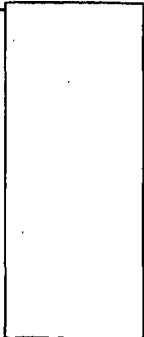


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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

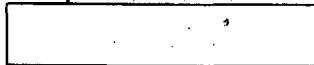
6 March 1974

MEMORANDUM FOR: The Director of Central Intelligence

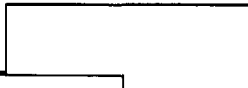
SUBJECT : MILITARY THOUGHT (USSR): The Control of a
Combined Arms Army During a Move over
a Long Distance

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 on a number of unidentified exercises to describe the control problems which arise in the continuous movement of a combined arms army over distances up to 1200 kilometers. The emphasis of the discussion is placed on the traffic control and communications aspects, with a table identifying the radios and cipher equipment used at army control posts during the move. This article appeared in Issue No. 2 (90) for 1970.

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.



William E. Nelson
Deputy Director for Operations



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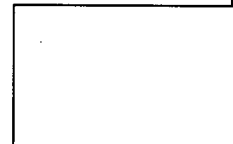
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Intelligence Information Special Report

COUNTRY USSR

DATE OF INFO. Mid-1970

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SUBJECT

MILITARY THOUGHT (USSR): The Organization of Troop Control During the Regrouping of a Combined-Arms Army Over a Considerable Distance

SOURCE Documentary
Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 2 (90) for 1970 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is General-Major D. Mikhaylik. This article draws on a number of unidentified exercises to describe the control problems which arise in the continuous movement of a combined arms army over distances up to 1200 kilometers. The emphasis of the discussion is placed on the traffic control and communications aspects, with a table identifying the radios and cipher equipment used at army control posts during the move.

End of Summary

[REDACTED] Comment:

Gen.-Major D. I. Mikhaylik was identified in an article as a general-mayor in 1966, Communist of the Armed Forces, No. 15, 1966, page 93. Military Thought has been published by the USSR Ministry of Defense in three versions in the past -- TOP SECRET, SECRET, and RESTRICTED. There is no information as to whether or not the TOP SECRET version continues to be published. The SECRET version is published three times annually and is distributed down to the level of division commander.

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The Organization of Troop Control During the Regrouping
of a Combined-Arms Army Over a Considerable Distance

by
General-Mayor D. Mikhaylik

Continuity, firmness, flexibility, efficiency, and security in troop control, as exercises show, can be achieved through the proper combination of the centralization of leadership with the independence given to subordinates and the creative initiative displayed by them. But the attainment of these goals depends to no less an extent on the system of the organs of control, their structure, organization of work, and the procedure for relocating and skillfully using communications equipment. Each time, the specific developing situation and the inherent characteristics of the combat mission necessitate specific solution of the problems of control. And yet, in almost all cases, certain common characteristics have appeared.

Let us examine these propositions on the basis of the most typical exercises involving the regrouping of an army over a considerable distance. The special feature of one exercise was the fact that the degree of centralization of control at the army-division level and the procedure for planning the regrouping were greatly affected by the security of this undertaking, and also by the necessity for detailed planning of the regrouping at such levels as the General Staff, the operations group of the military district, and the army. All this predetermined the procedure for the adoption of a plan, its support, formulation, and the transmittal of tasks to executors.

Planning was done by a highly limited circle from the army field command. Preliminary orders to prepare for the regrouping were issued immediately upon receipt of a directive bringing the troops to full combat readiness. Combat tasks in most cases were passed on through personal contact with the commanders of large units and the subsequent formulation of combat orders. Every element of the decision and plan for regrouping the army was examined

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and approved on the spot by the commander of the military district. The same approximate procedure was observed in divisional planning.

Despite the limited circle of people taking part in the planning and despite the strict centralization, the work was accomplished within a short space of time. This was due in good measure to the fact that the operations group headed by the commander and the chief of staff of the district, as well as higher echelons, reacted promptly and efficiently to the change in the situation. Another factor was the preparatory work done in the various staffs for improving methods of planning through the use of various basic data constantly on hand in staffs, departments, and services. For this purpose, special forms and tables, standard, graphic combat documents (on tracing paper) and textual combat documents (on maps) were prepared in advance where possible.

The most important task at this stage was control over bringing units up to full combat readiness and over preparing troops for the forthcoming march. Its success depended entirely on the organizational work done by staff officers directly among the troops. In doing this most of their efforts were devoted to assisting primarily large units and units of the first march echelon, and also to newly formed ones. The composition of operations groups for work among the troops was, as a rule, combined in nature. They were assigned specific tasks to ensure combat readiness and to prepare the troops for the impending regrouping. The entire field command was divided more or less into two independent groups under a single command. One performed the planning for the regrouping and stood combat duty, while the other worked among the troops and implemented the measures that had been outlined.

Experience gained from the exercises shows that during a threatening period it is possible for a limited circle of generals and officers to plan the regrouping within a short space of time and to thoroughly work out the basic problems of its implementation without the use of plans drawn up in peacetime. Such small groups have their own particular methods of work. In our opinion, operations staffs should master them during operational training.

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The special nature of the tasks of regrouping, and the conditions under which it takes place require not only proper methods of work but also the organization of an expedient system of control posts.

For example, in one of the exercises, when an army was regrouping over a considerable distance and was resubordinated to another front command, the dynamism of the overall military and political situation required special efficiency and continuity of control.

The solution of this problem was complicated by the fact that the regrouping was carried out under complete radio silence, and the prohibition of any communications on either open or secure channels of communications. Moreover, because of the conditions of the situation, the army command could not send forward in advance any communications equipment, control posts, or commandant services. A special approach to troop control was also needed if the regrouping was to be carried out with the crossing of important lines at a strictly determined time and if there was to be no gap between the support echelon and the main forces. During the exercises the opportunities for using such mobile communications equipment as helicopters were very often limited, since the troops conducted the move at night.

With the above factors in mind, the army command, in order to ensure continuity of troop control under these conditions, started setting up the kind of system which would enable the solution of a number of successive problems as the army advanced.

The control support echelon, as we called it during the exercise, was more or less divided into three groups.

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The first group included intelligence, the commandant service, the forward command post with an operations group from the rear area of the army, and with the means for setting up communications centers at the command post in the second position, and reconnaissance groups for the daytime rest areas. All these forces and means were supposed to ensure troop control in the near zone (up to 350 kilometers from the departure area).

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The second group of forces and means was aimed at ensuring control in the far zone (from 250 to 350 to 700 to 750 kilometers). One motorized rifle regiment and a communications company of the forward command post were allocated to this group for the organization of the commandant service and for control. Lastly, the third group included forces and means moving into the last concentration area.

In addition, a special group of officers was allocated to receive any military unit resubordinated during the movement. Their job was to receive and incorporate the unit into the march formation of an army on one of the routes of march.

Until the army forward command post could be set up (in the area of the first daytime rest), control was exercised mainly from the command post and rear area command post located in the departure area, and also by operations groups (at two rail junctions). The work of the command post was organized in such a way that it could direct rail shipments, the distribution of equipment arriving for newly formed units and from repair, the move of the second march echelon (two tank divisions and army units), and the collection of information for higher and coordinating staffs. Provision was also made for the command post, if necessary, to be ready to assume control of the first march echelon after permission was granted to use radio communications in the networks of large units and the commandant service.

The group of generals and officers of the army field command, who were sent to the troops of the first march echelon, controlled the crossing of the most difficult sections of each route and rendered practical assistance. Part of the field command located at the command post was ready to be airlifted (by helicopter) into the area where the forward command post was located. The collection of information concerning the movement of troops at night was accomplished through the use of mobile equipment: in large units on every route, from the rear to the head; in an army, along the front from the command post (forward command post) of the large unit to the forward command post of the army. After the restrictions were lifted on the use of radio means, these data could be received through the system of relay points available in the commandant service. At

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daybreak there was a sharp increase in the efficiency of sending this information, since we could allocate a helicopter for each route to control the advancing troops (as well as allocating one helicopter to each division).

Somewhat different conditions in the organization of army troop control prevailed in another exercise, in which the regrouping was carried out by a combined method. The difference lay in the fact that the system of control posts was supposed to ensure control of the troops moving by their own means and by rail in a zone 130 kilometers wide and 800 kilometers deep. True, by the beginning of the regrouping, the departure area and the final area contained operations groups from the army staff, and in the center of the zone of troop movement communication centers were set up at Kilometer 230 and Kilometer 550.

Under these conditions the basic method for moving control posts was to advance them in successive stages (by the "leapfrog" method). During the simultaneous move of the command post and the forward command post, it was planned to leave behind communications means, or to send them out in advance with small, mobile groups from the command post to intermediate deployment areas; after a brief lapse of time (one or two hours), light vehicles or helicopters would be used to transport these communications means to overtake the columns. Some of the generals and officers were airlifted by helicopter into the final concentration area.

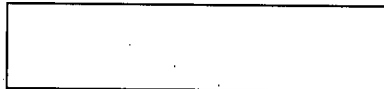
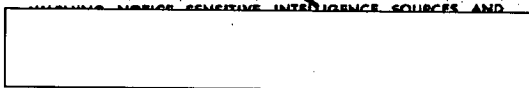
In order to reduce the number of measures involved in restoring the divisions of the first march echelon in the final area to combat readiness, it was decided to use the reserve of the commandant service of the large units of the second march echelon. This reserve supported the move of troops of the second march echelon to a depth of up to 250 to 300 kilometers. As each division of the second march echelon moved forward, it sort of "reeled in" behind it the commandant service and entered the final area at full strength. By so doing, the depth needed to deploy and collect the commandant service allocated from the first march echelon was reduced to 400 to 500 kilometers.

Upon completion of the regrouping by the combined method, the army troops dispersed into the areas assigned to them. But during the course of the exercise the situation

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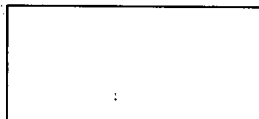
was made more complicated and the army was ordered to complete the march by its own means. The experience in troop control at this stage was extremely instructive.

The difficulty in organizing this march was due to the fact that orders were given to complete it in a very short space of time. Thus, the army assignment to regroup in full force was issued one hour before the beginning of the crossing of the line of departure by a large unit of the first march echelon. The army was to complete the march with two motorized rifle divisions in the first march echelon, and two tank divisions in the second. Moreover, it was established that, when crossing the line of departure, the time interval between divisions of the first echelon should not exceed two hours, and six hours between the first and second echelons.

The process of working out the regrouping plan and of allocating tasks to the troops under these conditions was broken down into a number of successive stages. The first step was the issuing of preliminary orders, the refinement of calculations for the march, and the refinement of the task for the motorized rifle division which was to be the first to cross the line of departure. While refining the task for this division, parallel march calculations were also being made for the second division of the first echelon, which was to cross the line of departure two hours after the first (that is, three hours from the moment the army was assigned its task).

From the very beginning of the planning of the regrouping, two groups were created at army headquarters, each of which more or less governed "its own" division. Within these groups the production of operational calculations was broken down into a number of elements: estimating the speed of movement within sectors; plotting distances; estimating the depth of the columns and the time necessary to cross the line of departure; formulating combat instructions, etc. Each of these elements was calculated and formulated by a specially appointed officer of the group. Significant factors in the completion of all the planning within the short time allowed were the preliminary calculations and the various possible march formations, taking into account the readiness of the troops to conduct combat operations from the march.

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The tasks of the troops were allotted through personal contact between the army commander and the commanders of large units, and by written combat orders sent through cipher organs. In a number of cases army command personnel were dispatched (by helicopter or motor vehicle) to the large units to allocate tasks.

In organizing the monitoring of the execution of tasks by the troops, the main emphasis was placed on checking the definition of the task assigned, the timeliness of its execution, and on insuring a high degree of combat readiness during the march.

Troop control during the regrouping was accomplished from the forward command post, the command post, and the rear area command post of the army. Also, the forward command post moved at the head of the column, and the command post moved behind the column of main forces of the first march echelon. In addition, monitoring groups from the army staff were stationed in the departure area and on the phase lines.

Communications in the army were organized as far as the line of departure with the help of mobile communications equipment and on existing channels of line communications allotted to the army by order of higher headquarters. Subsequently permission was given for the use of radio, tropospheric and radio-relay equipment for communications with higher headquarters and army large units.

Radio communication with higher headquarters was organized on twelve radio nets and radio links; and with subordinate large units, army control posts, and operations groups, it was organized on twenty-five radio nets and radio links.

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Amount of Basic Communications Equipment Used for These
Purposes at Army Control Posts

Type of Communications Equipment	Communications Center of Command Post	Communications Center of Forward Command Post	Communications Center of Rear Area Command Post
Radio Sets R-110	1	-	-
Radio Sets R-102, R-110, R-118	13	8	3
Radio-Relay Sets R-405, R-401m	4	2	1
Tropospheric Sets R-122	4	-	-
Secure Communications Device (ZAS) T-204	6	-	1
Secure Communications Device T-205	8	4	-
Secure Communications Device T-217	12	3	-

From what we have discussed thus far, we may draw the following conclusions.

What takes the most effort, because of the diversity of the tasks to be solved and the expenditure of forces and means, is control of the regrouping of troops by the combined method under conditions of complete radio silence. Experience shows that the creation of various temporary groups (operational, monitoring, etc.) makes it necessary to have outside the control posts (forward command posts, command posts, and rear area control posts) up to 20 to 35 percent of the officers of the main departments and services of the army command. Regrouping with an operational resubordination of an army also requires a substantial expenditure of means in order to ensure communications with higher headquarters. Thus, during the exercise it was necessary to allocate for this purpose up to 40 percent of the radio means and up to 33 percent of telephone and telegraph equipment with secure communications devices.

Consequently, the mastery by staffs of the methods of work performed by understaffed departments and services is an urgent problem. It will require further study and activity on the part of various operational groups.

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As for the organizational structure of the control posts (groups), it is advisable, in our opinion, to follow the principle of permanent assignment of officers to them, while still in peacetime. Here we must consider not only the status but also the individual qualities of each. Practice shows that the subjective side of the matter has a definite effect on work methods. Efficiency and accuracy in the conduct of all work, especially when the control post (group) is understaffed, depends to a great extent on harmony and cooperation among officers.

Another principle that has justified itself is the division of duties in departments by types of work. Thus, for example, the operations department contained three distinct groups: planning (3 men), axis officers (4 to 6 men, according to the number of divisions), information (3 men). The number of personnel in these groups very often turned out to be less. Often there were disproportions between the number of personnel and the amount of work to be done, especially when the forward command post and various operations groups were set up with work requiring 4 to 5 officer-operators. A similar situation existed in a number of other departments. The problem was solved not only by adopting the most economical methods of work, but also by ensuring mutual interchange within the departments and between them and by achieving full continuity when transferring control from one post to another.

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Practice has shown that a significant factor here can also be the degree to which the equipment of staffs can cope with the introduction of economical methods of work in various groups which are understaffed. For example, eleven specially equipped staff buses (of the "Babochka" type), with 181 square meters of usable floor space, were put into service for this purpose in the army field command. Four of them, joined together in a certain way, constituted the central control post, with more than 66 square meters of usable floor space. It contained a common hall, with work places prepared for the chiefs of the arms of troops, services, and departments, and for the planning group of the operations department; the control post for rocket troops and artillery; and work places for the axis group. In the control center were thirty-three telephones for various purposes, which made possible communications with subordinates directly, or through the central telephone

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exchange; and also made possible remote control of radio equipment. A steady flow of information as to the availability of communications channels, and data regarding the transmittal of combat documents and orders shown on illuminated displays in the central command post, made possible more efficient reaction to various changes in the situation when operating with reduced manpower.

In addition, in order to increase mobility and improve the working conditions of various operations groups allocated to the command post, we tried to ensure autonomy for part of the staff equipment by preserving the necessary level of its technical equipment.

On the whole, experience gained during the exercises showed that the system we selected for troop control during the regroupings by various methods justified itself. Our first attempts to ensure air mobility for a certain portion of the personnel of the control posts yielded positive results (~~control posts on Mi-4 helicopters were equipped with the necessary system of radio equipment~~). At the same time, the experience of the exercises enables us to express our proposals on other questions of control.

First of all, about the quality of leadership. As is known, this depends to a considerable extent on the completeness of the data collected on the situation, and on the timeliness of the allocation of combat tasks. At the same time it is precisely here, in one of the main questions of control, that a bottleneck developed during the exercises. The flow of operational-tactical information was in clear contradiction to economical methods of work of the staff, and also with the real capacity of the existing communications system.

Let us turn to certain facts from practice. The volume of operational-tactical information in one exercise lasting 22 days amounted to 15,000 telegrams (more than 2 million words). During the most intense period 6,320 telegrams were transmitted and received in 13 days. In other words an average of 450 telegrams were processed daily, with a volume of about 79,000 words (groups), not counting information transmitted orally.

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Try as we did to seek out the causes of the increase in this flow of information in the subjective side of the matter, the fact remains that under modern conditions the tendency toward a sharp increase in the volume of information objectively exists and will continue to do so. This is due to the nature of modern combat operations. The more abruptly and dynamically the situation changes, the faster the increase in the flow of information, irrespective of the technical capabilities of the communications equipment.

We view the solution of the problem as lying in changing the correlation between written and verbal information. In our view, preference should be given to the latter. And this is possible now that the troops have increasingly begun to receive models of radio equipment which make conversations over secure channels possible.

But the increase in the volume of information is caused by other factors as well. An analysis shows that the documents were at times wordy and overloaded with superfluous factual material. This can be eliminated by instituting special training in the wording of information documents, as well as by implementing practical measures in exercises and games.

But there are problems which must be resolved by the joint efforts of staffs at all levels.

For example, in examining the content of documents during exercises, the question constantly arose: why must our written information day after day include the same long wording, changing only the numerical data? The use of standardized documents has long been recognized as being worthwhile. Why can they not be used by operations staffs all the way up to the General Staff? This would make it possible not only to reduce the time needed to process documents within staffs, but also to increase the efficiency of their transmittal over the lines of communications.

It seems to us that there is now an urgent need for the use of standardized documents which are going to be introduced in wartime in the army-district (group) network and in the army-ground forces headquarters (General Staff) network. When an army is resubordinated, an exchange of

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standardized documents should take place between operational headquarters.

A reduction in the volume of information, in our opinion, can be achieved by other means as well. It is known that under modern conditions the very same information goes simultaneously over the same channels to various directorates of higher headquarters. For example, questions concerning materiel supplies for the troops are reflected in operational and rear area logistics reports, while data concerning the movement of troops, for its part, appear in operational documents, in documents of the military transportation service, etc. Evidently we must reexamine the procedure for reciprocal information within large operational headquarters and between them for the purpose of eliminating excessive duplication in transmitting situation data.

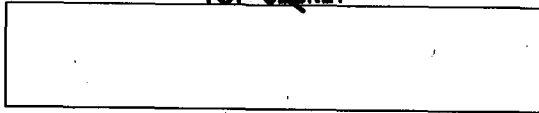
An analysis of the efficiency of the transmittal of information during the exercises shows that the flow of information during a 24-hour period was distributed extremely unevenly. Almost 79 percent of the information is transmitted during a four-hour period (between 1700 and 2100 hours), which results in considerable overloading of communications facilities and often exceeds the limits of their technical capacity. Consequently, in resolving the problem of coordinating the flow of information with the technical capacity of the communications equipment, a number of steps must be taken to ensure more efficient distribution of the load by time. Naturally a certain increase in the load will occur in the evening hours, since it is at this time that the organization of nighttime combat operations is carried out at the operational-tactical level, while at the operational level the day's activity is being assessed and tasks for the next day are being refined in detail. However, it is possible to spread out somewhat the incoming information among the various echelons of command so that the load on technical communications equipment will be more evenly distributed throughout the day.

In conclusion, we would like to point out another, in our opinion, important way of improving the reliability of control. We have in mind the organization of the commandant service with a system of relay stations established within it for transmitting messages and reports.

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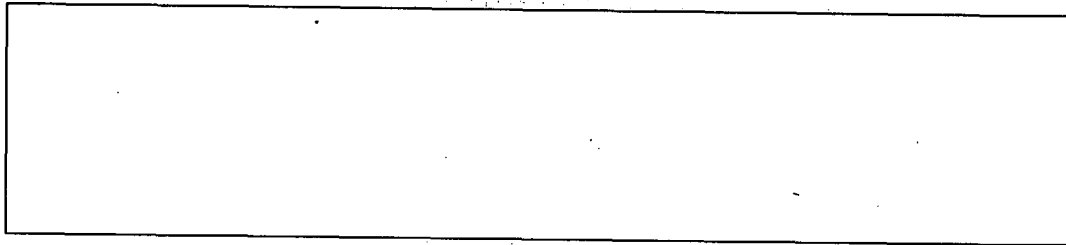


The efficiency of the work performed by the commandant service depends on the degree of readiness of the forces and means brought into its organization. In one exercise which involved a regrouping over a distance of 1200 kilometers, we succeeded in organizing this service effectively because we had properly equipped and trained in advance the personnel of two motorized rifle regiments, and in each large unit a trained reserve was created.



Therefore, in our view, depending on the special features of the theater of combat operations and on the operational purpose of the army, a certain part of the motorized rifle subunits must be prepared in peacetime to carry out commandant service duties while on the march, having made the appropriate additions to their training program and created the necessary emergency reserve of equipment.

The thoughts we have expressed on problems of control of a combined-arms army while regrouping over a considerable distance do not, of course, fully exhaust the subject, nor can they be considered definitive. The proposals for resolving problems of troop control under these conditions require further study.



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