MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: USSR GENERAL STAFF ACADEMY LESSON: Operational Reconnaissance

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Richard F. Stoltz
Deputy Director for Operations

11 March 1988

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Summary:

The attached intelligence report is a translation from Russian of the text of a lecture at the Voroshilov General Staff Academy on the subject of operational reconnaissance. It is a basic academic treatment of the topic, arranged into three sections: categories, tasks, and control of reconnaissance. It gives a fair rundown on resources, particularly OSNAZ and SPETSNAZ, available to the front. The text is a bit vague on the following points, but it appears twice to allude to high-level studies in progress that are expected to result in some reorganization and growth of reconnaissance capabilities in the near future (pages 14, 16) as well as to some data on what appears to be a computerized battle-management system (page 9).
OPERATIONAL RECONNAISSANCE

This lecture addresses three questions: the types of operational reconnaissance and their capabilities, the main tasks and targets of operational reconnaissance and the demands made on it, and control of operational reconnaissance.

Operational reconnaissance is one of the components of military reconnaissance as a whole. Operational reconnaissance is organized by the commanders of operational/strategic, operational, and operational/tactical formations, or, to put it another way, by the commanders of military districts, groups of forces, fronts, fleets, armies, and flotillas, as well as the commanders of army corps and [naval] squadrons.

As a whole, operational reconnaissance is the complex of measures aimed at getting the reconnaissance information necessary for the preparation and successful conduct of operations or combat actions. In other words, one might say that operational reconnaissance is an integral component of military reconnaissance, that it ensures the preparation and conduct of modern combined-arms, fleet combined-arms, joint, and independent operations by the forces of operational formations of the [1 word illegible] branches of the armed forces.

Operational reconnaissance appeared on the scene when operational formations did, when solid fronts made their appearance; and the actual birth of operational reconnaissance and its shaping into an integral part of military reconnaissance can be traced to the First World War. After the First World War, operational reconnaissance evolved, and in the years of the Great Patriotic War it played a very important part in the operations of fronts, armies, and fleets. At the present time, under conditions of international tension and stepped-up military preparations of the imperialist states, the role and importance of operational reconnaissance are growing ever more and more.

Operational reconnaissance has at present decisive significance for the successful planning and conduct of front, army, and other operations, since it is only with complete and reliable data on the enemy that one can discover his plans, provide for every eventuality that may occur, and use the various means of armed combat with utmost effectiveness.
TYPES OF OPERATIONAL RECONNAISSANCE

Depending on the sphere of activity, the nature of tasks, and the forces and means involved, operational reconnaissance is subdivided into four types of reconnaissance, namely: ground-based reconnaissance, air reconnaissance, sea reconnaissance, and special reconnaissance. And, if we speak of the fleet, the fleet brings in a fifth type, because military reconnaissance as a whole includes five types: ground-based, air, sea, special, and space reconnaissance. Since formations lack the forces and means to do space reconnaissance, this fifth type is not included in operational reconnaissance. That means that it comprises four types of reconnaissance.

To address each type, the following can be said. Ground-based reconnaissance is organized and conducted to get data on the composition, status, and nature of actions of groupings of enemy troops or forces, enemy intentions, targets or objectives for the use of nuclear and conventional weapons, and the condition of the area of operations and combat actions.

Ground-based reconnaissance is subdivided, at the operational level only, into radio, radiotechnical, radar, radiation, chemical, and bacteriological (sometimes called biological) reconnaissance. This is at the operational level. Sometimes we hear talk of ground-based troop reconnaissance, and also engineer and artillery reconnaissance. This is at the tactical level. When we speak of ground-based reconnaissance at the tactical level, there are six components: radio and radiotechnical, radar, radiation and chemical, troop, engineer, and artillery reconnaissance. This is related to the fact that the reconnaissance element of armies and fronts does not directly incorporate forces and means that can do this reconnaissance. It sometimes happens that [1-2 words illegible] engineer, artillery reconnaissance, etc. That is the tactical level. Moreover, formations and large units, to do ground-based reconnaissance, call on what are dubbed purely line or combat subunits, i.e., ground-based reconnaissance at certain stages can be done by motorized rifle, tank, parachute landing, and assault landing subunits, and in fleets by subunits of naval infantry and coastal missile and artillery units.

Let us dwell briefly on each of these components. Radio and radiotechnical reconnaissance. The very name tells us that it is conducted with radioelectronic means primarily against the radioelectronic targets of the enemy. On the basis of data obtained from these radioelectronic sources, radio and radiotechnical reconnaissance yields data about enemy assets and targets, data about enemy intentions and the nature of enemy actions, etc.

To say what means are employed to do radio and radiotechnical reconnaissance, these are first of all search, observation, intercept, and
analysis of radio emissions and direction-finding of radioelectronic sources. This means enemy radio, radio-relay, tropospheric, and space means of communications, radar, radio navigation, and radio and remote control.

The conduct of radio and radiotechnical reconnaissance involves various reconnaissance large units and units. But if we take the front, to do radio and radiotechnical reconnaissance, it has separate OSNAZ ["special purpose"] radiotechnical brigades. Armies, both combined-arms and tank armies, have separate OSNAZ regiments, [2-3 words illegible] battalions. The reason for this is that at the present time all the Soviet armed forces according to wartime TO&E are ascribed separate OSNAZ radiotechnical regiments, but in reality they still have radio battalions and radiotechnical battalions. There is a connection here with [lack of] equipment and perhaps with other issues. To do radiotechnical reconnaissance the large units of air defense forces can draw on radiotechnical reconnaissance regiments and battalions, and fleets can call on naval radio detachments and naval radiotechnical detachments as well as special OSNAZ complexes [kompleksy osobogo naznachenlya]. Were we to stop here, [1-2 words illegible] not entirely complete. In addition, in the armed forces, radio and radiotechnical reconnaissance is done by all electronic warfare units since any EW regiment or battalion necessarily designates one-half of the TO to do radio and radiotechnical reconnaissance and the other half of the regiment or battalion to [suppress detected means].

In lectures and during practical activities, instructors emphasize that in peacetime radio and radiotechnical reconnaissance obtains over 50 percent of all data. This may not completely correspond to the reality; some say that it gets up to 80 percent. This may not be so, either; but within the 60-percent range we will consider this what is obtained in peacetime by radio and radiotechnical reconnaissance.

Speaking of [capabilities], consider the following: Each year [1 word illegible], both we and our probable opponents constantly move towards increasing the various radioelectronic means designed for control of forces and combat equipment. I do not, it is true, have the very latest data; but according to data from a year or two ago a NATO army group had over 100,000 different pieces of radioelectronic equipment. This does not mean that radio and radiotechnical reconnaissance will do surveillance of all this equipment. That is [2 words illegible]. But of the radio equipment which may interest radio and radiotechnical reconnaissance, of which surveillance must be done, or of which we have the capability to do surveillance, the number is over 4000.

Speaking of the strengths and weaknesses of radio and radiotechnical reconnaissance, it does have besides its strengths a number of weaknesses. Among its strengths are the fact that to do radio and radiotechnical reconnaissance it is not necessary to penetrate enemy territory, i.e., it is, as
a rule, conducted from home territory. Why only "as a rule"? Because when agent sources (if they have portable equipment) or SPETSNAZ groups do radio and radiotechnical reconnaissance on their own behalf, they do this on enemy territory.

Radio and radiotechnical reconnaissance is done both in peacetime and in wartime constantly, regardless of whether it is summer or winter, day or night. This is another of its strengths. And so is the fact that the available forces and means of radio and radiotechnical reconnaissance allow it to be conducted in a wide swath to a great depth. If we take the separate OSNAZ radiotechnical brigade [of a front], it is able to do radio and radiotechnical reconnaissance in a 400- to 500-km swath, i.e., it essentially covers the whole zone of a front offensive operation. How about its depth? It can conduct radio reconnaissance in the shortwave band to a depth of as much as 1000 km or more. If we take what is called radiotechnical reconnaissance, it can do this to a depth of 400-500 km, i.e., to the depth of the immediate task of the front. A fleet can do radio reconnaissance to a depth of 9000-10,000 km. If we look at the air defense units, they can do radio reconnaissance in the [shortwave] band to 7000 km, of radio nav aids to 3000 km, and of radars to 500 km. You can see the numbers are fairly impressive.

Also among its strengths are the fact that radio and radiotechnical reconnaissance can simultaneously do surveillance and intercept of a considerable number of enemy targets. To dwell a bit longer on the brigade, it can in the course of a day detect as many as 70-90 enemy targets of nuclear missile type, different control posts, communications centers, etc. and carry on surveillance of 40 potential targets. To take a naval radio detachment, it too can in the course of a day detect somewhere between 70 and 90 targets, such as control posts, bases, separate ships, etc.

What else ranks among the strengths? The fact that radio and radiotechnical reconnaissance can quickly maneuver among reconnaissance targets and sources, i.e., quickly redirect various means from one target to another. This plus the fact that getting the data obtained through radio and radiotechnical reconnaissance to the interested levels requires very little time.

This is all to the good. Let us now see what is bad, what the weaknesses are. The first thing that can be mentioned is the dependence of radio and radiotechnical reconnaissance on the intensity of activity of the enemy's electronic equipment; should the enemy shut down, radio and radiotechnical reconnaissance will obtain nothing. Second, the hardware with which radio and radiotechnical large units and units are equipped is greatly affected by interference, both natural and manmade; and adding this interference to the signal which is being received sometimes leads to considerable distortion and at times yields data that are totally useless. The next thing to be said is that radio and radiotechnical reconnaissance does not yet fulfill one of the basic

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requirements of the armed forces concerning reconnaissance and engagement [porazheniye] of enemy targets. This is the principle of SEE, HIT, FORGET, i.e., a target must be detected with enough accuracy that it can be hit with the first missile or the first round. Even the best have some error -- one to 1.5 percent of the range, or one to 1.5 degrees. On terrain, one degree at a range of 10 km translates to 175 meters; at a range of 100 km it yields an error of 1750 meters. This is a real weakness. At the present time work is being done to reduce this error. Furthermore, regardless of the fact that the means of radio and radiotechnical reconnaissance are on wheels, the fact is that taking them down and setting them up at a new site consumes considerable time. Even the separate radiotechnical regiment which a tank or combined-arms army has requires 4-5 hours to tear down and set up in a new location. And if we look further, this regiment is supposed to operate in the operational maneuver group of the front. Will it be able to? Of course not, and this is also a real weakness.

Work is being done to enlarge the band coverage and reduce the size of equipment, to build equipment capable of doing reconnaissance on the go, to increase the DF accuracy of electronic equipment, and also to build automated reconnaissance systems, i.e., systems which operate with computers. We now have the [word illegible] and the RAMONA-PLANSHEP.

Radar reconnaissance. This topic sometimes leads to a digression: How is it that radar reconnaissance belongs to ground reconnaissance but does reconnaissance only of air targets? At the operational level this is the case. At the tactical level, [1 word illegible] means permit reconnaissance of ground targets and air targets, but radar reconnaissance units [at the operational level] have means for doing reconnaissance of air targets only. I am not saying that this is air reconnaissance; it is reconnaissance of air targets. Radar reconnaissance is conducted to detect means of enemy air attack from all directions at all altitudes, at the greatest distance, to do continuous surveillance of these air targets, and to give timely warning to, staffs, troops, aviation, and active means of air defense. This is the mission of radar reconnaissance.

Radar reconnaissance gets data on the air enemy through constant radar surveillance of the airspace, through search, detection, and tracking of air targets to the full range of the radars. The radars which the front has provide this at distances of 200-250 km or more, although, if we take the air defense forces, we have radars which detect an enemy at a considerably greater range.

What large units are drawn on to do radar reconnaissance? A front has separate air defense radiotechnical brigades, armies have separate air defense radiotechnical battalions. The air defense forces have their own radar reconnaissance large units and units, and the same is true of a fleet.
Speaking of the strengths of radar reconnaissance, it is necessary to mention that, just like radio and radiotechnical reconnaissance, radar reconnaissance has inherent strengths such as the fact that organizing and conducting it does not require penetration of enemy territory, that it is carried on in peacetime and wartime, at any time of year, time of day, under any weather conditions. But, unlike radio and radiotechnical reconnaissance, it enjoys great accuracy in determining the coordinates of air targets.

What are the capabilities? The capabilities primarily depend on the hardware which is available. At the present time a radiotechnical brigade can simultaneously process and issue information on 60 air targets. The rate of information output is one or two per minute. The IOc of a system like RAMONA-PLANSHEt makes it possible to cover a 200-km zone to a range of up to 400 km and do reconnaissance of up to 60 enemy air targets simultaneously, with an information output rate of around 15 seconds. And all the information (RAMONA does the reconnaissance, and it interfaces with a second system, PLANSENt) is simultaneously output automatically, all the processing of 60 targets is output to this system. Its drawbacks include for now the height of the antenna and the 25-meter spherical dome. This system, by mutual agreement among the Warsaw Pact countries, forms a network. At the present time, our armed forces in Germany and Czechoslovakia have it.

Radiation and chemical reconnaissance. This is the third component. Radiation and chemical reconnaissance, unlike the preceding components of ground-based reconnaissance, is done on our own territory. It is done principally in the departure areas or concentration areas of our troops and on their movement routes.

What is used to do radiation, chemical, and bacteriological reconnaissance? Although they are joined together, in reality the subordination here is dual: Radiation and chemical reconnaissance is subordinated in a front to the chief of chemical troops; bacteriological reconnaissance, to the chief of [1 word illegible]. To do RCB reconnaissance, a front has a radiation and chemical reconnaissance regiment and a radiation and chemical reconnaissance battalion of the rear. Of late, information has been going out that instead of a regiment, fronts will have radiation and chemical reconnaissance brigades.

Radiation and chemical reconnaissance is done in order to get data on the RCB contamination of the terrain, airspace, and water area. It is done both in peacetime and in wartime. What are its capabilities? Take a radiation and chemical reconnaissance regiment. In one hour it can do reconnaissance of an area of 13,000 km². But if we look at the whole area when [1-2 words illegible] are deployed in a departure position, [5 words illegible], or do reconnaissance of 32 routes simultaneously. The regiment has a computation and analysis station that can in one hour put out data on 80-95 nuclear bursts or 40-65 areas of chemical weapons employment. The same regiment has a laboratory which does
analysis of contaminated terrain, etc. In 10 hours the laboratory can run analyses of 20 samples for toxic agents or 60 samples for radioactive substances. But it would be wrong to say that radiation and chemical reconnaissance is done only by regiments and battalions; it is more correct to say that it is done by the forces and means, TO&E and non-TO&E, of formations of all branches of the Armed Forces.

Biological, or bacteriological, reconnaissance is done by sanitary-epidemiological or [1 word illegible] detachments, i.e., depending on where there are bacteria and insects. Such detachments in a front are somewhere [2 words illegible] 3-4 detachments.

Air reconnaissance. The very name air reconnaissance says that it is certainly a combat activity of aviation to do reconnaissance of the enemy, terrain, and weather. It is reconnaissance of the enemy, terrain, and weather on behalf of the commanders of formations — fronts, fleets, armies, flotillas, etc. Here, it turns out, whereas we said that ground-based radar reconnaissance does reconnaissance of the air enemy, the greater part of air reconnaissance is devoted to detecting targets that are on the ground or somewhere at sea or on the ocean; i.e., it is basically reconnaissance of the ground enemy. But an integral part of air reconnaissance is reconnaissance of the air enemy, reconnaissance in its own interests, the interests of air large units and formations.

How does air reconnaissance get data on the enemy? If [1 word illegible] that air reconnaissance is done with radioelectronic equipment, there are, first, radio, radiotechnical, radar, television, laser, thermal, and other means. Second, there is aerial photography, overhead and oblique. And, third, there is visual observation. Visual observation data are transmitted directly to the command posts of fronts, armies, and divisions. Chiefs of intelligence now have everywhere, even in peacetime, receive points. And, flying certain routes or in certain areas, data are reported immediately. The pilots say that is all very well, but the process ought to be automated because they have only two hands to hold the stick, and a map and a pencil.

To do reconnaissance there are special reconnaissance units and subunits. Air reconnaissance is done, if we take the front, by reconnaissance air regiments. Reconnaissance forces and means [several words illegible] squadrons of manned and unmanned reconnaissance vehicles. This applies to a front, and will apply also to long-range and naval aviation. Further, it is not out of the question that automatic [aerostats] may be used. And, besides that, reconnaissance will be done by non-TO reconnaissance squadrons and detachments. In each fighter, fighter-bomber, and bomber regiment, one squadron will, along with combat missions, train to do reconnaissance tasks. This is a non-TO squadron. In addition, air reconnaissance will be done by allaircrews of combat aircraft [and helicopters] simultaneously with the performance of combat
missions. In combined-arms and tank armies, of course, the means of doing air reconnaissance are still very modest. There is a squadron of drones, [3 words illegible] do reconnaissance to a depth of [number illegible] km, and those helicopters which the army has.

On the whole, we can say this: the capabilities, if we are speaking of radio and radiotechnical reconnaissance, the depth of reconnaissance is determined primarily by the capabilities of the hardware. The means of air reconnaissance can do reconnaissance to a considerable depth, but the depth is primarily determined by the tasks which the formations are to carry out. If it is a front offensive operation, air reconnaissance will be done to a depth of between 800 and 1000 km; if an army operation, to a depth of 400-500 km. A fleet does air reconnaissance to a depth of [8500] km.

Naval reconnaissance. The name naval reconnaissance says who conducts it and for whom. Naval reconnaissance is organized by formations of the Navy to get data on enemy naval forces in ocean and sea theaters of military operations. Naval reconnaissance employs the following hardware: means of radio and radiotechnical reconnaissance, radars, hydroacoustic systems, cameras, sensors, heat detectors, detectors of [word illegible] fields) of reconnaissance targets, and [electro-optic means].

Who does this reconnaissance? What forces are drawn on to do it? Naval reconnaissance draws first of all on reconnaissance ships, surface ships, submarines, auxiliaries, and also on stationary hydroacoustic surveillance systems.

Concerning capabilities, [2 words illegible] of a reconnaissance ship, surface ship, auxiliary, or submarine, the capabilities are primarily determined by the hardware available on board. On the whole, a surface ship is able in a day to detect up to 120 different enemy targets such as control posts, communications centers, ships at sea, aircraft, [base] [word illegible], and deck-based aviation. The range of detection directly from the ship itself is up to 1000 km by radio reconnaissance means, up to 500 km by radiotechnical reconnaissance means, and up to [150?] km with hydroacoustic reconnaissance.

The capabilities of a [surface] ship and a submarine are, of course, considerably less. In the course of a day, a surface ship or submarine can detect 5-10 lone enemy ships. Stationary surveillance systems in the underwater environment are able within their range to detect enemy submarines and surface ships, determine their location and changes in direction, identify the characteristics of acoustic signatures and the hydroacoustic and wire communications equipment of the ships, and provide guidance of fleet forces to strike targets.
Special reconnaissance. Special reconnaissance is at the present time organized and carried on by agent organs and special reconnaissance large units and units. Special reconnaissance is done to get data on the most important enemy targets, primarily means of nuclear attack and then to identify actions and intentions of the enemy. That is the first task, purely a reconnaissance task. The second task which special reconnaissance does is to destroy or knock out the most important enemy targets. And the third task is this: special reconnaissance is called on to provide assistance to progressive resistance forces in the enemy rear in order to channel the efforts of progressive forces in the interests of our troops.

Special reconnaissance is carried on both in peacetime and in wartime. Where special reconnaissance in peacetime is done only by agent organs, in wartime it is done by agent organs as well as special reconnaissance large units and units. To do special reconnaissance, the front has the following large units, units, and organs. Each front has an intelligence center, two or three reconnaissance posts, which together the acting agent network and agent reconnaissance reserve. The special reconnaissance large units and units are as follows. A front has a separate special-purpose [SPETSNAZ] brigade, and each army has a separate SPETSNAZ battalion. Their capabilities are these: the brigade can train and infiltrate into the enemy rear up to 240 SPETSNAZ groups, a battalion up to 30 SPETSNAZ groups. Each reconnaissance group is, as a rule, assigned one target or area of 100 square km or more a day.

The depth of reconnaissance is: in behalf of a front, up to 1000 km; in behalf of an army, up to 400-500 km.

A fleet, for special reconnaissance, has a naval intelligence center, two or three reconnaissance posts, and a SPETSNAZ brigade. Reconnaissance in behalf of a fleet is done to the entire depth of ocean or sea theaters of military operations.

To finish the question, it is necessary to stress that all types of operational reconnaissance act in close cooperation with one another and all data obtained by one type of reconnaissance are greatly supplemented by other types.

The Main Tasks and Targets of Operational Reconnaissance and the Demands Imposed on It

Speaking of the tasks of operational reconnaissance, all the tasks which we are going to talk about can be said to be inherent in all military reconnaissance. First of all, we must keep in mind that the tasks of operational reconnaissance are determined by the overall operational/strategic situation in the theater of military operations, by the combat tasks which must
be carried out by the formations in the operation, by the degree of knowledge about the opposing enemy, and by the availability and capabilities of operational reconnaissance forces and means. Determination of the content of tasks is affected by preparation of an operation. But on the whole the main tasks can be formulated as follows. It must be considered the main task of operational reconnaissance to constantly monitor changes in the military-political situation in target countries. Operational reconnaissance must detect a command of enemy armed forces to prepare and conduct operations of all types in the theater of military operations. Operational reconnaissance must establish the start of immediate enemy preparation for an attack and the concept and possible nature of enemy actions. Besides that, operational reconnaissance must constantly keep track of the strength, status, and position of enemy groupings of troops or forces, aviation, and air defense means, particularly means of nuclear attack -- to which must now be added precision-guided weapons systems -- and their level of combat readiness and the nature of their activity.

Nor is the next task unimportant: operational reconnaissance must determine the presence and the location of nuclear and special weapons depots and the system of supply of special types of weapons in the theater of military operations. To know how the enemy will act, to know how capable he will be of control, operational reconnaissance must be able to detect the system of troop and weapons control, the location of staffs, control and guidance centers and posts, communications centers, and the system of electronic support. The fifth task is, in short, to detect the enemy's troop and weapons control system.

Next, so that we can offer timely opposition to the enemy, operational reconnaissance must promptly detect the enemy forces and means of reconnaissance and electronic warfare and establish the location, coordinates, and basic characteristics of targets slated for destruction by nuclear and conventional weapons. Performing this task already during the preparation of an operation enables the commander to make a well-founded decision in adequate time and use all his available assets most effectively. Other tasks may include such things as determining the results of nuclear and conventional strikes on the enemy, his groupings of border-zone troops and forces. This means start of combat actions. Besides this, operational reconnaissance must constantly provide data on or constantly detect the movement of reserves in the theater of military operations, the strength of these reserves, their purpose, concentration areas, and axes of movement, since with timely data about enemy reserves, a front can, instead of offensive actions, think about going over to the defense and turning back the thrust of these enemy reserves. Among the list of tasks we may include such things as detecting the status and changes in the operational preparation on the boundary of the theater of military operations. This task is done constantly in both peace- and wartime.
Operational reconnaissance is also given the task of discovering enemy measures to protect troops and rear installations from nuclear and conventional weapons, ascertaining the system of materiel and technical support of the opposing enemy grouping, identifying enemy measures of operational camouflage, reconnaissance, disinformation, and ECM. Failure to appreciate this particular task, failure to carry out in time measures to detect enemy operational camouflage and disinformation measures can lead to sad consequences. Along with this, operational reconnaissance must also determine the economic and the health and sanitation status of the area of the operation or combat actions and also establish the political attitudes and morale of the enemy troops and population.

Looking at the list, the tasks we have enumerated are inherent not only in operational reconnaissance but also in strategic and tactical reconnaissance, and really in military reconnaissance on the whole. But the performance of those tasks facing operational reconnaissance requires its principal efforts to be focused on detecting the enemy concept for the conduct of combat actions and detecting his main groupings, especially groupings of means of nuclear attack, and their combat effectiveness and readiness to deliver strikes.

These tasks alone, as you can see, are extremely varied and their volume is very great. How are all these targets detected? First of all, through detection [sic] of various enemy targets. If we take the Western theater of military operations, the number of targets of interest to operational reconnaissance is rather considerable, possibly 1200, 1400. But there are some targets [2-3 words illegible]. Operational reconnaissance primarily [several words illegible], but on a smaller scale, i.e., the number of these targets overall will be considerably greater. Therefore, what requirements, target classifications are used at the present time? The very same way as military reconnaissance overall is divided into strategic, operational, and tactical reconnaissance, targets are divided into targets of strategic, operational, and tactical importance. The present hierarchy [gradatsiya] governing what targets pertain to what may soon change with the publication of regulations [nastavleniya] on operational reconnaissance, and the changes will include targets we used to rank among targets of strategic importance that will become targets of operational importance. But for now I am giving the hierarchy that is accepted at the present time. The scheme involves means of nuclear attack, ground forces, air forces, air defense forces, naval forces, and other targets.

When we refer to means of nuclear attack, what at present ranks among targets of operational importance? First, there are the detachments, platoons, or launchers of cruise missiles or operational/tactical missiles. Then there are the tactical missile battalions. In the west at the present time, we probably will not find these anywhere, but in the east [1 word illegible] battalions of tactical, special missiles are beginning to appear. Next are battalions of nuclear artillery, 155- and 203.2-mm howitzers, airfields of
tactical aircraft, and nuclear weapons storage and supply points. This is the 
group of targets we rank among the targets of operational importance.

Ground forces, air forces, air defense forces. Regarded as targets here are 
divisions of ground forces and equivalent large units, control posts from the 
army corps and its equivalent up, tactical air forces, air divisions, air 
control and warning posts and centers, and SAM guided missile batteries.

Naval forces. Targets of operational importance here include nuclear 
submarines, detachments or groups of surface ships, medium and small convoys. 
Other targets vary -- major elements of operational preparation of a theater of 
military operations, as well as considerable zones or areas of contamination, 
destruction, flooding, and fires.

A certain degree of detail is required. What are the target detail 
requirements employed at the present time? For example, reconnaissance of 
targets is being done in the interests of employing nuclear weapons. What is 
the degree of detail? Down to the battalion, nuclear artillery battery, SAM 
battery, operational/tactical or tactical missile platoon or launcher, command 
post, depot, airfield. In the interests of employment of conventional weapons, 
the degree of detail is even finer; it goes down to the platoon strongpoint, 
artillery battery, and launcher of operational/tactical and tactical missiles, 
and even individual [targets]. It is not enough to detect a target, it is also 
necessary to give the requisite detail.

CONTROL OF OPERATIONAL RECONNAISSANCE

In order to carry out the assigned tasks and detect enemy targets in time, 
operational reconnaissance, just like all military reconnaissance as a whole, 
must meet the following seven requirements: purposefulness, continuity, 
aggressiveness, timeliness and efficiency, security, reliability, and accuracy 
[tseloustremlennost', neperyvnost', aktivnost', svoevremennost' i 
operativnost', skrytnost', dostovernost', i tochnost' opredeleniya koordinat]. 
To meet these requirements, operational reconnaissance must be in constant high 
combat readiness; for this the corresponding chiefs who plan and organize 
operational reconnaissance must properly determine the tasks, areas, and targets 
of reconnaissance, carefully plan it, and skillfully allocate the available 
reconnaissance forces and means to perform assigned tasks; and they must also 
carry out a number of other important measures, the most [1 word illegible] of 
which is to control the forces and means of operational reconnaissance.

On the whole, when we speak of operational reconnaissance control organs, 
the chief organ which determines the principal directions, plans and determines 
the main tasks for the future is the Chief Intelligence Directorate of the 
General Staff, which determines the tasks of reconnaissance, both for peacetime
and for wartime. It also determines how operational reconnaissance is to be conducted in peacetime, what restrictions [apply] in a crisis situation, under direct threat of war, etc. It also engages in issues of planning and organization of operational reconnaissance. There is still no precise hierarchy. You know that there are staffs of the high commands of axes, the western, southwestern, southern, and eastern axes. These staffs have intelligence directorates which are involved in the planning and organization of operational reconnaissance. Why do I say there are no precise tasks? Because certain reconnaissance forces and means will be subordinate to intelligence directorates, and a certain number of reconnaissance posts will be directly subordinate to the chief of intelligence. The chief of intelligence of an axis will have an OSNAG radiotechnical brigade and a SPETSNAZ brigade. That means that on the whole the reconnaissance forces and means on an axis will be considerably beefed up, and there will be a certain reserve of forces and means.

Besides this, the planning and organization of operational reconnaissance involves the main staffs of the Air Defense Forces, the Air Forces, and the Navy, who have their own intelligence directorates. What reconnaissance do they plan and organize? The air defense forces have ground-based and air reconnaissance; the air forces have air reconnaissance; and the Main Staff of the Navy has sea, air, and ground-based reconnaissance -- and also space reconnaissance. The other two staffs are not involved in the planning and organization of reconnaissance since they lack forces and means to do [air?] reconnaissance, although right now the Ground Forces have, as you know, established an intelligence directorate.

In addition, air reconnaissance is planned, organized, and conducted by the staffs of military districts, groups of forces, fronts, the staff of the air defense district (there is now only one, the Moscow Air Defense district), fleet, combined-arms and tank armies, and front air forces, operational air armies of the Supreme High Command, flotillas, and fleet air forces.

The depth of reconnaissance is: front 800-1000 km, army 500 km, front air forces up to 1000 km. The air forces organize air reconnaissance to the entire depth of continental and ocean theaters of military operations. The navy organizes reconnaissance differently depending on which fleet is involved. The Pacific and Northern Fleets will organize reconnaissance to a depth of as much as 10,000 km, that is, to the full depth of the ocean theaters of military operations. But the Black Sea and Baltic Fleets go to the depth of the sea theaters of military operations, which is up to 3000-4000 km. It relates to the tasks which they are meant to carry out.