MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): Soviet View of US Field Army Intelligence Capabilities

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 describes the intelligence functions and capabilities of a US field army. The only analytical remarks that the authors venture to make are that the US Army considers intelligence extremely important and that Soviet forces must combat intelligence collection activities effectively to be successful in military operations. This article appeared in Issue No. 3 (91) 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.

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Summary:
The following report is a translation from Russian of an article which appeared in Issue No. 91 for 1970 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The authors of this article are Colonel A. Kushnarev, Candidate of Military Sciences, Docent, and Colonel A. Ryzhkov, Candidate of Military Sciences, Docent. The article describes the intelligence functions and capabilities of a US field army. The only analytical remarks that the authors venture to make are that the US Army considers intelligence extremely important and that Soviet forces must combat intelligence collection activities effectively to be successful in military operations.

Comment:
Lt.-Col. A. Kushnarev wrote an article in Voennyy Vestnik in August 1953 on rifle company reconnaissance. Lt.-Col. A. Pyzhkov published two articles on West German forces in Voennyy Vestnik in the August 1962 and May 1967 issues. In 1970 a Col. Ryzhkov was assigned to the Malinovskiy Armored Forces Academy. 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.
Intelligence in a US Field Army

by

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The US military command believes that intelligence, particularly tactical intelligence, is of paramount importance to the successful conduct of combat operations and to the effective employment of nuclear weapons directly on the battlefield, and the entire range of tactical intelligence tasks is performed by the field army.

It is the task of tactical intelligence to obtain information on opposing enemy forces, enemy capabilities and weaknesses, weather conditions, and the nature of the terrain in the area where the troops are engaged, or will be engaged in combat actions.

In time of war, the field army conducts agent intelligence collection, special reconnaissance, aerial reconnaissance, radio and radiotechnical reconnaissance, radar reconnaissance, and ground reconnaissance.

Agent intelligence collection is usually organized and conducted by an agent group, assigned from the reserve of the supreme high command, that carries out intelligence assignments on specific operational axes. Also assigned for this purpose is a group that has the function of studying and analyzing the information obtained by strategic agent intelligence collection and of coordinating its activities with army agent intelligence collection.

Field army agent intelligence collection is organized to a depth of up to 600 kilometers. Depending on the intelligence personnel available and the quality of their training, on the volume of intelligence tasks, and on the extent of enemy countermeasures against agent activities,
(individual agents, residencies, groups) deployed in the field army zone of operations.

*Special reconnaissance* in the rear area of the enemy, which is of extremely great concern to the American command, is conducted by sabotage-reconnaissance subunits equipped with the best communications and reconnaissance means. To engage in special reconnaissance, a special-purpose group from reserves of the command of ground troops of the US in the theater of military operations is occasionally attached to a field army. This group usually consists of a staff and seven companies (one headquarters company, four special-purpose companies, a communications company, and an army aviation company) and numbers 1,542 persons, including 268 officers and 1,274 enlisted men.

Each special-purpose company consists of an administrative detachment and a C operational detachment; the latter consists of three $B$ operational detachments, each of which is divided into four $A$ operational detachments (with twelve persons per detachment). The composition of the group varies, depending on the nature of the area in which it is to operate. When necessary, sixty-four operational detachments from a standard group may be dispatched to the enemy rear (to engage in sabotage-reconnaissance activities and to organize and supervise counter-revolutionary bands).

According to the views of the US command, these dispatched operational detachments are required to perform a number of special tasks: to organize counter-revolutionary uprisings and detachments of Insurgents; to conduct combat actions against partisans either independently or jointly with troops allocated to them; and to carry out reconnaissance and sabotage operations in the enemy rear.

Each special-purpose group operational detachment is trained and equipped to have the capability of organizing and supervising revolutionary organizations composed of local mercenaries and numbering up to 1,500 persons.

The equipment of a special-purpose subunit depends both on the number of its detachments and on the nature of its tasks. Small teams and detachments are supplied with
small-sized nuclear charges, incendiary and biological means, toxic agents, and technical equipment for the reconnaissance of radio and radar stations, etc. Therefore, in accomplishing their sabotage tasks the groups may employ small XM129 nuclear land mines with a yield of 0.02 kilotons and transportable by one person, and bacteriological and chemical means for contaminating water sources, food supplies, and small areas where enemy troops are deployed or may be deployed.

A field army and its component army corps ordinarily employ long-range reconnaissance companies assigned to them from the reserve of the supreme high command for reconnaissance in the enemy rear. Each company consists of two Platoons (each with twelve reconnaissance groups or patrols) and one communications platoon. A total of twenty-four groups, each with five or six persons (including radio operators from the communications platoon) can be dispatched to the enemy area.

The primary task of these groups is the reconnaissance of weapons of mass destruction, the main troop movement routes, areas of troop concentration, and other important targets in the operational-tactical zone to a depth of 75 to 450 kilometers from the forward edge of their own troops. In addition, these groups correct and evaluate the results of missile and air strikes, and they also engage in radiation, chemical, and bacteriological reconnaissance.

The reconnaissance groups from the special-purpose groups and the long-range reconnaissance companies are usually dispatched to the enemy rear by air, by waterways, by motor transport, and on foot. When delaying actions are being conducted, the reconnaissance groups may remain in the enemy rear.

In addition to long-range reconnaissance companies, reconnaissance groups (patrols) from the infantry (mobile) sections of aerial reconnaissance companies from armored cavalry regiments and reconnaissance battalions of divisions are designated for dispatch to the enemy rear.

Because the army and the corps are reinforced by the reconnaissance means of the commander of the ground forces
In the theater of military operations, and because the divisions have available to them multi-purpose reconnaissance platoons and a large number of aircraft and helicopters, the field army staff is able to organize aggressive sabotage-reconnaissance operations in the enemy rear. Thus, a mechanized division, an infantry division, and an armored division are able to dispatch to the enemy rear from four to twelve reconnaissance groups, each with a force of up to a section; and an army corps can dispatch fifteen to twenty reconnaissance groups drawn from a long-range reconnaissance company, and a minimum of four reconnaissance groups, each of section strength, drawn from an armored cavalry regiment.

In the case of the Central European Theater of Military Operations, where the US field army will have two army corps (five divisions), the overall intelligence capability of the field army in the offensive (defensive) zone consists of up to 50 agent collection points and 150 to 200 reconnaissance groups and detachments. Under favorable conditions they have the capability of reconnoitering within a twenty-four hour period 400 to 600 important targets, including nuclear attack means, nuclear munitions depots, control posts, and reserves; and of having all the important roads under continuous surveillance at a depth of 450 kilometers and more.

In the opinion of the US command, aerial reconnaissance is the most effective and reliable means of swiftly gathering intelligence data on the enemy and on a broad area of terrain. It is closely coordinated with other types of reconnaissance.

Aerial reconnaissance for a field army is provided by coordination with the means of the tactical air army to a depth of up to 500 kilometers, and also by organic army aircraft to a depth of 150 kilometers. There is a large quantity of aviation means available to a field army. The army staff has an air company; and each army corps has two air companies, one in the staff of the army corps, and the other in the staff of the artillery corps.

Each reconnaissance battalion of a mechanized, armored, infantry, or airborne landing division includes an aerial
reconnaissance company; and there is a section of army aviation in the headquarters and service companies of the brigade commands of all divisions and a helicopter section in the artillery battery headquarters.

Attached to each field army and to each army corps is one armored cavalry regiment, which contains an aerial reconnaissance company consisting of two light reconnaissance helicopter sections.

The headquarters battery of an artillery instrument reconnaissance battalion (there is usually one attached to each army corps) has at its disposal a platoon of AN/USD-1 pilotless aircraft (12 SD-1 pilotless reconnaissance aircraft).

Thus, in the case of the Central European Theater of Military Operations, a field army will have 38 reconnaissance aircraft, 280 reconnaissance helicopters, and a company of AN/USD-1 pilotless reconnaissance systems (24 pilotless reconnaissance aircraft).

US army aviation reconnaissance aircraft have a maximum speed of 180 to 320 kilometers per hour, an effective ceiling of 6100 to 9400 meters, and a maximum range of 1350 to 2900 kilometers. The reconnaissance helicopters have a maximum speed of 150 to 170 kilometers per hour, an effective ceiling of 3000 to 4000 meters, and a maximum range of 200 to 340 kilometers. They are equipped with electro-optical, infrared, radar, and photographic reconnaissance means.

With such organic forces and means available, a field army is able to engage in aerial reconnaissance to a depth of 150 kilometers and locate 580 to 860 targets within twenty-four hours. Piloted reconnaissance aircraft and helicopters of army aviation operate from small airfields (pads). The majority of army aviation airfields are located in the combat operations zone of divisions; and the remainder are located in the corps and army rear areas, usually not far from the command posts of the large units to which they belong.

Piloted aircraft and helicopters of army reconnaissance
aviation are employed for the following purposes: to reconnoiter the battlefield; to detect reserves moving up from the rear; to locate concentration areas for troops and combat equipment, rocket and artillery launching and firing positions, command posts, and communications centers; to fix targets; to correct fire; and to ascertain the results of nuclear strikes. The basic reconnaissance method employed is visual observation as well as observation with the use of radar and infrared equipment. It should be noted that army aviation is highly vulnerable to air defense means; for this reason, helicopters usually engage in reconnaissance from their own territory and aircraft operate in those areas where air defense is not able to offer effective opposition.

Radio and radiotechnical reconnaissance is one of the principal reconnaissance measures employed by a field army. According to American manuals, it is a component part of radioelectronic warfare; and its preparation and conduct, besides the continuous radio and radiotechnical reconnaissance of all types of electronic installations, include radio deception, communications security, jamming of enemy communications, radar, radio navigation, radio remote control equipment, and a number of other measures as well.

In a field army, radio reconnaissance, radio countermeasures, and radio deception are conducted by the army security group, while radiotechnical reconnaissance is conducted by army and corps radioelectronic warfare battalions.

In time of war, an army security service group from the reserves of the high command is attached to the field army for which it conducts radio reconnaissance, monitors the security of troop control, and carries out radio countermeasures against the enemy means of communications.

The standard complement of an army security service group usually includes a command and a staff, three army security service battalions (depending on the number of army corps which make up the field army), one to three type A army security service companies, one to three type C army security service companies (mobile radio reconnaissance), a support company for communications security, a data processing company, and a headquarters and service company.
Army security service battalions are attached to the army corps, and the companies of these army security service battalions are attached to the divisions.

An army security service group can set up approximately the following equipment in a field army combat operations zone: up to 345 radio interception posts (156 shortwave and 189 ultra-shortwave), 56 radio direction-finding posts (28 shortwave and 28 ultra-shortwave), 136 jamming stations (72 shortwave and 63 ultra-shortwave), and 15 shortwave radio stations for radio deception.

The operating range in the ultra-shortwave band of the ground means used by the army security service is limited by the direct geometrical line of sight and is forty to fifty kilometers for reconnaissance by ground radio stations and up to one hundred kilometers for reconnaissance by aircraft radio stations.

The range of ground radio reconnaissance of field shortwave radio stations which conduct communications by ground waves (on a whip antenna) is limited by the operating range of the radio stations being used and is 100 to 120 kilometers; in the frequency range of waves reflected by the ionosphere there is ground radio reconnaissance of sky waves at a distance from 90 to 600 to 1000 kilometers more.

The presence within the army security service group of 345 radio reconnaissance posts* and 20 radio direction-finding nets, each of which can take a direction-finding bearing on 30 to 40 working radio stations per hour, enables a US field army to conduct constant monitoring of up to 1000 to 1400 enemy radio nets and radio links and to locate 600 to 800 radio stations. This means that the absence of countermeasures by our side virtually guarantees the conduct of radio reconnaissance against the principal radio nets of our forces in the field army's attack or defense zone, and the neutralization of these nets by jamming.

*One post can keep an average of three to four enemy radio nets under observation.
Posts for the reconnaissance of ultra-shortwave means of radio communications are located in groups of five or six posts at a distance of three to five kilometers from the troops contact line near the forward command posts of the first-echelon brigades.

Shortwave radio communications reconnaissance posts of army security service companies that support the combat actions of divisions usually intercept ground waves and are located six to ten kilometers from the forward edge near the forward command posts of the divisions. Corps and army shortwave radio communications reconnaissance posts, as a rule, monitor ground stations that use sky waves and also, aviation radio communications. These posts are usually located at distances of thirty to forty and sixty to eighty kilometers respectively from the forward edge of their own troops, i.e., near the corps and army command posts. After the reconnaissance data have been processed by the control and analysis platoon of the army security service company, they go directly to the command posts of the divisions, the army corps and the field army.

An army radioelectronic warfare battalion consists of five companies and a headquarters detachment. Its functions are to monitor radar means installed on enemy aircraft, guided missiles, and aerial bombs, and to neutralize these devices by jamming so as to hamper enemy bombing, radio direction finding, and radio remote control.

An army radioelectronic warfare battalion is usually attached to the army air defense command. Its companies function as part of the Hawk SAM groups attached to the army corps, and are also part of the Nike-Hercules SAM groups which remain at the army's disposal. In turn within these groups the platoons of the radioelectronic warfare companies are attached to SAM battalions, while the crews from the platoons are attached to SAM batteries. A battalion is equipped with 20 AN/TLO-11 multi-purpose sets and 18 AN/MLQ-8 radio fuze detonation sets.

A corps radioelectronic warfare battalion is composed of four companies and a headquarters detachment. Its functions are: the reconnaissance of ground radar observation stations on the battlefield; the reconnaissance
of stations for air target detection and antiaircraft and field artillery fire control; and the jamming of these stations.

Companies of the radioelectronic warfare battalion are assigned to mechanized, infantry, and armored divisions; and detachments from these companies in the divisions are assigned to brigades, to division artillery, and to the reconnaissance battalion. The battalion has forty multi-purpose AN/MLQ-22 jamming sets and sixty-eight AN/MLQ-8 radio fuze detonation sets. This equipment makes it possible to determine the operating frequency bands for all ground radar sets, radio-navigation systems, and the ultra-shortwave and radio-relay communications of our troops.

The task of radar reconnaissance is to detect enemy air and ground (waterborne) targets. Antiaircraft units and large units, and the air forces are responsible for locating air targets. Radar reconnaissance of ground targets is performed by the means of units and subunits of divisions and by artillery reconnaissance subunits.

The artillery instrument reconnaissance battalion of an army corps has six AN/MPQ-10 counterbattery warfare radar sets, whose functions are the reconnaissance of ground targets and the correction of artillery fire. The headquarters battery of division artillery has one AN/TPS-25 radar set for locating moving ground targets, and each 155mm howitzer battalion has one AN/MPQ-4A radar set for fixing artillery and mortar positions.

Each headquarters company of the infantry, motorized infantry, and tank battalions of a division has two AN/TPS-33 radar sets and four AN/PPS-4 or AN/PPS-5 light radar sets for locating moving ground targets. The headquarters company of a division reconnaissance battalion has two AN/TPS-33 radar sets, and each ground reconnaissance company (there are three companies in each battalion) has two AN/PPS-4 or AN/PPS-5 radar sets.

More than seventy radar sets for locating moving targets and fixing artillery and mortar positions can be deployed in the zone of a mechanized (infantry or armored)
division. The majority of the sets are deployed three to four kilometers from the forward edge in order to create a solid radar monitoring field of the entire tactical zone to the depth of their maximum operating range.

In the zone of a field army with the above-mentioned composition, there may be more than 500 radar sets for locating the firing positions of mortar and artillery batteries, as well as moving ground targets at a distance of six to eighteen kilometers.

Ground reconnaissance is conducted by all large units, units, and subunits of a field army both during preparation for combat and during it. To carry out these tasks, large units have reconnaissance battalions, units have reconnaissance Platoons, and companies have ground observation detachments.

An armored cavalry regiment with sufficient maneuverability and strike and firepower is usually attached to a field army and army corps to conduct ground reconnaissance. It has 132 light and medium tanks, 233 tracked, armored personnel carriers, 18 self-propelled 155mm howitzers, 27 mortars, and 852 machineguns.

An armored cavalry regiment can engage in reconnaissance of routes, corps operational zones, and the important area in the zone of impending combat actions.

Reconnaissance of routes is conducted in order to obtain data on enemy forces and weapons on the lines of march and to take note of obstacles along these lines. A regiment usually engages in reconnaissance of several routes on a broad front.

Reconnaissance of a zone is performed to determine the condition of the roads and the nature of the terrain, and to obtain information on enemy activities within certain limits.

Reconnaissance of an area is engaged in when the command requires detailed information on cities, large populated areas, river courses, road networks, and other objectives which can play an important role in the zone of
impending combat actions.

An armored cavalry regiment almost always employs its full strength when carrying out its tasks in support of an army corps or a field army.

Calculations show that a field army composed of five divisions and three armored regiments can dispatch to the zone of operations from its reconnaissance subunits and armored regiments, 170 to 190 reconnaissance patrols of up to platoon strength and up to 140 to 170 observation posts.

Analysis of the organization and status of the forces and means of tactical intelligence of a US field army leads to the conclusion that, if our forces are to successfully engage in combat actions under all conditions, it is necessary to wage a constant battle against enemy intelligence, to organize our deception well, and to meticulously carry out troop protection and camouflage measures in strict conformity with the rules for secure control.

All arms of troops must combat enemy reconnaissance in their areas of deployment and operations, as well as in the rear areas. The principal prerequisites for success in this combat are a good knowledge of the means and methods employed by enemy reconnaissance, great vigilance, and the constant combat readiness of our forces.