. But the most important feature of this period will be the immediate development and conduct of the most active and decisive combat operations by all branches of the armed forces in order to disrupt the enemy attack and achieve the immediate strategic goals of the war.

Military operations in the initial period will immediately become mobile and fierce. To carry them out the greatest possible amount of forces and means of all branches of the armed forces in readiness at the time will be allocated. The buildup of their efforts will subsequently be accomplished by drawing on new contingents created according to plans for mobilization expansion.

A new world war will differ fundamentally from previous wars not only in its nature, but also in its methods of combat operations. It will be conducted with new weapons using completely different strategy, operational art, and tactics. In past wars the main target of action was the enemy's armed forces. Under modern conditions nuclear weapons make it possible not only to rout his armed forces, but also to destroy and wipe out the basis of the enemy's combat strength -- his economic potential, system of governmental administration, and strategic means of combat -- and wipe out most of the population. Nuclear weapons may be said to transcend the front line in the old sense and carry the gravitational center of the war from the zone of close armed contact to the depth of enemy territory, including his vitally important areas. Now even the territory of America will be subjected to strikes by nuclear weapons.

We must correctly understand the role of nuclear weapons in a future war and their impact on the actions of the branches of the armed forces. This is all the more necessary, since erroneous statements have been made on this subject.

Despite the fact that it is perfectly obvious that in a future war nuclear weapons will be the decisive means for achieving its goals, propositions are being advanced in which nuclear weapons are assigned the role of being merely a supporting means of fire support for the actions of the branches.
of the armed forces, principally the ground forces.

We simply cannot agree with these propositions. They underestimate the enormous destructive capabilities of nuclear weapons. The present level of development of nuclear weapons, their yield, and the presence of such advanced means of delivery as missiles of various types, point up the fact that nuclear weapons go far beyond the function of supporting the combat operations of troops.

Strategic nuclear weapons make it possible not only to destroy the enemy's means for waging war -- his nuclear means and armed forces groupings -- but also to totally destroy the economic base for waging war and disrupt the life of the country. This for all practical purposes deprives the given country of the capability of continuing the war.

The point must also be stressed that as a result of massive use of nuclear weapons there will be no continuous front line of troops, a concept which certain comrades are still extremely reluctant to accept.

Operational-tactical nuclear weapons make it possible to destroy the enemy's nuclear weapons and the basic groupings of his forces in a relatively short time. In their significance and destructive capabilities in accomplishing combat tasks, nuclear weapons are not only not inferior, but in such factors as speed, depth, and scale of effect on the enemy, exceed the capabilities possessed by combined-arms large units. It is this that makes nuclear weapons the principal means for waging a future war.

A particularly important factor in the successful conduct of a war is the initial nuclear strike. By this strike we mean the impact of nuclear weapons necessary to ensure the disruption of an enemy nuclear attack, the seizure of the strategic initiative, and the creation of favorable conditions for the successful conduct of military operations by all of the armed forces and the achievement of the goals of the war.

The principal means of delivery of the initial nuclear strike are strategic rocket forces, long range aviation, and missile submarines, as well as front nuclear means in immediate contact with the enemy -- operational-tactical rocket troops and
front aviation in areas within their range.

All branches of the armed forces must exploit to the maximum the results of the initial nuclear strike in order to accomplish their assigned tasks as quickly as possible. Fronts must go over to a rapid offensive. Military operations in sea and ocean theaters will be mounted on a major scale in order to rout the enemy navy, destroy his missile-carrying nuclear submarines and strike aircraft carriers, destroy important shore installations, and disrupt naval and ocean lines of communication -- for us it is very important to cut America off from Europe. Operations by air defense and antimissile defense forces of the country must provide protection for the troops and the territory of the country from enemy air and missile strikes.

It is on the basis of these propositions that we are resolving the basic questions of building and training the armed forces for war. We are being guided by the well-known conclusion that final victory in a war may be achieved by the united efforts of all branches of the armed forces. Accordingly, we are giving due attention to the development of all branches of the armed forces, furnishing them with modern types of combat equipment, and perfecting the organizational make-up of formations, large units, and units, so that they will meet the conditions of nuclear war to the greatest extent possible.

The main emphasis is being placed on the development of nuclear weapons, which are being introduced into our armed forces in large numbers, and on building and strengthening the main branch of the armed forces -- the Strategic Rocket Forces.

The Strategic Rocket Forces are the basis of the military might of our country. These troops are a distinctive, technically effective branch of the armed forces, placed directly under the Supreme High Command, and expected to achieve the main goals of the war.

The Ground Forces also retain their importance as one of the main branches of the armed forces. Equipping them with operational-tactical missile/nuclear weapons, the broad introduction into them of modern armored equipment and means of mechanization, and the qualitative improvement of the armament of airborne troops and the means of landing them have greatly
increased the capabilities of ground forces in accomplishing the tasks assigned to them. In a future war they will play a special role in the final rout of the enemy's ground forces and in seizing his territory. Only ground forces can advance rapidly to the full depth of theaters of military operations, seize vitally important areas and targets, and consolidate occupied enemy territory and establish order in it.

The Air Defense Forces of the Country are called upon to play a key role in a war. At the present time they are based upon surface-to-air missile troops and fighter aviation, which are used in cooperation with radiotechnical troops.

In the Air Forces particular attention is being devoted to the development of long range aviation, whose chief task consists of actions against enemy forces at sea and in the ocean, as well as to the development of front and military transport aviation.

The Navy's primary efforts are directed at routing the enemy's naval forces, especially at destroying missile submarines and routing aircraft carrier strike large units, as well as destroying his important shore installations and disrupting his sea and ocean shipments. Submarines now constitute the basis of the navy's armament. The navy is also devoting considerable attention to the development of naval missile-carrying aviation.

Under modern conditions, the matters of the timely establishment of armed forces groupings and their mobilization expansion have taken on special significance. The development of means of waging war, and the military preparations of the aggressive imperialist blocs, clearly aimed against our country -- all this urgently requires us to have in peacetime armed forces capable of successfully fulfilling the strategic tasks of the initial period of a war, which will be assigned to them by the Central Committee of the Party and by the Soviet government. Therefore the first strategic echelon of our armed forces has already been created at the present time and should, in effect, be in a deployed status in the appropriate strategic and operational dispositions.

The first strategic echelon consists of strategic rocket forces, long range aviation, air defense forces of the country, groups of forces, and border military districts, as well as
fleets. These are the forces in constant readiness.

Among these forces, the rocket forces are the most important. Launching positions, a reserve of missiles, nuclear warheads and propellant, and control systems have been prepared for them, and specific targets have been indicated. They must be ready to deliver a massed missile/nuclear strike in the shortest possible time at the first signal. Long range aviation also has this task. The air and antimissile defense forces of the country are already in a deployed status in peacetime in readiness to repulse a surprise enemy air and missile strike.

Groups of forces and border military districts with their large units in constant readiness and with those that mobilize fully in a short period of time must be ready to deliver where possible, using operational-tactical rocket troops and front aviation, a nuclear strike against the enemy and immediately go over to a decisive offensive following the nuclear strikes.

Fleets kept in the main naval theaters in a state of high readiness must be in a condition to immediately launch decisive military operations against the enemy navy on sea and ocean...

... by commanders and staffs is the maintenance of constant combat readiness of all units, large units, and formations constituting the first strategic echelon. This is one of the most important national tasks entrusted to the armed forces by the Central Committee of our Party and by the Soviet government.

By combat readiness we mean not only the ability of our subunits, units, and large units to assemble quickly during a combat alert and proceed to the areas assigned to them. This is only one of the elements of combat readiness of our troops, forces, and means, albeit a very important one. Combat readiness of troops is made up of a great number of elements, of which the most important are their teamwork in combat and constant readiness to conduct combat actions under conditions of massive use of all modern means of combat, and to perform any tasks that may be assigned to a unit or large unit at the outset of a war. Units and large units that assemble quickly during an alert but are unable to perform their combat task cannot be considered
combat ready.

The basis of combat readiness is a high level of field training among troops; excellent condition of combat equipment and the ability to handle it; well-organized control of the troops and their readiness to assemble quickly; the readiness of reserves of materiel-technical means necessary for the support of troops in the event of a signaled alert; the readiness of units and large units to carry out marches over long distances. Another important condition for combat readiness is the early preparation of the territory of the country and the theaters of military operations for a future war.

The opinion that the aggressor, as a rule, is in a higher degree of readiness for waging war, while states pursuing a peaceloving policy are less well prepared, cannot be considered correct. We cannot tolerate such a proposition either in theory or in the practical training of our Armed Forces. On the contrary, all the work of our commanders, staffs, and all scientific personnel and facilities is subordinated to the goal of seeing to it that the combat readiness of our Armed Forces and the Armed Forces of the countries of the socialist camp are on the whole higher than the combat readiness of the armed forces of the aggressor.

We cannot agree with certain statements to the effect that full readiness of the armed forces comes only after [one word missing] strategic concentration and deployment, after [two - three words missing] operational disposition of troops of fronts and armies, and [three - four words missing] training for the conduct of an operation or the delivery of [two - three words missing] strikes by operational formations of other branches of the armed forces. Armed forces assigned to disrupt an attack by the aggressors and achieve the immediate goals of a war, must, as stated above, be properly deployed in advance and be in constant combat readiness to perform the tasks confronting them.

We do not of course rule out the possibility that troops of the first strategic echelon may prove to be inadequate for the accomplishment of all the tasks of a future war. We must therefore train and [one word missing] provide for [three - four words missing] the deployment in a short period of time of mass [five - six words missing] to ensure the rapid [seven - eight
words missing] within a few days,[one - two words missing] of large units and units included in the first strategic echelon. Then [two words missing]large units kept in [five - six words missing] to form a considerable number of new formations, large units, and units for all branches of the armed forces.

All these newly activated contingents will constitute the second strategic echelon of the armed forces. Its function is the [one word missing] of forces of the first strategic echelon, the decisive exploitation of success achieved up to and including complete victory over the enemy, assistance to the population subjected to enemy nuclear attack, and [one word missing] the territory of the country. We must also plan measures that will ensure organized mobilization expansion of our Armed Forces under the most adverse situational conditions and in a short time.

II. CERTAIN QUESTIONS OF OPERATIONAL ART AND TACTICS

Let us examine what are on the whole the most significant questions of operational art and tactics of ground forces.

First we must clearly understand what it is that our ground forces are at present. They are not the same forces with which we brought the Great Patriotic War to an end; they have taken on entirely new combat qualities.

The equipping of ground forces with operational-tactical missile/nuclear weapons, the extensive introduction of modern armored equipment, the complete motorization and mechanization, the introduction of qualitatively new conventional weapons, and the improvement of the armament of airborne troops and of the means of landing, have greatly increased their combat and maneuvering capabilities. Ground forces are now able to accomplish with much greater effectiveness the combat tasks assigned to them and to achieve decisive results from combat actions in the shortest possible time. We must learn how to fully exploit the combat capabilities of modern ground forces.

Ground forces will be developed even further by a still greater increase in their fire and striking power, by increasing their mobility and ability to conduct effective combat actions under conditions of the wide use of nuclear weapons and of the resulting extensive zones of destruction and radioactive
contamination. Of great significance will be the further development of armored equipment by way of improving its protective features against weapons of mass destruction, increasing the power and effectiveness of fire, and increasing its mobility and range, as well as the production of an armored combat vehicle for motorized infantry with missile and small-arms armament and with good protective features against nuclear weapons. Under continuous improvement will be operational-tactical and tactical missiles along the lines of increasing their range and accuracy of fire, and their mobility and simplicity of maintenance, as well as missile and rocket weapons with conventional warheads, especially antitank guided missiles and surface-to-air means.

The problem of transporting airborne and motorized rifle large units by air together with their combat equipment deserves serious attention. At present work is being done to develop vertical take-off aircraft, rotary-wing aircraft, and new helicopters. Searches into the possibility of developing cross-country vehicles are under way. Solving this problem will greatly increase the capabilities of ground forces in conducting offensive operations to a great depth and negotiating zones of mass destruction and radioactive contamination.

Further development of ground forces and their armament, and furnishing them with new combat equipment and means of control, naturally will confront us with many new important problems of tactics and operational art.

The development of combat means is one aspect of preparing for war. Of great significance also is the development of the methods of employing them in combat, methods of conducting combat actions, and the art of leading troops under new conditions. It is important not only to equip the armed forces with modern weapons, but also to learn how to use them with the greatest effect.

When we speak of leading troops we mean all aspects of the activity of a military commander in the organization, all-round support, and command of combat actions by troops, and the art of conducting operations and battles by the coordinated efforts of all branches of the armed forces and branch arms. We believe the most important element in the leading of troops is the creative
activity of the military commander in commanding and controlling troops during combat actions. In working out questions of leading troops under modern conditions we must proceed on the basis of the nature and methods of conducting combat actions, mainly under conditions of the initial period of a war.

The basis of combat actions by ground forces is the offensive. But an offensive under conditions of nuclear war has very little in common with the offensive used in the last war. Modern front offensive operations, for example, will be completely different in nature, scope, and especially in the methods in which they are conducted.

The chief method of conducting a modern offensive operation will be the delivery of nuclear strikes and the rapid advance by troops along the shortest axes to the final objective of the operation. The offensive will develop along axes at high speeds reaching up to 100 kilometers a day, and will be conducted without halting practically to the full depth of the theaters of military operations. During a rapid advance there may also be other methods of conducting the offensive operation -- delivering nuclear strikes and an offensive by groupings of forces along converging axes, encircling and destroying the main enemy grouping, should anything be left of it, cutting off the enemy's lines of retreat and destroying him, breaking out to the rear and attacking the enemy grouping from the rear, and various combinations of methods of action. There must be no set pattern in this matter. A troop offensive will be conducted in wide zones. The maneuvering of forces and means will be of great importance.

In an offensive operation troops will often have to conduct meeting engagements and battles. One of the special concerns of commanders during the operation will be the identification and destruction of enemy means of nuclear attack. One exceptionally important task will be that of negotiating zones of destruction and radioactive contamination.

Here the question arises: on what should the development of tactics and operational art, and consequently the training of our command personnel, be based -- a future war in general or its initial period?
The generally commendable theoretical work "The Offensive", published by the M. V. Frunze Military Academy, deals mainly with offensive operations conducted during a war, when the initial period has already ended. As for offensive operations in the initial period, the authors merely note certain special features of them. The basic propositions of the work, therefore -- pertaining to methods of conducting an offensive and of employing nuclear weapons -- are covered in a general, non-specific way. But in our view the main attention should be devoted to the initial period of a war. The offensive during this period must be the focal point of all the scientific and academic work of the academies and the military press.

Questions of the offensive battle and the offensive operation of an army require specific research and study. They must therefore be based on the initial period, i.e., developing the theory and assimilating in practice those questions of tactics and operational art that we are most likely to encounter should war begin. This will satisfy to the greatest extent the requirements for training the armed forces and increasing their combat readiness. As for the battle and operations of subsequent periods of a war, for these we should probably develop general propositions and changes in the methods of conducting military actions during a war.

Also related to this is the question of breaking through the enemy's defense. Certain comrades believe that in a future war the offensive will be conducted primarily against a prepared defense, which must be broken through in principle by the same methods as were used in the last war. They recommend carrying out lengthy preparatory fire (30 to 40 minutes), "cutting up" the main enemy groupings with nuclear strikes, moving the troops forward for a certain time into the departure position in battle formations, and then at the same time going over to the attack, breaking through the defense, and broadening the breakthrough into the depth and in the directions of the flanks.

If we take only the principal -- the Western -- theater of military operations, we find that even here the enemy does not have the forces and means that will enable him to organize the kind of defense that we would have to begin to negotiate with a breakthrough.
We believe that the breakthrough of a defense under conditions where nuclear weapons are being employed is not typical of the initial period of a war. The former continuous fronts with dense dispositions of troops will no longer exist now. An offensive by our troops will be met with a fundamentally different kind of defense, based on the retention of key areas and on the maneuvering of troops. The enemy's defensive disposition will now contain many gaps, either unoccupied by troops or occupied by weak forces. We must seek out these gaps and weak sectors and exploit them to quickly overwhelm the enemy's defense. Finding these sectors in the enemy defense is one of the main tasks of our tactical reconnaissance.

Having at our disposal powerful long-range fire means and mobile troops under conditions where no continuous front exists, makes it possible to overcome the enemy defense from the march and rapidly develop an offensive to a great depth along separate axes, to maneuver on the battlefield, and to deliver strikes against the front and rear of enemy groupings. Our troops will also attack not in a continuous front, but along axes; their disposition will contain gaps. The offensive must be organized in such a way that the enemy does not take advantage of these gaps to disorganize the battle formations of the attacking troops. For this purpose, immediately following the columns of units and large units of the first echelon, second echelons and reserves must be kept in constant readiness for a movement in any direction.

It is therefore quite correct to say that in the initial period of a future war there will no longer be any need for a breakthrough of the enemy defense in narrow sectors, or for a methodical and uniform advance by troops on a continuous front.

Proceeding from an incorrect assumption regarding a breakthrough of the enemy defense, many comrades are making serious mistakes in the matters of employing operational-tactical and tactical rocket troops and nuclear weapons. Statements have appeared in the press to the effect that nuclear weapons are a means of fire support for the actions of motorized rifle and tank divisions, and that nuclear strikes are a component part of the preparatory fire and fire support for infantry and tank actions, i.e., the old methods of using artillery are being adapted to nuclear weapons. We see a tendency to play down the role of
operational-tactical rocket troops and a disdainful attitude toward existing missile hardware, with unsound proposals being advanced on the questions of organizing and controlling rocket troops, etc.

Nuclear weapons and rocket troops are not artillery; the old methods of artillery support for infantry and tank actions are not applicable to them. Nuclear weapons employed by operational-tactical rocket troops and front aviation must be directed toward accomplishing the main tasks of an offensive operation -- the destruction of the enemy's nuclear means and of his main troop groupings, and the disorganization of control and the functioning of the rear services. As for motorized rifle and tank divisions, they must exploit the results of nuclear strikes without delay, so as to complete the rout of enemy groupings and carry out a rapid offensive into a great depth at high speeds.

The terms "nuclear offensive" and "nuclear (fire) preparation and support" are not suitable for nuclear weapons; they lead to incorrect methods of employing these weapons. The basic method of employing nuclear weapons will be nuclear strikes, which reflect the essence of the use of these weapons. We are not against such concepts as preparatory fire and fire support, but they must pertain to conventional means of destruction -- artillery and the fire of tanks and self-propelled artillery.

In certain statements, operational-tactical nuclear weapons are represented as the only means of destroying enemy groupings in ground theaters of military operations. But, as we know, this is practically impossible to do. We must bear in mind the fact that the amount of nuclear weapons intended for the accomplishment of operational-tactical tasks is not unlimited.

Proposals are being advanced to abandon "rigid centralization" in the employment of nuclear weapons and to expand the functions of the chief of rocket troops and artillery in using these weapons. In these matters we should be guided by the following propositions. The organization of the employment of nuclear weapons and the control of operational-tactical rocket troops in operations will be carried out personally by the front and army commanders and their staffs, while that of tactical missiles will be carried out personally by the division
commander. During an operation, operational-tactical missiles with nuclear warheads must be used in coordination, according to the overall plan of the front. Army commanders may deliver nuclear strikes with their own means only with the permission of the front commander. This is essential in order to prevent the purposeless expenditure of nuclear warheads and also not to impede the actions of our troops.

Questions of the employment of tactical missiles in combat actions will be dealt with differently. Here we cannot allow excessive centralization, for this would hamper the employment of tactical nuclear means during mobile operations. Division commanders deliver nuclear strikes independently with their own means during an offensive. To do so they must learn how to employ them skilfully and economically. It is important also for division commanders to be constantly familiar with the overall situation and the concept of the army commander.

As for chiefs of rocket troops and artillery, they must deal with the highly complex technical problems involved in employing nuclear weapons, and ensure constant combat readiness on the part of rocket troops for the timely and precise delivery of nuclear strikes.

Certain comrades believe that our existing missiles have already become obsolete, that they must be replaced with new ones. Proposals are being made to establish missile batteries in motorized rifle regiments, and increase the number of missile launchers in a division, army, and front.

In this connection it must be noted that ground forces have in service missiles whose tactical-technical specifications fully ensure the fulfilment of tasks assigned to a front. And if we consider that in the near future a new missile with a range of up to 700 kilometers is to be introduced into service, the combat capabilities of the front will be increased even further. This is a remarkable piece of combat equipment. It must not be taken lightly. Our main task at present is to thoroughly study and master existing missile equipment. The successful use of this equipment is possible only if there is a high level of technical competence on the part of command personnel.
This does not mean, of course, that we should be satisfied with what we have. Our scientific-technical thought must work continuously to further improve the tactical-technical specifications of missiles of all systems, in order to maintain our missile weapons superiority over the enemy in the future as well. Work is being done to build missiles with superior tactical-technical specifications. In so doing we must naturally bear in mind the capabilities of the economy; we must not divorce ourselves from reality.

In determining the organization of rocket troops, especially the number of launchers, we often work on the basis of their fire output -- on the assumption, presumably, that rocket troops must be firing continuously, as does artillery.

But what matters here is not the fire output, but rather the number of nuclear warheads issued for the operation. We should state that the organizational structure of rocket troops that we have adopted, in terms of its output fully ensures that the number of nuclear warheads issued will be employed.

Under conditions where rocket troops are in the stage of being formed, where there are still many unresolved matters and others that are not entirely clear, we must not get carried away and make unrealistic proposals. Our main attention obviously should be devoted to the solution of specific practical problems of the present day, particularly that of perfecting our present organizational structure of rocket troops and improving control over them.

It seems to us that an offensive operation in the initial period of a war will begin with a massed nuclear strike by operational-tactical rocket troops and front aviation. The time of this strike and the targets of destruction must be coordinated with the initial nuclear strike by strategic means.

The initial nuclear strike by operational-tactical means is delivered in the front zone to the depth of their range or up to the line of nuclear strikes by strategic means.

In preparing an operation, the combat actions of rocket troops cannot be considered in isolation from the actions of other front troops, since the tasks of the operation can be
accomplished successfully only if there is coordinated employment of all forces and means.

Immediately following the initial nuclear strike by front means, combined-arms and tank armies of the first echelon must, depending on the situational conditions, go over to a rapid offensive from previously designated departure areas, from combat alert assembly areas, or directly from their permanent garrison areas. This applies, of course, to border military districts and groups of forces. The rapid and organized movement of first-echelon front troops onto the axes of the offensive under conditions where both sides are employing nuclear weapons is a very complex matter to which we attach the greatest importance. Serious work is needed to find effective means of quickly moving troops onto the axes of the offensive without loss of combat effectiveness in the face of enemy nuclear strikes.

But even more complex are the matters of determining the methods of conducting an offensive operation and offensive battle, and the tactics of actions by large units and units in an offensive. Some comrades are inclined to adopt the methods of attack employed in the last war to modern conditions without substantial changes. Others acknowledge that the former methods of attack are no longer applicable to present-day conditions and that new tactics of operations must be devised, but they do not go beyond general discussions and confine themselves merely to defining the principles of an attack under conditions in which nuclear weapons are being employed.

It is quite obvious that the methods of attack used in the last war are not applicable to present-day conditions. We must devise new offensive tactics, which are also specific in all details, so that they may serve as a reliable basis for instructing troops, and be used in the combat training of large units and units.

We know that the enemy is planning to wage a so-called nuclear offensive over a period of several days. Incidentally, we consider the term "nuclear offensive" to be inappropriate, since nuclear weapons cannot go on the offensive. A grouping of enemy ground forces will be situated at a distance of 80 to 120 kilometers from the line of contact, with its reconnaissance and security forward. The main forces of ground troops may take up
the defense on the main line or be situated in departure areas
for the offensive. On this line the enemy will not have a
continuous front with a dense disposition of troops.

Our troops must preempt the enemy in going over to the
offensive. To accomplish this, divisions and armies will have to
quickly negotiate the enemy's forward security zone immediately
after the nuclear strikes, without getting tied down in battles
with his reconnaissance and security units. During this period
the attacking large units must move in march columns or, as a
last resort, in approach march formations, in tanks and armored
personnel carriers, or in combat vehicles, with strong security
in front and on the flanks. When negotiating the enemy's forward
security zone it is essential to deliver nuclear strikes with
front, army, and division means against the main enemy groupings.
The enemy's means of nuclear attack must be subjected to strikes,
as well as his divisions, especially armored divisions. In so
doing the nuclear strikes are best delivered early, before the
troops approach the enemy line of defense.

In certain published works the authors recommend bringing
large units and units up to the enemy line of defense, deploying
them into battle formations, and halting them for a time so that
they can align themselves, get their bearings, and refine their
tasks, and then go over to the attack. We consider such
recommendations to be incorrect. It would mean exposing our
troops to a nuclear strike by enemy tactical means -- atomic
artillery and Honest John, Lacrosse, and even Davy Crockett
missiles, which could result in the disruption of the offensive.

It seems to us that large units and units in such a
situation must negotiate the enemy line of defense from the march
without stopping. It is essential to exploit any gaps in the
enemy's disposition, and in the event there are not gaps in a
certain sector, to make use of areas over which aerial nuclear
strikes have been conducted, and boldly send the large units and
units into the enemy position, reach the flanks and rear of the
groupings of his forces, and quickly develop the offensive to a
great depth. Here, too, the large units and units must attack
primarily in approach march formations in vehicles. Deployment
into battle formations, and even more so dismounting from
vehicles and attacking on foot, may be done only in exceptional
cases, when there is no possibility of outflanking a center of
enemy resistance. We must try in every way to avoid frontal attacks against the centers of the enemy defense and protracted frontal battles. Such attacks will inevitably lead to a slowdown in the rate of advance and to great losses of manpower. With this method of attack individual enemy garrisons will remain in the rear of our troops but we should not be afraid of this. To destroy them we may leave a portion of the forces or bring in reserves, while the main forces of the attacking troops must rush forward.

Of course, cases may also arise where it will be impossible to outflank an organized enemy defense in a certain sector. This kind of defense will have to be destroyed by nuclear strikes, by deploying artillery, siting tanks in indirect positions, and, after a powerful artillery strike, going over to the offensive so as to complete the rout of the defending enemy. Here it also will be necessary to deploy a large unit into battle formations, and possibly dismount the motorized infantry. But these are special cases.

The presence of breaches and gaps in the enemy's battle formations enables large units and units, as already noted, to carry out an offensive by axes. In considering an offensive by axes, we have in mind not isolated actions by troops, but an offensive involving the mandatory combining of the actions of the troops under the single concept of the commander and providing fire and tactical cooperation between them, as well as the possibility of concentrating the efforts of the troops in the decisive sectors at the necessary time. This must be achieved primarily by a rapid concentration of fire efforts, and especially by the delivery of nuclear strikes, in order to destroy the enemy's means of mass destruction and his main groupings of troops. Large units and units, on the other hand, should be quickly and secretly concentrated only for the time that the decisive attacks are to be delivered against the enemy, after which they must be dispersed. And during the actions on the separate axes, the main efforts should be concentrated on the axis of the main attack, on which we are most likely to achieve maximum results in a short period of time with minimum losses.

Actions by troops by axes help to protect them from enemy nuclear strikes and at the same time provide for movement and the best opportunities of exploiting the results of our nuclear
strikes and of splitting up the enemy's grouping and destroying him in detail.

The axes of attack must take the troops by the shortest route into the most vulnerable enemy areas, and make it possible for the branch arms to exploit their combat capabilities more fully, and for large units and units to carry out a maneuver in order to deliver coordinated attacks from different directions against enemy centers of defense and against his reserves. In the process, actions by tank large units and units, and their rapid advance to the greatest possible depth, will be of particularly great importance. They must exploit to the maximum the results of nuclear strikes and, without getting involved in protracted battles with enemy forces remaining in the rear and on the flanks, rout the enemy's reserves, capture the areas where his means of nuclear attack are based, disrupt lines of communication and his control, and capture important areas and installations.

In dealing with questions of an offensive by axes, we should determine the number of troops needed for operations on each of them, depending on the capacity of the axes, on the enemy grouping, on the terrain conditions, and on the status of our troops. It probably is advisable to have on each axis at least one reinforced regiment or battalion. We must not split up our troops excessively, or we will dissipate our forces and means and will be unable to establish the kind of grouping needed to rout the enemy. Instead of attacks we could end up with meaningless pinpricks.

These appear to us to be the methods of negotiating an organized enemy defense both at the beginning of an offensive operation and while it is in progress. The key to a successful offensive is the skillful employment of nuclear weapons and conventional fire means, an extensive maneuvering of forces and means, an advance in vehicles, the rapid deployment of units for battle and the forming of columns for movement, and the all-round support of the movement of troops, especially engineer support.

The ground forces must be ready for an offensive even against a more active enemy. The following situation is conceivable: the enemy delivers a nuclear strike and immediately afterward moves his ground forces groupings into the attack.
This variant of action on his part is entirely possible. In such a case we should immediately deliver nuclear strikes with operational-tactical means against the enemy and at the same time go over to the offensive. In such a situation the offensive will assume the character of a meeting engagement, which under modern conditions may extend over a broad front.

Widely differing views exist on the subject of the meeting engagement and battle. Some comrades deny altogether the possibility of meeting battles and engagements occurring in a future war. There is also a difference of opinion as to whether the meeting engagement is an independent type of combat action or a modification of the offensive, what should be meant by a meeting engagement, and under what conditions may it occur, etc.

It seems to us that those comrades who deny the possibility of meeting engagements and battles occurring in a future war are making a serious error. There is sufficient reason to believe that military operations in theaters of a future war will take on an active, highly mobile character, and that such actions are inherent in the most complex forms of combat actions. It is entirely possible that meeting engagements and battles will be a frequent occurrence in the course of operations. This is a highly complex type of combat action and we must thoroughly train our ground forces and command personnel for it.

The opinion exists that a meeting engagement may occur only at the outset of operations in the initial period of a war. We cannot agree with this. A meeting engagement also may occur during an operation, during an encounter with enemy reserves, when repulsing his counterattacks and counterthrusts, and also his counteroffensive, and when carrying out counterattacks and counterthrusts in a defense.

The meeting engagement belongs to the offensive type of combat actions, and this type is the most decisive besides. During a front and army offensive operation several meeting engagements may occur at various stages of the operation. The same holds true of the meeting battle. During a battle involving a division (lasting a day, for example) several meeting encounters involving subunits, units, and the entire division may occur. The offensive proceeds in such a way that the meeting engagement and meeting battle become the primary method of
conducting it. A meeting engagement and battle may also occur on defense, but this does not change the offensive nature of this type of combat action.

Certain authors reduce the essence of the meeting engagement to marching movements by troops, deploying them into combat dispositions, and delivering attacks from the march in order to rout the enemy. This is an inaccurate definition of the meeting engagement. Success in a meeting engagement now depends not only on aggressive actions by troops, but particularly on their skilful use of nuclear weapons. A meeting engagement must begin with nuclear strikes and aviation actions against the enemy's nuclear means and his advancing troops. This is the key to a successful meeting engagement.

During a meeting engagement first-echelon divisions, while carrying out reconnaissance -- especially radiation reconnaissance -- must move up their forward detachments, whose task is to boldly penetrate the enemy's disposition and capture important lines and installations. The main forces of the division break through into the depth between enemy columns, quickly deploy, and from the march deliver attacks against his flanks and split up and destroy the enemy in detail. In the process it is helpful to send tank divisions and tank armies into the depth, without tying them down in battles in the immediate operational depth. In a meeting engagement various methods of action may be used, especially attacks against flanks. Frontal encounters between troops should be avoided where possible.

One very important task at the present time is improving the offensive battle tactics of the soldier, the combat vehicle, the subunit, the unit, and the large unit under conditions in which nuclear weapons are being employed. We have as yet a lot of work to do in this area. Often the troops are still taught the old way, without taking into account the employment of nuclear weapons on the battlefield; they are not trained to act boldly under the extremely adverse conditions of modern warfare. We must develop and master clear-cut methods of providing safety for the troops from our own nuclear strikes, learn how to attack through areas which have been subjected to a nuclear strike, quickly negotiate zones of destruction and of high levels of radiation, learn how to exploit the protective properties of the terrain against enemy nuclear bursts, and quickly bring up to combat
status the subunits and units that have been subjected to a nuclear strike. Negotiating zones of radioactive contamination will be an exceptionally difficult task. We must not only master to perfection methods that we have developed as of now for negotiating these zones and maneuvering troops, but must also seek new, more effective ones.

One of the special concerns of commanders at all levels during an offensive will be the detection and destruction of enemy means of nuclear attack. To accomplish this task all the means at the disposal of the commander must be allocated without delay. One effective means of combat against nuclear weapons is fighter-bomber aviation -- this is its main task. To accomplish this task missile units, artillery, and airborne landing forces will be allocated. Of particularly great importance is the allocation of tanks to destroy the enemy's tactical nuclear weapons. In each division special detachments up to a tank company in strength must be set up, whose main task must be to destroy enemy tactical missiles and atomic artillery, both by fire from fixed positions and from indirect positions, and by a daring penetration into their fire positions, firing heavily at point-blank range, and by crushing them with the tank tracks. We must realize that without destroying the enemy's nuclear means, a successful offensive by our troops will now be difficult.

Second echelons and reserves play an important role in the development of an offensive. Here the correct determination of the goal, sequence, and time of their commitment are of decisive importance. The commitment of second echelons and reserves must not only be timely, but must also be done by surprise, so that the enemy does not have the opportunity to deliver nuclear strikes against them, bring up reserves, or organize resistance on the axes of their actions. The movement of troops to the line of their commitment to action must therefore be carried out covertly and in dispersed dispositions. It is essential in a timely manner to clear the routes of movement and give them engineer preparation, and to organize efficient provost and traffic control service.

Large units and units committed to battle must, by exploiting the results of nuclear strikes, deliver attacks against the enemy from the march, quickly destroy him, and rapidly develop the offensive into the depth. In so doing they
must be deployed and wage combat only on those axes where the enemy is insufficiently destroyed and neutralized. But their main forces must advance quickly in columns or in approach march formations, bypassing enemy centers of resistance and deploying for battle only when it becomes necessary.

During an offensive operation airborne landing forces will be employed extensively. On this question as well there still exists a certain degree of misunderstanding.

In individual theoretical works and in the practice of operational training the recommendation is often made that we use available airborne divisions to assist front troops and armies in conducting offensive operations. They are landed in the immediate operational depth and are often assigned passive tasks -- seizing and holding crossings, bridgeheads, and important areas and lines until the troops arrive. This is not the function of these troops. Airborne divisions are a means of the Supreme High Command. They are to be used primarily to land in the enemy rear at a great depth, in areas subjected to strikes by strategic rocket forces, i.e., in areas which front troops cannot reach quickly.

Airborne divisions may be assigned the following tasks: by exploiting the results of nuclear strikes with strategic means, they capture important administrative-political centers, economic regions, military bases, and ports, and perform occupation functions, etc. Successful operations by these divisions in the deep rear area are possible provided there is extensive maneuvering, aggressive offensive operations, and bold and daring raids against the rear areas. Passive defense in place accomplishes nothing -- in fact it might even make it easier for the enemy to rout the landing force.

In certain cases airborne divisions may be used in support of fronts, but this is not their main task. In supporting fronts, armies, and also motorized rifle and tank divisions, extensive employment must be made of tactical airborne landing forces consisting of units and subunits of motorized rifle divisions landed by helicopter.

Airborne landing forces intended for combat actions in the enemy rear must be employed in cooperation with other large units
and units of the ground forces and especially with tank and rocket troops and aviation. Their purpose must basically be to exploit the results of nuclear strikes as effectively as possible and thus ensure high rates of advance by the troops operating from the front line, assist them in destroying enemy groupings, destroy weapons of mass destruction, as well as disrupt troop control and the work of the rear services. Tactical landing force actions must be marked by high combat aggressiveness, mobility, and boldness in delivering surprise attacks against control posts and the enemy rear and flanks, as well as by great independence on the part of units and subunits when they are performing combat tasks. The principal method of landing force actions must be the delivery of surprise attacks against the enemy from different directions.

A few words about defense. We must assume that when strategic rocket forces and operational-tactical nuclear means are delivering powerful nuclear strikes against the enemy, orienting command personnel toward conducting front defensive operations would be absolutely wrong. Our doctrine is offensive. It is based on the premise that the state provides the armed forces with powerful weapons for the accomplishment of its aggressive tasks. Thus conducting a defense on a large operational scale, to say nothing of doing so on a strategic scale, would be unacceptable in a future war. We must educate the army, and especially command personnel, in an aggressive offensive spirit, and train them to conduct rapid, highly mobile combat actions immediately following nuclear strikes.

This does not mean, however, that defense has become a dead letter. We cannot rule out the possibility that our troops, in the course of offensive operations, will on a number of occasions have to halt, sustain a loss in the rate of advance, and even resort to a defense as a temporary and forced type of combat action. This may occur on axes where the troops have been subjected to powerful enemy action, where reserves have not arrived in time, where nuclear weapons have not been supplied, etc. But in scope this kind of defense will probably be conducted by a unit, large unit, or possibly an army.

We must state candidly that we have done a poor job of working out matters of defense.
We often hear it stated that nuclear weapons must constitute the basis of any defense. But we must remember that nuclear weapons are an offensive, not a defensive, weapon. If we subject the enemy to nuclear strikes, our troops must attack on these axes, not be on the defensive. Defense will be employed primarily in those cases where the defending troops do not possess nuclear warheads, or have them in limited quantities, i.e., it must be based on the employment of conventional means. Nuclear warheads will probably be used on defense when delivering counterattacks and when going over to the offensive.

The question of the organization of defense is one that deserves serious attention. Some comrades believe that present-day defense must consist of tactical and operational zones. This being the case, a tactical zone (the zone of defense of first-echelon divisions) must include four to five positions five to eight kilometers apart, and extending along the entire front, while the basis of defense of these positions must be company strongpoints set up in positions at intervals of one to two kilometers. It is not hard to see that this is the old linear defense on an almost continuous front that was used in the last war. Such a defense is hardly likely to be stable; the enemy can easily neutralize it with nuclear strikes and break through with attacking troops.

Organizing the present-day defense is a complex matter and one not sufficiently studied. When nuclear weapons are being used, the defense probably should be set up not on the basis of continuous positions, uniformly occupied by troops, but on the basis of a portion of the forces holding key positions on the most important axes in conjunction with maneuvering actions by the main forces of the defending troops. The zones of defense for first-echelon divisions, 20-30 kilometers wide, obviously should be designated on the most probable axes of attack of the enemy. On other axes divisions may be given wider zones. In the zone of defense of a division it is advisable to set up not positions, but regimental sectors and battalion areas of defense, which consist of a system of interconnected centers and strongpoints. Each regimental sector, battalion defense area, and strongpoint must be set up on the principle of an all-around defense and be equipped with a system of trenches, communication trenches, and fire positions and shelters, as well as a system of obstacles. Naturally each sector, area, and strongpoint must be
carefully camouflaged and dummy works built. Units of the
division must be echeloned in depth (up to 15 to 20 kilometers); in
the process a considerable portion of the division's forces probably
should be situated in the depth, in prepared defense areas in readiness
to repulse the enemy offensive from position and to carry out counterattacks. Between sectors, defense areas, and strongpoints, there
inevitably will be gaps not occupied by troops. These gaps must be
covered by obstacles, means of fire and by reconnaissance. A defense
by armies may be set up in approximately the same way. It should be
noted that this kind of defense can be prepared only in advance, when
there is no contact with the enemy. During highly mobile combat actions, setting up such a defense is hardly possible.

We have no objection to dividing a zone of defense into
tactical and operational zones. A tactical zone of defense will be
set up by first-echelon divisions, while an operational zone -- by
army second echelons and reserves.

The matters of antitank defense and air defense, and also of
protection against enemy nuclear weapons, deserve considerable
attention. The importance of a counterpreparation as one of the
effective means of disrupting an offensive being prepared by the
enemy remains as great as before. To carry out the counterpreparation, aviation, rocket troops (missiles primarily with
chemical warheads), artillery, and especially tanks delivering fire from indirect fire positions will be allocated.

Along with the offensive and the defense, serious attention
must be given to the matters of regrouping troops, in particular
that of moving them up from the depth to the area of combat
actions. During military actions it will be necessary to build up
first-echelon forces and replenish losses. This will require
rapidly shifting troops from the depth and committing them to battle. The moving up of troops or regrouping them will take
place under conditions where the enemy will be destroying roads,
crossings, road junctions, and airfields by nuclear strikes. We must therefore carefully develop and comprehensively study
methods of organizing and carrying out a movement of troops by
their own means of transport, as well as by using rail, air, and
water transport.
III. CONTROL OF TROOPS, FORCES, AND MEANS

The enormous destructive properties of nuclear weapons, and the highly mobile characteristics of modern troops, result in unprecedented rapidity in combat actions, drastic changes in a given situation, and great mobility. All this calls for rigid centralization, stability, and exceptional efficiency of troop control.

The nature of nuclear war also places new and exceptionally heavy demands on commands and staffs, and on their methods of work in controlling troops, forces, and means. The role of staffs, especially combined-arms staffs, has now grown considerably. They must be well-coordinated entities, staffed with highly skilled generals and officers.

When making a decision we can no longer count on lengthy conferences with subordinates in order to hear various reports, for the situation will require that all matters be decided in an extremely short time. We must spend as little time as possible in receiving and processing situational data, performing operational-tactical calculations, making decisions and assigning tasks, as well as in organizing cooperation and support for the actions of the troops. The combat task may be assigned to subordinates in the form of a combat order, or in the form of individual short orders -- instructions from the commander personally or through his staff. In troop control the organizational work of the commander and staff directly among the troops takes on even greater importance, as does strict monitoring of the performance of these tasks.

When planning combat actions, staffs must prepare only the absolute minimum necessary number of documents, without which successful troop control would be impossible. The number of planning documents, their content, and the completeness with which they treat their subjects must be determined in each case on the basis of the specific situation.

To increase the stability and efficiency of control, extensive use must be made of high-speed communications means, and means of minor automation and mechanization as well as integrated automated systems of control must be introduced into troop control. These means are now being produced and are
reaching the troops.

We have recently held a number of large-scale exercises in troop control employing means of automation and mechanization. We must say that one thing that made a very favorable impression was a special secure communications attachment for radio sets, which makes it possible to carry on open conversations over a distance of 40 to 60 kilometers. Steps are now being taken to introduce this device at all troop levels of command. This will bring about a veritable revolution in troop control.

We must work continuously to improve the work methods of commanders and staff officers in troop control. All generals and officers must quickly orient themselves to the situation and perform calculations, and be able in the shortest possible time to make a decision, assign the troops their task, and closely monitor their execution of it. We must develop a precise commanders' language and learn how to issue short, clear, and categorical orders.

We must learn how to work from a map quickly and skillfully. A map is a mirror of the situation. Unfortunately, instances of the inept use of maps are being noticed among the troops. The habit has become ingrained of showing the position of the troops on a map with lines and curves. In the last war this did reflect the true position at the front. But now troops operate differently, moving primarily in columns -- and yet the map still shows lines and curves as before.

In providing effective troop control, an important element is a proper system of control posts. In an army, a main and a forward command post and a rear control post must be deployed; in a division and regiment -- a command post and a rear control post. When necessary, the division commander and a group of staff officers may move forward in armored personnel carriers and control the action of the units. This kind of post may be called an auxiliary or forward command post.

All control posts must be highly mobile and have a limited complement of personnel, and must provide continuous command over the troops under any situational conditions, especially when commanders and staffs are moving. The distance from one control post to another must be enough to prevent their being
incapacitated simultaneously by a single nuclear burst of medium yield. Relocating them should be done with the permission of senior commanders.

IV. CERTAIN QUESTIONS OF METHODOLOGY

At a number of exercises conducted by the Ministry of Defense in recent years, it was found necessary to draw the attention of generals and officers to a whole series of new problems of military affairs. Our military personnel face the task of devoting more attention to theoretical knowledge and the correct application of the results of research in operational and tactical training.

Just take the one question of the qualitative and quantitative changes in means of combat and the taking into account of these changes under modern conditions. This question requires constant study on the part of officer personnel. Delay in this matter creates the danger of insufficient understanding of new forms of conducting the battle and the operation, and could lead to a situation where the modern capabilities of combat means are not fully utilized under the new conditions. Converting capabilities into actual reality takes both knowledge and skill.

It is important to emphasize particularly that the development of military affairs places heavy demands on military personnel in the area of Marxist-Leninist methodology. These include the method of mastering modern matters of conducting armed warfare, the correct approach to them, and studying them in the spirit of the requirements of Marxism-Leninism.

The first basic requirement of Marxist-Leninist methodology is a materialistic understanding of all the phenomena of nature and public life.

Marxism-Leninism has shattered the idealistic view of nature and society, and has dealt a mortal blow to the preconception that certain individuals are the motive force of history and their ideas supposedly determine the whole of historical development, including the course and outcome of a war.
Marxism-Leninism has placed the study of the phenomena of public life, including military life, on the basis of historical materialism. Marx, Engels, and Lenin saw the roots of social relations in the development of material production and in the economic relations of people. Accordingly they pointed out the task of analyzing the events and facts under study on the basis of material social relations, the determining role of social existence, the interrelationships of classes, and the needs of social development.

The second mandatory requirement of Marxist-Leninist methodology lies in the need to study the phenomena of nature and society and questions of military affairs in the process of their origin and development.

In accordance with the materialistic interpretation and the requirements of the dialectic, F. Engels demonstrated the dependence of methods and forms of armed combat on the development of technology, and the changes that occur in people themselves in the process of social relations. "It is not the 'free creativity of the mind' of military men of genius," he wrote, "that has wrought a revolution here, but the invention of the best weapons and the change in the nature of the soldier himself: the influence of military men of genius at best has been limited to their having adapted the methods of combat to the new weapons and to the new fighting men." (F. Engels. Selected Military Works. Military Publishing House. 1956, p. 11).

We will not be in a position to gain a deep understanding of the changes in the nature of war, in military science, and in military art, if we are not guided by these requirements of Marxist-Leninist methodology.

If we do not sufficiently realize our great actual combat capabilities, if we do not analyze to the fullest our country's advantages over those of the countries of the Western military bloc in terms of economic, morale-political, and military potentials, if we do not come to realize the changes brought about by missile/nuclear weapons, as well as the tremendous possibilities and prospects of today for the development of science, technology, and industry, and the level of skill of our military personnel to bring to reality the capabilities of our economy and all other capabilities, we shall inevitably commit
serious errors.

Marxism-Leninism requires that one give proper attention to the study of the popular masses and to how, under the influence of the changing conditions of life, people themselves change, including their morale-political consciousness. V. I. Lenin wrote," ... the earlier theories did not embrace the activities of the masses of the population, whereas historical materialism made it possible for the first time to study with scientific accuracy the social conditions of the life of the masses, and the changes in those conditions." (Works, vol. 21, p. 40)

By studying the life of the Soviet people we realize the tremendous advantages in the moral potential of our country, which is marked by monolithism and inner unity, the ability of the people to endure the grave ordeals of war, and the selfless dedication of the people to the Communist Party.

Marxist dialectics require the researcher in any field of knowledge to observe the principle of the specific historical approach. Any military question is studied in the process of its development, in its specific historical context. V. I. Lenin defines this requirement in the following words: "The most reliable thing in a question of social science, and one that is most necessary in order really to acquire the habit of approaching this question correctly and not allowing oneself to get lost in the mass of detail or in the immense variety of conflicting opinion -- the most important thing if one is to approach this question scientifically is not to forget the underlying historical connection, to examine every question from the standpoint of how the given phenomenon arose in history and what were the principal stages in its development, and, from the standpoint of its development, to examine what it has become today." (Works, vol. 29, p. 436)

What we gain from this approach is graphically demonstrated by a study of the history of wars.

The history of wars, especially the Great Patriotic War, teaches us that combat in every war, and in the case of the Great Patriotic War even at every stage of the war, has assumed its own particular forms and has been conducted by its own methods, which are determined both by the goals of the war and the balance of
forces, as well as by the state of the economy and a number of other factors and conditions. Consequently, we cannot accept as eternal and immutable the principles of military art and the organizational forms of the armed forces. These principles change, depending, primarily, on the political and economic conditions and capabilities.

The specific historical approach requires that our military personnel devote more attention to analyzing the quantitative and qualitative changes in combat equipment, as compared with that which existed in the Great Patriotic War and the postwar period. We must study how this or that type of combat equipment developed, and how certain quantitative and qualitative changes in military equipment affected troop organization and the forms of waging the battle and the operation, i.e., how it affected tactics and operational art.

A profound understanding of these changes will help us to grasp more accurately and quickly anything new that results from quantitative and qualitative changes in modern means of combat.

Now as never before life requires that officer personnel be able to correctly assess not only changes of a purely military nature, but also the latest specific achievements in science and technology. Of considerable importance for our generals and officers is an acquaintance with the history of technology and science, especially of the postwar period. This will enhance their ability to find the key points in the development of technology, its progressions to new qualitative levels, and its impact on the nature of war and on military art.

We must learn how to foresee the further development of the achievements of science and technology and determine the possibilities of exploiting these achievements for military purposes. Just take semiconductors, which have gained a significant place in radio technology, electronics, automation, signaling, illumination equipment, missile matters, etc. The discovery of semiconductors cannot fail to bring about a profound improvement in all our military equipment, particularly in the development of lighter, portable radio sets, radar, and other military technical means where electrical power and electronics are used.
We should also stress the significance of the specific historical study of the phenomena of military affairs, in order to gain a clear understanding of the laws of armed combat and the laws governing the development of technology and their impact on military affairs.

Marxism has pointed out the law of how the nature of armed combat, and the methods and forms of conducting it, depend on weapons, combat equipment, and means of communications.

Under present-day conditions the Communist Party particularly emphasizes the fact that in a new war missile/nuclear weapons will be of decisive importance. The appearance of these weapons, together with the complete motorization and mechanization of troops, the equipping of our ground forces with tanks, the rapid development of modern aircraft and the equipping of our air forces with them, and the introduction of new modern submarines into the navy, i.e., those fundamental qualitative and quantitative changes that have taken place in the postwar period in the development of our Armed Forces, have already exerted and will continue to exert an ever growing influence on the nature, forms, and methods of conducting the operation and the battle.

It stands to reason that without carefully studying the postwar changes in the armament and combat equipment of our army and the armies of our probable enemies, we shall be unable to gain an understanding of the principles, nature, forms, and methods of conducting the operation and the battle under present conditions.

Equipping an army with motor vehicle equipment gives rise to more fluid forms of waging war and increases the mobility and maneuverability of troops. As a result the forms of waging war also become more and more diverse and more complex, and require precise and smooth cooperation between all branches of the armed forces and branch arms.

It is clear that the conduct of military science work under present conditions without adequate knowledge in the field of science and technology, is impossible.
We must also particularly stress the importance of the creative element in military affairs. Marxism-Leninism cannot tolerate a simplified, vulgar materialistic interpretation of military affairs. Military activity is to a great extent creative -- it is art in the Marxist sense of the word. In this connection it is appropriate to recall the passage from the speech of V. I. Lenin at the Eleventh Congress of the Russian Communist Party (of the Bolsheviks) where he, while warning of excessive and harmful infatuation with fantasy, at the same time pointed out where fantasy may be regarded as "a quality of the highest value." "It is wrong to assume that it is needed only by the poet. This is a foolish preconception! It is needed even in mathematics -- even the discovery of the differential and integral calculus would have been impossible without fantasy." Fantasy and dreaming move us forward, contribute to science, and inspire the scientist, the researcher, and the inventor.

Mere superiority over the enemy in forces and means is not necessarily always a guarantee of success. We cannot make the assumption that, having completed all the calculations, planned a battle or an operation, and issued the appropriate orders, we may then be certain that everything will go smoothly and more or less automatically. No, it is after a battle or an operation has been organized that the most critical period of activity for the commander and staff begins -- seeing to it that the plan is actually carried out. This requires the greatest possible creativity, the greatest amount of art, and the greatest will on the part of the commander, so that despite all obstacles, he sees to it that the concept is brought to its conclusion, and that victory is won.

Creativity is an important part of the organizational ability of a commander or chief. And it is greatly increased by a knowledge of methodology. The methodology of Marxism-Leninism helps to separate what is new and progressive from what is inert and obsolete, and to foster among personnel an indomitable sense of the new.

As the experience of the Great Patriotic War showed, the ability to size up a situation, draw from it the correct conclusions in order to subsequently achieve major successes, and the ability to be self-critical -- this has been the absolute prerequisite for the growth of our military personnel. And
conversely, the failure to appreciate new conditions and new means of combat, as well as a non-critical attitude toward mistakes and failures, the attempt to justify them in every way, and the lack of desire and will to overcome mistakes, has led to situations where at times even an experienced commander has lost the valuable qualities of a leader of troops.

Studying the experience of a war is not an end in itself. It must serve as a powerful means of developing military science, a means that ensures the development of the Armed Forces. It is precisely for this reason that we must approach the study of this experience from positions of Marxist-Leninist theory, from positions of the dialectic method.

Examining the experience of war with consideration for the postwar development of the Armed Forces of our Homeland and of the armed forces of the principal capitalist states, and with consideration for the quantitative and qualitative changes in the means of combat, makes it possible to move our military thought forward.

We see that after the Great Patriotic War the qualitative and quantitative changes in our combat equipment, as well as the correct solution of problems of organizing the armed forces (both troop large units and operational formations), a thorough consideration of their combat characteristics, and skillful exploitation of them, gives us every opportunity to develop a modern battle and operation at high speed and to a great depth. For this capability to become a reality, military science must be forward-looking and personnel must possess a highly developed sense of what is new and be capable of exploiting it.

When working on the development of our military thought, we must constantly remember that the strength of Marxist-Leninist theory lies in the fact that it makes it possible to orient oneself in a situation, understand the inner connection between events around us, foresee their development, and discern not only how events are developing at present, but also how they must develop in the future.

Marxist-Leninist dialectic proceeds from the premise that, as Lenin wrote, "When new ideas begin to sprout we must study them carefully, give them the greatest possible attention, and do
everything possible to help them grow..."

Relying on the objective study of the experience of the Great Patriotic War, on everything new that has appeared in military affairs, on the technical achievements of the postwar period both in our country and in the capitalist countries, and guided by Marxist-Leninist theory, we must thoroughly develop our Soviet military science and move it forward.

We must do everything possible to prevent a gap from developing between the capabilities of modern means of combat and the methods of their employment, since such a gap is fraught with extremely serious consequences and could lead in the end to a situation where new combat means are not fully utilized.

As of now not everything new that we develop in practice is quickly absorbed. The use of tank artillery to fire from indirect positions is but one graphic example of this.

With the introduction of the T-44 and T-54 tanks armed with 85-mm and 100-mm guns, the question arose as to the possibility of allocating them in a number of cases to fire from indirect positions. But the tank operators categorically opposed using tanks in this manner. They were supported by many others, even including artillerymen. A curious situation developed -- the barrel of the 100-mm gun stuck way out of the tank turret, but the artillerymen walked by and seemed not to notice it. It took six years for it to be recognized as artillery capable of being fired from indirect positions. It was not until 1954 that the use of tanks for firing from indirect positions was formally approved. Six years of training for our tank officers went for naught. And unfortunately even now voices are still being raised against it.

Or take another example. New means for negotiating water obstacles have been developed, which offer a new solution to the problems of making an assault crossing of rivers from the march. But at the exercises we see that not all officer personnel have recognized the capabilities of these new means. The new method of assault crossing based on modern crossing equipment screams and cries out for attention, but we still remain deaf to these cries.
At the present time the troops are able to board self-propelled crossing means long before they reach the water obstacle. Theoretical calculations and demonstration exercises in assault crossings of rivers from the march have led to the conclusion that forward detachments can board water crossing means 25 to 30 kilometers away from the river. But we are still carrying out crossings the old way -- self-propelled water crossing means move independently toward the organization point for the crossing, and either arrive ahead of time and wait for the forward detachment, or are late themselves. As a result, of course, a backup of troops develops with potentially harmful consequences, since the element of surprise is lost and the enemy can disrupt the crossing with a nuclear strike. It is important for us to have a forward detachment make a sudden assault crossing of the river in order to seize the opposite shore, quickly expand the captured beachhead, and thus support the crossing by the main forces of the division. But thus far no such bold solutions exist for this question.

In working out questions of operational art we must not divorce ourselves from the tactics and the organization of the troops and the modern means of combat with which they have been equipped. In the final analysis the achievement of the varied operational goals will depend on the actual capabilities of the troops.

Compared to past wars a future war will be incomparably more complex in all respects. It is therefore more useful for us to recall more often the difficulties of the initial period of the Great Patriotic War. The operations of this period were conducted under difficult conditions and against a powerful enemy. This is what is particularly instructive about them. This does not mean, of course, that other operations do not have to be studied. They should be studied, but from a different point of view.

In developing the theory of military art under conditions of modern warfare, in exposing the harm caused by the personality cult of Stalin, in cleansing the theory of everything alien, we must study with particular care V. I. Lenin's works of genius that deal with the direction of war and the conduct of it.
Let us recall the words of M. I. Kalinin in his article "Lenin on the Defense of the Socialist Fatherland." Urging the study of the material on Lenin's military activity, he wrote: "The study of this material would graphically demonstrate Lenin's profound knowledge of military art and the strategy and tactics of war. But then it could not be otherwise, for Lenin, after all, was the leader of the most revolutionary class -- the proletariat; he founded the most militant party in the world -- the Bolsheviks, who by their practical activity prepared and carried out the armed uprising.

"The study of Lenin's activity is an urgent necessity for all of us, and this extends to the army, its commanders, and political workers, so that we may gain a better understanding of modern events and constantly improve our knowledge of our cause."*

M. V. Frunze attached very great importance to Lenin's military activity. Thirty years ago he said, "Leninism is the entirely new spirit that has been introduced into the doctrine of class warfare. In the military sphere that concerns us, we have in a whole series of Comrade Lenin's works the kind of premises, rules, and principles that are fully analogous to our military work. It is entirely proper to transfer strategy and tactics from the area of the purely military to the area of the purely political. This doctrine of Lenin represents the quintessence of those strategic and tactical views that have guided our Bolshevik Party in its struggle against capitalism."** The study of the fundamentals of Leninism, said M. V. Frunze, is not prompted solely by a desire to expand our overall outlook but is "a natural required supplement in the study of our purely military course in strategy and the course in general tactics."

Of particularly great importance are Lenin's ideas on the interrelationship between economics and war and between war and politics, on the decisive role of economic and morale factors in the course and outcome of a war, and on the role of the rear and of armament (Works, vol. 30, pp. 15, 133; vol. 27, p. 54).

*The magazine Bolshevik, No. 2, 1943, p. 30
** M. V. Frunze. Selected Works, 1951, p. 304.
V. I. Lenin taught our military personnel always to know the enemy. "The most dangerous thing in war," said Lenin, "is to underestimate the enemy and to relax on the assumption that we are stronger than he." (Works, vol. 31, p. 150).

When studying modern military science we must be guided by what was said by N. S. Khrushchev in his report at the 4th Session of the Supreme Soviet of the USSR in 1960, where the nature of a future war and the methods of waging it were defined, the role of the branches of the armed forces in achieving the goals of war were shown, and the paths toward further development were indicated. The report set forth the basic premises of our military doctrine. We must study with the greatest of care the new Party program adopted at the 22nd Congress of the CPSU, which convincingly shows how sociopolitical, economic, and morale factors affect our military problems. Relying on objective study of the experience of the Great Patriotic War, on everything new that has come into military affairs, and on the technical achievements of the postwar period both in our country and abroad, and guided by Marxist-Leninist theory, we must thoroughly develop and advance our Soviet military science, which must express the ideas and views of our Communist Party on military matters.

The study of dialectical and historical materialism and the works of Marx, Engels, and Lenin is therefore compulsory for our military personnel, since without them it would be impossible to assimilate all the new developments that are occurring in military affairs.

In our military science work we must not be like the philosophers of whom Marx wrote: "Philosophers have merely explained the world in various ways; the problem is to change it." Our military scientific thought for the most part has only explained the so-called Stalinist military science, but has not always sought ways to change and perfect military science in the light of the new qualitative and quantitative changes that have occurred in our Armed Forces, and consequently, to come up with new forms and methods of conducting the battle and the operation. This approach has led to a stagnation of military thought, and has not brought about the necessary development in the working out of new matters in Soviet military science.
"We do not have the right to forget," N. S. Khrushchev pointed out in a speech at a reception in the Kremlin for graduates of military academies on 25 November 1957, "that with the development of science and technology, great changes are taking place in military affairs, new types of combat equipment and armament are being produced, and the methods of using them in battle are changing. This is why the Party insists that military personnel not rest on their achievements, but do everything possible to move military science forward, constantly improve their military knowledge, diligently pursue the mastery of new combat equipment, and increase the vigilance and combat readiness of the troops."

In recent years a great deal has been done in the matter of developing Soviet military science, and the fundamental propositions of Soviet military art have been reexamined. But we cannot rest on our achievements. We must not forget the splendid words of V. I. Lenin: "The whole problem is not to be satisfied with the skill that our past experience has given us, but to move inevitably onward, seek inevitably to achieve more, inevitably move on from simpler tasks to more difficult ones." To continually and persistently discover new problem questions of military theory, study them thoroughly, and solve them correctly and quickly, is the most important task of our generals, officers, and staffs of our scientific research facilities and military training institutions.