MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: MILITARY THOUGHT (USSR): Combat with Enemy Electronic Equipment

1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". This article summarizes the electronic warfare experience of the Transcaucasus Military District. The main conclusion of the authors is that it is most advisable to incorporate into a single plan everything pertaining to the organization of combat against enemy radioelectronic means in the operation of a front (army). This plan will be prepared jointly by the front operations directorate and the ninth department, under the overall direction of the chief of staff. The numbers of jamming units and jamming equipment authorized for the district (front) were insufficient for effective combat against enemy radioelectronic means. Another problem was that front aviation did not possess jamming means capable of overcoming a modern air defense system. This article appeared in Issue No. 3 (79) for 1966.

2. Because the source of this report is extremely sensitive, this document should be handled on a strict need-to-know basis within recipient agencies. For ease of reference, reports from this publication have been assigned ____________

William E. Nelson
Deputy Director for Operations
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Summary:
The following report is a translation from Russian of an article which appeared in Issue No. 3 (79) for 1966 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The authors of this article are General-Leytenant I. Katyshkin and Colonel B. Lukashev. This article summarizes the electronic warfare experience of the Transcaucasus Military District. The main conclusion of the authors is that it is most advisable to incorporate into a single plan everything pertaining to the organization of combat against enemy radio-electronic means in the operation of a front (army). This plan will be prepared jointly by the front operations directorate and the ninth department, under the overall direction of the chief of staff. The numbers of jamming units and jamming equipment authorized for the district (front) were insufficient for effective combat against enemy radioelectronic means. Another problem was that front aviation did not possess jamming means capable of overcoming a modern air defense system. End of Summary

Comment:
There is no information in available reference materials which can be firmly associated with Col. Lukashev. Gen.-Lt. Katyshkin was Chief of Staff of the Transcaucasus Military District from 1965 to 1967, Chief Soviet Military Advisor in the UAR from January 1969 to February 1970, and (as Colonel General) Deputy Commander for Military Education in the Moscow Military District in 1971. He wrote "Emerging Questions of Civil Defense", Collection of Articles of the Journal "Military Thought", Issue No. 2 (81) for 1967. The SECRET version of Military Thought was published three times annually and was distributed down to the level of division commander. It reportedly ceased publication at the end of 1970.
Combat Against Enemy Radioelectronic Means

(Based on the experience of exercises of the Transcaucasus Military District)

by

General-Leytenant I. Katyshkin

and

Colonel B. Lukashev

In recent years the headquarters of our district has made a detailed study of the various ways of planning and organizing measures for combat against enemy radioelectronic means. As a result, we have been able to establish the fact that it is most advisable to incorporate into a single plan everything pertaining to the organization of combat against enemy radioelectronic means in the operations of a front (army). Such a plan ensures the purposeful and most effective use of all forces and means called upon to destroy and neutralize enemy radioelectronic means, and it will also facilitate control.

A single plan gives the troop commander a complete picture of the extent to which tasks are being carried out in combat against enemy radioelectronic means.

In order to correctly plan all measures of combat against enemy radioelectronic means, it is necessary to collect, collate, and analyze a large amount of diverse data on our own troops and those of the enemy; assess the operational formation of the enemy, his grouping, and composition; clarify the purpose of an impending front operation, and, on the basis of all this, plan the use of all means of destruction and radio jamming. For this reason we believe that the planning of combat against enemy radioelectronic means in an operation should be performed jointly by the front operations directorate and the ninth department under the overall direction of the chief of staff.

It goes without saying that representatives of directorates of arms of troops, special troops, and air army headquarters should also be brought into this work.
The conveying of tasks to their executors, the directing of jamming forces and means, the organization of coordination, as well as the function of control, would best be assigned to the ninth department of front headquarters.

The experience of exercises confirmed that what is the clearest and most convenient for the leadership is a graphic plan for combat against enemy radioelectronic means that is worked out on a map and supplemented with the necessary calculations and legends. Based on our experience the map should reflect the following basic questions:

- the goal of combat against the enemy radioelectronic means;

- the grouping and characteristics of radioelectronic installations that have been discovered;

- reconnaissance and final reconnaissance against enemy radioelectronic means, the forces brought in for this purpose, and the amount of time needed to fulfill these tasks;

- the most important enemy radioelectronic installations and control points to be jammed by SPETsNLA2 radio units, or to be destroyed by missiles, aviation, artillery, assault landings, and sabotage groups, and the time required to fulfill these tasks;

- antiradar camouflage measures for troops and installations of the front;

- the procedure for the coordination of forces and means taking part in the destruction and neutralization of enemy radioelectronic means;

- the organization of control and communications with special units;

- measures of radio deception.

The chiefs of arms of troops and special troops have no need to develop special plans for combat against enemy radioelectronic means; it is much better for all this to be incorporated into plans for using arms of troops. Measures to protect our radioelectronic means from enemy jamming and from destruction by weapons must be developed with particular care.
Experience shows that it is advisable to convey tasks to their executors by combat instructions that are easily adaptable into a standard form.

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Research conducted in the district points to the fact that the presently existing decentralized control of radio and radiotechnical jamming units in the district, which are, as is known, the basic means of combat against enemy radioelectronic means, is not justified.

We believe that front headquarters should contain a single organ to carry out both the planning and the direction of the combat activity of jamming units. If we consider that control at all levels strives for simplification, the reduction in the number of intermediate echelons, the organization of direct communications between the directing agency and the executors, and the extensive use of the means of mechanization and automation, then centralization in the area of control of radio jamming would ensure more economical, expedient, and effective use of jamming forces and means. This, moreover, will simplify to a considerable degree the process itself of planning, coordination with radio reconnaissance, as well as the direction of combat training and combat activity of jamming units.

The district has a department of officer-specialists (the ninth department) which at present has no responsibility for the training units, since the units are not subordinated to them. Officers of the department are often in the units and perform a great deal of work there, but all this is by way of giving assistance. At the same time, actual responsibility for combat training falls on the chiefs of communications and air defense troops, for whom problems of combat against enemy radioelectronic means are not paramount.

We believe it would be more expedient to free the chiefs of communications and air defense troops from the responsibility of directing radio jamming units and of the control of radio jamming, especially since they are now confronted with a more important task which has yet to be solved—namely, the protection of their own radioelectronic means from mutual jamming, from jamming by the enemy, and from destruction by enemy weapons. Radio and radiotechnical jamming units should be placed under the ninth department of district headquarters.

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The experience of exercises and an analysis of the capabilities of radio and radiotechnical units revealed another important fact: the number of jamming units and jamming means in them that are authorized to the district (front) are insufficient for effective combat against enemy radioelectronic means.

Also of concern is the fact that front aviation does not as yet possess sufficiently effective jamming means, which greatly reduces its capabilities for successfully overcoming a modern air defense system.

We believe that in peacetime it is extremely desirable for border districts to have one radio battalion for jamming shortwave radio communications of an operational echelon of control (12 to 15 sets for jamming shortwave communications), and one radiotechnical battalion to neutralize onboard enemy radioelectronic means (12 sets for jamming radar, 4 sets for jamming ultrashortwave radio communications, and 2 sets for jamming short-range radio navigation).

Armies should contain subunits for jamming shortwave, ultrashortwave, and radio-relay communications of a tactical echelon of control (4 to 6 sets for jamming shortwave radio communications, 3 or 4 sets for jamming radio-relay communications, and 5 or 6 sets for jamming ultrashortwave radio communications), while an air army should have one squadron (9 to 12 aircraft) with equipment for jamming radar detection and guidance sets.

With these means at our disposal we could considerably improve radio reconnaissance against the radioelectronic means of contiguous capitalist countries in peacetime and neutralize them most effectively at the immediate outset of war.

Radio jamming companies would enable army headquarters to work out the practical organization of radio jamming at exercises and the organization of coordination with army radio reconnaissance units, and also to provide more fruitful instruction for staffs of large units and units in the control of troops by radio under jamming conditions.

It is quite obvious that the presence of radio jamming battalions in a district and radio jamming companies in armies would ensure the training of personnel for the formation of radio jamming units at wartime levels and the rapid preparation of these units for combat activity.
In wartime the quantity of means in a front battalion for jamming radio communications must be doubled, army companies reformed into battalions, and the quantity of jamming means increased by 2.5 to 3 times.

To cover basic groupings of troops and the most important installations of a front or army from aimed bombing, the front must have about 30 to 36 sets for jamming radar and 30 to 40 sets for jamming ultrashortwave radio communications of aviation guidance and control and short-range radio navigation (2 or 3 radiotechnical battalions for jamming onboard radioelectronic means).

An air army must have an aviation regiment with special modern equipment for jamming ground radar sets and control systems of surface-to-air guided missiles.

In order to jam ultrashortwave and radio-relay communications, sets carried by air are needed, capable of neutralizing enemy ultrashortwave and radio-relay communications to a depth of 150 kilometers. It is extremely important to accelerate the supplying of radiotechnical battalions with jamming sets in the 225 to 400 megahertz range in order to neutralize ultrashortwave communications of aviation guidance and control, as well as with sets for jamming short-range navigation.

There exists a need to develop jamming transmitters of one-time use which could be launched by aircraft and rockets into areas of enemy radio centers, as well as small-size receivers to detect such transmitters when they are launched by the enemy into areas of radio centers of control posts of our troops.

And, lastly, front aviation needs modern effective aircraft jamming sets.

Needless to say, other methods of combat against enemy radioelectronic means must be perfected in equal measure, but we shall not dwell upon these in this article.