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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

3 September 1975

MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT : MILITARY THOUGHT (USSR): Movement of Troops from the Zone of Interior in the Initial Period of War

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, in two parts, presents comments on a previous article concerning the control of troops being moved over long distances. The author of the first part deals with the planning and control of rail shipments, communications, and temporary transshipment areas among measures associated with the survivability of rail lines and continuity of shipment. The second part is concerned more with parallel versus consecutive work in decision-making and planning, the application of planning to coordinate the movements of troops and their heavy equipment, and additional aspects of the control of troops during a move. This article appeared in Issue No. 3 (76) for 1965. [redacted]

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 [redacted]

William E. Nelson
Deputy Director for Operations

[redacted]

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SUBJECT

MILITARY THOUGHT (USSR): Movement of Troops From the Zone of Interior in the Initial Period of War

SOURCE Documentary

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 3 (76) for 1965 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". This article, in two parts, presents comments on a previous article concerning the control of troops being moved over long distances. The author of the first part, Colonel General I. Tutarinov, deals with the planning and control of rail shipments, communications, and temporary transshipment areas among measures associated with the survivability of rail lines and continuity of shipment. The second part, by General-Mayor A. Zaporozhchenko, is concerned more with parallel versus consecutive work in decision-making and planning, the application of planning to coordinate the movements of troops and their heavy equipment, and additional aspects of the control of troops during a move.

End of Summary

[redacted] Comment:

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. [redacted] The article to which it refers is not available.

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Movement of Troops from the Zone of Interior in the Initial Period of War*

by
Colonel General I. Tutarinov
and
General-Mayor A. Zaporozhchenko

The organization and execution of troop movements over long distances in the initial period of a missile/nuclear war have been studied over the last few years at a number of command-staff exercises and war games. These questions have also been discussed many times in the pages of the military periodical press. In most cases, however, the movement of troops was considered as it applied to the conditions prevailing in border military districts. We therefore feel it useful to examine some of the particular features of the movement of troops of an internal military district to a theater of military operations.

Based on the experience of the exercises and war games held in border military districts, plans call for the movement of front or army troops for commitment to an engagement to be carried out basically by a combined method or under their own power. Full use of rail transport to carry heavy equipment is planned only for the period prior to the beginning of military operations. The reason for this is that the very first enemy nuclear strikes could disrupt through rail traffic and the carrying capacity of the railroads would be drastically reduced. In such a situation the troops would be forced to complete the march under their own power, and would be able to use rail transport only partially on certain axes and in certain sectors.

Completely different conditions prevail when moving troops of an internal military district. Here marching capabilities are greatly limited by the operating range of heavy tracked vehicles, by the physical stress on the drivers, and the difficulty of rear technical road maintenance, especially during the period when roads are washed out by spring rains or blocked by snowdrifts. Nor can we count on massive airlifting of large units and units at full strength with their equipment. This would require a substantial amount of military transport aviation with a lifting capacity

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*Comments on the article by Colonel General V. Kramer and General-Mayor N. Reut, "The Organization of Troop Control when Moving a Front over a Long Distance for Commitment to an Engagement from the March," Collection of Articles of the Journal "Military Thought" No. 1 (74) 1965.

and space for cargo on transport aircraft commensurate with large-size heavy military equipment. Military transport aviation, therefore, can be used at present only to carry operations groups of staffs, individual units and subunits of rocket troops and other troops and special small-size cargo. Its basic purpose remains that of meeting the needs of airborne troops. The waterways of the Soviet Union are far removed from the most important areas of formations of the internal military districts, and the majority of navigable rivers flow north and south. For these reasons water transport will also have only an auxiliary role in transporting troops from the interior to theaters of military operations.

Thus, rail transport remains the basic method of moving troops of an internal military district to a theater of military operations. But railroads are extremely vulnerable to enemy nuclear strikes. The restoration of traffic will require considerable time, manpower, and equipment. Particularly difficult will be the restoration of traffic on electrified rail lines and sectors, where in the event that overhead transmission lines are put out of action, it will be necessary to switch to diesel (steam) traction.

In recent years a number of measures have been taken to increase the survivability of railroads. But they are not as yet always being carried out with sufficient purpose and do not encompass the entire range of problems to be solved. In particular, construction is lagging on bypass routes for large cities and rail junctions, and on rail approaches to large water barriers, while temporary transshipment areas, loading stations, and approach roads to them are not being adequately equipped.

The large volume of shipments at the beginning of a war from the interior of the country to areas of combat operations will require strict centralization of planning and efficient operations by all control organs of the railroads. Under these conditions the pace and direction of operational movements of troops will be determined by the plan and order of the General Staff. But considerable responsibility for their organization will also rest with the commander, staff, and department of military transportation of the military district. They will have to take all possible measures to ensure the dispatch of large units and units formed in the district as well as the timely passage of troop convoys across the district's territory according to the plan of the General Staff. For this purpose the staff must plan in peacetime all necessary measures for providing military technical and other types of support for through troop convoys, especially in the event of destruction of rail junctions and lines and the disruption of communications.

In the command-staff war games that were held, the staff and department of military transportation of the district developed a plan for troop transport on the basis of an order from the General Staff. This plan specifies the principal and alternate areas, troop loading stations, sequence in dispatching large units and units, the time allotted for passage of convoys over the district's railroads, air defense cover, measures to be taken in the event of destruction of rail installations and to protect troops from weapons of mass destruction, and materiel support and matters of control. Simultaneous with the plan for transporting troops of a district, another plan was developed containing the measures to be taken to ensure the passage of through rail convoys across the district's territory.

Troop control when moving from the interior must ensure the maintenance of a high level of combat readiness on the part of large units and units and their timely arrival according to their operational assignment. The commander and staff of the district, and the commanders and staffs of all large units and units being transported, must be constantly familiar with the transportation situation, be able to react promptly to any changes, and know how to make a decision in a short time when fulfilling tasks involving the movement of troops. Experience at the exercises shows that for direct organization of troop transport, and control of the timely dispatch and movement of troop convoys, the staff of a district should have operations groups or responsible officers in the areas of the main loading stations, as well as at points where "barrier" areas have been created and temporary transshipment areas set up on each rail line.

At the present time we plan to use the wire communications of the Ministry of Railways and the Ministry of Communications for controlling the dispatch and movement of troops by rail. But wire communications will in all probability be disrupted in the event of nuclear strikes by the enemy. It is therefore our opinion that we must make every effort to develop, parallel with the existing system of conducted communications, a system of radio communications both through the Ministry of Railways and through the Ministry of Defense, while telephone wires running along a railway line must, if at all possible, be buried underground. The existence of radio communications on the main rail lines will enable the staff and the chief of military transportation of a district to exercise constant control over the movement of convoys and, using the cipher of the convoys, convey the pertinent instructions and orders to the commander and staffs of the troops being transported. The commanders of large units and units in turn could, in the event of an extreme emergency, establish contact with the staff of

the district.

In addition, obviously, considerable planning should also be done for using aircraft and helicopters in communications. During periodic flights over a designated area or rail line they could convey the situation to the staff of the district. For this purpose, and also to fulfil other tasks in overseeing the full mobilization and transportation of troops in an internal military district, a squadron of six to nine aircraft and helicopters should be planned right now, in peacetime.

The maintenance of continuity of mass troop movements in the event of an enemy missile/nuclear strike will depend largely on the most rapid reconstruction of damaged rail installations. All efforts of reconstruction organizations must be concentrated on this task. One measure designed to help achieve this is the organization of temporary transshipment areas. They should be placed in areas near railway bridges that span large water barriers, near tunnels, and near large rail junctions and cities.

The experience of troop exercises held in a military district indicates that temporary transshipment areas on rail lines have fully proved their worth. Calculations show that up to ten days will be needed to restore a rail bridge 800 to 1,000 meters long that has been destroyed by a nuclear strike. Two or three days would be needed to erect a floating rail bridge from an NZhM-56 bridge set, but we cannot count on an adequate quantity of such sets. At the same time several hours were spent in organizing a temporary transshipment area using the facilities of a steamship line. Two ferry crossings on the Kama River using heavy-duty barges ensured a carrying capacity of 20 to 24 convoys a day for the temporary transshipment area.

A weakness of the temporary transshipment areas is that of road support when troops are moving through them under their own power. To move heavy equipment across small water barriers, fords must be prepared or bridges erected out of the improvised and authorized means of the troops. During a period of threat a timely concentration of a sufficient quantity of river vessels and barges near the temporary transshipment area should be planned, reserves of fuel established in advance, and personnel acquired and trained for work in the temporary transshipment areas.

Well-organized movement by rail depends to a large degree on the effectiveness of the commanders and staffs of large units and units and on the training of the troops themselves for the movement. The troops will

have to bypass damaged rail installations and "barrier" areas, switch over to a combined movement, and complete a march of hundreds of kilometers under their own power. When switching to a movement of troops under their own power, personnel of subunits and units must be trained for quick loading and unloading of equipment at railroad stations that are not equipped for this purpose. Subunits making up a troop convoy must have complete independence in combat, transport, and materiel-technical matters. Given the existing organization of units, this task may be best accomplished if the basis of the troop convoy in a motorized rifle regiment is a reinforced battalion with supporting subunits. For greater independence of the convoys it is advisable to add means for increasing their cross-country capability and for air defense, as well as subunits of radiation and chemical reconnaissance.

Under modern conditions the participation of the troops being transported and of the population in restoring disrupted rail traffic takes on added importance. The authority to bring in troops to perform urgent reconstruction work must be granted to organs of military transportation, to be followed by a report by the commander of the troops of the military district to the General Staff.

The complexities of organizing the movement forward of troops to a theater of military operations in a missile/nuclear war require that in peacetime, along with the needs of the national economy for the building of roads and railroads and repair and reconstruction enterprises, and the creation of reserves of materiel (chiefly fuel), we give greater consideration as well to the needs of wartime. We should, in our opinion, also consider the question of possibly placing heavy equipment, armament, and materiel reserves for certain formations of an internal military district close to the border zone. In this case, should the railroads be destroyed, personnel of individual large units could be transported more quickly by air or moved by motor transport.

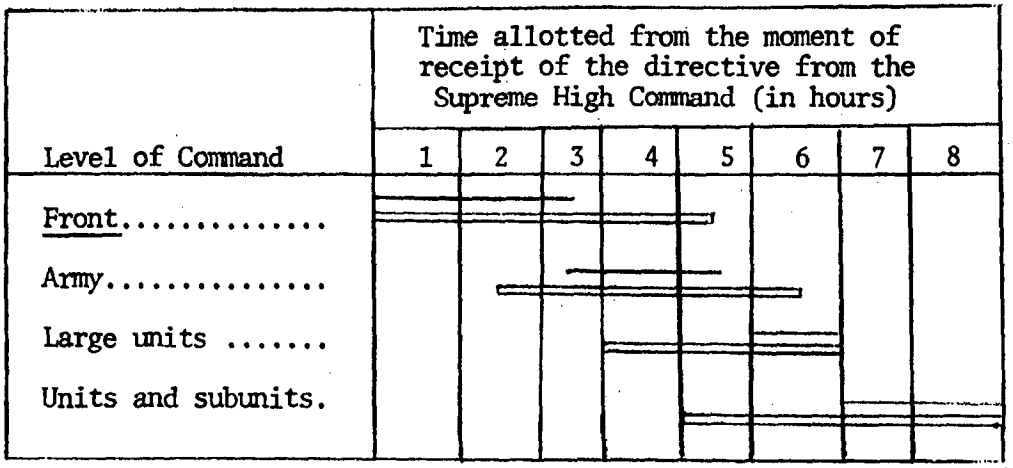
* * *

Colonel General V. Kramer and General-Mayor N. Reut state in their article that they believe that the commander, as a rule, must make his decision in the presence of the key personnel of the front field headquarters, and organize its execution in such a way as to ensure almost parallel planning in the front and the armies (pp. 25-37). This is not an isolated opinion. A similar method of operation is being studied and used in (one word missing) (of) military districts, in the Academy of the General Staff, and in operational staffs of friendly armies of socialist countries.

Research carried out during the ZENITH (ZENIT) war game in the Academy of the General Staff demonstrated that the commander of front troops should have a specially equipped work area, where the senior members of the staff and branch arms may work with him during the operation. This greatly speeds up the process of decision-making, since the commander is then in a position to immediately clarify any matters unclear to him and obtain any information, and sometimes listen to arguments bearing on the question under discussion. There should be no fear here that the commanders of branch arms who are present when a decision is being made will to a certain extent undercut the commander. The sole authority for making the final decision rests unquestionably with him.

The presence of the chiefs of the primary directorates and branch arms when a decision is being made enables them to keep informed about the details of the concept and the decision of the commander, to quickly organize the work of subordinate directorates (departments and staffs) in planning and refining individual aspects of the decision, and also eliminates the occurrence of many ambiguities. Lastly, joint work makes it possible, even after the determination of the concept and the main features of the decision, to issue more specific preliminary instructions to the troops, on the basis of which they can proceed with the planning, without waiting to receive a written directive or order. Thus, we are able to achieve what is, in effect, parallel work at the front, army, and sometimes even the division level, which enables staffs to use more time in planning and thus do it in greater detail, as well as to save time spent on direct organizational work among the troops in training them to carry out the tasks assigned.

In corroboration of the above we cite a comparative computation of the time required to adopt a decision and do the planning under both consecutive and parallel work based on the experience of the ZENITH war game in the Military Academy of the General Staff (1965), when the front had only eight hours to prepare for and carry out a task.



The computation shows that when organizing consecutive work in a front, in armies, and in large units, of the total amount of time available, no more than two hours and 30 minutes can be allotted to the front, two hours to armies, and one hour to large units. Less than two hours remain for units and subunits, which is clearly insufficient. But parallel work, on the other hand, makes it possible to increase significantly the time available at each level, to work out individual aspects of the plan in greater detail, and, most important, to reduce when necessary the total amount of time spent in preparing the front for the move.

The authors of the article correctly focus their attention on the need to coordinate the movement of troops under their own power with the shipment of their heavy equipment by rail. This is a very complex problem which, unfortunately, it has not always been possible to solve in a positive manner at the exercises. The problem here, in our view, lies in the fact that it is impossible to pose the question of coordinating the movement of troops with the shipment of their heavy equipment at all, in the sense of synchronizing them. The difference in speeds of movement between motor vehicle columns and trains, as well as the fact that the latter extend over such a great distance, make the solution of such a problem on the scale of a front impossible. The proposal to select motor vehicle routes parallel to rail lines is also untenable, since they do not

as a rule coincide. It would appear that when planning a troop movement by the combined method we can and should try to coordinate the movement under their own power and the rail movement of those large units and units which constitute a definite grouping or a convoy in march formation. But even then it should not be for the entire period of the move, but only at a particular stage of it -- most often, the final one.

This task may be accomplished by increasing the general pace of loading the heavy equipment of large units, providing simultaneous loading of all the equipment of one unit at several railroad stations, making maximum use of the carrying capacity of railroads at a particular stage of the move, and by other well-known methods. Calculation of the beginning of movement of columns and trains from the departure area should begin from the new concentration area, or from that line at which the highest degree of combat readiness of the troops will be required and then calculating back to the departure area. Such planning will ensure the concentration of units, and sometimes large units, with their heavy equipment in the new area within 24 hours, which may be considered normal.

The most important requirements in planning a move are flexibility and practicality. Flexibility, in our opinion, means first of all that we possess the capability at any stage of the move to switch comparatively easily from transportation by rail to movement under one's own power, as well as to change, when necessary, the direction of the move with no special reforming of the troops. Practicality of planning is based on the consideration of all factors affecting the movement of troops in one way or another. The most important of these is the nature of the enemy's capability and actions for disrupting the movement. The enemy's action with nuclear weapons against our troops and lines of transportation will undoubtedly result in more or less lengthy interruptions of traffic because of the formation of various kinds of barrier areas in the form of zones of destruction, zones of radioactive contamination, etc. Based on the experience of exercises, on one rail line about 1,000 kilometers long we can expect at least two or three barrier areas that have formed as a result of enemy nuclear strikes. To negotiate each of them, troops traveling by rail will require some eight hours or more to unload, move to the next station, and reload. In the course of one day's movement over roads the troops may encounter from two to four barrier areas which will require considerable time to negotiate.

This does not mean, of course, that we should plan to cut in half the distance covered in a day by troops or trains. But we must allow a certain additional amount of time (probably at least one to two days for every

1,000 kilometers) in case of a forced delay.

In the authors' opinion it is advisable to organize temporary posts on major river lines, mountain and other obstacles, and defiles, and to have operations groups with the task of ensuring a planned crossing of these barriers by the troops (p. 33). In principle no objections can be raised against these recommendations, since in certain cases, when the troops are spread out over a considerable distance from their main control posts, it will be difficult to react in time to frequent and at times drastic changes in the situation on the lines of transportation. But we must also caution against an excessive increase through the allocation of a large number of auxiliary control posts of various types. For the fact is that in any event the staff of the front will probably have to leave a small group of officers in the previous area of deployment to monitor the full mobilization and the dispatch of troops to their assigned areas, and also send out the appropriate groups to the new concentration area and to cooperating staffs. Thus, the allocation of several auxiliary control posts could lead to a weakening of the main control posts of the front which, of course, would not help their normal operation.

In addition we should bear in mind that auxiliary control posts can provide real help for a commander in the control of troops, and for the troops in negotiating difficult lines, only in the event that they are provided with communications means and have special reserves of engineer and chemical troops, rear services, etc. But, as we know, the capabilities of a front in this respect are extremely limited. Calculations show that realistically a field headquarters of a front can allocate no more than two auxiliary control posts, and then only on condition that they be staffed in part from staffs of the armies and the troops. Thus, without denying in principle the need to allocate auxiliary control posts in individual cases, we believe that it cannot be made a standard practice. In some cases, rather than establishing a whole network of auxiliary control posts, it is more advisable to strictly centralize at the front level the choice of sites for control posts of armies, or perhaps large units, so as to exercise troop control by relying on them as well as on the auxiliary control posts.

We do not fully share the opinion of the authors of the article regarding the sequence of relocating control posts. They propose (p. 33) that the forward command post of a front be dispatched immediately to the new concentration area. In that case it would be far removed from the troops, and controlling them during a move when they are spread out over a distance of 1,000 kilometers or more could be accomplished only from the

command post, which is extremely difficult. Furthermore, they consider it advisable to divide the command post into two positions (i.e., in effect make two command posts out of one) and relocate each in turn by leapfrogging immediately by two 24-hour marches. If we consider the fact that to relocate each position of a command post, counting the time spent in closing it down and setting it up again, plus the time spent during planned and unforeseen stops, will take at least 24 hours, then troop control in practice will be constantly exercised by one command post at half strength (and this is not even counting personnel assigned to auxiliary control posts). Even when the basic staff of the command post is airlifted by helicopter or aircraft, communications means will still be unable to quickly execute such "leaps". All this, of course, will adversely affect the reliability and continuity of control.

It seems to us that one of the most important conditions for ensuring uninterrupted control of troops during a move is that of keeping to a minimum the distance between the control posts and the troops, since this will greatly facilitate the restoration of communications with them in the event communications are disrupted, as well as personal contact with subordinates in monitoring the movement of units and large units. In this connection, command posts and forward command posts must be moved at the pace of the corresponding troop convoys.

We should point out that during a move to a great depth an extremely effective means of transporting control posts is by helicopter, especially when they are equipped with communications means. It is therefore extremely desirable for the staffs of a front, armies, and large units to have such helicopters, since by using them not only will control not be interrupted during the period of the move, but it will also be possible to observe the movement of columns from the air and quickly clarify the situation in any area of a zone in the event that communications are disrupted.

In conclusion, we would note that in view of the great vulnerability of mobile control posts located in existing-model buses, the sites for control posts must receive engineer preparation in advance, and when possible be equipped with communications means in accordance with the plan of the move. At the same time, depending on the specific conditions of each military district, it is advisable to study the possibility of controlling troops over the entire period of a move from stationary, previously prepared control posts. This, in our opinion, will give them great survivability and contribute to continuity of control.