MEMORANDUM FOR: The Director of Central Intelligence
FROM: William W. Wells
Deputy Director for Operations
SUBJECT: MILITARY THOUGHT (USSR): Cooperation Between
Formations (Large Units) of the Air Defense
of the Country and the Field Air Defense
of a Front

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 discusses the procedure
for organizing and maintaining cooperation between the Air
Defense Forces of the Country and the ground forces air defense
troops, based on the experience of the DNEPR exercise. The main
focus in this was on setting up the appropriate grouping of air
defense forces and means and the conduct of joint combat actions
to cover troops and installations against enemy air strikes. The
author examines specific ways in which cooperation was
implemented under the actual combat conditions of the exercise,
concentrating on the actions of fighter aviation, surface-to-air
missile troops and radiotechnical troops, and on the procedure
for carrying out support, cover, reconnaissance, and control.
This article appeared in Issue No. 2 (84) for 1968.

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

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MILITARY THOUGHT (USSR): Cooperation Between Formations (Large Units) of the Air Defense of the Country and the Field Air Defense of a Front

Comment:

End of Summary
Cooperation Between Formations (Large Units) of the Air Defense of the Country and the Field Air Defense of a Front (Based on the experience of the DNEPR exercise) by General-Major of Aviation F. Kostenko

In recent years a number of exercises have been conducted in which the problem of cooperation between the Air Defense Forces of the Country and ground troops has been studied. These matters also received great attention in the DNEPR exercise.

In this article we would like to share some of the experience acquired in this exercise.

During the DNEPR exercise, the Air Defense Forces of the Country (acting as border air defense districts), in addition to fulfilling their own main tasks for covering the most important installations of the country against air strikes, were allocated to reinforce the air defense of front troops and their lines of transportation.

Cooperating with the front air defense forces and means, they provided cover for front troops against air strikes while the troops were being brought to combat readiness and deployed for going over to the offensive, and also during the offensive once it had begun; they covered military transport aviation and long range aviation during overflights in the front zone.

In doing this, the main emphasis in organizing and maintaining cooperation between formations (large units) of the Air Defense of the Country and the front air defense was focused on accomplishing the following matters:

-- the setting up of an appropriate grouping of air defense forces and means to provide for the successful fulfilment of the assigned task;

-- the conduct of joint combat actions to cover the most important installations of the country, the troops, and front rear services installations against air strikes,
in their departure position and with the beginning of the offensive operation.

A large unit of the Air Defense Forces of the Country, reinforced with units of low-altitude surface-to-air-missile systems and all-weather fighter-interceptors, and with subunits of antiaircraft machineguns and radiotechnical troops, was allocated in order to carry out tasks in support of covering front troops more effectively.

It was established that before the beginning of an offensive (before the front troops move across the state border), the front air defense forces and means will be carrying out their tasks in the same zone as the Air Defense Forces of the Country, and cooperation will be effected by distributing the efforts of the air defense forces and means by axes and installations (groups of installations).

The grouping of the large unit of the air defense district remained basically unchanged during this time, but the grouping of the front air defense troops was structured on the basis of the existing grouping of the large unit of the Air Defense of the Country and its organic equipment.

To support the conduct of reconnaissance at low altitudes, the maneuvering of radar subunits (from the air defense large unit) was carried out; they increased the density of the radar field and lowered its lower edge to 200 meters. In effect a single radar field was set up for detection, guidance, and target indication. It was planned to implement control of the cooperating air defense forces and means on a centralized basis: from the control post of the front air defense. Direct communications were established to provide for control and mutual warning between the front air defense control post and the control post of the commander of the air defense large unit. For the purpose of coordinating matters of cooperation, an operations group from the air defense district was allocated to the front air defense control post. Although this group was rather small in strength, it included officer specialists from all the branch arms.

All matters of cooperation in the exercise were reflected in the plan, which specified:
-- the strength of surface-to-air missile units and fighter aviation units, the procedure for their joint actions when covering ground forces against air strikes and supporting the overflight of military transport aircraft carrying airborne landing forces, and also the procedure for their actions when supporting the overflight of long range aviation in the front zone;

-- the strength of units of radiotechnical troops and the procedure for their joint actions in conducting reconnaissance of the air enemy and warning the command posts in this regard prior to the start of the front offensive operation and during its course;

-- the strength of the forces and means allocated from the air defense district and the front to provide control of the cooperating troops;

-- the procedure for providing continuous control and guidance of fighter aviation as well as safety for its actions in the combat zones of surface-to-air missile units and antiaircraft artillery units.

The plan for cooperation specified the lines of the commitment of fighter aviation to battle from an "airfield alert" status at Readiness No. 1 and from an "airborne alert" status, and also specified the procedure for materiel-technical support of fighter aviation at cooperating airfields and its commitment to battle from these airfields.

The limit of responsibility of the air defense district remained as previously established (the state border).

During the period of the deployment of front troops and their advance to the departure line, enemy aviation began aggressive combat actions to deliver air strikes against front troops and installations and also against the installations to be covered by troops of the air defense district. In this situation, the troops of the air defense district and the forces and means of the front air defense conducted aggressive combat actions at low and high altitudes, under conditions of extensive enemy use of active and passive jamming.
The cooperation between the radiotechnical troops of the air defense district and those of the front during this period consisted of the coordinated conduct of reconnaissance of the air enemy, the receiving and transfer of targets, mutual warning about the air enemy and overflights of their own aviation, and also mutual support of the combat actions of units of surface-to-air missile troops and fighter aviation located in the radar zones of adjacent units.

The cooperation between the fighter aviation of the air defense district and that of the front when repulsing enemy air strikes was organized and implemented according to lines and axes. Fighter aviation units of the air defense district and of the front destroyed all targets without exception within the limits of their combat capabilities, usually outside the zones of the surface-to-air missile troops. However, on several axes, joint actions in a single zone were planned and carried out. In this instance, the fighters were assigned targets which were operating at low altitudes or which had not been fired on by surface-to-air missile units. Fighter aviation units of the air defense district operated from lines located at a distance from their own main airfields equal to the tactical radius of the fighters, subsequently landing at forward (alternate) airfields. They were guided from the control posts and the guidance posts of the fighter aviation units of the air defense district and of the front.

The relocation of the front air defense forces and means began with the going over of the front troops to the offensive and their movement from the zone of responsibility of the air defense district; the troops of the air defense district remained in their former areas, continuing, however, to carry out a number of tasks in support of the front. The tasks remaining were to cover the troops of the front's second echelon and reserves, the airfields of bomber aviation, and crossings, and also to support the overflight of transport aviation carrying airborne landing forces and the overflight of long range aviation.

Under these conditions, certain adverse occurrences came to light which disrupted the cooperation which had been set up between the troops of the air defense district and the front air defense forces and means. What happened was that as the front troops advanced into the interior of the enemy's territory, a gap
was formed between the systems of the air defense of the country and the air defense of the troops, with the gap widening rather rapidly. At average rates of advance by the ground troops of up to 70 kilometers in 24 hours, their depth of advance for the first three days of the operation was more than 200 kilometers.

This situation was aggravated even more by the fact that in drawing up the plan for cooperation, the joint actions of air defense forces and means were planned in maximum detail only for the initial stage: when joint actions were being conducted in the same overall zone. The procedure for maintaining cooperation during the offensive operation was set up only in general outline, by delimiting the zones of responsibility according to depth without indicating the specific forces and means for their support.

The representatives of the front staff naturally required the troops of the air defense district to move directly behind the advancing front troops in order to support the joint actions to cover the troops and lines of transportation of the front. This, in turn, confronted the troops of the air defense district with the need to seek out methods and types of actions which would ensure the support of cooperation with the front air defense system without impairing their own main task of covering the important installations of the country. Thus, in order to build up the radar field, several radiotechnical subunits implemented maneuvering but not at the expense of worsening the district radar field or reducing the capabilities for radar support of the combat actions of surface-to-air missile troops and fighter aviation at low and medium altitudes.

In order to push forward the lines for interception by fighter aviation, especially for destroying low-altitude targets, it was planned to rebase part of the fighter aviation forces of the air defense district to the airfields being vacated by front aviation.

Removal and relocation of surface-to-air missile units of the air defense district in order to cover the troops and lines of transportation of the front were not carried out, since this would have led to a decrease in the density of the forces and means covering important economic, administrative-political, and military installations and to considerable disruption of the
system of air defense of the country.

As regards the covering, by forces of the Air Defense of the Country, of front installations and lines of transportation on territory occupied during an offensive operation, this must be done, as the exercise showed once again, by air defense large units from the reserve of the General Headquarters or of the Commander-in-Chief of the Air Defense Forces, with a simultaneous change in the limits of responsibility of air defense formations whose composition includes reserve large units. These large units (units), before they move forward to build up the efforts of the Air Defense Forces of the Country, can obviously be employed for additional coverage of the most important installations of the country.

Following the relocation of the front air defense command post during the offensive, control of the forces and means of the air defense formation, and also of the front air defense forces and means covering its rear services installations and reserves, was centralized and was implemented from the control post of the air defense formation. This experience merits introduction into actual practice.

The DNEPR exercise was of great importance for future practical resolution of such a complex problem as that of cooperation. The forms and methods of cooperation which were employed fully justified themselves, but nevertheless a number of concepts require further testing and refining, since the Air Defense Forces of the Country are constantly being equipped with new weapons, especially long-range surface-to-air missile systems and airborne long-range interception systems, and automated systems of troop control are being introduced. All of this naturally calls for appropriate changes in established views on the development of the operational art and tactics of air defense troops, and it also requires the working out of a sound
mutual understanding between the staffs of formations and large units of the Air Defense of the Country and the staffs of other branches of the armed forces.