MEMORANDUM FOR: The Director of Central Intelligence
FROM : John N. McMahon
Deputy Director for Operations
SUBJECT : MILITARY THOUGHT (USSR): Some Problems
of Reconnaissance in the Preparation of
a Front's First Offensive Operation

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 discusses the
functions, organization, priorities, and conduct of
reconnaissance in peacetime and in a period of threat in order to
prevent surprise nuclear attack by an enemy and to support the
preparation of a front's first nuclear strike and first offensive
operation. It specifies the number and types of mobile and
stationary targets that a border military district is to keep
under constant peacetime surveillance by means of agent and
radiotechnical reconnaissance. This reconnaissance is to focus on
the enemy's nuclear attack missiles and aircraft, the storage and
movement of his nuclear warheads, and his large-scale exercises
and maneuvers. This article appeared in Issue No. 1 (62) for
1962.

2. Because the source of this report is extremely
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MILITARY THOUGHT (USSR): Some Problems of Reconnaissance in the Preparation of a Front's First Offensive Operation

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 1 (62) for 1962 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article, Colonel R. Simonyan, discusses the functions, organization, priorities, and conduct of reconnaissance in peacetime and in a period of threat in order to prevent surprise nuclear attack by an enemy and to support the preparation of a front's first nuclear strike and first offensive operation. It specifies the number and types of mobile and stationary targets that a border military district is to keep under constant peacetime surveillance by means of agent and radiotechnical reconnaissance. This reconnaissance is to focus on the enemy's nuclear attack missiles and aircraft, the storage and movement of his nuclear warheads, and his large-scale exercises and maneuvers.

Comment:

Colonel K. Simonyan also wrote "Special Features of Reconnaissance During the Initial Front Offensive Operation" in Issue No. 1 (71) for 1964.
Some Problems of Reconnaissance in the Preparation of a Front's First Offensive Operation
by
Colonel R. SIMONYAN

A characteristic feature of a front's first operation consists in the fact that its planning and preparation are carried out under peacetime conditions so that with the start of war the troops of the border military district (front) are capable of quickly setting about the fulfilment of combat tasks.

Continuous, active, and purposeful reconnaissance occupies an important place in the system of measures that ensure constant maintenance of the high combat readiness of the armed forces, timely and effective delivery of the first nuclear strikes against the enemy, and successful conduct of a front's first operations. And, like the other measures, reconnaissance in support of the preparation and conduct of a front's first offensive operation must be organized beforehand and conducted long before the start of combat actions, i.e., during peacetime.

Only reconnaissance that has been organized in advance and is actively operating in peacetime using the forces of the border district in cooperation with strategic reconnaissance will enable the command to obtain in time for the start of war the necessary data about the enemy and detect his immediate preparation for an attack. At no other time will there be sufficient time for reconnaissance. Herein lies the main feature of reconnaissance during the preparation of the first operations.

Indeed, if the probable enemy can start a war at any time and in the process put his main reliance on the surprise massed employment of missile/nuclear weapons, then it is fully understandable that under these conditions it is clearly necessary long before the start of war to watch his every step intently, not to let the aggressor -- especially his means of nuclear attack -- out of sight for literally one minute, to detect in good time all the changes taking in the disposition and grouping of hostile forces, to skilfully collate the systematically incoming reconnaissance information, and to
objectively evaluate the capabilities of the enemy at every given moment.

Consequently, the all-round treatment of the matters of organizing and conducting reconnaissance in peacetime in the interests of supporting a front's first offensive operation has extremely important theoretical and practical significance and naturally requires special attention.

However, in the pages of our military press, during the discussion of these or other problems of the conduct of combat actions in the initial period of war, the matters of reconnaissance in the interests of supporting the first operations are examined only within the framework of a war already started or at best of the period of threat.

It is perfectly obvious that such an approach to the solution of the problems of reconnaissance is mistaken and even harmful, as it underestimates the importance of reconnaissance for the successful conduct of the first operation, and means that it does not ensure the constant combat readiness of troops for immediate actions at the start of war and dooms these actions to failure.

Right now the probable enemy maintains his armed forces in the main theaters of military operations at such strength and such a degree of combat readiness as will permit him to go over to combat actions without considerable mobilization measures, within the very short time periods needed merely for notifying the troops and for having them occupy departure positions and for missile means to occupy firing and launching positions.

Thus, the general combat alert of the US ground forces in Europe, conducted in March 1961, showed that the 7th Field Army at full strength is able, after the signal, to arrive at the concentration areas and bring itself to combat readiness in 7.5 hours. Ground forces nuclear weapons means require no more than six to nine hours to occupy launching (firing) positions and prepare missiles for launching. Bringing delivery aircraft to combat readiness is done even faster.

Consequently, if our reconnaissance does manage to detect in good time the beginning of the enemy's immediate preparation for
an attack, even in this case the duration of the period of threat may amount to a few hours in all. There is no doubt that during such a limited time it is impossible to fully reconnoiter the enemy operating in the zone of a given front. For instance, in order to disrupt the surprise nuclear offensive of an aggressor and thereby ensure the successful conduct of the front's first offensive operation, it is necessary even in peacetime not only to discover the strength of forces and the grouping of the enemy to the full depth of the theater of military operations, but also to determine the targets to be hit in the first missile/nuclear strike. To assert that these tasks can be accomplished in the period of threat -- and especially after the initial nuclear strike of an aggressor -- is a delusion. This assertion is unsound in theory, since it incorrectly evaluates the capabilities of reconnaissance and in actual practice will lead to adverse consequences.

Thus, we believe that in border military districts (groups of forces) in peacetime it is necessary to have well-organized effective reconnaissance of all types with the tasks to be accomplished by it fully subordinated to the support of the preparation and conduct of the first operations. In conformity with this, it is necessary to introduce substantial changes in the content and nature of the peacetime reconnaissance activity, not only of the staffs of military districts, but also of the staffs of armies, divisions, and branch arms. The main content of this activity must become not only the combat training of reconnaissance units and subunits, but also the actual conduct of reconnaissance, the purposeful study and accumulation of valid reconnaissance data about the actual enemy, and the strict systematization and recording of the data on the number and nature of targets so that every staff of the border military district (group of forces) can at any time know the complete descriptions of the targets which are offering resistance to the advancing troops and are to be hit upon the delivery of the first missile/nuclear strike in the zone of actions of the front.

For these same purposes it is necessary, as the directive of the Minister of Defense on operational training for 1962 requires, to continue the study of the theaters of military operations with all generals and officers, paying special attention to a thorough knowledge of the axes and areas of the probable actions of formations and large units according to their
probable assignment.

The actual conduct of reconnaissance in peacetime, of course, does not in the least mean renunciation of thorough concealment of reconnaissance actions, thorough clandestinity, and all-round camouflage. Reconnaissance actions in peacetime must not arouse in the enemy excessive suspicions, much less cause provocations or unnecessary aggravation of the situation in the border zone.

In concretely examining the organization and conduct of reconnaissance in the interests of supporting a front's first offensive operation, one should above all determine the number and nature of the targets which will have to be reconnoitered in the zone of actions of front troops and, in connection with this, the requirement for reconnaissance forces and means.

As calculations show, in the zone of a front offensive the targets may number from 400 to 450. They are divided into two basic groups.

The first group is mobile targets: operational-tactical missile units; units, large units, and staffs of the ground, air, and naval forces; control and guidance centers and posts, field type surface-to-air guided missile units, etc., i.e., those targets which will, when the enemy starts immediate preparations for an attack, change their permanent locations and go to the areas of operational deployment (launching and firing positions). Continual surveillance of these targets is required.

The second group is stationary targets: operational and strategic missile bases, base depots, and fixed positions of surface-to-air guided missiles, airfields, naval bases, bridges, and transportation centers. Systematic monitoring of these targets is required for the purpose of determining the nature of their activity.

Undoubtedly, detection of all the enumerated targets under peacetime conditions is beyond the power of a single border district conducting reconnaissance in this period with relatively limited forces and means -- basically agent and radiotechnical reconnaissance only.
Peacetime reconnaissance in a given theater of military operations will be conducted according to a unified plan of the General Staff by the combined efforts of strategic reconnaissance, state security organs, and the operational reconnaissance of the border military districts (groups of forces), border guard troops, etc.

To efficiently use the forces and means subordinate to the enumerated staffs and organs and exclude unnecessary parallelism in reconnaissance requires allocating reconnaissance targets among them and organizing close cooperation and constant exchange of information. Therefore, the border district will receive reconnaissance data not only from its own operating reconnaissance organs, but also from the General Staff in the form of intelligence summaries, informational, reference, and other materials and, besides that, in the form of materials from adjacent districts (fleets), border guard troops, and counterintelligence organs. In turn, the staff of the district must systematically inform the General Staff, submitting to it the information obtained on the enemy.

The experience of the last war and the reconnaissance activity of some staffs under peacetime conditions show that the foreign military press and radio, and materials from interrogation of border violators and defectors occupy an important place in the collection of the necessary reconnaissance information.

For instance, after the end of the Great Patriotic War, the staff of the 8th Guards Army arranged for the regular receipt of the "Stars and Stripes" newspaper, the organ of the American occupation forces in Germany. On the basis of a comprehensive analysis of the materials published in this paper and partly from the information obtained by interrogating those violating the demarcation line -- American servicemen and German citizens -- the staff of the army in the course of two months found out nearly the entire disposition of American troops in Europe down to the regiment, inclusive, which was subsequently confirmed fully by documentary data.

At the same time, it is important to emphasize that information obtainable from legal sources will often be incorrect and confused; therefore, it must in all cases undergo careful
checking and obligatory confirmation by other sources of intelligence.

Needless to say, all the reconnaissance activity of the staff of a border district in the interests of supporting the front's first offensive operation is a long, complex process. Based on the concept of the first operation and the available data about the enemy, the staff works out a detailed reconnaissance plan. It must define the volume and content of the tasks which reconnaissance has to accomplish in peacetime and in a period of threat, as well as the possible variants in the use of reconnaissance forces and means during the first operation on the basis of the specific tasks to be accomplished in it by front troops.

The reconnaissance plan must work out with special thoroughness the measures supporting the first missile/nuclear strike of front means through the final reconnaissance of the targets (installations) to be hit by this strike. In addition, it must indicate the tasks for the reconnaissance of the enemy on the axes of actions of front troops as specified by the plan of the first operation.

In conformity with the reconnaissance plan, it is necessary to draw up reconnaissance instructions beforehand for the reconnaissance means of front subordination and for the armies. Those means which are allocated to conduct reconnaissance in peacetime are given special instructions.

District (front) means of reconnaissance must be used to reconnoiter those targets which are to be destroyed in the first missile/nuclear strike to the full depth of the range of the front nuclear means and those targets through whose activity one can establish the start of the enemy's immediate preparations for a surprise attack.

The most important of these targets to be reconnoitered in the territory adjoining the border guard district are primarily the enemy means of nuclear attack which can take part in the first nuclear strike and the nuclear weapons depots. In the offensive zone of the front such targets may number around 40, including two Redstone (Pershing) guided missile battalions, four to six Mace (Matador) cruise missile squadrons, nine to ten
Corporal (Sergeant) guided missile battalions, three to four field type surface-to-air guided missile battalions, and 20 to 25 nuclear weapons storage depots. To disrupt the nuclear attack of the enemy it is precisely these means which must be destroyed first of all, whereas the organic means of nuclear attack and those attached to divisions for reinforcement, which cannot take part in the enemy's first strike owing to their short range (18.5 to 40 kilometers), will be destroyed both at the time we deliver our strikes against the tank and infantry divisions as well as during the ensuing course of the front's first offensive operation.

One of the enemy's main means for delivering the first nuclear strike is aviation, including carrier-based aviation, and it will apparently remain so in the near future. According to the experience of the maneuvers conducted in recent years by the NATO Allied Armed Forces, the number of nuclear warheads to be employed by delivery aircraft constitute 70 to 80 percent of the total number to be allocated for the first strike. Consequently, the reconnaissance of aviation at its home airfields and the organization of its continuous surveillance affords the possibility not only of determining the targets for our nuclear strikes, but also of detecting the enemy's immediate preparation to deliver a surprise strike. In the zone of the front the enemy may have 40 to 50 tactical aviation airfields and on coastal axes three to four aircraft carriers in addition.

The destruction of the enemy's combined-arms and especially tank large units in our first missile/nuclear strikes will deprive him of the capability of carrying out an organized invasion with ground forces. Therefore, the enemy's combined-arms large units are very important reconnaissance targets for border districts in peacetime and continuous surveillance over them has to be organized both in their permanent garrison areas and especially in the concentration areas where they are to go according to operational deployment plans. The number of enemy ground forces targets which must be reconnoitered will be different in each specific case, and it may reach 40 to 50 in the zone of a front.

Consequently, to detect with timeliness the immediate preparation of the enemy for a surprise attack and to ensure the effectiveness of our first missile/nuclear attack in the zone of
the front, it is necessary to keep under constant surveillance no less than 135 to 150 very important targets.

Besides surveillance of the enumerated targets, the border district reconnaissance must also constantly monitor the nature of troop movements over the most important transportation lines (a minimum of two points on each line). In the zone of actions of a front there may be five to six railroads and four to five main highways going to the front line and three to four lateral roads, which amounts to 24 to 30 points.

Considering the limited capabilities of front and other means of reconnaissance in peacetime, at first glance it seems that reconnoitering the number of targets listed above and conducting constant surveillance of them will not be possible. However, this is not so. Experience and calculations show that a border district is fully capable of fulfilling the reconnaissance tasks supporting the first operation. Agent and radiotechnical reconnaissance will play a decisive role in this, naturally. Therefore, the carefully and thoroughly thought-out organization of these types of reconnaissance acquires especially great importance.

It is necessary to arrange the agent net in such a manner that it can conduct continuous surveillance of all the above-listed targets. For this the border district must have in the complement of its active agent net not less than 120 to 130 residences, agent reconnaissance groups, and individual sources.

It is important to emphasize that organizing an agent net is not a one-time process, but a lengthy one to be carried out throughout the entire period preceding a war, as well as while waging it. Therefore, the initial number of agent sources may be smaller, but subsequently it is necessary to build up the active agent reconnaissance net and step up its activity in every possible way.

Considering the possibility the enemy may eliminate a definite part of our agent net, especially in the period of his preparation for an attack, which can lead to a serious weakening of reconnaissance in the most crucial period, it is necessary to develop beforehand a reserve agent net in addition to the active one. To perform the new tasks that arise during the offensive
operation itself and to replace losses requires having a strong reserve made up of not less than 35 to 40 agent reconnaissance groups.

An important condition for the successful activity of agent reconnaissance is to provide it not only with portable and powerful radio sets, but also with technical means of reconnaissance: devices for listening, sound recording, microphotography, intercept of conversations and transmissions over ultra-shortwave and radio-relay communications links, and direction-finding of operating radiotechnical stations. The equipping of agents with highly sensitive devices with whose help it is possible to detect nuclear warheads at a distance has acquired special importance under modern conditions. Thus, a presently available aerogeophysical device has a sensitivity of down to one microroentgen per hour and is capable of detecting sources of gamma radiation at a distance of 500 meters (as is known, the gamma radiation of nuclear warheads amounts to up to 10 microroentgens per hour). If active agents are equipped with such devices, even if only on the main transportation lines, then it is possible with sufficient accuracy to determine the number of nuclear warheads being transferred by the enemy to the territory near the border and the places for their storage and to establish to some extent the beginning of the aggressor's immediate preparation for a surprise attack.

Thus, to conduct effective reconnaissance with district means requires considerably reinforcing the front agent reconnaissance that is active in peacetime and equipping it with new technical means.

Under peacetime conditions, radiotechnical reconnaissance can, throughout the entire period preceding a war, secretly and continuously follow the preparation and deployment for a surprise attack by the enemy's armed forces.

By the positioning of radio centers, radio sets, and means of radio navigation and radio remote control, radio reconnaissance is capable of detecting control posts and of finding out the disposition of ground forces, air forces, and naval forces, and of the nuclear weapons units belonging to them, as well as of the system of air defense and of materiel and technical support.
The peacetime requirements of a border district for means of radio reconnaissance are determined by the necessity of conducting continuous surveillance over each of the above-indicated 135 to 150 targets by posts specially designated for this purpose. In addition, it is necessary to conduct continuous surveillance over 400 to 150 radio nets (radio links) based on the normal load of these posts -- three to four enemy radio nets per radio reconnaissance post and ten radars per radiotechnical reconnaissance post.

In order to accomplish this task, a border district must have a minimum of 250 to 300 radio intercept posts and up to 100 radiotechnical posts. With the start of combat actions, the requirement of the district (front) for radiotechnical reconnaissance means will increase still more.

The requirement that the troops of a border district be constantly ready for immediate actions makes it absolutely necessary to strengthen this most important type of operational reconnaissance in both quantitative and qualitative respects. This is the second condition ensuring the effective delivery of the first nuclear strikes and the successful conduct of the first operations.

Together with agent and radiotechnical reconnaissance, in peacetime, as we know, air reconnaissance can also be conducted with the aid of radiotechnical equipment by means of flights along the national border or over neutral waters.

It is necessary to especially emphasize that under peacetime conditions the activity of all types of reconnaissance must be increased considerably in a period when the probable enemy is preparing and conducting large maneuvers and exercises. This is due to the fact that exercises of this sort afford the enemy the opportunity of carrying out many measures relating to the immediate preparation for an offensive and of setting up the necessary prerequisites for a surprise unleashing of war.

All of this naturally requires that the staffs of border districts strengthen as much as possible the active forces and means of reconnaissance and bring to full combat readiness those means which are not deployed under peacetime conditions. And the periods when the probable enemy is conducting large-scale
exercises and maneuvers must be regarded as threatening by the reconnaissance of the border districts (groups of forces), especially during an aggravation of the international situation.

At this time, reconnaissance operating in the location areas of nuclear weapons depots and assembly bases, launching areas of long- and medium-range missiles, and home airfields, must show special aggressiveness in order to obtain in good time the information that will make it possible to differentiate the enemy's true preparations for delivering a surprise strike from measures being conducted for training purposes. Pertaining to such information are primarily data about the mating of missiles in supply bases, the delivery of warheads directly to launching positions and airfields, the bringing of medium-range missiles to readiness for launching, etc.

With the start of a period of threat, reconnaissance is sharply increased. It should be noted that some generals and officers are of the opinion that under modern conditions there will be no period of threat at all. Is this assertion true?

In our opinion, it is not; and this is why. In preparing for a surprise attack, the aggressor is forced to carry out a careful and thorough preparation having a political, economic, and purely military nature. Without proposing to expound in detail all aspects of such a preparation, and taking into consideration that the enemy will carry out many measures secretly, it is at least obvious that to deliver a missile/nuclear strike he will still have to move the nuclear weapons means out to launching (firing) positions, bring the nuclear warheads to them, change the permanent garrison posts of the ground forces, and finally, have his strategic and tactical aviation take to the air. Otherwise, he will not be able to start a war.

Consequently, the unleashing of war is always preceded by what is objectively a period of threat -- though this period may be very brief. And establishing this period in good time depends entirely on the results of the actions of reconnaissance, whose reliable data about the start and progress of immediate preparations for a surprise attack serve as the basis for the expectation of a threat situation. This being so, the sooner the immediate preparations of the enemy for an attack are detected,
the longer the period of threat will be and the more time the troops will have at their disposal to prepare the first nuclear strike.

Under the conditions of missile/nuclear war the period of threat will naturally be very short. It may last a few hours altogether. Therefore, there is no basis to assume that in this time reconnaissance will be able to accomplish a large amount of tasks. Its main immediate task will be final reconnaissance of the targets planned for destruction in the first nuclear strike. We should like to direct attention to this matter. As is known, at the start of and during the period of threat a considerable number of the enemy targets designated for destruction in the indicated strike will begin to move out of their permanent locations to areas of operational deployment and launching (firing) positions or simply change the disposition areas known to our reconnaissance.

In connection with this, the number of targets which need reconnaissance and final reconnaissance will grow drastically. Calculations show that in the zone of a front at this time there may be from 700 to 750 such targets, including 300 to 350 mobile ones. The detection of some of these targets will be entrusted to strategic reconnaissance. At the same time, the commander and staff of the front are required to sharply step up the operating reconnaissance and to commit new forces and means of reconnaissance. However, it is by no means obligatory to endeavor to detect all targets. The practice of operational exercises conducted in recent years testifies to the fact that under the indicated circumstances success is achieved not by scattering forces and means for final reconnaissance and reconnaissance of numerous targets throughout the zone of the front, but by concentrating them only on the most important targets, whose continuous surveillance will make it possible to draw correct conclusions about the changes taking place in the enemy's grouping, primarily in his nuclear means, and ensure that the first missile/nuclear strike delivered against him is highly effective.

Serving as an instructive example is the experience of the front command-staff exercise conducted by the commander-in-chief of the ground forces in February 1958 in which the problems of conducting aggressive reconnaissance by both sides in a period of
threat were worked out.

In this exercise, the reconnaissance efforts of the "Westerners" were concentrated basically on the detection of the most important targets or of the specific areas in which they might be located. As this was done, for each newly detected target, especially one to be hit in the first nuclear strike, specific agent and radiotechnical reconnaissance means were deployed, which conducted continuous round-the-clock surveillance of the targets right down to the moment when the strike was delivered against them. And this produced results -- 75 percent of the nuclear warheads employed in the first strike hit the target. Of course, this is not an ideal case; but in comparison with some other sectors, in which 50 to 60, and even 80 percent of the nuclear warheads fell on an empty spot, it is quite a step forward.

Consequently, with the onset of a period of threat, the main efforts of front reconnaissance are aimed chiefly at the final reconnaissance in short periods of time of the mobile targets which are to be hit in the first missile/nuclear strike and which must be reconnoitered beforehand in peacetime. It has already been pointed out above that such targets in the zone of attack of a front may number from 135 to 150. The task consists in establishing whether these targets continue to be located in their former places or whether they have been repositioned in new areas. In the latter case it is necessary to determine in good time the precise coordinates of their new location. Only if this is done can effective destruction of the enemy be achieved in the first nuclear strike.

Judging by some statements in our military press, it is proposed that we use air reconnaissance with deliberate violation of state borders as the main means of final reconnaissance. This very thing has been done in practice in the conduct of some operational exercises. For instance, in one of them, for purposes of final reconnaissance of the targets to be hit in the first missile/nuclear strike, the front planned to conduct 20 aircraft sorties in the course of a day and half; and, taking into account the drop of agent and sabotage-and-reconnaissance groups, the total number of planned aircraft sorties with violation of state borders in the indicated time amounted to 58. This means that, in a theater of military operations with the
presence of two or three front formations, the number of aircraft flights across borders will be in excess of 100 to 150.

Such actions cannot, in our opinion, be considered justified. In the first place, under actual conditions not only will they alert the enemy, but they will also give him cause to accelerate the delivery of the first nuclear strike. Secondly, these sorties are not very effective, even in support of the final reconnaissance of targets. After all, the entire point of final reconnaissance consists in the fact that it is to immediately precede the delivery of the missile/nuclear strike against the given target and that the period between the final reconnaissance and the nuclear strike is to be no greater than the time it takes the enemy target (installation) to completely relocate to a new area and prepare for actions.

If we examine the relocation of enemy nuclear means from this point of view, we will see that a Corporal guided missile battalion will be located in the same firing (launching) position for two hours allowing for one firing (launching); a Redstone guided missile group, up to three hours; and Matador and Mace cruise missiles, 1.5 hours. Then they change their positions. Consequently, the latest data about the location of targets must be obtained by the front staff an hour to an hour and a half before the delivery of a strike against them (in this time the reconnaissance forces and means in the area of these targets must get a safe distance away, and the signal of their relocation must be given by the associated reconnaissance organs).

The complexity of final reconnaissance consists in the fact that it must determine new target coordinates (or confirm the ones obtained earlier) and transmit them as quickly as possible, affording front means the necessary time to prepare the delivery of the nuclear strikes against these targets before these themselves carry out launchings. Experience shows that air reconnaissance cannot do this unless a considerable number of reconnaissance aircraft simultaneously violate state borders. But a final reconnaissance that is to be carried out not only for days, as was done before, but also for a time that exceeds the period that an enemy target stays in the same position will not produce anything and for all practical purposes cannot be called final reconnaissance.
On this basis we consider that in a period of threat the basic means for final reconnaissance of the enemy targets to be hit in the first strike is not air reconnaissance (in spite of all its positive qualities), but agent and radiotechnical reconnaissance means, which even in peacetime must detect these targets and keep them within their field of observation, as well as agent and sabotage-and-reconnaissance groups and roadwatch agents additionally sent into the enemy disposition at the beginning of the period of threat. The use of reconnaissance aircraft with the violation of state borders must be limited to literally single cases and only for the final reconnaissance of those specific targets about which data cannot be obtained by other methods.

To express it in a term adopted among the air defense forces, agent and radiotechnical reconnaissance means must ensure that mobile targets are "tracked" right up until they are hit or transferred to another source for the conduct of further surveillance over them. Therefore, immediately upon the introduction of a period of threat, the front staff transmits to the operating agent and radiotechnical reconnaissance previously worked-out instructions (signals) about the final reconnaissance of specific targets scheduled for destruction in the first strike.

Together with this, the front staff partially or fully commits to action the reserve agent net, sets up additional radio reconnaissance posts by changing units over to full two- or three-shift duty, organizes the infiltration into the enemy disposition, and primarily into the border zone to a depth of from eight to ten to 50 to 100 kilometers, of reconnaissance and sabotage-and-reconnaissance groups and roadwatch agents. Their main task is the final reconnaissance and reconnaissance of the enemy's tactical and operational-tactical nuclear weapons and the first-echelon grouping of his ground forces.

At the line of the state border, primarily on the axes of the impending offensive of the front troops, a system of combined-arms, artillery, radiation, and chemical surveillance is set up. The conduct of aerial surveillance to a depth of 25 to 30 kilometers is also strengthened, as a rule, without overflights of the state border.
In the period of threat, exceptionally important significance is given to the prompt collection and processing of reconnaissance data, the reporting of them to the formation commander, and the timely transmission of them to the rocket troops and aviation in order to afford them the minimum necessary preparation time for the delivery of strikes.

With the approach of the presumed or established time for the delivery of the nuclear strike by the enemy, it is necessary to drastically increase radiotechnical reconnaissance. This is due to the fact that the delivery aircraft of the strategic and tactical aviation, as shown in actual practice of exercises conducted by the NATO command, become airborne two to three hours and one to 1.5 hours, respectively, before the delivery of strikes, and 10 to 15 minutes before the launching of missiles the radioelectronic equipment is turned on for warm-up and technical check-out.

Radiotechnical reconnaissance, conducting continuous surveillance of the home airfields of enemy aviation and of missile/nuclear means and their control posts, is called upon to determine the takeoff time of delivery aircraft and the readiness of missiles for launching.

In the period of threat, simultaneously with final reconnaissance, active reconnaissance is conducted for the purpose of detecting new enemy targets that have appeared. So that this reconnaissance be purposeful and not scattered all over the territory occupied by the enemy, it is advisable to assign areas of special attention to each type and means of reconnaissance. Such areas can be the probable locations of command posts for army groups, field armies, and army corps, areas for the deployment of nuclear warhead assembly bases and depots, concentration areas for large units, and other important enemy targets. However, some staffs -- as shown by the experience of exercises we have held -- in solving this problem seek a way out by assigning an excessively large number of areas. Thus, in an inter-academy command-staff exercise, the staff of the 2nd Eastern Front, in the zone to be reconnoitered, assigned a large number of areas of special attention, each ranging in size from 1,800 to 3,800 square kilometers. In actuality it meant that nearly the entire zone of the front of the "Easterners" to a depth of up to 300 kilometers was included in the areas of
special attention. This reduces to nothing the importance of assigning such areas.

The actual practice of exercises conducted shows that the number of areas of special attention, in the light of the specific situation and the available data on the enemy, may amount to the following: for an army -- from four to six within the limits of 50 to 100 kilometers from the state border, and for a front -- from 18 to 20 to a depth from 100 to 150 to 300 to 500 kilometers. The size of each of these areas must correspond to the capabilities of the forces and means assigned to conduct final reconnaissance by the time prescribed by the front (army) commander and this size can vary within the limits of from 30 to 50 to 600 to 800 square kilometers.

With the start of combat actions, when the restrictions on the use of air reconnaissance means are lifted, the sizes of the areas of special attention can be larger.

Thus, in a period of threat, front reconnaissance is faced with extremely crucial and complex tasks. As a result of its activity, reconnaissance in this period must determine the beginning of the immediate attack of the enemy, do final reconnaissance of the targets to be destroyed in the first missile/nuclear strike, and thereby ensure the timeliness, surprise, and effectiveness of this strike and the successful conduct of the front operation.

It is desirable that the matters of reconnaissance in peacetime and in a period of threat during the preparation of a front's first operation raised in this article be discussed more widely and that they be worked out in operational exercises being conducted.