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CENTRAL INTELLIGENCE AGENCY
WASHINGTON 25, D. C.

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12 APR 1962

MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT : MILITARY THOUGHT: "The Question of Increasing the Stability of Troop Control", by Major-General of Artillery V. Ilinykh and Lieutenant-General of Communications Troops P. Kurochkin

1. Enclosed is a verbatim translation of an article which appeared in the TOP SECRET Special Collection of Articles of the Journal "Military Thought" ("Voyennaya Mysl") published by the Ministry of Defense, USSR, and distributed down to the level of Army Commander.

2. In the interests of protecting our source, this material should be handled on a need-to-know basis within your office. Requests for extra copies of this report or for utilization of any part of this document in any other form should be addressed to the originating office.

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Richard Helms

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Richard Helms
Deputy Director (Plans)

Enclosure

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APPROVED FOR RELEASE

30 JUN 1992

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Original: The Director of Central Intelligence

cc: The Director of Intelligence and Research,
Department of State

The Director, Defense Intelligence Agency

The Director for Intelligence,
The Joint Staff

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

The Director of Naval Intelligence
Department of the Navy

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

The Director, National Security Agency

Director, Division of Intelligence
Atomic Energy Commission

National Indications Center

Chairman, Guided Missiles and Astronautics
Intelligence Committee

The Deputy Director of Central Intelligence

Deputy Director for Intelligence

Assistant Director for National Estimates

Assistant Director for Current Intelligence

Assistant Director for Research and Reports

Assistant Director for Scientific Intelligence

Director, National Photographic Interpretation Center

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COUNTRY : USSR

SUBJECT : MILITARY THOUGHT: "The Question of Increasing the Stability of Troop Control", by Major-General of Artillery V. Ilinykh and Lieutenant-General of Communications Troops P. Kurochkin

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Following is a verbatim translation of an article titled "The Question of Increasing the Stability of Troop Control", written by Major-General of Artillery V. Ilinykh and Lieutenant-General of Communications Troops P. Kurochkin.

This article appeared in the 1961 Third Issue of a special version of the Soviet military journal Voyennaya Mysl (Military Thought). This journal is published irregularly and is classified TOP SECRET by the Soviets. It is distributed only within the Ministry of Defense (down to the level of Army Commander). The 1961 Third Issue was sent to press on 10 July 1961.

Headquarters Comment: The article by Major-General M. Ivanov referred to in the first sentence of the attached was disseminated as [REDACTED] on 5 April 1962. 1.3(a)(4)

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The Question of Increasing the Stability of
Troop Control

In the article by Major-General M. Ivanov, extremely urgent questions of increasing the effectiveness and stability of the control of troops are raised.¹ In analyzing the existing structure of operational staffs and the requirements levied on them, the author reaches the conclusion that there must be a radical reorganization of control organs, the essence of which consists of the elimination of staffs of arms of troops and certain directorates and the creation in their place of several centers for planning and for troop control. Specifically, he proposes the creation of a nuclear/missile center as the organ for controlling all nuclear means of destruction, i.e., missile troops and the appropriate types of aviation.

In our opinion, it is impossible to agree with the organizational structure of operational staffs proposed by General Ivanov. He bases his thoughts mainly on the necessity for planning and only partially on control, losing sight of the other side of the activities of the chiefs of arms of troops and their staffs, which is training and thoroughly providing for the constant combat readiness of their subordinate units and large units. Even the control of, for example, the missile troops of a front, represents an involved complex of a number of measures.

In addition to this, the consolidated combined arms staff with various centers, which is proposed by the author of the article to replace the presently existing directorates and staffs of arms of troops, is also unwieldy and still does not eliminate the division of duties, and consequently, unavoidably requires appropriate coordination among the centers.

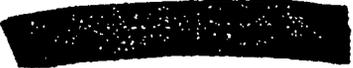
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1. Special Collection of Articles of the Journal "Military Thought", First Issue, 1961.

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It is perfectly correct that the element of time has assumed an extremely important significance and that timely collection of the most complete data on the situation, a comprehensive analysis of these, adoption of decisions and transmission of these decisions to the troops, and also control over the execution of these decisions, is required of staffs. However,,all of these tasks can be successfully accomplished with the existing organization of the staffs if certain modifications are introduced.

Preservation of the duties of the chiefs of arms of troops with their appropriate staffs or directorates conforms to the principle of single command and strengthens responsibility not only for planning but also for the training and education of personnel and for the support and thorough training of the appropriate arms of troops. Modern combat equipment is complex and in order to handle it specific know-how is necessary.

In itself, the idea of control of means of mass destruction, i.e., missile troops, aviation, and chemical troops, from a single center is not new. It was implemented in training exercises of the American Army, where a similar center was headed by the artillery commander.

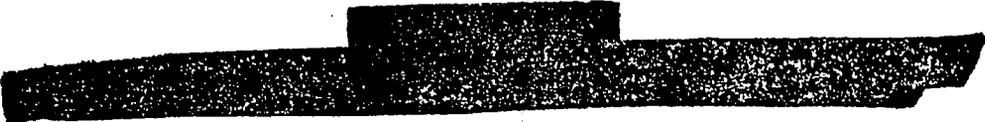
Perhaps, such a system contains certain positive aspects, but to unify the control of missile troops and atomic bomb-carrying aviation is not appropriate, in our view, because control of the latter has its own specific characteristics and is the prerogative of the commander of an air army.

In the practice of combat training, fairly definite views have been worked out for organization of the control of missile troops and atomic-bomb-carrying aviation; they consist of the following.

The commander of the troops of a front determines the target and the procedure for the use of nuclear weapons, allocates missions among the missile troops and aviation and establishes the bases for coordinated action among them, and during the progress of the operation makes decisions concerning the delivery of nuclear strikes.

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The staff of a front jointly with the staffs of the missile troops and artillery and of the air army develops the plan for the use of nuclear weapons, organizes intelligence, determines the objectives for destruction, determines the yield of the nuclear warheads to be used against them and the types of bursts, and also the time for delivering the strikes.

The chief of missile troops and artillery and his staff must, on the basis of the decision made by the commander of troops of the front, plan in detail the combat use of the missile troops to be used to carry out the overall tasks of the front, and, in an army the overall tasks of the army, allocate fire missions and assign them to those who are to execute them and must organize the tour of duty of launch batteries, the timely delivery of missiles to units and also the preparation of these for launching. During the course of an operation, they execute maneuver by trajectories and the movement of missile units and their supply bases.

In order to control missile troops, it is necessary constantly to know the situation and condition of the missile large units and units and also the availability and degree of readiness of the missiles for launching. Control of missile troops and their fire must be carried out continuously, which can be achieved by means of constant readiness for their control from presently existing forward command posts (peredovoy komandnyy punkt -- PKP) and command posts (komandnyy punkt -- KP) with high operational and technical training of generals and officers, a clear-cut distribution of functional responsibilities with the existence of interchangeability, and also uninterrupted and reliable communications.

As a rule, the control of troops will be conducted from two points; these can be PKP or KP. In this, the personnel must be available at the PKP who are necessary to the commander of troops of the front in the process of working out a decision and in the control of troops, namely generals and officers from the combined arms staff and chiefs of arms of troops, including the chief of missile

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troops and artillery of the front with a small group of well trained officers. The remaining personnel of the staff and the field control headed by the chief of staff of the front are located at the KP. A constant reciprocal exchange of information between the PKP and KP must be implemented.

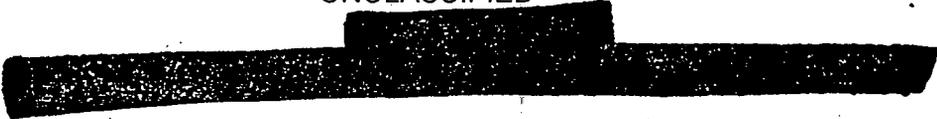
In his article, General Ivanov argued sufficiently convincingly for the advisability of having in the composition of the field control of a front and army two independent elements of control. Without raising an objection against this method of resolving the problem of control, we add that, in our opinion, the chiefs of the basic directorates of the staff and arms of troops with small groups of subordinate officers must be located with the commander of troops of a front in all cases, thus permitting rapid evaluation of a situation, adoption of a decision, and issuance of commands.

The opinion of the author of the article concerning the elimination of parallelism in requesting data on a situation is also perfectly correct. Obviously, the introduction of automation into the control of troops will eliminate such defects but even under the given conditions this system needs revision. All information received from the troops must be concentrated in one organ and represented on an overall map or map-screen.

This proposal does not exclude, of course, the necessity for interested command echelons to receive certain special information from directly subordinate troops (for example, for the staff of the missile troops and artillery to receive data on the movement of missiles and their degree of readiness for launching).

As is known, in view of the use of nuclear/missile weapons, the significance of intelligence has increased sharply, especially the timely receipt of reliable data. And in this regard we are in full agreement with General Ivanov, that the accomplishment of all tasks facing intelligence, primarily those on behalf of the use of nuclear/missile weapons, requires its centralization.

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Does the necessity for the staff of the missile troops and artillery to have its own intelligence department no longer exist? No, it still exists. In our view, it is needed in small complement, in particular for the organization and execution of preliminary reconnaissance of targets prior to delivery of a nuclear strike, and also for the organization of control, topographic-geodetic support, and other work. But its activities must be coordinated by the chief of intelligence of the front.

As a whole, in our opinion, the questions raised by General Ivanov regarding the reorganization of methods of control of troops merit further discussion.

Major-General of Artillery V. Ilinykh

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In our opinion, the article by Major-General M. Ivanov reflects correctly the deficiencies in the organizational structure of the staffs of operational formations, in the methods of control of troops, and in the organization of control points, and the author's practical proposals do not raise any fundamental objections.

However, in our view, one can approach a resolution of the problem of increasing the stability of troop control most correctly not from an examination of the organizational structure of staffs as does General Ivanov, but from a thorough analysis of the methods of control of troops and combat weapons, upon which in turn will depend the structure of the control organs.

New weapons of armed combat, and the nature of conducting combat operations corresponding to them, have a strong influence on the methods of control of troops and combat equipment, and the latter in turn makes definite, perfectly specific demands on the organizational structure of the organs and means of control. The anti-aircraft defense of troops, for example, requires such methods and means of control as to ensure the timely transmission of data on current aerial targets directly to the combat weapons, the instantaneous aiming of these weapons at targets which have been discovered, putting the combat weapons into action, and effectively destroying the target. As we see it, the main role belongs to the actual method of control.

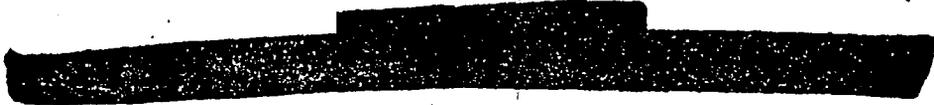
The requirements on the organs of control which are listed in the article amount, in essence, to control over the readiness of combat means, regulating the activities of the commanders of arms of troops and the chiefs of special troops, and ensuring more purposeful work by appropriate departments in the collection and processing of operational information. These requirements are correct, but they do not include the main condition emanating from the use of modern combat weapons and from the nature of the conduct of combat and operations.

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The main element, in our view, is the fact that the control of troops, weapons, and equipment must ensure effective results from the use of all weapons of armed combat, primarily of nuclear/missile weapons, anti-aircraft missile weapons, and the system of anti-aircraft and anti-missile defense as a whole. On this basis, particular requirements for the control of troops are determined. Besides those indicated by General Ivanov in his article, we should like to bring up some new ones in addition, such as:

-ensuring speedy reaction by the commander and staff to events (phenomena) as they occur, which depends, on the one hand, on the use in combat and operations of rapid-fire combat weapons and troops possessing high speeds of movement and, on the other hand, on the necessity for counteracting an enemy who has similar forces and weapons;

-ensuring maximum expediency in decisions and precision in the operations, especially of nuclear/missile weapons, the system of anti-aircraft and anti-missile defense, airborne troops and radio countermeasures means;

-ensuring thorough control over the timely readiness of nuclear/missile weapons, means of anti-aircraft and anti-missile defense, and also over the operations and situation of friendly troops and their materiel and technical support.

In our opinion, the requirement for control organs advanced by the author in regard to the concentration of data on the situation in one point (center) should be broadened. It is necessary to ensure the timely collection and processing and the reliability of information on the condition of combat weapons, troops, materiel and technical reserves, intelligence information on the enemy (in the first order, on objectives for nuclear strikes), and data on the radiation and chemical situation. Under modern conditions, the versatility and volume

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of the information which characterizes the combat situation, the increased number of directions from which it is received, and the sharp expansion of the area within which it is necessary to collect this information is noted. In addition, the collection and processing of information must be accomplished in very limited periods of time, consisting, in many cases, of minutes and even seconds.

We fully agree with the opinion of General Ivanov concerning the necessity for stricter centralization of troop control as a whole, including centralization of planning, control of fire weapons, and collection and processing of operational information, but we do not share his point of view on the composition of the field control of a front (army).

In our view, the creation of two separate centers, a main command-planning center and an operational center, is contrary to the concept of centralization of the control of troops. In essence, one center plans, and another concerns itself with the collection of data and directs combat operations. This can lead to parallelism and to the necessity for coordinating the work of these two centers and, in the final analysis, to loss of time. Would it not be better to have one center, an operational directorate (department), whose functions have been broadened in the sphere of unified planning, and the collection and analysis of all information on the situation of friendly troops and on the results of the use of nuclear weapons, and in the transmission of all instructions based on the plan for the operation, and on the progress of combat operations? In this situation, the concept of centralization of control will be effected more fully and the necessity for coordinating the work of both centers will no longer exist.

The designation "nuclear/missile center" also warrants comment. In proposing the formation of such a center, General Ivanov indicates that "the nuclear/missile center will be a unified organ for controlling the weapons of destruction of the front. All weapons

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of nuclear attack must be concentrated in the hands of the chief of this center, i.e., missiles of all types, bomber aviation and others, which will undoubtedly improve and expedite their use". It appears to us that it would be more correct to call such a center the "fire and chemical center" which will more fully reflect the content of its work.

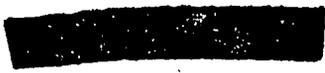
In the composition of the field control of a front (army) proposed by the author of the article, a highly important organ is omitted, the communications directorate (department). Without this organ, none of the indicated centers can operate. To assign the organization of communications to each or to any one of them separately is impossible and moreover it is perhaps harmful.

The organization and support of communications is a completely independent branch of military affairs directly involving the use of numerous communications troops and various technical means. Therefore, it appears to us that one of the most important organs in a front's system of field control should be the communications directorate.

Without dwelling on the organization of the communications system of a front, let us examine the problems which, in our opinion, are of fundamental significance in determining the organizational structure of the field control of a front, and which were not touched upon in General Ivanov's article.

First of all, it is advisable to dwell on the designation of the organs that are in charge of the organization of communications. Taking into account the future development of technical means of control, it is advisable to have in the field control a mechanism (apparat) for the chief of communications troops and an automated system of control for the front. All the forces and means of communications, the automation of troop control processes and provision for secret communications,

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including cryptographic organs and means for making electrical signal communications channels secure should be concentrated in the hands of the chief of communications troops and automated control systems.

The chief of communications troops and automated control systems must organize a single system of communications for ensuring the control of the front's troops as a whole. All means, available at the present time to the chiefs of missile troops and artillery and to the PVO troops, and designated for the organization of an autonomous communications system, must be employed for the creation of a single system of communications for a front. It is also necessary to avoid using the independent high frequency (vysokaya chastota -- VCh) government communications units. The VCh government communications organs must have only station secrecy devices, operating on selected channels assigned from the overall front system of communications.

The above listed measures permit, in our opinion, a higher quality and more economical communications system for operational formations especially if one considers the development of multi-channel radio relay, radio, and wire communications systems and also the introduction of means of automating processes of control and means of communications.

At the present time, a sharp increase is evident in the requirement for communications channels for ensuring troop control and direction of the operational rear area. It appears to us that the basic direction in the development of means of communications, which permits most effectively provision for the increasing requirements is the creation of a single centralized system of communications with wide-scale use of multi-channel radio relay and wire means.

The effectiveness of this approach can be demonstrated by the following examples. The existing equipment for the multiple use of heavy field cable lines will permit receipt on one line of 4 or 5 telephone and one telegraph

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channel. Prospective means offer the possibility of having 12 telephone channels on such a line and the adoption of prospective voice-frequency telegraph equipment will enable us to replace each telephone channel with 12 telegraph channels. As a result, by the adoption of multi-channel equipment, the effectiveness of the communications system on telephone channels can be increased by 3 or 4 times, and on telegraph channels by several dozen times. A similar result will be achieved by the adoption of multi-channel radio relay and radio means.

Consequently, the widespread introduction of multi-channel communications systems permit provision for the increasing requirements for communications channels in operational control elements without an increase in the number of communications troops.

And now the last of the questions touched upon by Major-General M. Ivanov in his article. We fully subscribe to his proposal concerning control points. Actually, the existence of forward command posts along with command posts does not promote the assurance of stable control under present conditions, on the contrary, it leads to a dissipation of forces and means, weakens the capabilities of the main command post, decreases its role in the control of troops and gives rise to complications in the organization of the communications support of a front. The creation of two independent control points, one of which is a reserve point, can in many respects further ensure the stability of troop control under the conditions of a nuclear/missile war.

Lieutenant-General of Communications Troops P. Kurochkin

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