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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

16 March 1977

MEMORANDUM FOR: The Director of Central Intelligence
FROM : William W. Wells
Deputy Director for Operations
SUBJECT : MILITARY THOUGHT (USSR): Reconnaissance
Capabilities and Requirements

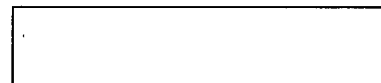
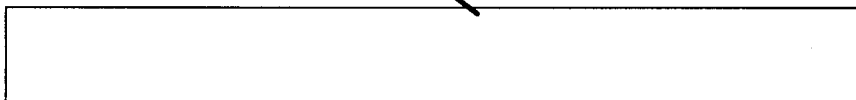
1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". This article is an overview of reconnaissance capabilities and requirements at the army and division level. The number and types of targets to be reconnoitered and the ability of the various types of reconnaissance available to detect them at various depths are studied in arriving at the conclusion that an army needs a separate reconnaissance regiment on its T/O. The author also stresses the need to maintain the wartime T/O of reconnaissance elements to ensure readiness, to set up an improved communications system to allow more timely receipt of data, and to improve the selection and training of intelligence personnel. This article appeared in Issue No. 1 (77) 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

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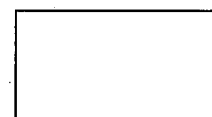
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Intelligence Information Special Report

Page 3 of 10 Pages

COUNTRY USSR

DATE OF INFO. Early 1966

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DATE 16 March 1977

SUBJECT

MILITARY THOUGHT (USSR): Reconnaissance Capabilities and Requirements

SOURCE Documentary

Summary:

The following report is a translation from Russian of an article which appeared in Issue No. 1 (77) for 1966 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is Colonel M. Dedovich. This article is an overview of reconnaissance capabilities and requirements at the army and division level. The number and types of targets to be reconnoitered and the ability of the various types of reconnaissance available to detect them at various depths are studied in arriving at the conclusion that an army needs a separate reconnaissance regiment on its T/O. The author also stresses the need to maintain the wartime T/O of reconnaissance elements to ensure readiness, to set up an improved communications system to allow more timely receipt of data, and to improve the selection and training of intelligence personnel.

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.

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Page 4 of 10 Pages

Reconnaissance Capabilities and Requirements

by
Colonel M. Dedovich

The employment of nuclear weapons, the high mobility of troops, and the change in methods of conducting the battle and the operation have led to a sharp growth of the role of reconnaissance. Its tasks, as we know, have been greatly complicated, and requirements for its organization and conduct have increased. Having especially great significance now are continuity, timeliness, and reliability of reconnaissance. At the same time, the time for fulfilling its tasks has been greatly reduced.

In a present-day army operation, the main task of reconnaissance is searching out enemy means of nuclear attack and determining their degree of readiness for delivering strikes. Besides this, it must determine the enemy concept of operations and the grouping of his forces and means. Army reconnaissance is charged with providing the command in good time with reliable data about the targets against which the delivery of nuclear and fire strikes by the missile units and artillery of the army is planned.

Considering that the main targets for delivery of nuclear strikes are missile/nuclear means, armored troops, nuclear warhead depots, and airfields of the atomic weapons-carrying aviation of the enemy, which are situated at a depth of 10 to 250 kilometers, reconnaissance in support of an army operation must obtain data over this whole depth, which is in keeping with the range of the missile/nuclear means available to the army commander.

In the zone of an army up to 100 kilometers wide and 250 kilometers in depth, four or five enemy divisions (up to three of them in the first echelon) can be conducting combat actions, which together with attached and supporting artillery will constitute over 300 targets. In this same zone, among the means of nuclear attack there may be nine or ten battalions of Honest

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Page 5 of 10 Pages

John free-flight rockets, four or five battalions and four or five batteries of 203.2-mm howitzers, up to four battalions of Sergeant missiles, one or two battalions of Pershings, and up to four or five nuclear warhead supply points and one or two army depots of nuclear warheads, that is, up to 50 more targets.

Besides this, there will be other important targets in the zone of the army, such as control posts, airfields, aviation guidance posts, surface-to-air missile means, rear services organs, the most important transportation lines, and bridges over water barriers; around 150 targets in all.

In sum, in the army's offensive zone there may be up to 500 targets, including 120 to 150 most important ones. The majority of them (about 300, up to 90 of the most important) will be situated at a depth of 50 to 100 kilometers.

Clearly, the reconnaissance forces and means of the army cannot detect all these targets. Indeed, there is no need for this. But the most important targets must be detected by reconnaissance in good time and with enough reliability, which requires that data on each target come in from several sources. Final reconnaissance also is necessary.

The experience of exercises with division and army reconnaissance units has shown that the forces and means of the first-echelon divisions with the participation of army means in the zone of the army can successfully conduct reconnaissance of 100 to 120 enemy targets simultaneously.

Here it should be noted that targets are more fully detected at a depth up to 30 kilometers, where radio, radiotechnical, combined-arms, artillery, and engineer reconnaissance are conducted. Less fully detected are targets at operational depth, and they often acquire the most importance. Thus, at a depth from 40 to 100 kilometers are situated operational-tactical missiles in position, depots of nuclear warheads, control posts, corps and army reserves, etc. These targets interest both the division commander and the army commander.

What can be used to conduct reconnaissance at a depth of 40 to 100 kilometers? Of division means -- first of all, long-range reconnaissance groups, of which there are five in a division.

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Page 6 of 10 Pages

For carrying out reconnaissance tasks at this depth, two to three groups from each division can operate simultaneously, and five to six groups altogether in the zone of the army. Of army means, only radio reconnaissance in the shortwave band can operate at this depth. Clearly, these means are utterly inadequate.

Organization of reconnaissance deeper than 100 kilometers falls entirely to the staff of the army. At this depth it is necessary to detect such targets as depots and supply points of nuclear warheads, positions of operational missiles, airfields of atomic weapons-carrying aviation, and also concentrated and advancing deep operational reserves of the enemy. Besides this, the army reconnaissance is charged with final reconnaissance of targets designated for destruction with army nuclear means.

Thus, army reconnaissance is confronted with extremely complex tasks. However, fulfilling them with the available forces and means of reconnaissance is extremely difficult.

As we know, among the reconnaissance means in an army there is only one OSNAZ radio battalion and one separate artillery reconnaissance battalion.

A separate OSNAZ radio battalion can set up ten radio intercept posts in the shortwave band (four of them for intercept of printer transmissions), ten radio intercept posts in the ultra-shortwave band, three radio direction-finding posts in the shortwave band and four such posts in the ultra-shortwave band, and also four intercept posts for radio-relay communications. With this, only 15 intercept posts and three direction-finding posts in the shortwave band can conduct reconnaissance to a depth of more than 40 kilometers. In all, the battalion can simultaneously conduct reconnaissance of 75 to 100 targets, but at a depth over 40 kilometers, only 30 to 40 targets.

Using radio reconnaissance it is possible to obtain very valuable information. But the army OSNAZ battalion, because of being inadequately equipped technically, unfortunately is not capable of giving the precise coordinates of targets for delivering nuclear strikes on them. Therefore, as we know, radio reconnaissance is still conducted only as a "frill". Radiotechnical reconnaissance is conducted the same way with the forces of the separate artillery reconnaissance battalion to a

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Page 7 of 10 Pages

depth up to 45 to 60 kilometers.

Thus, there are not enough reconnaissance forces and means in the army to fulfil tasks in support of an army operation. To allege that the front will conduct reconnaissance of targets in the operational depth for the army, as some still try to do, is, in our opinion, totally wrong. The staff of the front can plan targets for destruction by army missile troops only in the initial strike. During the operation, the army is obliged to conduct reconnaissance with its own forces.

We consider that it is necessary to have in the complement of an army, besides the reconnaissance forces and means now existing, a separate reconnaissance regiment. It may consist of one or two reconnaissance battalions (with one tank company and two reconnaissance companies in armored reconnaissance vehicles in each one), a long-range reconnaissance battalion composed of two companies (with nine groups each), an aerial reconnaissance squadron (two flights of tactical aerial reconnaissance aircraft, a flight of aircraft for dropping long-range reconnaissance groups, and a flight of helicopters), and a squadron of unmanned reconnaissance means. The availability of such forces and means of operational reconnaissance in an army will, as calculations show, fully ensure the carrying out of reconnaissance tasks in an army operation.

In exercises, in order to get out of the difficult position which comes about because of the lack of the necessary reconnaissance forces and means, those involved plan to use, strange as it seems, reconnaissance units that do not exist in the army. In some exercises, for instance, they used a separate special purpose company and an aerial reconnaissance squadron. Inasmuch as there are no such forces and means in an army, their capability and principles of combat employment are, as a matter of fact, unknown to army staffs and, thus, not studied. Obviously, it is not necessary to demonstrate that such a convention only brings harm. True, they try to demonstrate that there is nothing wrong with this inasmuch as there are plans to give the army such reconnaissance forces and means with the start of a war. In our opinion, this is not the best solution to the problem of reconnaissance.

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Page 8 of 10 Pages

Inasmuch as a present-day war may be a nuclear one and begin with powerful nuclear strikes by the belligerents, it is first of all required to know the targets subject to destruction by nuclear weapons, including destruction by the army means. It is assumed, as we have already said, that the staff of the army will receive the targets for these strikes from the front. However, the pinpointing of these targets, i.e., the conduct of final reconnaissance, will have to be organized by the staff of the army. Otherwise, the delivery of nuclear strikes with the army means against empty areas is not excluded, since many enemy targets, with the exception of stationary installations (airfields, depots), will change their locations.

In an army, though, there will not be such forces and means of final reconnaissance up to the time the war begins; therefore, the tasks of destroying enemy targets may be generally unfulfilled.

Even if an army does receive the above-indicated reconnaissance forces and means by the beginning of a war, it will be difficult to count on their effective use. The thing is that it is necessary to train reconnaissance personnel a long time so that they have the necessary skills, which newly formed units will not have. Therefore we fully support the statements of a number of authors that in border military districts and armies we should already now have all reconnaissance units fully manned according to wartime T/O and always keep them in full combat readiness. Only in this case will army reconnaissance be capable of successfully accomplishing tasks from the very beginning of a war.

One of the basic principles of reconnaissance is timeliness of receiving data on the enemy. This principle has existed for a long time, but it acquires special significance in present-day conditions involving the employment of nuclear weapons and highly mobile ground forces. Now the time necessary for getting reconnaissance data is not reckoned in days or even in hours, as it used to be, but in minutes and even seconds.

Let us consider this example. Let us assume that a long-range reconnaissance group has observed a Sergeant battery or battalion at a launch position. Bringing this battalion to readiness for a missile launch requires no more than 30 to 50

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Page 9 of 10 Pages

minutes. Our missile battery on alert can carry out a launch in 15 to 20 minutes after receiving the appropriate command. Thus, in order that this target be reliably destroyed, it is necessary to transmit the data on it to the battery on alert in five to ten minutes (from the moment the target is spotted). This time is shortened even more if the target has already been in position for several minutes by the time it is spotted.

In practice, though, we still have not succeeded in achieving such time of passage of reconnaissance data. In exercises, missile batteries receive reconnaissance data from long-range reconnaissance groups in an hour and even later, i.e., with a very great delay. This grossly violates the principle of timeliness of reconnaissance.

One of the measures that would allow improving this situation to some degree is to set up stable, continuous, and reliable communications with reconnaissance organs and means. Practically speaking, it is impossible to set up such a system of communications specially for reconnaissance because of the lack of the appropriate means of communications. Therefore, it seems to us, the time has come to really study the questions of providing reconnaissance organs and units with means of communications. In particular, it is necessary to have, in the T/O&E of communications companies and battalions, radio sets for the intelligence chiefs of regiments and divisions. The intelligence chief of an army should have a special communications center that ensures quick collection and processing of reconnaissance data. Such a center must be provided for in the T/O&E of the army communications regiment, the more so as it is always set up for exercises, but in an improvised way.

With the availability of the indicated radio means, the army chief of intelligence will be able to have communications with the division chiefs of intelligence by radio net, and with the OSNAZ radio battalion and the reconnaissance regiment -- by radio links. When long-range reconnaissance groups are operating in the operational depth, radio communications must be organized by the army chief of intelligence himself, also by independent link.

The success of the organization and conduct of reconnaissance depends heavily, too, on the presence of trained

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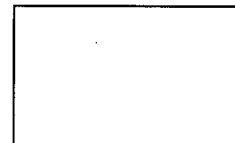
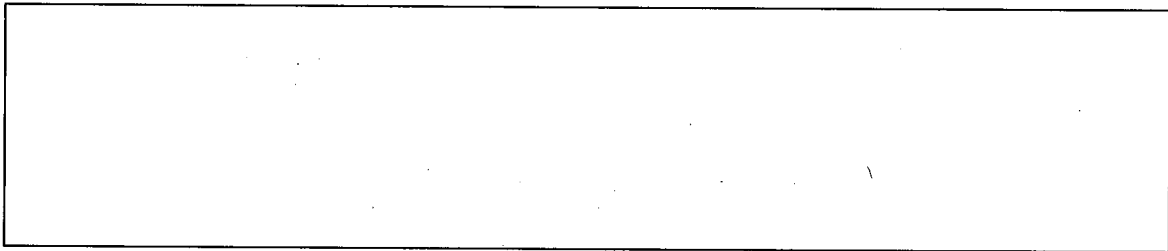
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Page 10 of 10 Pages

cadres of reconnaissance personnel. It is fully understandable that, even with the most modern technical means of reconnaissance, man remains the main and the deciding factor in the accomplishment of reconnaissance tasks, as of all other tasks. Unfortunately, however, sufficient attention is still not being devoted to the selection of intelligence officers, especially in division and regiment staffs, or to their training as specialists and their service in the troops.

Thus, many matters of the organization and conduct of reconnaissance at the army and division levels require radical improvement in order to sharply increase the capabilities of reconnaissance organs and units, in order that reconnaissance in an army may be capable of accomplishing not only tactical, but also operational, tasks.



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