MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): Experience in the Control of the Rocket Troops

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 draws upon experience in the Transcaucasus Military District with exercises specifically for the control of rocket troops, which the authors assert have significantly increased the effectiveness of control at all levels. In recommending additional periodic, district-wide special tactical exercises for rocket troops, they examine the remaining problems of readiness, control procedures, communications and missile delivery time which are peculiar to mobile missile technical bases. This article appeared in Issue No. 2 (78) for 1966.

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

William E. Nelson
Deputy Director for Operations

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Intelligence Information Special Report

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SUBJECT MILITARY THOUGHT (USSR): Experience in the Control of the Rocket Troops

SOURCE Documentary

Summary:
The following report is a translation from Russian of an article which appeared in Issue No. 2 (78) for 1966 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The authors of this article are General-Mayor of Artillery S. Pogudin, Colonel A. Monakov, and Lieutenant Colonel A. Timoshenko-Lavrov. This article draws upon experience in the Transcaucasus Military District with exercises specifically for the control of rocket troops, which the authors assert have significantly increased the effectiveness of control at all levels. In recommending additional periodic, district-wide special tactical exercises for rocket troops, they examine the remaining problems of readiness, control procedures, communications and missile delivery time which are peculiar to mobile missile technical bases.

Comment:
A General-Leytenant S. Pogudin was identified between 1964 and 1966 as the Chief of Rocket Troops and Artillery of the Transcaucasus Military District. There is no information in available reference materials which can be firmly associated with the other two authors. The SECRET version of Military Thought was published three times annually and was distributed down to the level of division commander. It reportedly ceased publication at the end of 1970.
Experience in the Control of the Rocket Troops

by

General-Mayor of Artillery S. Pogudin,
Colonel A. Monakov, and
Lieutenant Colonel A. Timoshenko-Lavrov

In the Transcaucasus Military District a great deal of attention is being devoted to the all-round improvement of the control of the rocket troops. In addition to command-staff exercises and war games in which the staffs of missile brigades and mobile missile technical bases take part, exercises on the control of the rocket troops are being systematically conducted. Those participating in these exercises are: the staff of the rocket troops and artillery and an operations group from the directorate of missile and artillery armament from the military district headquarters, and the staffs of the rocket troops and artillery and departments of missile and artillery armament from the armies. The staffs of missile brigades and battalions (with the commands of the launch batteries) and the headquarters of mobile missile technical bases also always participate in these exercises. As a rule, all of the above staffs are located during the exercises about 50 kilometers from their permanent deployment areas; and communications are maintained with them by radio, telephone and permanent communications lines.

The exercises, which usually last two days, cover problems pertaining to the control of the rocket troops during preparations for the first nuclear strike, and during its delivery as well as during the delivery of nuclear strikes in the course of an operation. What are the aims of these exercises? First of all, we test the stability of control of the rocket troops under conditions when the distance between them and their staffs corresponds to that which would exist in a combat situation. Secondly, we teach effective decision-making to staffs at all levels. Thirdly, we carefully adjust the radio net (since radio stations and radio operators permanently assigned to military district and army communications units are working in the exercises). And finally, we are able to determine the actual time spent on the passage of commands and signals from the staff of the rocket troops and artillery of a front to the batteries. The systematic conduct of exercises has significantly increased the effectiveness of control at all levels of the rocket troops of the military district. Based on the experience of these exercises convenient forms for
planning documents and combat instructions have been developed; and a brevity code chart has been compiled for the transmission of commands to units and subunits on delivering strikes with nuclear, chemical and conventional missiles. While the coded message used previously for the transmission of a command contained about 20 groups, the present one contains no more than nine groups.

In exercises the staffs of the rocket troops and artillery and the staffs of missile units derive complete solutions to all problems of the planning of combat actions, the employment of forces and means and the control of units and subunits in a situation approximating combat conditions.

Unfortunately, we have not been able to obtain the same results in the control of missile technical units. Various shortcomings continue to exist in this area. The main reason for this lies in the lack of sufficient experience in using mobile missile technical bases and in certain omissions made in manning these bases.

How is experience in controlling missile technical units actually acquired? In a majority of cases it is acquired only in command-staff exercises and war games, where all problems concerning the control of these units are worked out on maps. But it is one thing to make all the calculations for missile technical support on paper (which is usually done correctly and rapidly) and another to actually supply units with missiles. The work of the staffs of mobile missile technical bases in training resembles most of all work during command-staff exercises. This is explained by the fact that the subunits of mobile missile technical bases do not carry out the technical preparation of delivery vehicles and warheads and do not actually deliver missiles to missile units.

Combined exercises conducted at the present time with missile and missile technical units at the brigade and mobile missile technical base level do not give a complete picture of missile technical support because of the small number of troops participating and, therefore, make it impossible to form well-founded conclusions on the actual operation of army and front staffs with respect to the control of mobile missile-technical bases.

In this connection we would like to make the recommendation that special tactical exercises of the rocket troops be conducted periodically on a district-wide scale. In our opinion, precisely this type of exercise would be the best method to check the readiness of the rocket troops, to
reveal capabilities for preparing and delivering missiles and missile propellant to them, to clarify certain theoretical propositions and calculations, and to find practical solutions for all other problems which arise pertaining to the preparation of missiles for launch.

In exchanging experience on improving the methods of controlling the rocket troops, we would like to touch upon the opinions of various authors whose articles have dealt with the control of missile technical units. It is a fact that mobile missile technical bases cannot be treated as ordinary rear units. Therefore, they should not be controlled from the rear control post. Evidence of this is the experience accumulated in our military district. In all front and army exercises, the chief of the directorate (department) of missile and artillery armament is located, together with an operations group (the second department of the directorate and part of the fourth department), at the command post, from which all mobile missile technical bases are controlled. What functions are performed by the operations group of this directorate?

During the period in which an operation is planned, together with the planning group of the staff of the rocket troops and artillery, it considers the most suitable procedure for missile technical support in a particular situation, plans the deployment areas of missile technical units, and determines possible variants in their movement. Since the chief of the rocket troops and artillery and the chief of the directorate of missile and artillery armament are present at the front (army) command post, all problems relating to deviations from the plans for supplying missiles (because of changes in the situation) are solved efficiently and effectively, bypassing intermediate levels. All other problems (for example, the supply of conventional ammunition, the recovery, repair, and supply of equipment, etc.) fall under the authority of the missile and artillery service and are solved at the rear control post since close cooperation between this service and the staff of the rear is required. It is true that even a control procedure of this type has its negative aspects. But if they are compared with the positive aspects, in the final analysis it turns out that the chief of the directorate of missile and artillery armament should still be located at the front command post.

As is known, the readiness of the rocket troops to deliver the first strike (as well as to deliver strikes in the course of an operation) depends most of all on the times required for the preparation and delivery of missiles. Under the conditions of our mountainous theater of military operations, the factor which has the main influence on the readiness times of large units and units to deliver a strike is the time required to
deliver missiles from the mobile missile technical bases to them.

However, the width of a front offensive zone reaches 1,000 kilometers, and it is not always possible to attach a mobile missile technical base to each missile brigade. The experience of exercises shows that frequently one mobile missile technical base supports two missile brigades. At the indicated width of an offensive zone, the missile supply distance can extend 250 to 300 kilometers or more.

It requires 25 to 30 hours to deliver missiles by motor vehicle transport under such conditions, even if the mountain roads are in good repair. This time may be shortened considerably, as we are doing in exercises, by using MI-6 helicopters. True, under certain conditions this is not an entirely reliable method of delivering missiles since in the mountains poor flying weather (rain, dense fog, snow), which prevents the flight of helicopters, occurs more often than on flat terrain. Therefore, in order to guarantee the delivery of missiles and to shorten the time required to transport them, it obviously is best to bring the missile and warhead assembling and preparation areas closer to the missile brigades. In some exercises we attached an assembling group from a mobile missile technical base to a missile brigade. In this case, the entire cycle of the preparation of the missiles and warheads took place directly in the missile brigade. Because of this, the time required to deliver readied missiles to a launch battery was reduced, and delays along the way were eliminated. We also believe it would be advisable to have a mixed army mobile missile technical base capable of readying both tactical and operational-tactical missiles.

An army mobile missile technical base of this type will make it possible not only to shorten the delivery times for missiles, but also to increase the responsibility of the chief of the rocket troops and artillery and the chief of the department of missile and artillery armament of an army for the delivery of missiles to the brigade and for their timely readiness for launch. By planning missile deliveries only to the army mobile missile technical base, the staffs of the rocket troops and artillery and the directorate of missile and artillery armament of a front will automatically improve the conditions for the control of the front mobile missile technical bases.

Experience gained from exercises also shows that the communications means available in missile and missile technical units cannot fully satisfy control requirements. For example, a mobile missile technical base has two R-118 radios and five R-108 radios. This does not permit a base to
organize stable control over missile transports or to organize monitoring of their movement. In fact, the chief of the mobile missile technical base can only inform the brigade commander of the time of departure and the type of transport. The missile transport is uncontrolled while under way. This is a very dangerous situation if we consider that during the time the transport is on the road (from four to 30 hours), conditions change often and abruptly, and the chief of the mobile missile technical base or the commander of the missile unit cannot pass instructions to the chief of the transport or influence its movement.

In our military district we have been investigating and testing methods for controlling missile transports while they are moving from the mobile missile technical base to their designated area. One method was to control them by using road traffic control posts deployed by the road traffic control service of the military transportation service. Each transport was assigned a code number which was reported to the chief of the mobile missile technical base, the commander of the missile unit and the chiefs of the road traffic control posts.

The road transport department of the military transportation service immediately reported the time the transport passed by the posts to the chiefs of the directorate of missile and artillery armament. If it was necessary to change the route of travel or transmit any instructions to the transport, the chief of the directorate of missile and artillery armament communicated the information to the appropriate road traffic control post located on the route; the post passed the instructions to the transport. Experience gained in exercises has shown that this type of control can be very successful. But it is very difficult to organize, requires reliable cooperation between the road traffic control service and the chief of the directorate of missile and artillery armament, and is applicable only to routes served by road traffic control battalions.

The second method of controlling missile transports was to assign each of them an R-103 or R-118 radio. This method assures the most reliable control over the transport along its entire route and in any situation. Since a mobile missile technical base does not have a sufficient number of radios, our military district established non-organic communications subunits (taken from other units) with four or five radios in each mobile missile technical base. This immediately and sharply improved control and enabled everyone (from the chief of the district directorate of missile and artillery armament to the commander of the missile unit) to effectively monitor the movement of literally all missiles.
It is appropriate to mention here that we still do not have sufficient forces and means to set up wire communications between the command posts of the brigade and battalions. As a result, in the course of preparing for an operation, when radio communications are forbidden, the brigade commander can control his battalions only by calling the necessary personnel to the brigade command post or by sending officers from his staff to the battalions. How can one talk about effectiveness in controlling the subunits of a brigade under such conditions?

To this one might answer that the concentration areas and prepared missile deployment areas should be equipped with permanent communications lines even in peacetime. But a brigade concentration area that has been prepared in all respects in advance can remain unoccupied as combat actions develop. The brigade may move to secret combat deployment areas or to newly designated missile deployment areas. Such a situation can also occur in the course of combat actions when radio traffic is prohibited for some reason.

Thus, in order to increase the effectiveness of controlling the rocket troops we must first of all continuously gather experience in the actual control of missile technical support. This can best be done by regularly conducting special exercises with the participation of all missile technical units in the military district. In addition, it is extremely desirable that mobile missile technical bases be supplied with the necessary radio communications means to permit them to control missile transports, and that the preparation and assembling areas for operational-tactical missiles be moved closer to the brigades.