

~~TOP SECRET~~Withheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALS

THIS DOCUMENT MAY NOT BE REPRODUCED

Central Intelligence Agency



Washington, D. C. 20505

24 June 1988


MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT : USSR GENERAL STAFF ACADEMY LESSON: Troop Control
in Front Offensive Operations

1. The enclosed Intelligence Information Special Report is part of a series now in preparation, classified ~~TOP SECRET~~, prepared in 1985 for use in the Voroshilov General Staff Academy.

25X1, E.O.13526

2. [redacted] this document should be handled on a strict need-to-know basis within recipient agencies.


Richard F. Stolz
Deputy Director for OperationsTS #888527
Copy # 8

ALL PORTIONS CARRY CLASSIFICATION AND CONTROLS OF OVERALL DOCUMENT

Withheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 1 of 11 Pages

DECLASSIFIED UNDER AUTHORITY OF THE
INTERAGENCY SECURITY CLASSIFICATION APPEALS PANEL,
E.O. 13526, SECTION 5.3(b)(3)ISCAP APPEAL NO. 2012-026, document no. 11
DECLASSIFICATION DATE: May 14, 2015~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~

WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALS

Withheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Distribution:

The Director of Central Intelligence

The Director of Intelligence and Research
Department of State

The Joint Chiefs of Staff

The Director, Defense Intelligence Agency

The Assistant to the Chief of Staff for Intelligence
Department of the Army

Director of Naval Intelligence
Department of the Navy

The Assistant Chief of Staff, Intelligence
U. S. Air Force

Director, National Security Agency

Deputy Director of Central Intelligence

Deputy Director for Intelligence

Director of Soviet Analysis

Director of Scientific and Weapons Research

Page 2 of 11 Pages

TS #888527
Copy # 8

~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALS

THIS DOCUMENT MAY NOT BE REPRODUCED



Intelligence Information Special Report

Page 3 of 11 Pages

Withheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

COUNTRY USSR

DATE OF
INFO. 1985

DATE 24 June 1988

SUBJECT

USSR GENERAL STAFF ACADEMY LESSON: Troop Control
in Front Offensive Operations

SOURCE Documentary

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 command and control. The text is relatively short and the development of the topic lacks balance; some points are presented in considerable detail while others are mentioned almost in passing. While it has some fresh illustrative facts and figures, the content is basically the standard treatment of troop control.

End of SummaryTS #888527
Copy # 8~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 4 of 11 Pages

TROOP CONTROL IN FRONT OFFENSIVE OPERATIONSGrowth of the part played by control of front troops.

The factors that determine the role and importance of troop control are:

1. The dramatic increase in the hitting capabilities of the combat means of a front. This is illustrated by nuclear weapons. A front may employ up to 500-600 nuclear weapons, and the TNT equivalent of a single nuclear weapon employed today is equal to practically the whole TNT equivalent expended in the fire and air preparation of an attack in the years of the Great Patriotic War.

2. The marked increase in the rates of advance in an offensive operation. In the years of the Great Patriotic War, the rates of advance were about 12-25 km per day; we now plan on 40-50 km per day. Consequently, all the processes have accelerated and the time for control has greatly diminished. This complicates control and gives rise to the need to automate certain control processes.

3. Increase in combat readiness of the principal means of nuclear attack. Today the actual launch capability of alert means of nuclear attack is a few minutes. Consequently, the control system must be more combat-ready in terms of time.

4. The marked growth of the amount of information which must be gathered and processed by each control entity. Whereas in the past war the staff of a front would daily collect data on an average 200 targets, reconnaissance must now in the course of an operation keep tabs on 700-800 targets, 300 of which are most important. These targets must be kept under constant surveillance with double coverage. The daily volume of information may now average as much as a million characters. This is roughly 666 typewritten pages. The minimum amount of information which must be gathered before the start of an operation is 70,000-80,000 characters in a division, 250,000-300,000 in an army, and 2-2.5 million in a front. Most of this information -- about 70-80 percent, according to an article in Military Thought -- is on our own troops.

5. The considerable growth in quantity and complexity of the computations associated with the employment of forces and means, their interaction, and support. This can also be illustrated by some figures. In preparing the decision for an operation, the field headquarters of a front must perform over 20 forms of comprehensive computations -- not 20 computations, but 20 forms of comprehensive computations. Many of these are needed not in one, but in several

TS #888527
Copy # _____~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 5 of 11 Pages

variants, each of which requires large expenditures of work. For instance, one computation variant involved in the planning of the first nuclear strike of the front is made up of an average of 300 elementary computational suboperations. Were they to be performed by one person, it would require roughly 16 hours. This is why planning of the first nuclear strike usually involves several persons.

All these factors together show that the part control plays and the amount of work the control entities do have grown considerably, while the time they are given has diminished. In other words, the revolutionary changes in the development of equipment, weapons, and troops must be matched by revolutionary changes in the organization, means, and methods of control.

What is the essence of control and what is its aim? The essence of troop control consists in the purposeful activity of the command, staff, and political and other control entities to maintain the combat readiness of the troops, prepare them for combat actions, and direct them during the performance of assigned tasks. The activity involves directing also the development of the armed forces, the instruction and education of the men, and the combat and operational training of troops and staffs.

The principal aim of control is to ensure maximum effectiveness in the use of forces and means in the conditions of a situation to accomplish the assigned tasks in the shortest possible periods of time with the smallest losses.

Control of troops in a front offensive operation is exercised in keeping with the principles of control, of which there is a whole set. Principles of control are the most general, basic rules and recommendations which must be taken into consideration and followed in the practical activity of the command and control entities at all levels. The main principles of control are:

1. The chief principle of control is direction by the Communist Party of the Soviet Union. It manifests itself in unity of the political, state, and military direction of the armed forces.
2. The second principle is unity of command; it manifests itself in the fact that the commander is granted the right to make a decision and implement it.
3. The intelligent combination of centralization and decentralization. This principle corresponds to the principle of concentrating the main efforts at the necessary time on the main axis. Were it not for this principle, every commander would be trying to perform some little task of his own. This principle is particularly manifest in planning and making the decision and in preparing for the first nuclear strike. However, centralization in today's conditions can allow some decentralization; the principle is not absolute. At the same time, in the appropriate circumstances, it presumes latitude for

TS #888527
Copy # 8~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE--INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 6 of 11 Pages

initiative and independence of subordinate commanders and staffs in keeping with the concept of the operation and assigned tasks.

4. Continuity and reliability of control. This follows from the principle in the Soviet art of war of continuity of the operation and combat actions to the full depth of the assigned tasks. Continuity and reliability are achieved through timely creation of a system of control, concealed placement and relocation during the offensive operation of control posts and communications centers, provision for their survivability, and preparation and prompt implementation of measures to restore control.

5. Firmness and flexibility. Make a decision, get at it, and carry it out, monitoring troops enough that they perform tasks in keeping with the decisions. During a front offensive operation, the situation may change and require updating or even changing the decision.

6. Personal responsibility of the commander for the decision made, for the use of subordinate troops, and for the times and results of tasks assigned.

Creative application of these principles in the process of control creates conditions for the most effective use of troops during performance of the tasks of an offensive operation.

The principles of control are inseparable from the demands made on it. These demands are: high constant readiness of the control system, stability of troop control, and security of control.

High constant readiness is achieved by timely establishment of the control system, presence of combat crews on duty at control posts, and availability of well-trained, well-integrated combat crews at control posts.

Stability of control is expressed in the ability of the system to perform its tasks in any situation that arises during an offensive operation. Stability of control is provided by reliable sheltering of control posts and the availability of strong engineer structures, their coverage by air defense against enemy air strikes, and by the conduct of special measures to protect against interference of various enemy electronic systems.

Security of control consists in hiding from the enemy the system of control adopted and the principal measures to prepare and direct troops in the operation. It is achieved through concealed location and movement of control posts and communications centers and lines, through use of secure communications equipment, observation of a strict operating regime and camouflage of technical means, and also through implementation of special measures to deceive enemy intelligence, i.e., development or elaboration of a special plan of operational camouflage concerning the front offensive operation.

TS #888527
Copy #~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 7 of 11 Pages

We have seen the principles of control and the demands made on it. These things apply also to the organization of control of intelligence forces and means.

Organs and means of control of front troops

Control of front troops is exercised by the commander personally or through the staff or other forms of control. Therefore the exercise and implementation of control involves establishment of control entities, equipping with special means of control, and creation of a special system of control posts to accommodate control entities, as well creation of an automated system of control.

To review and decide important issues of its activity, a front has a military council which includes the front commander, the front chief of staff, the chiefs of services and the chief of rear services of the front. Control of front troops is exercised through the field headquarters of the front. Besides the front staff, the field headquarters includes the political directorate, the commanders and staffs of rocket troops and artillery, air defense, and air forces of the front, and chiefs of directorates and departments with their directorates and departments. The front staff includes an operations directorate, an intelligence directorate, a communications directorate, an organization, accounting, and manning directorate, an eighth department, a topographic department, and an electronic warfare department.

The front staff is the principal control entity and is senior to all other staffs, directorates, departments, and services of the front field headquarters. It is responsible for timely organization of combat actions and for ensuring continuous control of subordinate troops under any conditions of the situation. The chief of staff is the first deputy commander of the front, and he alone is granted the right to issue instructions and assign tasks in the name of the front commander. He exercises direct supervision over all the intelligence activity of the front and has immediate responsibility for the organization of reconnaissance, proper and effective use of reconnaissance forces and means, and timely performance of all reconnaissance missions.

The operations directorate is the leading staff directorate in matters of operational direction of troops. The chief of this directorate is the deputy chief of staff and he has the right, in the development of planning and other combat documents, to call on the commanders of branch arms and the chiefs of special troops and services and to get the necessary materials and memoranda from them.

The intelligence directorate is intended for planning reconnaissance and conveying reconnaissance missions to assets in time, organizing and supporting

TS #888527
Copy # _____~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 8 of 11 Pages

the actions of subordinate reconnaissance large units and units, directing the combat training of reconnaissance large units and units, and getting the reconnaissance data to the levels concerned. All activity of the intelligence directorate is carried out in close cooperation with the operations directorate.

To support troop control, all these forms of control must be provided with the necessary technical means. These means are the means of gathering situation data; they include technical means of doing reconnaissance with all types of operational and strategic reconnaissance, means of fixing nuclear bursts, weather instruments, and other such means.

Means of communication are radio and radio-relay, wire, and mobile means of communication, tropospheric communications, and satellite communications. In this context, we may dwell on working communications systems under conditions of a nuclear exchange.

Under conditions of the use of nuclear weapons, the Americans have special plans for high-altitude nuclear bursts to paralyze our short-wave and other communications. This will paralyze them for some two or three to four, five, or six hours and even longer -- for up to nine hours radio transmissions will not get through. The only thing that will [be left?] is that ultrashort-wave operation will improve, but this has a limited range. It is clearly necessary to provide for control by ultrashort-wave with relays. [Wire] communications will likewise be disrupted unless specially hardened, and special hardening is expensive. The neutron effect will simply burn them out; i.e., telephone communications will also be disrupted, and then there will be only radio-relay and ultrashort-wave communications. Therefore, in conditions of nuclear weapons employment it will not do to renounce all the old, traditional methods of communications when [2 words illegible] a person to gather the necessary information or give the necessary instructions, which is what messenger communications are.

Means of automatic scrambling and encoding. These are telephone secure communications systems, telegraph, copying machines, cipher machines, means of processing information and doing operational computations, calculators, punch-card machines, computation and analysis stations, slide rules, tables, and charts. Again, in a complex situation, this system may not work because the computers are rather capricious and awkward and may fail to work in battle conditions, leaving the commander [these computations?] for making decisions and planning combat actions. Therefore [2 words illegible] forego working them out and exploring them. In this context we should note that our mathematical support base is weak; we have no models that could give a commander serious assistance in making decisions. Why? Because the process is quite complicated and involves a large number of different factors and elements to consider which may change, as well as constants, and the figures number in hundreds of

TS #888527
Copy # 8~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 9 of 11 Pages

thousands of characters which must be run on this machine, we do not, unfortunately, yet have a reliable mathematical model for computers.

The Gagarin Academy has worked out a model for the use of aviation, a model of planning of the first nuclear strike, a model of delivery of the first massed strike, and a model of combat actions of front air forces in a front offensive operation. One of the scientists developed this model and has taught the machine to issue the text of the decision directly to where it is to go; second, the plan of combat actions, and whom to send where, to what target, all computed in the optimum variant; third, the operational-tactical disposition (the machine directly calls up and [shows?] where which aircraft, subunit, and unit is at what time, i.e., the operational tactical disposition of front air forces in the air); and finally, the results of combat actions. [Half of line illegible] is, of course, a first step. It has many flaws and quirks. [Two lines illegible.] The Main Staff took to it, and now the [word illegible] center has turned to the solution of these problems and the results are not bad.

What he has done is to break down all the information, those tens and hundreds of thousands of characters of information into three groups. Group one comprises information which does not change throughout an entire offensive operation and even longer, such as tactical technical characteristics, capabilities, etc. Group two is the information that changes in a definite period, in two or three days, such as the immediate task of front troops. Group three is real-time information [operativnaya informatsiya] which changes by the hour and by the minute.

And so he reduced this whole volume of information to a minimum that operators can punch in in 40 minutes. To punch in all information would take two or three days, but here it is done in 40 minutes. How? The information that corresponds to changes in the situation is entered by an operator, and in half an hour the computer issues the four elements mentioned earlier. Say the commander does not like the ratio of [word illegible] and losses, he may say it will not do, to rearrange and do this and that. Three or four hours will yield four or five alternatives of combat actions until the commander is satisfied.

Something else, still in the future -- if such a system exists and is initiated in line units, what else is there to see further on in the development of this system? If all subordinate units have communications with this machine, a plan has been worked out, which indicates unit has what target, all done electrically; i.e., issuing the plan, the commander approves it, pushes a button, and who is to do what lights up on their displays. This is what is planned for the future in control systems. There are some automated control systems, chiefly aimed at automated input and processing of information. This problem is more or less solved, but solving the creative problems [rest of line illegible].

TS #888527

Copy # _____

~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE--INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 10 of 11 Pages

Further there are visual display devices -- screens, displays, boards, televisions, projectors, videos, terminals. And other technical means of control are the means of drawing up and reproducing documents -- printers, copiers, duplicators, stamping and drafting sets, rules, and templates. These are also means of control used at the present time.

Organization of control of front troops

The organization of control is the comprehensive set of measures undertaken by the commander and staff of the front aimed at establishing a stable system and ensuring its unbroken operation during the preparation and course of an offensive operation. The control system is the aggregate of functionally related control entities and posts, the communications system, and the automated troop control system.

The principal control organization measures are maintenance of high political morale among the personnel of control entities and communications, security, and service units, definition of tasks and work procedures of control entities during the preparation and course of an operation, timely preparation and support of stable and secure operation of the troop control system, planning of the movement of control posts, maintenance of stable communications, [word illegible] of the operation of data gathering systems during the operation, organization of security and defense of the elements of the control system and protection from weapons of mass destruction and means of electronic warfare, planning of measures to restore disrupted troop control, and, finally, organization of traffic control in the zone of the front.

Ensuring control implies the establishment of control posts. All these control entities obviously have to be so positioned in some sort of quarters and provided with communications so that they can function. This is what a system of control posts is involved in, what a system of control posts is for. A system of control posts includes a command post, an alternate command post, a rear control post, and an auxiliary control post. These four main elements in the system of control posts are stationary or fixed. Stationary control posts are meant for troop control just prior to and at the beginning of a war during the transition to full combat readiness, during deployment, and, in the case of first-echelon formations, during actions to turn back the enemy invasion. Later, when the front has left, they are occupied by the headquarters of the wartime military districts, [which direct] the subordinate troops, and communications centers are used as centers of the primary communications network of the Ministry of Defense. Mobile control posts -- also a command post, alternate command post, rear control post, and auxiliary control post -- are for control of front troops during the first front operation as well as during the preparation and conduct of subsequent ones.

TS #888527
Copy # 8~~TOP SECRET~~~~TOP SECRET~~

~~TOP SECRET~~~~TOP SECRET~~WARNING NOTICE—INTELLIGENCE SOURCES OR METHODS INVOLVED
NOT RELEASABLE TO FOREIGN NATIONALSWithheld under statutory authority of the
Central Intelligence Agency Act of 1949 (50
U.S.C., section 403g)

Page 11 of 11 Pages

Let us briefly consider what command and control posts are. The command post is the main control post from which the commander exercises control of troops during preparation of the first operation. It has a control group, which is the most important element of the command post. Further elements of the command post are the forward control post and the airborne control post; the joint command post of front air forces and air defense is an element of the command post, as is the control post of the chief of communications. These are the main elements, without which troop control is inconceivable. There are also the support group, the control post of the chief of intelligence, and the radio transmission center. A front command post is located 70-100 km deep and moves every other day. An army command post is located on the order of 30-50 km deep and moves every day.

The chief [elements] in the control group are the combat control center, the planning, information, and reconnaissance control group, the eighth department, and the [word illegible] group of the chief of intelligence. Basically their data are used for planning further control of troops.

The alternate command post is for improving the stability, reliability, and continuity of control. It exercises control of individual tasks if the command post is operating; if the command post goes down, control is exercised entirely from the alternate command post and it is then regarded as the command post. It, too, is located 40-50 km deep.

The rear control post is for control of troops and units of the rear services and supervision of the supply of troops with everything necessary. It has the [entire staff] of the rear and a political directorate group. [Line illegible.] The rear control post has an officer from all the control entities; therefore, if the command post and alternate command post go down, control can be exercised from the rear control post. Not only for this but also to provide everything and control all the units, a powerful communications system is established here. This is how the commander can painlessly move and set about control of troops of the front.

Finally, the auxiliary control post is meant for control of troops on special separate axes. [Unknown amount of text apparently missing here.]

It is divided into troop control documents, the commander's decision, the operations directive, the operation plan, the plans for types of support, political work plan, the control plan and other planning documents on troop control, reporting and information documents, combat intelligence reports, operational and intelligence summaries, reports on types of support, reporting maps and diagrams, and reference documents. These are the documents that are prepared as references for decision-making by the commander, for planning of operations, and reporting results of combat actions.

TS #888527
Copy # 8~~TOP SECRET~~~~TOP SECRET~~