MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): Reconnaissance

Independence of a Tank Army

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 cites delay in receiving the required reconnaissance data from the front as a justification for independence of reconnaissance for a tank army. To provide a tank army with better reconnaissance, the author recommends the introduction of integrated equipment to differentiate and locate targets, a temporary augmentation of organic means, and the establishment of a separate reconnaissance unit in the army. Organic air reconnaissance and transport also will help provide reconnaissance independence through more timely reaction in operational situations. This article appeared in Issue No. 2 (81) for 1967.

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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COUNTRY USSR

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SUBJECT MILITARY THOUGHT (USSR): Reconnaissance Independence of a Tank Army

SOURCE Documentary

Summary:
The following report is a translation from Russian of an article which appeared in Issue No. 2 (81) for 1967 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is Colonel V. Volobuyev. This article cites delay in receiving the required reconnaissance data from the front as a justification for independence of reconnaissance for a tank army. To provide a tank army with better reconnaissance, the author recommends the introduction of integrated equipment to differentiate and locate targets, a temporary augmentation of organic means, and the establishment of a separate reconnaissance unit in the army. Organic air reconnaissance and transport also will help provide reconnaissance independence through more timely reaction in operational situations.

End of Summary

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.
Reconnaissance Independence of a Tank Army
by
Colonel V. Volobuyev

Under present-day conditions the significance of reconnaissance is especially great for a tank army operating to the entire depth of a front offensive operation at a considerable distance from the remaining forces of the front and independently resolving various combat tasks. It is necessary to take into consideration the fact that the time for acquiring precise and authentic information will be very short, and the time for reconnaissance and final reconnaissance of specific targets can literally be counted in minutes.

In comparing the period of deployment and preparation for fire of the enemy's operational-tactical and tactical nuclear weapons with the time needed for the organization of his destruction by the fire means of a tank army, we arrive at the conclusion that it is necessary to keep these enemy weapons in the field of view of army reconnaissance. The results of this reconnaissance must be reported to the army commander almost simultaneously as events and enemy actions occur.

The available reconnaissance forces and means of a tank army under present-day conditions do not possess such capabilities. At the same time, research conducted at the Academy of Armored Troops and materials from research war games, corroborated by the experience of operational exercises, show that reconnaissance data, even when acquired by front means with the use of the most improved types of communications, also arrive at the army with a great delay of from one to three hours. It is impossible to make use of these outdated data. Thus, expensive nuclear and other means of destruction can be pointlessly expended.

As a result, a situation can develop in which the commander of a tank army, possessing nuclear warheads and realizing the absolute necessity of destroying important enemy targets, but not having reconnaissance data available or awaiting it from the front staff, will not be able to employ the nuclear power of the army. In so far as only the commander is authorized in accordance with the situation to employ his powerful organic nuclear and other fire means, it is extremely desirable for him to also have his own organic forces and means of reconnaissance.
Consequently, a tank army must be sufficiently independent in respect to reconnaissance. In our opinion, within a tank army must be included reconnaissance forces and means which assure the timely acquisition and rapid transmission of precise and authentic information about important enemy targets in order to strike or destroy them by preemption and with a high degree of reliability.

What are the ways of resolving this problem?

An analysis of the capabilities of various types and means of reconnaissance shows that, when used separately, they do not always assure the acquisition of the required information. The ever wider employment of radioelectronics by the enemy for troop and weapons control, the increase in mobility and the reduction in the preparation time of weapons for action, continue to complicate the acquisition of information by any one means or type of reconnaissance. It is necessary to recheck the data obtained and to compare it with other data, and this leads to a substantial time loss in the course of which valuable information becomes outdated. Furthermore, the expenditure of forces and means becomes excessively great.

A simple quantitative increase of reconnaissance means in an army will not completely resolve the problem of the timeliness, accuracy and authenticity of the acquisition of reconnaissance information. One possible way is the further improvement of each separate type and means of reconnaissance, and of reconnaissance equipment and devices.

However, in our view the most promising method, which meets present-day conditions, is the establishment of integrated reconnaissance equipment consisting of various devices operating with functional interdependence of time and place, and permitting the detecting and distinguishing of actual targets from simulated ones according to specific characteristics, the precise and rapid determination of a target's coordinates and the transmission of these to the commanders, staffs and directly to the means of destruction. A special role in integrated reconnaissance equipment will apparently belong to television in combination with infrared, magnetic and radar equipment.

Television equipment allows the visual observation of reconnaissance targets and the instantaneous (simultaneous with the events taking place) transmission of information to television receiver screens at troop and weapons control posts. Magnetic equipment assures the distinguishing of actual targets from simulated ones, and radar devices give the precise coordinates of the target. The standardization of various units, which
permits the joining together (integrating) of units depending on the special purpose of the entire system, and the rapid replacement of them, is advisable from the very beginning when integrated reconnaissance equipment is built.

As it appears to us, with the use of similar systems, precise, authentic reconnaissance data can be obtained within the maximally short time required by the situation, which will increase the reliability of a preemptive strike or the destruction of important enemy targets with the least expenditure of expensive means of destruction. As a result, the capabilities of the reconnaissance forces and means of a tank army will sharply increase and their number will significantly decrease in comparison with the present situation.

However, it cannot be forgotten that war can break out before the supplying of reconnaissance organs with new equipment has been completed. For this reason, to increase the combat readiness of an army, it is already advisable at the present time to maintain an army's reconnaissance units and subunits at their wartime tables of organization.

It is necessary to constantly search for the most expedient methods of organizing reconnaissance and of summarizing the results of reconnaissance activity within a brief time period. At a war game conducted by the Academy of Armored Troops in February 1967, a system for the listing of important enemy targets destined for destruction by nuclear means was developed jointly by the intelligence department and by the staff of the rocket troops and artillery of the army in advance. The experience of this game shows that by using this system the volume of information and the time required for the mutual exchange of information can be decreased by a factor of 1.5 in the field headquarters of the army.

At the same game the development of a graphic reconnaissance plan was practiced not on a special map as before, but on a transparent overlay superimposed on a map of the enemy grouping. The development of such a reconnaissance plan by two officers required approximately three hours, i.e., less time by a factor of two than is normally spent; this plan is graphic and simple. It can be superimposed on the chief's map, which gives him the capability to quickly issue the most advisable instructions concerning reconnaissance.

The degree of reconnaissance independence of an army can be increased from the present-day level by a rational temporary augmentation of organic reconnaissance forces and means. The process of the constant reduction of
the overall strength of reconnaissance units and subunits will continue as new means and systems of reconnaissance equipment are introduced into the troops. The proposed augmentation of forces and means must correspond to the minimal requirements of a tank army for the accomplishment of only the most important reconnaissance tasks which assure the preemptive fire destruction of an enemy grouping, having a strength of approximately three to four divisions, which could oppose the army troops at any time.

An analysis of the typical conditions of army combat actions and calculations show that it is advisable to increase the capabilities of radio, radiotechnical and special (long-range) reconnaissance means by a factor of two for the optimal variant. Thus, radio reconnaissance means will be able to constantly monitor all of the most important radio nets (communications) of the enemy grouping discussed above. An increase in the number of special-purpose reconnaissance groups from nine to 18 or 20 per army and an increase in the number of long-range reconnaissance groups from five to 12 or 14 for each division will permit the detection of all nuclear means and important enemy targets during any maneuver. This presents the possibility of newly establishing a network of special (long-range) reconnaissance sources on the basis of two positions.

A twofold increase in the capabilities of reconnaissance units and subunits of divisions and regiments will free them from the necessity of dispersing the striking power of tank units in order to conduct tactical reconnaissance.

An organic, highly mobile, separate reconnaissance unit is necessary in a tank army. It will assure the swifter penetration of reconnaissance through the security zone to the enemy main forces, nuclear means, control posts and reserves. This unit will be able to intensively conduct long-range reconnaissance, to quickly redirect its efforts to a new axis or to areas in which the destruction of the immediate enemy grouping and the joining of the unit with an airborne landing force are planned. A mobile reconnaissance unit can be a kind of reserve for the replacement of possible losses in reconnaissance forces and means and in large units. Finally, in our opinion it is the most desirable method of combating the enemy's nuclear means as it combines reconnaissance with the immediate destruction or disabling of these means.

The availability within a tank army of organic air reconnaissance means and transport aircraft or helicopters can to a considerable degree assist in the achievement of reconnaissance independence by a tank army. They will establish imposing prerequisites for the realization of the range
advantages of army operational-tactical missiles over the respective enemy missile systems; they will support the dispatch of special-purpose reconnaissance groups (long-range reconnaissance groups) into the enemy dispositions and the airlift of air-transportable reconnaissance organs for the purpose of the timely fulfilment of suddenly arising tasks, especially during the negotiation by the troops of nuclear mine barriers, nuclear minefields, water obstacles, and areas of flooding, destruction and other serious obstacles.

In our view the measures enumerated above will permit the accomplishment of a large number of tasks in a short period of time, which will promote an objective appraisal of the enemy and the organization of his preemptive destruction by the forces of a tank army.