MEMORANDUM FOR: The Director of Central Intelligence

FROM: John N. McMahon
Deputy Director for Operations

SUBJECT: MILITARY THOUGHT (USSR): Cooperation Between the Air Defense System of a Front (Military District) and a Frontline Formation (Large Unit) of the Air Defense Forces of the Country

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". In this article are presented a number of responses to an article on improving cooperation among the air defenses of various branches of the armed forces. While generally in agreement with the ideas contained in the article, the respondents do provide certain constructive criticism, one stating that there should be only one large unit of the air defense of the country in a military district and objecting to the concentration of control over all air defense within a military district in the hands of the district commander. This article appeared in Issue No. 2 of the Journal "Military Thought" for 1962.

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

John N. McMahon

Page 1 of 16 Pages

TOP SECRET
Distribution:

The Director of Central Intelligence
The Director of Intelligence and Research
   Department of State
The Joint Chiefs of Staff
The Director, Defense Intelligence Agency
The Assistant to the Chief of Staff for Intelligence
   Department of the Army
The Assistant Chief of Staff, Intelligence
   U. S. Air Force
Director, National Security Agency
Deputy Director of Central Intelligence
Director of the National Foreign Assessment Center
Director of Strategic Research
MILITARY THOUGHT (USSR): Cooperation Between the Air Defense System of a Front (Military District) and a Frontline Formation (Large Unit) of the Air Defense Forces of the Country

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 2 (63) for 1962 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". In this article are presented a number of responses to an article written by General-Mayor P. Lavrinovich on recommendations for improving cooperation among the air defense forces and means of various branches of the armed forces. While generally in agreement with the ideas contained in the article, the respondents do provide certain constructive criticism. For example, one respondent believes that there should be only one large unit of the air defense of the country in a military district and he sharply objects to the concentration of control over all the forces and means of the air defense located within a district in the hands of the commander of the military district. Another respondent discusses the role of the various air defense elements in providing area and point cover. End of Summary

Comment:

The article to which the responses refer is not available.
Cooperation Between the Air Defense System of a Front (Military District) and a Frontline Formation (Large Unit) of the Air Defense Forces of the Country

A realistic evaluation of enemy capabilities for delivering massed strikes against vitally important centers of the country and main groupings of armed forces causes us to treat with particular attention the problems of setting up a stable and reliable air defense system encompassing all the countries of the socialist camp, as well as those territories in which the offensive operations of our armed forces are developing.

The most complex and crucial tasks for the air defense troops arise in the initial period of war when they must decisively repel the air offensive which has been initiated by the enemy. The successful actions of the air defense troops at this moment will have the most telling influence on the outcome of the entire initial period of war. The specific make-up of the tasks being carried out in this period above all consists in frustrating enemy intentions to deliver strikes against military-economic and administrative-political centers, rocket troops, transportation lines, and other of the country's important installations, of ensuring the carrying out of complete mobilization, concentration, and deployment of troops, and the conduct of the first offensive operations of our armed forces.

Naturally, to carry out such tasks, it is necessary to coordinate the efforts of all the forces and means of air defense which the air defense forces of the country and the other branches of the armed forces have at their disposal. This circumstance emphasizes the particular urgency of the correct organization of cooperation of all air defense means. It is namely for this reason that the article by General-Mayor P. LAVRINOVICH,* in which are presented his recommendations for the improvement of cooperation among the forces and means of the air defense of various branches of the armed forces, evoked the responses of readers, a portion of which we cite in this review.

Colonel V. KOLESNIKOV, commenting on the urgency of the matters examined in General LAVRINOVIČ's article, thinks that some of them, not having had sufficient substantiation, require some clarification. For example, the author of the response expresses the idea that within the borders of a military district there should be only one large unit of the air defense of the country since in this case it is easier to organize cooperation with the air defense of the military district, the air army, and the air defense of a fleet. However, this fundamental tenet, in his opinion, does not entirely exclude the fact that under certain conditions within the borders of a military district there will be two air defense large units. For example, in those instances when such a large unit is specially allocated to cover the forces of the fleet.

The author of the response agrees with General LAVRINOVIČ, who thinks that the boundaries of the responsibility of a large unit of the air defense of the country and the territorial boundaries of a military district must coincide, but the author sharply objects to the concentration of control over all the forces and means of the air defense located within a district in the hands of the commanders of the border or coastal military districts. Colonel KOLESNIKOV does not think that it is possible to separate out the large units of the air defense of the country stationed in the territory of military districts from the overall closely interactive system of the air defense of the country. In his opinion, the transfer of control of the border forces and means of the air defense to the commander of the military district might violate the integrity of the air defense system of the country and impede the accomplishment of extremely crucial tasks. The necessary reverse resubordination of air defense large units to the Commander-in-Chief of the Air Defense Forces of the Country during a war which has broken out can lead to a temporary disruption of control, which is extremely dangerous, considering the rapidity, intensity, and decisiveness of the air defense operations. One must keep in mind that the particular responsibility of the air defense forces of the country for ensuring normal conditions of the vital activity of the state in the initial period of a war requires extreme caution when effecting any changes in the already established strictly centralized system of control. The unacceptability of the temporary resubordination of border air defense armies has become especially apparent with the introduction of an automated system.
of control which finds ever wider application in the air defense forces of the country. As regards cover for important installations located on the territory of a military district, also including the troops located there, Colonel KOLESNIKOV, emphasizing the great importance of this task, thinks that it should be provided by the plan of combat actions of the border air defense large unit. Consequently, when drawing up such a plan in peacetime, it is necessary to specify as fully as possible the tasks of the air defense of the district which will arise at the beginning of combat actions.

General-Major of Aviation B. SINITSYN, completely sharing General LAVRINOVICH's evaluation of the importance of the matters of cooperation of the forces and means of the front with the air defense forces of the country, thinks at the same time that a number of his proposals cannot contribute to the accomplishment of the main task -- the strengthening of the air defense as a whole.

The author of the response writes that Comrade LAVRINOVICH formulated his proposals for the reorganization of the troop control system of the air defense proceeding from a purely "bureaucratic" position, under the influence of the tasks facing him, and that he allowed very important facets of the general problem to slip from his field of vision -- the tasks of the air defense of the country. Meanwhile, in the opinion of General SINITSYN, any researcher, if he were to critically evaluate a number of basic aspects, namely the nature of the first enemy air strike, the features of the actions of the air defense forces of the country and the principles of cooperation between the air defense forces of the country and the air defense of the front in different periods of the front offensive operation being conducted, should arrive at a correct solution.

General SINITSYN finds substantial errors in the evaluation of all the factors cited by General LAVRINOVICH.

The author of the response notes that when the enemy has long-range means of attack and destruction, everyone's habitual notion about the rear of the country, as territory being in relative security, is not now realistic. In the course of the very first air invasion undertaken by the enemy, installations in the interior that are of exceptional national importance, such as
major administrative-political centers, key control centers for the rocket troops and air forces, transportation centers, nuclear and missile weapons production centers, as well as missile sites and missile and fuel depots, etc., may find themselves under attack.

As a result of the first enemy strike the vital activity of the entire state might be disrupted, and a sharp decline in industrial production and a slowdown or breakdown of mobilization measures might follow.

In light of this it is completely clear what the responsibility of the air defense forces is for the accomplishment of the main task -- disruption of the enemy air attack -- for the protection of the country from the air enemy. And naturally, the air defense forces of the country can successfully carry out such a task only with centralized control, concentrated in the hands of the Commander-in-Chief of the Air Defense Forces of the Country.

**General-Mayor LAVRINOVIČ**'s proposal to resubordinate the large units of the air defense of the country to the commanders of the military districts will lead to the dissipation of forces, the violation of the integrity of the air defense system and to the weakening of it as a whole.

The author of the response thinks that some of the unacceptable recommendations of General LAVRINOVIČ, in his opinion, arose because he incorrectly evaluates the nature of the air defense operations. The enemy will strive to achieve his goal by conducting air-missile operations in several theaters of military operations. Simultaneously the air defense forces of the country will conduct their own air defense operations. A reasonable question arises, of whether the Commander-in-Chief of the Air Defense Forces of the Country will be able at the very same time to direct four or five air defense operations which have developed on different axes. No, he will not, asserts Comrade SINITSYN, and in order to create the necessary conditions for the reliable control of analogous operations, in 1960 a certain reorganization of the air defense forces of the country was conducted, and headquarters of air defense armies were established on the axes where air defense operations are particularly probable.
Owing to what has been said the author of the response considers erroneous General-Mayor LAVRINOVICH's proposal to eliminate the army level of control in the air defense forces of the country, and to subordinate the air defense corps and divisions to the military districts. In this case, we would only be able to oppose the organized, precisely planned, and combined actions of major enemy forces with corps and division actions that were uncoordinated, that had not been integrated in a single plan.

In the opinion of the author of the response, General LAVRINOVICH incorrectly represents the essence of the cooperation between the air defense forces of the country and the air defense troops of the front. General SINITSYN asserts that it is incorrect to consider that cooperation should be expressed in the subordination of the troops, since, in his opinion, it is completely unnatural, under such a decision, to subordinate the main forces of the air defense, the air defense forces of the country, to the field air defense system. On the contrary, cooperation should be organized so that the main forces of the air defense would have the greatest possible initiative and freedom of action. In the opinion of the author of the response, this will be a form of cooperation, and will be most advantageous both for the air defense of the front and for the frontline formation of the air defense of the country. When the front is activated or conducts combat actions in a territory covered by the air defense forces of the country, the air defense means of the front are utilized only to build up the air defense system on separate axes. In this case the main task is carried out by the air defense forces of the country, and this is completely correct, concludes Comrade SINITSYN: the air defense forces of the military districts are now operationally subordinated to them. In those instances when the front in the course of an offensive has set up its air defense system forward of the air defense forces of the country, the cooperation between them will consist of their air defense systems' covering installations on adjacent territories, making it easier for one another to fulfil its own tasks.

General SINITSYN asserts that a gap between the air defense system of the front advancing at high rates of speed, and the air defense system of the country might occur not on the first day, as General LAVRINOVICH asserts, but not until the end of the
fourth day of the operation, since at the beginning of the offensive the front troops are covered by the overall air defense system of the country, while their own air defense forces are in a state of readiness, changing position together with the advancing troops, to build up the air defense system of the troops. Thus, the front which is preparing itself for the offensive has forces and means (taking reinforcements into account), sufficient to set up air defense to a depth of 300 kilometers.

In the event that a gap forms between the air defense system of the country and the air defense system of the troops it is best to eliminate it by bringing in reserves of air defense forces and means of the Supreme High Command, as well as units and large units of the air defense of the country, which are to be taken from the defense of installations in the interior. It is better to transfer the air defense forces and means of the front, which remain, as a result of a rapid troop offensive, beyond the limits of the front zone, to the air defense forces of the country. Such a method of building up the air defense system of the front troops, in the opinion of General SINITSYN, will make it possible to provide constant air defense of troops without conducting large regroupings and without weakening the defense of important rear services installations of the front.

As regards matters of cooperation, the author of the response asserts that combat actions of surface-to-air missile troops and fighter aviation in one zone are completely feasible. It is only necessary to carefully coordinate their actions, to increase the discrimination of the control equipment and to change the control methods to some extent.

Agreeing with General LAVRINOVIČH that when repelling the first surprise raids all the air defense forces and means in a border area should be utilized in a centralized manner, according to a single plan, the author of the response thinks that control should be concentrated in the hands of the commander of the formation of the air defense forces of the country.

Lieutenant Colonel M. FRAKMAN, examining the front in the capacity of the first operational echelon of the air defense of the country, writes about the necessity to have in the entire zone of the front a single air defense system, subordinate to the
front command. The author of the response asserts, it is best to establish the boundary of responsibility between the systems of the air defense of the front and country along the rear boundary of the front. In this case the depth of the first echelon of the air defense ensures more favorable conditions for the operations of the second echelon -- the frontline army of the air defense.

Lieutenant Colonel A. KAPITANOV expressed a number of additions to General-Mayor LAVRINOVICh's conclusions. In particular he thinks that the cumbersome nature of the control system and the complexity of planning mentioned by the author of the article, are only some of the shortcomings which impede the effective utilization of the air defense means. The main one is the imperfect organizational structure of the air defense troops of the Ground Forces. The air defense of the frontline zone is carried out by the forces and means of three official organizations: large units of the air defense of the country, the air army and the air defense of the troops. Experience shows to what extent such an organization is imperfect and difficult to control.

In the opinion of the author of the response, it is desirable to concentrate the control of all forces and means of the air defense under one authority -- in the hands of the commander of the military district.

At the present time the entire air defense system must ensure area cover for the troops. It follows that the organization of the air defense troops should also correspond to the demands of area cover, ensuring by this the simplicity and reliability of control and cooperation.

Proceeding from the fact that it is best to organize the air defense troops on the principle of area cover on the scale of front and army formations, the author of the response asserts that for this reason the air defense large units and units forming its basis should be subordinate to the front and the army. He thinks that the front and army should have an air defense formation and large unit, respectively. In the complement of the former, the author proposes to have surface-to-air missile troops, fighter aviation, radiotechnical troops, and countermeasures units. In the complement of the army air defense large unit there should be no fighter aviation.
other respects his organization is analogous to the front air defense formation.

Having established centralized air defense systems for front and army formations, it will be possible to set up area cover for all the troops operating in the offensive zone of the front (army), freeing them of their own organic air defense means.

Lieutenant Colonel KAPITANOV shares the opinion of the author of the article concerning the necessity of eliminating the multiplicity of levels of control. He thinks that the chief of the military district (front) air defense forces and his apparatus is able to ensure centralized control of all the air defense forces and means located within the district (front) boundaries.

Including the problems of the air defense of troops among the most grave and complex ones, the editorial staff of the journal has regularly published research devoted to these matters over a number of years. In 1961 the attention of almost all the authors working in this field was directed mainly at working out the most expedient methods of cooperation among troops fulfilling air defense tasks, and their control.* But, unfortunately, in spite of rather energetic research a unified opinion covering all the matters of control and cooperation still has not been worked out. This is confirmed when the conclusions of various authors are compared.

Colonel P. LOZIK, proceeding from the necessity of strictly centralized control over all the means of the air defense, considers the absence of unified control in the air defense system of the troops the greatest shortcoming. In his opinion, effective cooperation and reliable control of all the means of the air defense cannot be ensured simply by colocating the control posts of the chief of the air defense forces and the air force commander. Colonel LOZIK sees the solution to the problem in the establishment in the front of a formation similar to an air defense army, its complement made up of both ground air defense means and fighter aviation, and in the combined-arms and tank armies -- air defense large units, which should have ground air defense means in their complement.

Regarding matters of cooperation, the author expresses the following ideas. In connection with the continuous increase in the range of operation of surface-to-air missiles, overlapping of zones of fire of adjacent surface-to-air missile units inevitably takes place. Thus, already in the near future a continuous zone of surface-to-air missile fire can be produced in the zone of the front. In this case front installations, regardless of the degree to which they are dispersed, will be covered by a single interconnected system of surface-to-air missile fire.

The shift to area cover, the author asserts, leads to the possibility of only one method of cooperation between the surface-to-air missile and fighter aviation elements, namely, their joint actions in one zone with allocation of targets in terms of frontage, altitude, and depth.

Marshal of the Soviet Union S. BIRYUZOV, presenting the new essence of the demands which are to be made on the air defense, specifically asserts that in order to disrupt the initial enemy air operations, in which the maximum number of aircraft and unmanned means will participate, coordinated actions of all forces and means of the air defense will be required regardless of which branch of the armed forces they belong to. During an offensive, the forces and means of the troop air defense will undoubtedly play the role of the first echelon of the air defense.

Speaking about cooperation, Marshal BIRYUZOV especially notes the importance of coordinated actions in operations of the
surface-to-air missile troops and fighter aviation. He thinks that cooperation between them can be organized primarily by two methods: according to the principle of demarcation of zones of actions, and when both branch arms are operating in one zone. The first method, in the opinion of Marshal BIRYUZOV, was adopted at a time when surface-to-air missile troops were few in number. As the number of missile troops and their kill zones increased it became necessary to turn the main attention to the organization of cooperation in one zone by means of distributing efforts in terms of targets, altitudes, and axes. Such a method of cooperation is most complex, but at the same time, it ensures a more complete exploitation of the combat capabilities of the active defense means under the complex conditions of the air situation.

In practice favorable conditions for cooperation in one zone are established by colocating command posts of fighter aviation units, surface-to-air missile and radiotechnical troops which carry out the common tasks of point cover, and by utilizing reliable equipment for identifying targets.

In examining the organization of the air defense of the territory of the frontline zone in the wake of the advancing front troops, Marshal BIRYUZOV cites several possible variants of the organization of air defense by the air defense forces of the country. First, this means the deployment of a new air defense large unit formed from reserves which were moved in beforehand, second, the forward movement from the first echelon of the air defense forces of the country of several large units and units into the zone of the air defense of the troops, and third, enlarging the zone of responsibility of the air defense of the country or the border air defense large unit by moving their boundaries of responsibility forward, in the wake of the advancing troops.

To implement any of the methods cited it is necessary for the frontline formations of the air defense of the country to have at their disposal adequate reserves of forces and means, the creation of which during the preparation of an offensive operation, the author considers of great importance.

Marshal of the Artillery KAZAKOV, sharing Marshal BIRYUZOV's point of view in evaluating the role of the air defense of troops
in the course of an offensive as the first operational echelon of the air defense of the country, expresses other ideas on the subject of the organization of cooperation between the surface-to-air missile troops and fighter aviation.

He thinks that the main method of cooperation of these branch arms is the allocation between them of zones or times of combat actions. In the author's opinion, the actions of fighter aircraft in the kill zones of the surface-to-air missile units can be allowed only when the latter are relocating or are unable to conduct fire for any reason. The conduct of simultaneous actions in one zone and mutual action against targets are unrealistic, since they do not ensure the safety of one's own fighter aircraft and limit the combat capabilities of the surface-to-air missile units.

As regards the organization of cooperation of the air defense of troops with a frontline formation of the air defense of the country, Marshal KAZAKOV thinks that, in repelling the first strikes of the air enemy, it is more advantageous to exercise control of all air defense forces and means on the territory of the military district from the command post of the border formation of the air defense forces of the country. In the future, as the preparation for the initial front operation proceeds, it is best to exercise control of the front means of air defense from the command post of the front air defense. Marshal KAZAKOV does not recommend that during an offensive of front troops (when they fulfill the immediate task) the line of responsibility between the border area formation of the air defense forces of the country and the troop air defense forces be moved forward, and that the gap which has formed between them be filled by drawing on the border area formation or on newly activated units of the air defense forces of the country. The author asserts that actually up until the fulfillment of the subsequent task the front rear and missile technical bases and other important installations of the front, as well as front air defense means covering them, will still remain in the former areas. Consequently, a gap will not be formed, only a deeper echeloning of the front air defense brought about by the relocation of part of the forces and means together with the advancing troops. The shifting of the line of responsibility under these conditions leads to the actual removal from the front commander of the responsibility for the air defense of a part of
the very important installations located in the front rear area.
Proceeding on the premises cited, Marshal KAZAKOV thinks that the forward boundary of the frontline formation of the air defense of the country should always pass along the rear boundary of the front.

Finally, in the present issue of the Collection, an article by General-Leytenant B. VYSOTSKIY is published, in which ideas concerning matters of cooperation and control in the system of troop air defense are set forth. The author, using a number of arguments, reaches the following conclusions.

1. The employment of surface-to-air missiles and fighter aviation in one zone with the existing means of control and identification is made very difficult. The safety of one's own fighters under these conditions can be ensured only by a temporary ban of surface-to-air missile fire, which will lead only to the partial exploitation of their high combat capabilities.

2. A reliable system of air defense of the troops can be established only when unified control of the ground air defense means and fighter aviation is set up. For this purpose it is necessary to broaden the authority of the chief of the air defense troops of the front, having fighter aviation operationally subordinated to him.

3. For the purpose of improving the control of the air defense means, dispersing control posts, and increasing their survivability and flexibility, the surface-to-air missile regiments and radiotechnical units subordinate to the front should be brought into the air defense large units.

Analyzing the content of the responses of the present review, as well as the articles published earlier, the editorial staff notes that questions of control of the air defense forces and means of the troops and the cooperation between them still have not received full theoretical and practical solution.

Concluding the discussion of the article by General-Mayor P. LAVRINOVIICH, by publishing this review, the editorial staff
proposes at the end of 1962, after the military exercises have been conducted, to again return to the discussion of the most fundamental matters of the air defense of the troops.