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STUDENT RESEARCH REPORT

THE SOVIET COMBAT INTELLIGENCE PROCESS:
AN INTEGRATIVE INTERPRETATION

MAJ ROY E. PETERSON

1980

GARMISCH, GERMANY

APO NEW YORK 09053

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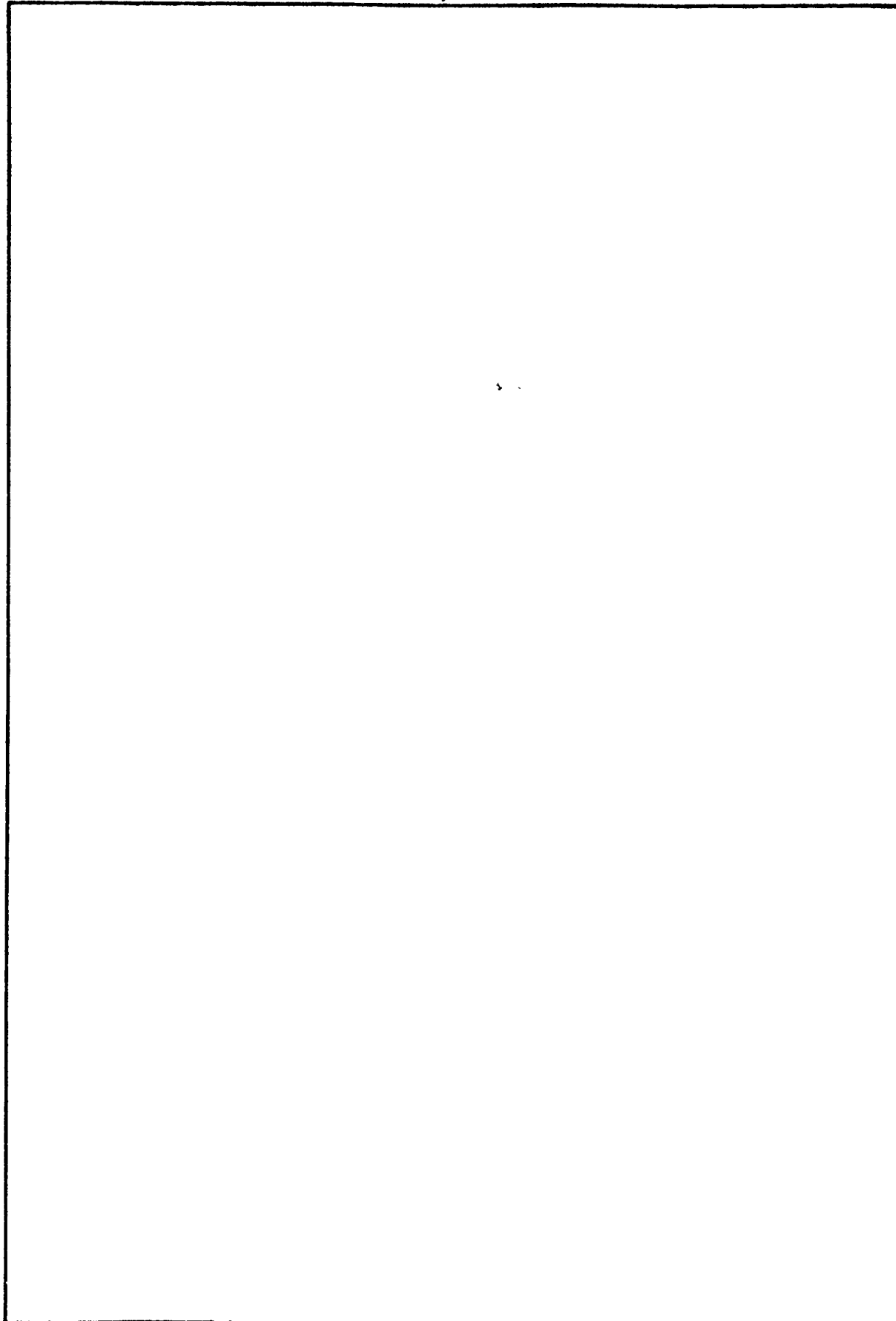
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SUMMARY

→ The focus of this paper is the Soviet tactical combat intelligence process. The author concludes that in recent years the Soviets have attempted to systematize and mechanize their intelligence processes so that commanders of Soviet units may act more expeditiously in combat situations, that there are ten demands placed on data collectors for acquisition of the required information, and that the Soviets have been discussing the role of Soviet ground units in conducting reconnaissance under the conditions of modern warfare. Each of these areas of concern point out that Soviet military leaders continue to worry about the capability of their combat units and staffs to process the mass of data collected on the battlefield in an efficient manner. ↗

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I. INTRODUCTION

The aggregate posture of combat readiness in any army is more than the training of men and the preparation of military equipment. It must include a thorough evaluation of opposing forces. This sentiment has been expressed repeatedly in Soviet military literature from Lenin to present day writers.¹ The theme is as ancient as the oldest armies and as contemporary as the modern forces of today. When this component of combat readiness is ignored, the outcome of battle may well be defeat. As expressed in a recent Soviet article, "The history of wars knows many examples where troops who possessed a numerical superiority in personnel and weapons lost this advantage due to ignorance of the situation at hand."²

In the introduction to his military memoirs, Major General (equivalent to US Brigadier General) M. A. Voloshin, quoted General of the Soviet Army, I. V. Tyulenev, as having said. "Only that army which well knows what its enemy is doing and [knows it] before he intends to do it, is actually combat ready."³ To achieve such a goal in combat requires a fundamental knowledge which can be attained only by processing collected information into a finished intelligence product.

The purpose of this paper is to analyze the Soviet tactical combat intelligence process. The Soviet concept of intelligence is presented by a review of Soviet terms related to information, as well as to intelligence. These terms are often confused in everyday usage, but if one thinks of information as the raw data which intelligence specialists seek to obtain and intelligence as consisting of elements of information pieced together into a meaningful pattern, then one can keep the two concepts in perspective. The Soviet tactical combat intelligence process is composed of various phases from collection tasking and planning by staffs, through reconnaissance units or elements which acquire the desired data, to the staffs again which assemble the data into the meaningful patterns which become the intelligence product.

The intelligence process as currently depicted by the US Army includes: 1) directing; 2) collecting; 3) processing; and 4) dissemination and use.⁴ Variations on this theme are suggested not only in foreign armies, but between separate services of the United States armed forces.⁵ Since the Soviets have not provided us with a convenient scheme for portraying their intelligence process, one must review their articles for hints of how they view the operation of their system. Generally, one can analytically separate the Soviet concept of the intelligence process into the following phases: 1) organizing or planning and tasking; 2) collecting; 3) processing; and 4) dissemination. These phases cover the primary Soviet concepts regarding the operation of their tactical combat intelligence cycle. It should be mentioned that the intelligence cycle which was included in US Army Field Manual (FM) 30-5 shows planning and supervision as continuing requirements throughout the other phases.⁶

This paper concentrates on the intelligence process at the battalion level and lower, although the scope is the entire intelligence process. Changes in modern warfare requirements have been recognized by the Soviets along with the need to update the capabilities of their intelligence system. Their problem remains one of matching machines and men to the requirements of a modern, intensive combat environment for the collection and processing of data which has intelligence significance. This is not to degrade their capability or to denigrate their morale. Rather it points out their dissatisfaction with the current conditions in their army which restrict what they believe to be an essential commodity in warfare, namely a more efficient and effective tactical combat intelligence system.

II. SOVIET CONCEPTS OF INTELLIGENCE AND INFORMATION

Before dealing with Soviet nuances on the terms, "intelligence" and "information," it is instructive to examine US Army usage. The US Army distinguishes between information and intelligence on the basis of data integration. Thus:

1. Information is material of all descriptions which may be acquired from any source and which may take a multiplicity of forms. "Information itself may be true or false, accurate or inaccurate, confirmed or unconfirmed, pertinent or impertinent, positive or negative."⁷ In tactical combat terms, "Information is the raw data about an actual or potential enemy or area of operations."⁸

2. Intelligence, on the other hand, "is the product resulting from the collection, evaluation, and interpretation of information...."⁹ It is clear that in this concept, intelligence is a derivative of information. Specifically, for our purposes here, "Combat intelligence is derived from the interpretation of information on the enemy...and the environment."¹⁰

Intelligence operations are a primary method for obtaining data required by commanders to enhance mission accomplishment. This is the point at which confusion of the terms often arises. The data collected remains information until it is integrated with other data into a meaningful pattern of intelligence.¹¹

There are three key Soviet terms which require translation and discussion for a comprehensive understanding of the comparative Soviet concepts of intelligence and information. The Soviet terms are "razvedka," which generally applies to the collection of data for intelligence purposes; "vovennaya informatsiya," which pertains to information of military significance which is necessary for mission accomplishment and intelligence processing; and "svedeniye," which refers to particular items of data either of an informational or intelligence nature. Soviet writers have provided us with a particularly good view of the utility of the first two terms and their various functional categories. These will be reviewed in depth.

1. Razvedka. According to the text of the Large Soviet Encyclopedia,

Razvedka is the aggregate of measures taken by military commanders at all levels, which are conducted with the goal of collecting data about the composition, activity and intentions of the enemy troops; about the terrain, radiation and chemical conditions; and other data necessary for the complete evaluation of the tactical situation and for making a correct decision.¹²

Positive collection by intelligence elements is suggested by this definition. The authors of the Soviet book, The Principles of Command and Control of Troops in Battle, reinforce the understanding of this use of the term, but place special emphasis on the need for knowledge relevant to nuclear battle. They state:

Under any conditions, razvedka is obligated to provide a commander and staff with the necessary data concerning the enemy, terrain, radiation condition, and hydrometeorological situation. Such data should be received in a timely manner, should be accurate and precise, especially the coordinates of the most important objectives upon which the senior commander plans to strike a nuclear blow.¹³

An exegesis of the relevant passage in the Short English-Russian, Russian-English Military Dictionary reveals sixty-three forms, methods, and types of razvedka with the following synthesized translations: 1) intelligence, 2) reconnaissance, 3) monitoring, 4) observation, and 5) detection.¹⁴ Each of these terms is associated with the actual acquisition of data, rather than the processing of data by a commander and his staff.

Razvedka is divisible into strategic, operational, and tactical categories depending upon the scale of operations.¹⁵ Strategic collection of information for intelligence purposes (razvedka) may be conducted either in peacetime or during war, but the most important tasks are to gather information related to a nation's military forces, assess a nation's economic and moral potential, and report on military preparedness and armament in a particular theater of military action.¹⁶ Operational razvedka provides the link between strategic collection and tactical reconnaissance in the Soviet concept. The goal of operational collection is to acquire data about the enemy which would reveal plans, intentions, distribution, composition, and other order of battle factors.¹⁷ Tactical razvedka is the relevant form for the purposes of this paper. Used in this way the term connotes both reconnaissance conducted for the purpose of acquiring information, and the acquired information which is to be processed into intelligence. In this form, razvedka more closely approximates intelligence, although usually appended to another term indicating data. An example of the imprecision of this term is provided by the translations of the English-Russian Military Dictionary, published in Moscow, which adds to the confusion of translations of this term in the following ways:

1. Gather intelligence--this means to collect razvedyvatel'nyye data.
2. Disseminate intelligence--This means to bring data of razvedka to the notice of (the corresponding people and organs).¹⁸

In other words, the Soviets use these terms imprecisely and are actually referring to data which has not yet been worked into a meaningful pattern of intelligence.

Although the term razvedka is subject to some misinterpretation, it is one of the most frequently used Russian words regarding both the collection process, which in US Army usage would be reconnaissance, and the data which has been collected but which has not been developed into an intelligence product. Although the Soviets divide collection activity into strategic, operational, and tactical, they further subdivide these fields by collection sources, to include agents, special collection activities, and NBC collection.¹⁹

2. Vovennaya informatsiya.

Military information (vovennaya informatsiya), which the Soviets sometimes refer to as operational-tactical information (operativno-takticheskaya informatsiya or OTI), consists of three substantive areas: 1) information about the combat environment including enemy order of battle, political conditions, and characteristics of the area of operations; 2) information about the goals of command and control; and 3) command information.²⁰ According to the Soviet Military Encyclopedia, military information is not only the data, but the process of its transmission and receipt.²¹

The nature of military information as viewed by the Soviets perhaps can be presented best by translating two charts which show the relationships of various categories of operational-tactical information (OTI). (See the charts on page 4.)

CHART #1: General Classification Scheme of Military Information^a

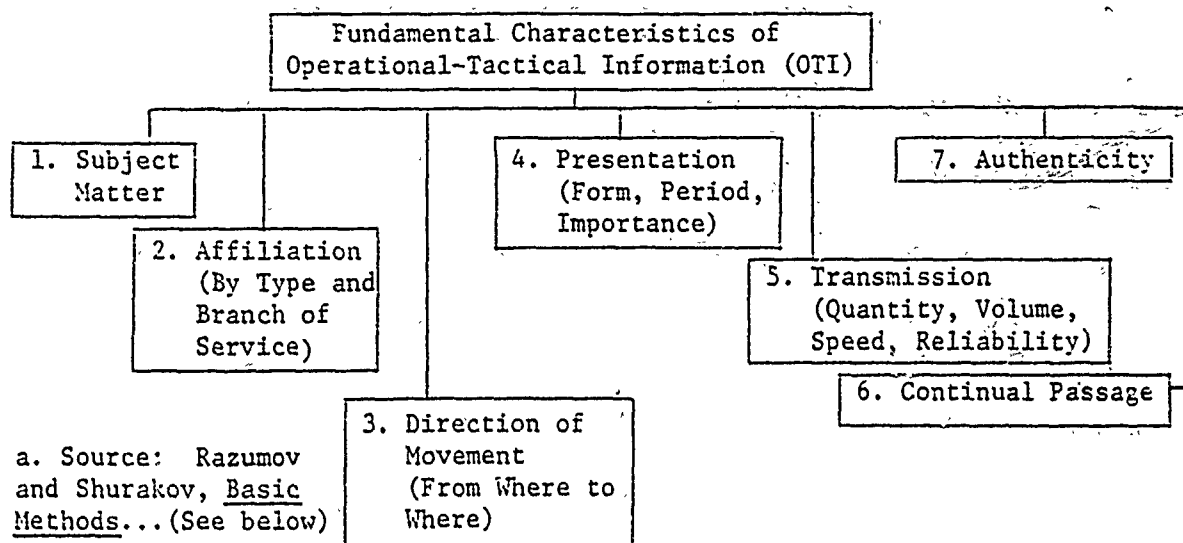
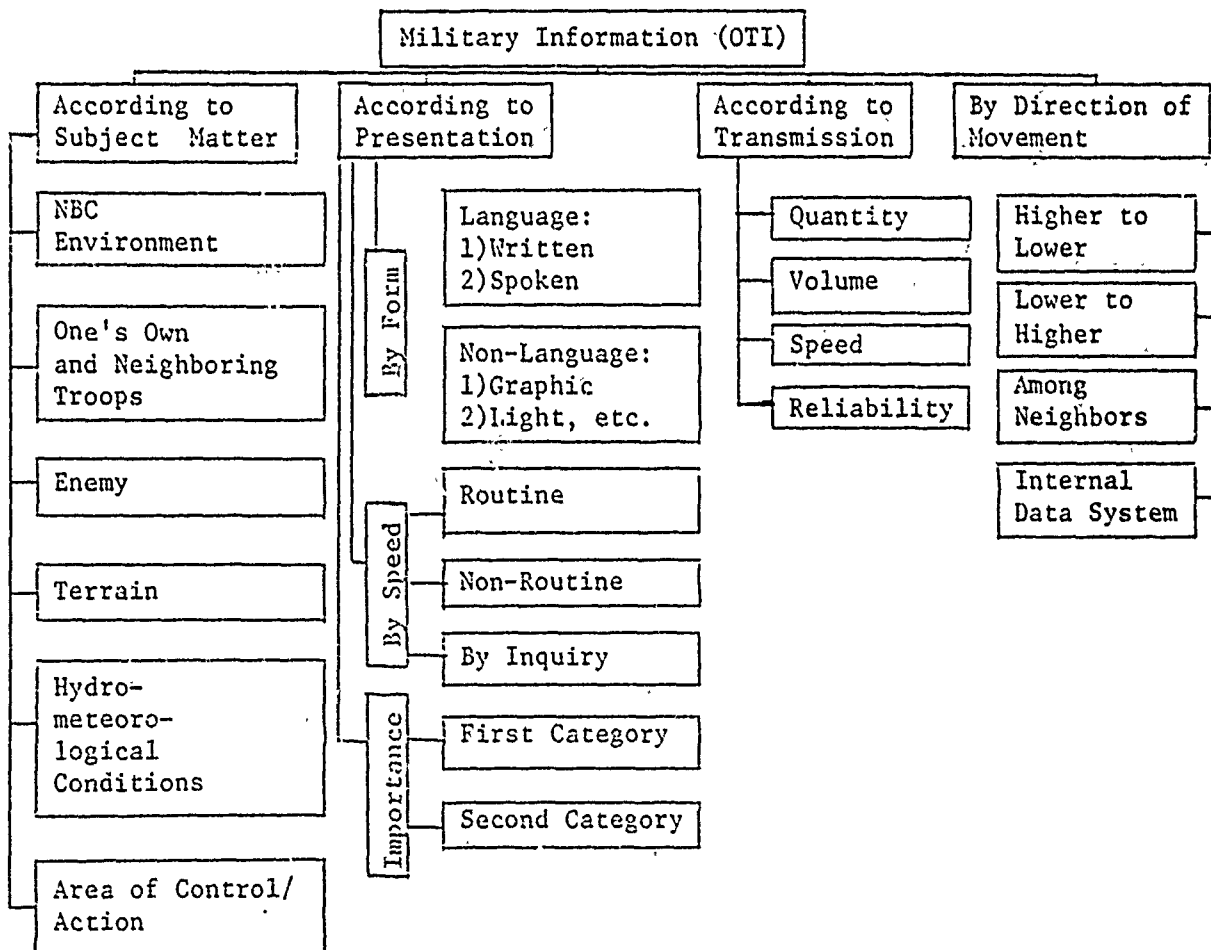


CHART #2: Detailed Diagram of OTI Categories^a



^aO. S. Razumov and V. Shurakov, Osnovnyye printsipy i metody obrabotki voyennoy informatsii na ATsVM (Basic Principles and Methods of Processing Military Information by Means of Computers), Moskva: Voennoye Izdatel'stvo, 1975, p.23.

Chart #1 provides an overview of the fundamental characteristics of OTI. According to this chart, OTI may be categorized on the basis of: 1) subject matter, 2) affiliation by type and branch of service, 3) direction of movement, 4) presentational form, such as written or oral, 5) transmission, 6) continual passage, and 7) authenticity. These categories could form a matrix of informational variables, since one piece of data can be broken down on any of these bases.

Chart #2 is a further delineation of the major categories shown in the first chart. The first column shows a Soviet categorization of tactical military information on the basis of subject matter. In the words of the authors, this category includes:

1. Data about the enemy, one's own troops and neighboring troops,
2. Data about radiation and the chemical environment,
3. Data about terrain and the area of operation,
4. Data about the hydrometeorological situation.²²

This categorization of collection objectives is not materially different from that offered by FM 30-5, which adds to the basic objectives of enemy, weather and terrain, the additional ones of area of operations, civil populations, and friendly forces, as affecting intelligence operations.²³

The Soviet writers who produced the above classification of military information have noted that there is a problem of vagueness and uncertainty in the data. This is because of incompleteness, contradictions, and falsifications which arise because of the rapid tempo of combat operations.²⁴

The mode of presentation of information is the form, speed, and importance which is attached to it by collectors and workers. It is then transmitted to various echelons and neighboring units in the most suitable manner possible depending on such elements as quantity, volume, speed, and reliability. Situational data is acquired by razvedka. This is matched up with the information communicated to the commander and his staff regarding his established tasks. The quality of experience is added. Command information is the sum of all the forms of data which are fed into the commander as the focal point of the informational system. Although the inputs are considerable, the actual material needed to arrive at a decision for command and control purposes may be condensed into four categories of necessary information:

1. From higher organs of the chain of command (orders and instructions),
2. From the results of reconnaissance (all branches),
3. About the conditions, characteristic actions and measures of neighbors,
4. About the coordination of podrazdeleniya subunits.²⁵ (See Glossary, Appendix 2)

Each of these inputs is included within the framework of Chart #2.

3. Svedeniye.

This term is used confusingly both for intelligence and for information; therefore, it is necessary to observe how the Soviets associate the term in practice. According to one Soviet text, svedeniye constitutes a basic part of OTI and is exchanged at all levels among commanders and staffs.²⁶ It includes information about friendly and enemy troops and their units.

An additional term should be mentioned before moving on to the nature of the Soviet intelligence process. This term is usually called command reconnaissance. Command reconnaissance (razvedka) is "reconnaissance of the enemy and

terrain which is personally conducted by commanders at all levels and branches of troops.²⁷ It is made prior to the decision-making process, although it can be conducted only as time and the situation permit. The preferable form of reconnaissance conducted by a commander of a unit is visual reconnaissance using rapid modes of transportation such as helicopters, fixed-wing aircraft, or "rapid-moving command vehicles".²⁸

A review of Soviet terminology fails to reveal clear distinctions between intelligence and information in the sense in which it is used in the US Army. It will therefore be necessary to keep in mind the Soviet distinctions when considering the intelligence process.

III. SOVIET INTELLIGENCE PROCESS

Soviet writers seem to consider the tactical combat intelligence process to be divisible into four phases: 1) planning and tasking, which is also commonly referred to as the organizing phase; 2) collection (razvedka); 3) processing by command and staff elements, usually referred to as obrabotka of data; and 4) dissemination, which is done both internally to one's own unit, as well as to the various echelons comparable to those in Chart #2. The intelligence process is dynamic with the various echelons and intelligence-oriented structures operating simultaneously in combat in an effort to update intelligence files and to refine the intelligence product. It is necessary to understand the Soviet concepts of what should occur in each phase of this process, before making an indepth analysis.

1. Planning and Tasking Phase. These phases are actually two parts of the Soviet concept of organizing for reconnaissance or other means of collecting information.²⁹ Included in the Soviet concept is a definition of objectives and what is required of collection agencies, i.e., essential elements of information; how and by what means data is to be collected; and tasking of units and/or agencies to acquire and report data. Planning is necessary to avoid a waste of collection resources, to assure target coverage by various elements, and to prioritize collection targets. According to Soviet doctrine, organization for reconnaissance should be conducted by a battalion commander immediately upon receiving his combat mission and after evaluating the situation.³⁰ The Chief-of-staff is responsible for actually assigning the forces and means while specifying the procedures and sequences for mission performance.³¹ The Soviets refer back to the experience of the Great Patriotic War (World War II) to show the importance of proper organization of the collection effort. According to the Soviet writers:

Where it was organized skillfully...success almost always accompanied the unit (podrazdeleniye or chast'). On the other hand, serious failures and excessive losses were often explained only by poor reconnaissance.³²

Planning the collection endeavor is thus considered to be one of the "keys to victory" and it has received considerable attention in recent training exercises.³³

2. Collection Phase. Collection is often called the heart of the intelligence process. There is great variety in the types and means of reconnaissance considered necessary by Soviet armed forces leaders. According to Reznichenko's book, Tactics,³⁴ reconnaissance includes those necessary measures taken to acquire information about enemy dispositions and intentions, terrain, weather, and the area of potential operations. These are the collection objectives. Actual reconnaissance, according to Reznichenko, should be conducted with the newest technical means available to units. Of particular importance is collection on nuclear weapons and means of mass destruction.³⁵ The next three chapters will deal with the collection phase in depth. What is useful at this point is to gain an appreciation for Soviet emphasis on this particular phase and how it fits into the overall intelligence process.

3. Data Processing Phase. Data processing using modern means such as computers has begun to receive considerable attention in the Soviet press. Where technical details are mentioned, however, the writers fall back on reports

from Western sources to show what they mean or desire. It is therefore difficult to gain an insight into distribution in the Soviet armed forces of the benefits of the technological era.

Two of the functions performed during this phase are evaluation and synthesis of data to form an intelligence picture. Evaluation implies the ability to sort out the truthfulness of data, as well as to analyze its utility. Synthesis is also an analytical capability which involves categorization of data, prioritization, and integration.

Data evaluation is a special category of concern for the Soviet commander because of the variability of the information which has been collected and the need to attach some degree of significance to it. According to the Soviet Military Encyclopedia, military information may be considered to be trustworthy (dostovernaya), probable (veroyatnaya), doubtful (somnitel'naya), or untrue (lozhnaya).³⁶ The commander and his staff are responsible for data evaluation prior to its synthesis into a finished product and must remain alert to enemy attempts at deception:

Data on the enemy requires special attention. Even those data obtained by combat and by immediate observation frequently may not correspond to reality, since the enemy will strive to disseminate false information.³⁷

Soviet sources further suggest reporting of even the most troublesome information should be as objective as possible, i.e., without embellishment or concealment. "It is particularly dangerous when what is desirable is presented as the truth, and that which is doubtful is presented as reliable."³⁸ From this account, as well as other readings, this was a particular problem for the Red Army during World War II, and stemmed from conditions at the top of the hierarchy.³⁹

Data synthesis or integration of information at higher echelons in the Soviet Army is a staff function, but at battalion level and lower, the emphasis is on the commander being able to integrate data into his mind on the basis of experience and intellectual capability. In modern warfare the commander is to be assisted by the availability of technological methods for combining data, especially given the plethora of sources which are now at least theoretically employed on the battlefield.

The sources for obtaining information are quite varied. Each one has its features, as we know, and one [source] taken in isolation cannot provide the full picture. Therefore, the primary principle...is the careful and comprehensive use of information obtained from all sources. The more such sources there are, the easier the information can be rechecked.⁴⁰

The characteristic of redundancy is built into the Soviet concept of a multiplicity of sources. Thus, there is considered to be the need for vertical and horizontal sources in which types of collection such as human sources, radio-technical forms and imagery are duplicated on a horizontal plane where practicable.

4. Dissemination Phase. Deciding what to do with data which has been collected, evaluated, and analyzed constitutes the final category for assessing the Soviet intelligence process. Dissemination is the feedback to the planners and taskers, as well as the phase which provides the commander with his desired data in a form which will permit actions commensurate with combat objectives.

Soviet writers reiterate the need for rapid dissemination of items of information which have intelligence significance and suggest, "The value of information depends to an enormous extent on the timeliness with which it is submitted to interested echelons."⁴¹ Thus they conclude, due to the destructive force of nuclear weapons, their high speed of delivery and the nature of enemy troop mobility, "Information even a few hours old becomes unfit for decision-making."⁴²

This concludes the theoretical view of the tactical combat intelligence process which the Soviets seem to use. It is a conceptualization which emerges from various articles and books with intelligence, information, and reconnaissance themes. The processes may be regarded as universal, but it is instructive to study how each army conceives of its tasks and where emphasis is placed in the system. The following chapters dwell on the specifics of how intelligence systems are expected to work in the Soviet Army, the problems which commanders and their staffs must face, and the ways in which Soviet leaders hope to resolve their problems.

IV. SOVIET PLANNING AND TASKING FOR DATA COLLECTION

Planning and organizing for the collection of information which is needed to produce intelligence is one of the basic responsibilities of Soviet commanders and their staff elements at all echelons. In the Soviet view, "Reconnaissance is one of the first and foremost staff functions since the existence of staffs themselves."⁴³ First it is necessary to consider staff responsibilities for intelligence at the level of a division, and then there will be a basis for discussing the more compact staff work which is conducted at battalion level. This will provide some perspective on the centralization of staff work.

Division organization for reconnaissance.

The staff intelligence function in a Soviet tank or motorized rifle division is located in the second section; however, the chief of operations (first section) must coordinate the organization of reconnaissance with the intelligence section.⁴⁴

The Chief of Intelligence (second section) is a link in an intelligence chain of command which originates at front level.⁴⁵ During combat his responsibilities include:

- a. Collection, analysis and dissemination of information and intelligence;
- b. Organization of reconnaissance (including aerial means) in conjunction with elements of the first section;
- c. Preparation of a collection plan;
- d. Preparation of the intelligence input to the divisional combat order and to periodic reports;
- e. Exploitation of documents, captured materiel, and prisoners of war.⁴⁶

The collection function is performed by various collection agencies. Analysis is carried on by staff subordinates and is the first level at which there is a significant capability for integrating data and discarding false inputs.

Battalion organization for reconnaissance.

There is no separate intelligence staff officer or section in the battalion to handle intelligence and reconnaissance. In Soviet units the chief of staff (nachal'nik shtaba) performs a leading role in the organization of reconnaissance. The chief of staff in a Soviet battalion thus handles those functions of the S-2 in the US Army minus those which have been appropriated by the commander of the unit. In a Soviet battalion the chief of staff is obligated: 1) to know the friendly and enemy situation in the zones of advance, 2) to foresee possible changes in the situation, and 3) to be prepared to present his conclusions on the enemy and suggestions to the commander.⁴⁷

Planning for reconnaissance within a battalion begins with the anticipation of combat actions in which "the commander and staff have determined from the available data the enemy forces that could oppose the battalion, his TO&E structure, enemy operational tactics, and possible losses."⁴⁸ This first stage of the planning process ideally occurs before combat action has taken place and is dependent upon information which has been collected from higher and adjacent headquarters, and the reconnaissance plan prepared at regiment.

Once the initial data has been evaluated from sources internal to the Soviet Army the next step is to begin investigating more specific matters regarding:

- a. Outline of the forward edge of the enemy;
- b. Enemy strongpoints, flanks, and boundaries;
- c. Obstacle emplacements;
- d. Weapons dispositions, especially antitank weapons;
- e. Location of reserves and direction from which to expect counter-attacks;
- f. All additional relevant data.⁴⁹

This evaluation will necessarily entail reports by collection agencies.

The last stage of organizing for reconnaissance is to assign reconnaissance missions. The Soviet battalion commander assigns reconnaissance missions to the chief of staff. In making the assignments, the battalion commander should then specify: 1) the objectives and primary missions of reconnaissance units, 2) where to focus the main effort, 3) data to be obtained, 4) when data must be transmitted, and 5) the forces and means to obtain data.⁵⁰ The Soviets consider the optimum opportunity for reconnaissance mission assignments to be immediately after the battalion or company commander has been issued his combat mission for the unit.⁵¹

The Soviet battalion does not produce a separate plan from the one sent them from the regiment. In the words of one Soviet writer:

As is known, such a plan [of reconnaissance] is not compiled in the battalion. Although the work is not finalized as a document, this does not mean that the work is conducted in an unorganized, spontaneous manner.⁵²

The proper organization of elements for reconnaissance is one of the basic conditions which the Soviets consider to be important. They include:

With all else being equal, the side which has the best organized reconnaissance receives all the advantages, since it can count on more effective employment of weapons and equipment, on more reliable suppression of enemy means of destruction, on preventing and disrupting enemy attacks and maintaining the initiative.⁵³

Soviet battalion planning and tasking is the careful modification of the plan sent to them by regiment. This modification is through the execution of the regimental prerequisites and is usually minor barring, of course, a major catastrophe or being cut-off from the parent unit.

V. DEMANDS PLACED ON SOVIET INTELLIGENCE COLLECTION

The demands which the Soviets place on the acquisition of data by sources may be divided into two categories. The first category concerns the nature both of the reconnaissance effort and of collection agencies as they relate to the collection environment. The second category is the characteristics of scouts and the expectations about what scouts should be able to accomplish. This second category may be more succinctly referred to as the attributes of scouts and their capabilities.

Soviet Collection Demands

Demands for standards of information acquisition and flow are inherent in any army, but perhaps the Soviets are more consistent than most in reporting on their requirements and emphasizing each of them. It is almost as if the Soviets were attempting to overcome inadequacies through repetition. On the other hand, these demands probably receive so much attention because in Soviet writings, reconnaissance is often called, "the most important form of combat support of the troops."⁵⁴

Ten collection demands have been identified which the Soviets believe are important if their collection effort is to be a success. These ten demands provide an internal measure of effectiveness of collection agencies engaged in reconnaissance, as well as provide signals to warn intelligence staffs when there are problems in the collection environment. The first six demands have been enshrined in Soviet doctrine as "the basic principles of reconnaissance."⁵⁵ The remaining demands are derived from Soviet sources and are explicit points made in the literature.⁵⁶

1. Continuity (nepreryvnost'). Continuity of collection apparently takes precedence over the other demands with the possible exception of timeliness of reporting.⁵⁷ The nature of contemporary warfare is such that even a short break in intelligence collection may have dire consequences for Soviet units. Continuity of collection means that troops must perform their activities regardless of the time of day or night, despite any adverse weather conditions, and regardless of the type of terrain.

2. Activeness/Aggressiveness (aktivnost'). The Russian term, "aktivnost'," connotes both activeness and aggressiveness in the collection of data. The concept is one of acquiring data on designated objectives by any available means or method, regardless of the obstacles which the enemy may have implanted to impede the progress of scouts. It is a process of constant striving by not only podrazdeleniya, but by the commander and staff as well. It is achieved by bold and decisive actions, the skillful application of resources for collection, and by displays of initiative by Soviet commanders and scouts.

3. Purposiveness (tselestremlennost'). This principle "consists of the subordination of primary reconnaissance measures to the interests of performing a combat mission."⁵⁸ Commanders and staffs are warned, although it is desirable to have complete coverage of the enemy, it is impossible to obtain exhaustive information. "Consequently, efforts must be concentrated on the primary elements and on those aspects on which the stability of the entire combat formation depends."⁵⁹ Particularly emphasized as primary targets for collection are weapons of mass destruction, tanks, antitank weapons and reserves. Purposiveness or goal-oriented collection enables the commander of a unit to continue organizing

for further reconnaissance and avoids the pitfall of being suffused with trivia which often overwhelms a staff.

4. Timeliness (svovevremennost'). This principle is the attainment of information either by a prearranged time, or within a time frame in which the data remains useful to a commander and his staff. Timeliness is one of the major features emphasized by the Soviets in their training exercises. According to one source:

The most valuable information becomes old quickly under conditions of fast-moving, modern combat and high troop mobility and maneuverability. Therefore, commanders and staffs are obligated to display a maximum of efficiency in collecting and processing intelligence information. To this end, it is necessary to assign reliable means of communication to podrazdeleniye performing reconnaissance and work out signal tables which would allow transmission of data obtained rapidly and accurately.⁶⁰

The obsession with time as a crucial factor may be related to problems with Soviet technological capabilities, although time has indeed diminished on the modern battlefield. It applies not only to the collection process, but the entire spectrum of decision-making in combat.

The concern with time is particularly manifest in the concepts of "winning time"⁶¹ and "critical time".⁶² As pointed out in a recent article, "Now, time is considered to be the basic criteria for the effectiveness of control."⁶³ The first place where Soviet writers usually suggest time can be reduced is in the conduct of reconnaissance. They then proceed to note, "Swiftness in conducting a reconnaissance is not haste and acting on the first impulse, but is the result of thorough and comprehensive knowledge..."⁶⁴

The Soviet idea of "winning time" is dependent on experienced officers who automatically know when to initiate action and the sequence in which work should be performed. "Relying on knowledge, experience and, of course, on a well-conceived plan for conducting reconnaissance, [an experienced and prepared officer] concentrates his main attention of the basic questions--and time will not be spent on secondary ones."⁶⁵

The concept of "critical time" (T_{crit}) is closely related to "winning time". In contemporary Soviet theory, the length of T_{crit} for attaining and processing information has diminished, requiring staffs to work at an increased pace and troops to be at a higher stage of readiness.⁶⁶ Critical time is "the time at the end of which obtained information is obsolete."⁶⁷ The time spent in receiving, processing and transmitting information plus the time required for troops to act upon a given command must be less than critical time for success to be obtained.⁶⁸

5. Reliability (dostovernost'). One of the major staff requirements is to check and recheck information as it comes in before integrating the data into the data base. A key to achieving reliability is to arrange to receive inputs about enemy targets "from different sources of reconnaissance, and from different intelligence collection agencies."⁶⁹

To be able to attain a qualitative level of data reliability while maintaining a high tempo of attack, the Soviets believe it is necessary to assign the following battalion elements to reconnaissance tasks:

...observers in the squad, platoon and company; a combat reconnaissance patrol, one or two patrol vehicles, an observation post and artillery OP's in the battalion. In this case, there will be 20-30 sources for obtaining reconnaissance information in a battalion supported by an artillery battalion and having a combat formation in two echelons.⁷⁰

The Soviet system still requires personal verification wherever and whenever practicable by the unit commander. Thus in addition to these reconnaissance elements, commanders at lower levels of command are not only encouraged, but obligated to personally conduct reconnaissance. The battalion commander must perform reconnaissance personally because the enemy will resort to deception, according to Soviet doctrine. For this reason, "chast" and podrazdeleniye commanders and intelligence officers are obligated to study each new report thoughtfully, compare the information...and draw conclusions on enemy intentions from individual intelligence indicators.⁷¹ This suggestion, however, goes against the traditional Soviet requirements for redundancy of sources, although to maintain a high tempo in the attack in modern warfare, it may be necessary to gage intentions from single indicators. This is one of those areas where Soviet writers often seem to contradict themselves. A study of various sources, however, leads to the conclusion the Soviets hope to have knowledgeable commanders who are able to make automatic, spontaneous judgments based on single factor analysis. If time permits, then the data can be further screened and compared for reliability by staff elements at the various levels of the chain of command.

6. Accuracy (tochnost'). Accuracy is the ability not only to detect targets effectively, but also to determine coordinates with preciseness. Therefore, it differs from reliability. Reliability of data is based more on the expectation of trust put on a source. Accuracy demands not only reliability, but capability to gather exact data. The higher the accuracy of data, the more effective will be the destructive fires placed on enemy positions. Accuracy of data has become a much greater problem in modern warfare with the proliferation of small, mobile targets, such as missile launchers, antitank weapons and the like. Fluidity of the battlefield is one of the primary problems addressed by recent Soviet tacticians.⁷²

7. Collection objectives. The data required about enemy order of battle is broken down into several primary groupings including: composition, intentions, nature of actions, disposition of heavy weapons and means of mass destruction (especially nuclear missile weaponry), location of command and control facilities, position of reserves, and any other data available. Data required on the terrain includes: passability, concealment features, locations of various obstacles, and areas of contamination and destruction. Both sets of data are necessary before assigning specific missions to combat troops.

8. All source collection. One form of reconnaissance by itself will not produce results on the foregoing collection objectives. Consequently, it is necessary to use "All forces and means of troop, aerial, artillery, radio, radiotechnical, engineer, chemical and other forms of reconnaissance in an integrated manner."⁷³ All source collection is regarded as essential to provide for both redundancy and to ferret out information which may be acquired only by a specific reconnaissance element or collection agency.

9. Coordination (koordinizatsiya). This demand is placed on the staff as the agency responsible for reconnaissance and planning. The requirement is to allocate properly collection efforts among the branches of service, to delineate zones and areas for their operation, and to assign them timely missions. Coordination also involves the organization of a regular exchange of intelligence

among the various combat arms units, with higher and lower elements, and with adjacent units.

10. Professionalism. According to Soviet writers, the accomplishments of reconnaissance units have dramatically improved in the past few years as demonstrated by various exercises. Although there remain some deficiencies according to Soviet writers who write about the training environment, there is a higher degree of professionalism in the collection of intelligence data in the modern Soviet Army.

Attributes and Capabilities of Scouts

The collection of data for intelligence purposes requires personnel with special characteristics. One recent Soviet work, People of Silent Deeds: Studies About Intelligence Collectors⁷⁴ (razvedchiki), has delved into the history of intelligence collectors on behalf of the Soviet state and Armed Forces and has suggested their physical and moral attributes should be emulated by Soviet youth. Of particular interest is the introduction written by Hero and Marshal of the Soviet Union, A. M. Vasilevskiy. While claiming that the characteristics desired of intelligence collectors are not taught, but are innate (stemming from the character of the Soviet people), Marshal Vasilevskiy provides the following portrayal of an ideal collector of either strategic or tactical intelligence:

Intelligence collection (razvedka) demands not simply the desperation of a dare-devil, but exceptional people of conspicuous intellect with imagination and fancy, who have the ability to act independently and quickly orient themselves in the most complex situations and to make instantaneously the exact and only possible correct decision in the most difficult single-handed combat, and in seemingly inescapable positions.⁷⁵

While this is a somewhat nebulous, if not mystic, view of the desired attributes of a scout, a more concrete listing has recently been provided by S. S. Veshchunov, who suggested personnel of scout patrols should have strong will and character, should have staunchness and bravery, should be observant with a good memory, should be skilled in the mastery of weapons, as well as with reconnaissance materiel and instruments.⁷⁶

The attributes of a good scout provide the physical and mental basis for his selection. Once a scout has been selected, he is then trained to be able to perform with specific capabilities. Veshchunov then lists these capabilities in which a scout should be able to:

- a. Identify enemy nuclear weapons by external appearance;
- b. Know data concerning enemy tactics and techniques, and by various indicators, determine whether the enemy is preparing to use weapons of mass destruction;
- c. Have command of camouflage and move noiselessly over a variety of terrain;
- d. Covertly approach the enemy and suddenly strike him to seize prisoners, documents, and combat technology;
- e. Be able to orient oneself, day and night, on any terrain by compass and map, by ground features, and by heavenly bodies;
- f. Penetratingly observe the enemy, briefly and concisely report discoveries, and conduct eavesdropping while by various sounds be able to determine locations of personnel and the nature of enemy activity;
- g. Shoot accurately, throw grenades precisely, use butt-stocks and knives, and also know enemy weapons and be able to use them;

- h. Determine numbers, composition, and direction of enemy movement;
- i. Noiselessly and covertly overcome enemy engineer obstacles, ford or swim across water barriers, either on vehicles or using improvised means;
- j. Determine on unknown terrain the coordinates of enemy intelligence objectives;
- k. Carry out simple interrogation of prisoners;
- l. Determine enemy composition by clothing recognition, and by the markings and external images of military equipment.

Before going on reconnaissance, scouts are admonished to sanitize their belongings. In particular, "Personnel are forbidden to take along documents, letters, books, newspapers, money and topographic maps with notes about one's own troops."⁷⁸ Furthermore, "During the conduct of reconnaissance, it is forbidden to leave the wounded or abandon firearms and equipment..."⁷⁹

Soviet doctrine emphasizes specific physical capabilities and mental attributes which an individual must exhibit before he is selected as a scout. Professional scouting units on the ground continue to receive a major share of Soviet attention in military journals, although during the Great Patriotic War extensive use was made of ad hoc infantry arrangements. This chapter has presented the demands which are placed on scouts, the selective features which the Soviet military looks for in the recruiting phase, and the expectations of scouting performance. The professional reconnaissance units in which the scouts operate will be discussed next.

VI. GROUND COMBAT RECONNAISSANCE UNITS, METHODS, AND EQUIPMENT

Several types of ground combat reconnaissance units are contained in a division. These units utilize four basic methods to obtain information: 1) observation, 2) raids, 3) ambushes, and 4) contact. The last three methods help distinguish ground maneuver reconnaissance units in a division from reconnaissance units which have more specialized purposes. Reconnaissance elements maneuver in equipment which has been constructed with the needs of scouting in mind.

Organization of ground combat reconnaissance.

1. Reconnaissance in force (razvedka boyem). This combat formation has a variety of compositions, but usually it is composed of reinforced motorized rifle or tank subunits (usually companies) in contemporary battle. Often these units are called reconnaissance detachments (razvedyvatel'nyy otryad), and are considered to be a temporary formation designed to fulfill one or more reconnaissance missions "in the interests of all-arms units."⁸⁰ They may operate at a depth of up to 50 kilometers.

A reconnaissance detachment may have several missions for each form of combat envisioned.⁸¹ In the offensive, the mission may be to detect enemy centers of resistance, locations of enemy weapons, enemy reserves, defensive lines in depth, and the conditions in the rear of the enemy. On the march the mission is to detect the main force of the enemy at a maximum distance from friendly units. Thus it may act as a screening force. In a meeting engagement the mission is to ascertain the strength and composition of enemy troops, echelonment and maneuver potential, to prevent advancement into one's own rear, and to define locations of the major means of firepower. During an enemy withdrawal or delaying action the missions become assessment of the direction of withdrawal, strength and composition of the covering force, and detection of obstacles and mine fields. At all times the primary mission is to detect the main force of the enemy and to capture POWs, documents or other data which may indicate plans of the enemy. The missions sometimes include direct combat action. The idea, however, is "to find a gap in the enemy battle formation and penetrate undetected through it into the depth."⁸²

Reznichenko has stated, "Reconnaissance in force found wide application during the years of the Great Patriotic War and was one of the most effective methods of military reconnaissance."⁸³ He has warned, however, that it is connected with a large expenditure of forces, and if unskillfully conducted, leads to a disclosure of one's own prepared offensive. Consequently, according to Reznichenko, reconnaissance in force is conducted only upon the decision of a senior commander, and only when the data required cannot be obtained in any other fashion.⁸⁴ During the course of the Great Patriotic War, reconnaissance in force featured increased quantities of arms and men participating on an increased scale.⁸⁵

Some insight into the scale of a major reconnaissance in force operation as the Soviets employ the concept may be gleaned from a description of action along the Byelorussian front:

In 1944-45, the employment of reinforced advanced battalions for a reconnaissance in strength before the beginning of an offensive became an integral part of each operation and was carried out on a large scale. Thus, reconnaissance in strength (force) before the Byelorussian operation (June-August 1944), was carried out in the zones of eleven armies on a frontage of over 500 km, and, counting seven other armies, participating in the breakthrough

at the second stage of the operation, on a frontage of 1,000 km. The composition of subunits and the quantity of supporting forces and equipment participating in strength considerably increased too.⁸⁶

Colonel Popov argues that skill is an essential prerequisite to such an operation, although during modern warfare, reconnaissance in force is supplemented by the available technical means for reconnaissance such as by air, radio, radar, and the like.⁸⁷

2. Reconnaissance group (razvedyvatel'naya gruppa). The reconnaissance group is an organ of combat reconnaissance which attempts to acquire information about the enemy while the main force is operating in the attack, on the march, or is involved in a meeting engagement.⁸⁸ A reconnaissance group normally consists of tank and motorized rifle elements operating jointly at a depth which may occasionally reach 50 kilometers, but more often ranges from 20-30 kilometers. Such an element usually operates as a company which has been augmented by chemical reconnaissance and by sappers.⁸⁹ The concept of operations is to penetrate into the rear of the enemy in an undetected fashion using raids or ambushes as a last resort.⁹⁰ Under contemporary conditions, one of the basic purposes of such an element is to conduct reconnaissance of enemy nuclear means.

To accomplish its missions, the reconnaissance group may penetrate into the rear of the enemy on foot, on a ground combat vehicle, by helicopter insertion (vysazhivat'sya), by submarine, by surface ships, or any other means appropriate to mission accomplishment.⁹¹

3. Combat reconnaissance patrols (Bovevyye razvedyvatel'nyye dozory). A combat patrol is sent to conduct reconnaissance of enemy units and terrain up to 10 kilometers to the front and flanks of a subunit. The composition of the force can range from a squad to a reinforced platoon.⁹² Combat patrols may proceed in either a mounted or dismounted fashion, and individual patrol vehicles may be dispatched with scouts from subunits designated for reconnaissance. A battalion usually sends squad-sized reconnaissance patrols (otdel'nyy razvedyvatel'nyy dozor). As with a reconnaissance group, a patrol may have specialized reconnaissance functions such as chemical and engineer elements.⁹³

Methods of reconnaissance by ground combat elements.

Soviet doctrine has set forth four primary methods to be used by ground combat reconnaissance organs to acquire data about the enemy. These methods--raid, ambush, contact and observation--are supplemented by various forms of transportation (air, ground, sea), and by technological devices such as infrared devices, laser systems, passive light devices, etc.

a. Raid (poisk). The objective of a raid is to capture prisoners, documents, new weapons, and technical equipment.⁹⁴ Experiences in the Great Patriotic War showed raids were one of the most prevalent methods of reconnaissance used by the Soviet sources, out of the 10,630 various reconnaissance attempts to seize prisoners and documents during the two war years of 1943-1944, 6,171 of them were raids.⁹⁶

Raids may be executed by units ranging in size from a squad to a group which has been specially trained. Reznichenko considered, "the complement of subunits designated for conducting raids usually includes scouts of other branches of forces and special troops."⁹⁷ Although the objective is to capture enemy personnel or equipment, a raid may also inflict some specialized damage or may create a

diversion in the rear of the enemy to sap strength or to mislead the enemy as to size or intentions. Raids are normally conducted against enemy entrenchments, sentries, communication centers, headquarters, or other likely places where enemy troops may be found.⁹⁸ The ability of a scout to silently capture a prisoner and return to friendly forces without detection, or at least without losses, is highly prized; therefore, raids are conducted primarily by specially trained troops.⁹⁹

b. Ambush (zasada). Although an ambush has essentially the same goals as a raid, an ambush is set along a route of movement and has the objective of destroying and/or capturing significant numbers of vehicles and troops. The size of an ambushing force may range from a section to a reconnaissance group. An ambushing force may be split into two groups: the support force and the assault force. The duty of the support force is to pin down the enemy contingent, while the assault force attempts to achieve the mission of destruction of the enemy element, capture of members of the opposing force, or both.¹⁰⁰

c. Contact. This is the method of gaining information by direct combat action against an enemy. This is usually performed by reconnaissance in force, however, it could also involve more major units in an effort to make an initial probe or contact with the enemy in an effort to acquire data which has not been gained by other methods.

d. Observation (nablyudeniye). Reznichenko considers observation to be "the most widely used method of conducting reconnaissance in subunits and units of all types of forces and special troops."¹⁰¹ S. S. Veshchunov adds "For a squad it is the basic method."¹⁰² It is employed under all forms of combat and is conducted continuously by selected personnel using ground observation posts. Usually observation is conducted by elements who have been assigned a sector of responsibility, although they may also be assigned a region or objective depending on the circumstances of combat.¹⁰³ Surveillance must be established to maximize observation of the enemy, while providing cover and concealment of one's own troops.

The density of observers is generally as follows: one observer is assigned in each squad or team; one or two observers are designated in a platoon or company; and one or two posts consisting of two or three observers each is preferable for a battalion.¹⁰⁴ Furthermore, "Battalion observation points are equipped with instruments for observation and orientation, maps, diagrams, and observer's logs."¹⁰⁵ For night observations, the Soviet Army uses night vision devices.¹⁰⁶

Reznichenko and other Soviet writers have suggested that photography is an ideal supplement to observation. Ground photography in the Soviet system is used by artillery and engineering troops, although sometimes scouts are equipped with cameras for the purpose of providing photographic evidence of the nature of important objectives located in the rear of the enemy area.¹⁰⁷ Reznichenko cautions, however: 1) the camera cannot always establish the presence of an enemy in areas where he is concealed, 2) photographs may show only general outlines of objects, 3) it may be impossible to distinguish false objects from real ones, 4) photographs cannot show attitudes or moral conditions of troops, 5) the range of ground photography is insignificant, and 6) it can be executed only within the limits of direct line of sight.¹⁰⁸

Listening posts which employ sound ranging devices and eavesdropping are considered to be supplements to the method of observation, "especially at night and in conditions of limited visibility."¹⁰⁹ Thus it is not considered to be

a completely separate method of reconnaissance.

Ground Vehicles of combat reconnaissance organizations.

The Soviets have produced three families of ground vehicles which in various configurations are designed to assist reconnaissance units with movement, mobility, and firepower in the fulfillment of their missions.

1. PT-76. This vehicle is a light tank, but since its introduction in 1952, it has been one of the staple vehicles of reconnaissance units. In the Soviet War Machine, it has been stated, "The basic PT-76 [modified] is still the most numerous reconnaissance tank of the Warsaw Pact Armies."¹¹⁰ However, "In front line Soviet divisions [such as Groups of Forces], the PT-76 is now almost completely replaced by a recce [reconnaissance] version of the BMP."¹¹¹

2. BRDM/BRDM-2. Based on the BTR-40 series which went into production in 1951, the BRDM (1959) and redesigned BRDM-2 (1966) have been the scout car for the Warsaw Pact. Recent Soviet praise for the BRDM series has mentioned that in addition to carrying specialized equipment, it meets the requirements of speed and reliability.¹¹² It has been reported in Western Europe that "The BRDM and BRDM-2 armored scout cars are the most commonly used vehicles for performing the patrolling and observation function."¹¹³ The BRDM series also comes in a CBR reconnaissance version (BRDM-2RKh) which contains the basic equipment necessary to make environmental surveys of a CBR nature and to mark areas of contamination.

3. BMP. The BMP is finding increasing usage in a reconnaissance role. The firepower of its 73-mm main gun makes it an ideal vehicle for conducting raids, for reconnaissance when a meeting engagement is expected, or as a basic scout vehicle which can carry sophisticated equipment. In a meeting engagement, BMP-equipped units can play a primary role both by timely detection of the enemy and by preventing enemy deployment.¹¹⁴ Taking advantage of the great maneuverability, heavier armor protection and sufficient firepower, BMP podrazdeleniya are considered to be particularly effective.¹¹⁵ There are variations of the BMP which have been detected since 1975 with reconnaissance, surveillance, and artillery associations.¹¹⁶ It should be reemphasized that the Soviets have replaced the PT-76 with the BMP in front line divisions.

VII. ALL SOURCE RECONNAISSANCE

The production of all source intelligence requires the use of various forms of reconnaissance. In addition to the units and methods discussed in the previous chapter there are several complementary elements which also conduct reconnaissance activity with methods which are suited to their roles. The motorized rifle division contains artillery, radio, engineer and chemical reconnaissance elements. These units often employ newer technological techniques for the acquisition of information. Some of these techniques will be mentioned at the end of the chapter because they have applicability in many fields of collection activity.

Special Reconnaissance Units

1. Aerial reconnaissance. Units which employ aerial reconnaissance are usually special purpose units which have organic aircraft. This distinction, however, may be blurring as there is an increasing use of helicopters, in addition to fixed wing aircraft which the Soviets now use on the battlefield.

A most interesting account of aerial photo-reconnaissance activity during the years of the Great Patriotic War was published in 1979.¹¹⁷ The picture presented was one of dismal failure in the first few years of the war in terms of capability for reconnaissance and organization for photo-interpretation. "Photo-interpreters were on the tables of organization of airfield maintenance battalions."¹¹⁸ This condition meant photo-interpreters were often used to perform tasks outside their specialty. Also in the beginning of the war, only 10 percent of aerial reconnaissance missions were flown with photo equipment. The other 90 percent of the time involved visual reconnaissance. In contrast, by the end of the war in 1945, 87 percent of the aerial reconnaissance missions were conducted using photographic equipment.¹¹⁹

Reznichenko more recently has concluded "aerial photography is the basic form of aerial reconnaissance."¹²⁰ Observation and reporting on matters of substantive intelligence importance, however, are carried out on the spot so as to provide immediate data on the enemy and terrain.¹²¹ According to Reznichenko, aerial photography has greater possibilities than ground photography, however, some of the same conditions apply. In addition, well-organized enemy anti-aircraft defense can not only hamper flights, but render this form of activity useless.

2. Artillery reconnaissance group. The function of this unit is to locate firing positions for the guns of a battery and to locate enemy targets. It also has a radiation and chemical survey function.¹²²

3. Radio and radiotechnical units. Radio intercept and radio direction finding are the primary means of gaining intelligence about the enemy by electronic means. Radio intercept is the ability to collect and understand message content, while radio direction finding is designed to locate stations. Reconnaissance conducted by radioelectronic means is accomplished with the aid of radio intercept equipment on the ground, onboard ships, pilotless as well as piloted aircraft, and by earth satellite.¹²³ Tactical radioelectronic intelligence is considered by the Soviets to be one of the fundamental means of support to the troops.¹²⁴ In Soviet books concerning radioelectronic intelligence, a considerable portion of the material is dedicated to analyzing the

nature of the structure of Western armies in the conduct of electronic warfare. The Soviets have provided a useful glossary using American terminology:

- radiorazvedka--Communication Intelligence (COMINT);
- radiotekhnicheskaya razvedka--Electromagnetic Intelligence (ELINT);
- radiolokatsionnaya razvedka--Radar Intelligence (RADINT);
- televizionnaya razvedka--Television Intelligence (TELINT);
- razvedka (with the aid of infrared technology)--Infrared Sets Reconnaissance;
- razvedka (with the aid of quantum-optics instruments)--Laser Sets Reconnaissance.¹²⁵

The Soviet authors make extensive use of American sources in describing the various radio reconnaissance processes. This may be due to a reluctance on their part or the part of their censors to reveal any information on their systems. Recognition of the categories of American radio reconnaissance is tacit admission, however, that they have accepted most of these concepts and employ them in their own training and systems.

Apparently much of the radio-electronic intelligence gleaned by Soviet forces is used to produce an estimate of the signal intelligence situation.¹²⁶ According to Major General of Signal Troops, V. Grankin:

The constant and ever-increasing saturation of troops with various radio-electronic devices has created premises for the fact that at the present time groupings of combat equipment and elements of the enemy's command and control systems can be uncovered comparatively quickly and with high reliability both by communications and electronic intelligence, i.e., they can be determined from data of the signal intelligence situation taking shape on the battlefield.¹²⁷

In Grankin's view, the most important objectives for signal intelligence systems include: command and control systems of ground forces units, missile systems, artillery, tactical and army aviation, and air defense.¹²⁸ Through radio-electronic interception of signals the Soviets hope to discern the zones and depths of disposition of enemy units, to be able to pinpoint and consequently target the elements mentioned, and to ascertain changes in patterns which might indicate enemy preparations for the use of nuclear weapons.

4. Engineer reconnaissance units and patrols. Engineer reconnaissance is conducted basically to study the terrain. In mountainous conditions helicopters are the primary mode of transport. Such features as river crossings, mountain passes, zones for setting up obstacles and the like are studied by the employment of helicopters and technical means such as photography.¹²⁹

An engineer reconnaissance patrol aboard the MI-2 helicopter consists of 3-4 persons. In such a patrol, the first member (a commander) is an officer who estimates the route, makes a verbal recording of obstacles and transmits reconnaissance data immediately, if required; the second member (a sergeant) photographs sectors of the route and important objectives; the third member is the radio operator; and the fourth member is the scout who may disembark for a detailed investigation of a particular terrain feature.¹³⁰ Collection of information on terrain is also performed by commanders of units, especially during troop movements, and is studied carefully by engineer reconnaissance elements.

Reconnaissance under special conditions has received considerable attention in the Soviet military press.¹³¹ There are good reasons for this because of the

variety of terrain which is contained in the confines of the Soviet Union. The fundamental principles for reconnoitering roads, rivers, bridges, woods, swamps, and soil are provided in The Officer's Handbook for Military Topography.¹³²

5. Radiation and chemical detection units. Radiation and chemical reconnaissance is conducted while on the march and helps ensure a high tempo in the attack. Chemical reconnaissance patrols often operate on unfamiliar terrain, cover a wide zone, overcome chemical obstacles, and are prepared to repel sudden attacks by enemy diversionary elements.¹³³ Various scales are indicated on this card for an assessment of levels and types of chemical or radiation doses. In the Soviet view, it is desirable to increase the number of chemical observers at night and to conduct observation not only from the chemical reconnaissance vehicles, but from trenches that have been set up with good circular vision.¹³⁵ Chemical observation points are set out on the windward side and constant checks must be made of meteorological conditions.

6. Airborne unit reconnaissance. This type of reconnaissance may take several forms from a patrol to a group. Airborne units also use such methods as raids and ambushes to acquire the data required of them.¹³⁶ Tactical airborne forces are often used to destroy enemy nuclear weapons emplacements, although other elements may be used as well:

Missile and artillery podrazdeleniye, the senior chief's aviation, as well as a tactical airborne force and forward detachments usually are employed to reconnoiter and destroy enemy nuclear weapons, and tank podrazdeleniye are used.¹³⁷

Airborne elements are often designed to conduct diversionary activities on enemy territory and to gain intelligence data from either partisans or neutral elements.

Developing Fields of Reconnaissance

The Soviets have recognized the value of modern technological techniques of reconnaissance. They write about "rapidly developing fields" of technology and the application of these fields to reconnaissance targets.¹³⁸ The Soviets divide these fields into: 1) Heat (teplovaya) or infrared (infrakrasnaya), 2) Magnetic (magnitometricheskaya), 3) Radiothermal (radioteplovaya), which measures electromagnetic micro-waves, and 4) Laser technology (lazernaya tekhnika). The Soviets emphasize, however, that more traditional technological means are also developing in applications for reconnaissance. This includes photographic means, radio-location, biological, and television.¹³⁹

VIII. SOVIET STAFF PROCESSING, AND DISSEMINATION OF INTELLIGENCE

The processing of military information by staffs of Soviet units is similar to the process performed by staffs in most modern armies. This does not mean, however, that each step is the same or that differences in capacity to handle data do not exist. It is merely to assert that the Soviets seek efficiency in their internal processing system. The following discussion is based on the Soviet view of how they hope to attain efficiency.

Staffs of Soviet units are asked to analyze collected data in the following preferred order:

1. Plot incoming data on a working map,
2. Indicate the source and time of receipt of the information,
3. Familiarize oneself with the content of the data,
4. Determine the urgency and value of data,
5. Enter evaluated information in a log and systematize it according to targets.
6. Compare the data received with that already available on the target.¹⁴⁰

These steps are closely related to constructing target analysis files in the US Army. Such an approach has the value of consistency. There must be some discrimination among the data plotted on the working map in the initial step, otherwise false information could be mixed with authentic, it could be forgotten that it has not yet been integrated into the data base, and it may impede the actual study of information. Perhaps the Soviets have internal processes, however, which solve this problem for them.

There are other opinions about how to refine the staff process. In one Soviet article it was suggested that the study and processing of information should include the following:

1. Comparison of the newly obtained information with that already available to the staff.
2. Determine the authenticity of each bit of information.
3. Check the information where there remains doubt as to its authenticity.
4. Eliminate vague and imprecise areas.
5. Compare the timeliness of the information and arrive at conclusions as to changes which might have occurred in the friendly and enemy situation.¹⁴¹

The key to such a process is the constant checking of information in combat:

"Experience shows that an officer who is under immediate pressure of combat...may miss important facts, or may take an insignificant fact as the primary and chief element."¹⁴²

The Soviets hope to compensate for such problems by thorough staff training. Training is as important for staff officers as it is for the elements which are conducting reconnaissance. As suggested in one article:

We must see to it that staff officers are able to plan reconnaissance in short periods of time...to analyze quickly information received via reconnaissance, to maintain constant communications with reconnaissance elements, and direct their actions.¹⁴³

This is accomplished by training of staffs in proper procedures. The Soviets also suggest that classes should be presented by staff members.

The chief of staff of a Soviet unit plays a major role in the assessment of data from the time of its immediate receipt to the end of the process. It is his responsibility to determine whether or not the information should be prioritized, whether additional inquiries should be made, or whether something should be communicated without delay to the commander.¹⁴⁴ Especially in a battalion, the chief of staff plays a greatly enhanced intelligence role because he has no specified intelligence officer to fill the function.

Record Maintenance

The maintenance of proper records is of major concern in any intelligence organization. The Soviet method for maintaining records is to keep records by objective and to properly classify them; to make action reports on a scheduled and unscheduled basis; to use preprinted forms and formats which have been developed in training; and to keep a war diary.¹⁴⁵ These methods will be examined in more detail.¹⁴⁶

1. Keeping records by objective and classification. The method of recording data by objective is well proven in Soviet exercises, because it allows the commander to study important objectives at a glance and the information is more readily retrievable. Classification of information according to its importance, priority and value is also useful.

2. Action reports. This form of reporting was on a scheduled basis during the years of the Great Patriotic War--usually once or twice a day at all command echelons. Soviet writers believe that the exigencies of fast-moving contemporary warfare require reporting on a more real-time basis. Such reports must be issued as the situation warrants. For this purpose, unscheduled reports issued at the initiative of subordinates have been found to be of positive value in training exercises involving staffs. Although such reports should be brief and clear, they should include where an event occurred, the nature of the friendly and enemy units engaged in an activity, and what the reporting commander has done or proposes to do.

3. Formatted/pre-printed reports. It is most interesting in reading Soviet literature to note what their writers exult over as ways to improve procedures. Formatted reports and pre-printed forms are apparently a relatively new discovery, because recent articles have suggested that formats for written action reports have been developed in training and are of considerable value. Situation data may be properly logged and the time for reporting information by technical means of communication may be reduced with the use of pre-printed forms.

4. War diaries. War diaries kept by unit commanders and their staffs during the Great Patriotic War have provided Soviet tactical theoreticians with a vast reservoir of combat examples. Today, however, Soviet authors lament the fact that the war diary should include: operation orders, instructions, action reports, and records of verbal instructions or conversations. The status of maintaining war diaries is amplified by the fact that during a particular exercise one staff officer received praise for keeping such a diary.¹⁴⁷ Thus it is apparently not something which is a consistent item receiving attention by staff elements. It is interesting to speculate on this state of affairs. Perhaps the reason for failure to maintain war diaries, especially in training, is a communications overload of the Soviet commander and his staff by modern means of communication

and recording which either preempt the utility of a diary, or which require a majority of staff time.

Dissemination

Dissemination is the final phase of intelligence processing to be considered in this paper; however, it is also the beginning of a new collection cycle. In this phase the staff of a unit or the chief of staff provides the commander of a unit with the information he requires to perform his functions and assign tasks. The staff attempts to make this reporting as accurate as possible within the constraints of time.

One of the problems for Soviet units apparently has been the timely delivery of information to those who need it. According to one critique:

Exercise experience shows that up to now much time is being wasted in communications centers, the most important channels often are overloaded with secondary information, and the passage of urgent operational data is delayed.¹⁴⁸

The proposed solution to this problem was not the institution of additional means or channels of communication, or to provide more staff assistance, but to require staffs to develop more stringent procedures for data dissemination. This procedure was to require staffs to prioritize data flows, to seek brevity in presentation of information, and to regularly update deadlines for report submission.¹⁴⁹

There are efforts to improve the technical assistance to staffs for information processing despite the suggestions to report data more concisely. Among the proposed methods to speed up data processing are the following:

1. Automation and mechanization;
2. Rational allocation of communication channels;
3. Brief radio conversations and reports;
4. Bypassing of intermediate control organs;
5. Use of formatted/pre-printed documents;
6. Strict control over the passage of information.¹⁵⁰

Soviet writers have also suggested sending liaison officers directly to lower headquarters and to adjacent units, and flying about the battlefield in helicopters.¹⁵¹ The advantages of these measures would be enhanced processing speed, personal observation, and more centralized control.

The Soviet military recognizes the importance of dissemination of the intelligence product and has attempted to improve their system by automated means where possible. Since secrecy cloaks the Soviet intelligence system in a protective shroud, it is difficult to gain a complete appreciation of the effectiveness of processing information into intelligence. Some difficulties have been reported in this process, but it is difficult to relate these problems to the developments of modern warfare and to the Soviet Army as a whole.

IX. CONCLUSIONS

The purpose of this study was to assess the nature of the Soviet tactical combat intelligence process. The following conclusions dissect this process into problems of terminology, problems with the process, and general research findings.

Terminological Problems.

The distinction between information and intelligence in Soviet usage is blurred compared to US Army terminology. The Russian term, razvedka, generally refers to the collection of data for intelligence purposes, although it may refer to a range of options from intelligence to observation. Voyennaya informatsiya pertains to several categories of information which closely approach intelligence when dealing with the enemy, weather, and terrain; but approximates operational data when friendly information is incorporated. Svedeniye also can mean information or intelligence, depending on the context.

Although these distinctions seem confusing, the Russian meanings become clear in Soviet texts. It is also helpful to remember that razvedka usually refers to the collection process, i.e., reconnaissance, while voyennaya informatsiya refers to data which has been or must be collected.

Soviet Problems.

Given the limited views of Soviet writers which were presented on the internal workings of unit staffs, their equipment and efficiency, it was necessary to analyze whatever hints were printed concerning problems which apparently were sufficiently pervasive to merit at least limited public criticism. Problems which were specifically mentioned in the course of this study are categorized on the basis of the phases of the intelligence process:

1. Planning and Tasking. It was difficult to determine any particular problem that the Soviets have with this phase. Mention was made that just because a reconnaissance plan is not compiled in the battalion, this does not mean work is to be conducted in an unorganized or spur of the moment manner. Whether or not this constitutes a major problem would be pure speculation. However, it does provide both an implicit admonition, as well as an expression of Soviet intelligence procedure in the battalion.

2. Collection. The demand of timeliness has received a major share of Soviet attention and is an area over which the Soviets seem to be agonizing. The concepts of "winning time" and "critical time" are symptoms of this fretting and are designed to impress on Soviet officers the need both for training experience and for increasing the speed of reconnaissance and the reporting the results.

Equipment deficiencies are being rectified as the BMP series of vehicles has been replacing the older PT-76 in Soviet front line reconnaissance elements. Because of design age and recent Soviet press interest in Western scout vehicles, the BRDM series also may well have a successor vehicle by the mid-1980's.

3. Processing. The staff process involves the reporting and recording of data. The reporting function has apparently become more refined as pre-printed/formatted forms have been developed in training. The maintenance of war diaries has received only limited attention in exercises. This could mean either they simply are

ignored as unimportant or they receive short shrift because of a processing overload of staff elements.

4. Dissemination. A major complaint which has arisen is the waste of time in Soviet communication centers and overloading of important channels. The proposed solution was to make reports briefer; however, the Soviets also have made suggestions to automate and rationally allocate communication channels, to bypass intermediate control organs, and to use pre-printed/formatted document forms.

General Research Findings.

Planning and organizing for intelligence collection is the combined responsibility of the Soviet commander and his staff. A Soviet commander assigns reconnaissance missions to his chief of staff for implementation, defines the objectives, and states the methods of collection. In a Soviet tank or motorized rifle battalion, the reconnaissance plan is not made but implemented. It is prepared by the parent regiment. The battalion chief of staff performs many of the functions that an S-2 would perform in a US battalion.

Ten demands are placed on the collection of information. Soviet writers emphasize the use of the six principles of continuity, aggressiveness, purposefulness, timeliness, reliability, and accuracy. These six principles are especially regarded as important when collection is conducted against enemy nuclear weapons systems. There are additional demands placed on intelligence collectors to be oriented on the collection objective, to acquire data by all available means, to coordinate with other staffs and elements to assure continuous coverage, and to build professionalism through the training of staffs.

The basic forms of reconnaissance units was covered. Raids, ambushes, contact, and observation were the methods used by ground reconnaissance units to accomplish their missions. Some Soviet theorists still consider the efficacy of ground reconnaissance units penetrating into the rear of enemy, while others, such as Reznichenko, consider that under present conditions there may be some difficulties in allowing ground units to make such long range penetrations.

In the Great Patriotic War (World War II), the use of photography during aerial reconnaissance increased dramatically. In contemporary warfare this is taken as a necessity. Radio-electronic and radio-technical forms of collection are highly important to the Soviets; however, most of their information concerning the subject is couched in carefully edited language and is done through the medium of exploring the doctrine of Western armies, particularly that of the United States. Therefore, an analyst is left to consider whether Soviet literature on the subject is discussing their actual state of the art, or whether they are suggesting changes and requirements based on what the West has in its inventory.

CBR forms of collection, engineer reconnaissance, and airborne unit reconnaissance also received some attention in this paper. These specialized forms of conducting reconnaissance use sophisticated equipment to collect information about the environment, terrain, and enemy.

The Soviet intelligence process is apparently undergoing fundamental adjustments which include measures to improve the efficiency of managing data flows, modernization of reconnaissance vehicles, and technological experimentation with sophisticated real-time reporting and recording systems. It is one of the areas of modern warfare in which the Soviets have perceived themselves to be deficient. The Soviet military writers seem to have a firm grasp of methods and equipment

used by Western armies. Thus it is reasonable to conclude that they recognize their own deficiencies. To overcome this situation, the Soviets are emphasizing reconnaissance vehicle modernization and improvement in technological collection systems while striving for eventual automation and mechanization of intelligence support systems.

The Soviets believe they have attained a superiority in many features of modern battle. They recognize their numerical strength and equipment potential. They don't want to lose due to "ignorance of the situation."

APPENDIX: GLOSSARY OF RELEVANT RUSSIAN MILITARY TERMS

1. Chast'--"Unit. Any administrative, line, or housekeeping unit of regimental size or smaller that is administratively self-contained and has its own designation, number, and banner. It is the basic tactical (combat) and independent organizational unit up to, and including the regiment. Each consists of subunits."^a
2. Podrazdeleniye--"Subunit. It has a permanent organization and is usually homogeneous in make-up. It does not have its own (subunit) number.
Battalions (sic), batteries, companies, platoons and squadrons may all be subunits."^a
3. Razvedka--Reconnaissance or intelligence. See chapter II for a discussion of this term as used by the Soviets.
4. Svedeniye--Information, data, and intelligence.
5. Vovennaya informatsiya--Military information (often with intelligence significance).

^aSlovar' osnovnykh terminov (Dictionary of Basic Military Terms), Moskva: Voennoye izdatel'stvo, 1965. Translated by USAF in Soviet Military Thought series, No. 9, p. vii.

NOTES

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3. M. A. Voloshin, Razvedchiki vsedga vpered (Moskva: Voennoye Izdatel'stvo, 1977), p. 3.
4. US Department of the Army, Field Manual (FM) 30-5: Combat Intelligence (Washington: October 1973), pp. 2-14.
5. Irving Heymont, Combat Intelligence in Modern Warfare. (Harrisburg, Pa: The Stackpole Co., 1960), p. 7.
6. FM 30-5, pp. 2-14.
7. FM 30-5, p. 2-1.
8. Heymont, p. 2.
9. FM 30-5, p. 2-1.
10. Ibid.
11. Ibid., p. 15.
12. Bol'shaya sovetskaya entsiklopediya (Moskva: Izdatel'stvo "Sovetskaya Entsiklopediya," 1975), Vol. 21, p. 405. (Hereafter, Bol'shaya).
13. D. A. Ivanov, V. P. Savel'yev, and P. V. Shemanskiy, Osnovy upravleniya voyskami v boyu (Moskva: Voennoye Izdatel'stvo, 1977), p. 304.
14. Kratkiy anglo-russkiy i russko-angliyskiy voyennyi slovar' (Moskva: Voennoye Izdatel'stvo, 1963), pp. 461-462.
15. Slovar' osnovnykh voyennykh terminov (Moskva: Voennoye Izdatel'stvo, 1965).
16. Bol'shaya, Vol. 21, p. 405.
17. Ibid.
18. Anglo-russkiy voyennyi slovar' (Moskva: Voennoye Izdatel'stvo, 1968), p. 445.
19. Sovetskaya voennaya entsiklopediya (Moskva: Voennoye Izdatel'stvo, Vol. 7, 1979), p. 32. Operational intelligence includes assessments of morale, political persuasion and the like.
20. O. S. Razumov, V. V. Shurakov, Osnovy printsipov i metody obrabotki voyennoy informatsii po ATsVM (Moskva: Voennoye Izdatel'stvo, 1975), p. 20.

21. Sovetskaya voyennaya entsiklopediya, Vol. 3, p. 573.
22. Razumov and Shurakov, p. 20.
23. FM 30-5, pp. 2-17.
24. Razumov and Shurakov, p. 21.
25. Ibid.
26. Ibid., p. 22.
27. Bol'shaya, Vol. 11, p. 105.
28. Ibid., Vol. 25, p. 405.
29. V. Lisovskiy, "Pervoye slovo k razvedke," Voyennyy Vestnik, No. 3, (1977), p. 51.
30. Ibid.
31. Ibid.
32. "Razvedka--vazhneyshiy vid obespecheniya boyevykh deystviy," Voyennyy Vestnik, No. 4 (1978), p. 2. Refer to the Glossary at Appendix 2 for the definition of a chast'.
33. Ibid.
34. General-Major V. G. Reznichenko (editor), Taktika (Moskva: Voyennyy Izdatel'stvo, 1966), p. 135.
35. Ibid., p. 129.
36. Sovetskaya voyennaya entsiklopediya, Vol. 3, p. 573.
37. Colonel P. Kunitskiy and Colonel V. Dobronravov, "Sovremennyy boy i informatsiya", Voyennyy Vestnik, No. 4 (1978), p. 22.
38. Ibid., p. 23.
39. See, for example, Adam B. Ulam, Stalin: The Man and His Era (London: Allen Lane, 1974), p. 539 and 545.
40. Kunitskiy and Dobronravov, p. 22.
41. Ibid., p. 23.
42. Ibid., p. 21.
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48. Ibid., p. 53.
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50. Ibid., p. 52.
51. Ibid.
52. A. Zyryanov, "Komandir batal'ona provodit rekognostsirovku," Voennoy Vestnik, No. 1 (1979), p. 26.
53. "Razvedka--vazhneyshiy vid...", p. 2.
54. "Razvedka--vazhneyshiy vid...", p. 2.
55. Reznichenko, pp. 129-130.
56. Ibid.
57. Ibid.
58. "Razvedka--vazhneyshiy vid...", p. 3.
59. Ibid.
60. Lisovskiy, p. 53.
61. Zyryanov, p. 25.
62. Ibid.
63. N. A. Lomov, Nauchno-tekhnicheskiy progress i revolyutsiya v voennom dele (Moskva: Voennoye izdatel'stvo, published in English by the USAF, Soviet Military Thought series, Vol. 3, 1973), p. 167.
64. Zyryanov, p. 25.
65. Ibid., p. 40.
66. Lomov, p. 167.
67. Ibid.
68. Ibid.
69. "Razvedka--vazhneyshiy vid...", p. 3.
70. Lisovskiy, p. 52.
71. "Razvedka--vazhneyshiy vid...", p. 3.
72. Reznichenko, p. 129.

73. "Razvedka--vazhneyshiy vid...", p. 3.
74. Lyudi molchalivogo podviga (Moskva: Izdatel'stvo Politicheskoy Literatury, (1975), pp. 3-7.
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81. Ibid.
82. Ibid., p. 15.
83. Reznichenko, p. 134.
84. Ibid.
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86. Ibid.
87. Sovetskaya voyennaya entsiklopediya, Vol. 7, p. 33.
88. Ibid.
89. Ibid., p. 35.
90. Reznichenko, p. 134.
91. Sovetskaya voyennaya entsiklopediya, Vol. 7, p. 35.
92. Reznichenko, p. 134.
93. Sovetskaya voyennaya entsiklopediya, Vol. 7, p. 38.
94. Reznichenko, p. 133.
95. See, for example, R. G. Simonyan, S. V. Grishin, N. S. Nikolayev, and V. A. Tumas, Razvedka v boevykh primerakh (Moskva: Voennoye Izdatel'stvo, 1972).
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97. Reznichenko, p. 133.
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129. L. Medlev, "Inzhenernaya razvedka s borta vertoleta," Voennoy Vestnik, No. 5 (1978), p. 103.
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137. A. Ustinov, "Unichtozheniye yadernykh sredstv protivnika," Voennoy Vestnik, No. 12 (1978), p. 61.
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