MEMORANDUM FOR: The Director of Central Intelligence
FROM: William W. Wells
Deputy Director for Operations
SUBJECT: MILITARY THOUGHT (USSR): Questions of Employing Long Range Aviation in Support of the Ground Forces

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 examines various aspects of the employment of long range aviation for direct support of the ground forces. These include the procedure for allocating long range aviation among the fronts, the tasks assigned to it and the methods of its combat employment, the most advantageous of these being the delivery of massed nuclear strikes. The author also discusses the role of long range aviation in reconnaissance, and the actions of branch arms of the fronts in support of the long range aviation strikes. The methods and tasks necessary for ensuring efficient and precise control, cooperation and coordination of efforts of forces and means also are indicated. This article appeared in Issue No. 2 (A1) for 1967.

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 W. Wells
Distribution:

The Director of Central Intelligence
The Joint Chiefs of Staff
The Director, Defense Intelligence Agency
The Assistant to the Chief of Staff for Intelligence
Department of the Army
The Assistant Chief of Staff, Intelligence
U. S. Air Force
Director, National Security Agency
Deputy Director of Central Intelligence
Deputy Director for Intelligence
Deputy Director for Science and Technology
Deputy to the Director of Central Intelligence
for National Intelligence Officers
Director of Strategic Research
Intelligence Information Special Report

COUNTRY USSR

DATE OF INFO. Mid-1967

SUBJECT MILITARY THOUGHT (USSR): Questions of Employing Long Range Aviation in Support of the Ground Forces

SOURCE Documentary

Summary: The following report is a translation from Russian of an article which appeared in Issue No. 2 (81) for 1967 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is General-Mayor of Aviation V. Barkovskiy. This article examines various aspects of the employment of long range aviation for direct support of the ground forces. These include the procedure for allocating long range aviation among the fronts, the tasks assigned to it and the methods of its combat employment, the most advantageous of these being the delivery of massed nuclear strikes. The author also discusses the role of long range aviation in reconnaissance, and the actions of branch arms of the fronts in support of the long range aviation strikes. The methods and tasks necessary for ensuring efficient and precise control, cooperation and coordination of efforts of forces and means also are indicated.

Comment:

End of Summary

TOP SECRET
At the beginning of a nuclear war, long range aviation usually will operate according to plans for the employment of strategic nuclear forces. After the initial air operation is completed, and sometimes while it is in progress, some long range aviation forces may be employed directly in support of ground forces in accordance with the plans of front commanders. Thus, in most cases it will have to operate against targets which previously were not planned for it, without having a flight plan thoroughly worked out in advance, but one conforming only to frequently very incomplete data on a rapidly changing situation. It will deliver strikes against inadequately reconnoitered and highly mobile targets, usually on the basis of ground forces requirements arising immediately during an offensive.

If combat actions are initiated employing only conventional means of destruction, part of the long range aviation forces will build up front aviation efforts, but its main forces will remain in readiness to deliver strikes with nuclear weapons in accordance with the plans of the Supreme High Command.

Considering the large volume of tasks long range aviation will have to accomplish according to plans for the employment of strategic nuclear forces, in the first days of the war only limited forces may be allocated from it for direct support of ground forces, i.e., no more than one or two regiments will be allocated to the front which is advancing on the main axis. This number subsequently may be increased somewhat if, of course, long range aviation does not sustain heavy losses. This increase is necessitated by the natural attempt to reinforce the aviation groupings of the fronts and compensate for expended missile/nuclear means, and in some cases by requirements to support individual ground forces groupings which have pushed on beyond the radius of front aviation operations.

Long range aviation forces are allocated among the fronts by the Supreme High Command. Thus its large units may be assigned...
to certain fronts while they are carrying out the tasks of an operation. This kind of allocation has a number of advantages: the aviation control system is stabilized, and its cooperation with ground forces is facilitated considerably. But we must take into consideration that assigning large units to certain fronts for a comparatively long time tends to dissipate long range aviation forces, making it difficult to mass them when carrying out the most important tasks. Having aviation units deliver strikes at various times at a great distance from each other complicates the already unfavorable conditions for negotiating air defense. Therefore, it obviously is more desirable to base the allocation of long range aviation on the requirement for successive massed employment of it in support of fronts which are carrying out the primary task. Certain long range aviation forces can be allocated first to one front, for example, to support the landing and combat actions of a landing force, then to another while it is routing large enemy reserves. Of course, allocating forces by tasks complicates the organization of control and cooperation somewhat, and requires maneuvering them between fronts. Nevertheless, the effectiveness of the massed employment of long range aviation is significantly increased. And that is the main thing.

The front commander must assign specific tasks to forces allocated from long range aviation based on their combat capabilities.

The most characteristic of these tasks might be the following:

-- aerial and radiotechnical reconnaissance, conducted to a great depth to photograph vast areas; long-term surveillance of targets or areas (for example concentration areas of enemy reserves);

-- destruction and neutralization of nuclear attack means by delivering strikes against missile launch sites, tactical aviation airfields and nuclear weapons depots;

-- destruction and neutralization of troops in concentration areas and on lines of march, as well as destruction of crossings and road junctions and obstruction of mountain passes;
-- disorganization of troop control by destroying and neutralizing command posts and communications centers, and by producing powerful radio and radiotechnical jamming;
-- combat against amphibious landing forces on coastal axes, and destruction of warships;
-- combat against airborne landing forces by delivering strikes against these troops in concentration areas and against military transport aviation at airfields.

The front commander, in assigning tasks to long range aviation forces, specifically indicates strike targets, the yield and type of nuclear warheads to be employed, the type of burst, the detail of forces for the employment of conventional and chemical warheads, as well as the time to deliver the strike (or time to be ready for take-off). In so doing he usually designates strike targets beyond the maximum range of front means. Under certain conditions requiring the concentration of considerable forces to inflict decisive destruction on the enemy, for example, to repel a heavy counterattack, the efforts of long range aviation also can be directed toward delivering joint strikes with the front means.

The decision of the front commander usually takes the form of a plan for the combat employment of the allocated long range aviation forces. This document is the basic one used by the long range aviation staff (or large unit staff) in working out methods for carrying out the assigned tasks.

The long range aviation commander coordinates the actions of the large units by time and methods in accordance with the overall concept for the employment of long range aviation.

The most advantageous operating method for long range aviation is massed strikes which, if feasible, must be delivered at the same time and on the same axes as massed strikes by the fronts' aviation and, as a rule, immediately after strikes by the rocket troops.

The combined actions of the above forces will facilitate the negotiation of enemy air defense. But it will not always be
possible to deliver massed strikes during an offensive. This is due both to a shortage of aircraft and to the necessity of destroying over a vast area a large number of small-size targets which frequently are in motion. Obviously, in this connection, strikes by small long range aviation subunits (squadrons, detachments) operating on request will be employed extensively. When the enemy's main air defense system is disorganized during an offensive by fronts, the success of echeloned actions by long range aviation against individual targets may be counted upon, with comprehensive support, of course.

The results of all types of reconnaissance conducted according to the plan of the fronts' commanders, will be used by long range aviation to identify targets of actions. But at the same time reconnaissance requires allocating forces from long range aviation itself. They should be assigned small areas to reconnoiter. Otherwise reconnaissance of mobile and small-size targets will not be very effective even with a very large expenditure of forces. The problem is that identification of such targets as a rule requires low-altitude visual observation. But this can be done only in the daytime under favorable weather conditions and at night by illuminating the targets. Aerial photography of vast areas, of course, makes it possible to find appropriate targets on photographs, but developing the spent film, interpreting the photographs and reporting the results to the staffs concerned still takes a comparatively long time. Mobile targets can move a great distance during this time and, consequently, the data obtained on them lose their significance.

The huge tasks levied on aerial reconnaissance under the complex conditions of a rapidly changing situation in all probability will have to be carried out by allocating long range aviation forces. The number of aircraft sorties dedicated to aerial reconnaissance during an offensive by front troops, according to rough calculations, can be as much as 30 percent or more of the total sorties available. True, the opinion sometimes is expressed that this percentage could be less, since aircraft strike groups can both find and hit the targets they are assigned to destroy. But such a recommendation is acceptable only for actions against large-size, stationary targets or those with low mobility which produce radar contrast.
It should be taken into consideration that reconnaissance of small-size and mobile targets (low altitude visual observation, the carrying out of several runs to identify targets, photography) differs sharply from procedures for the delivery of strikes, especially with nuclear weapons (striking on the first run, usually aiming beyond target visibility using auxiliary aiming points, employing missile weapons from maximum distances to target). For example, a missile-carrying aircraft cannot first run over the target and reconnoiter it, then pull back to possible missile launching range and hit it.

Therefore, to support long range aviation strikes against mobile targets usually requires organizing aerial reconnaissance to provide data on them and, in addition, final reconnaissance immediately before the strikes are delivered, for which target indication aircraft are assigned to fly forward of the combat formations of the strike groups.

We must remember that considerable time, measured in hours, is expended from the moment the tasks are assigned to crews at the airfields before take-off until the moment strikes are delivered against the assigned targets. In this amount of time the situation can change drastically. In many cases it is necessary to refine tasks for crews who are already airborne, to make a more precise target indication or to retarget them against other targets.

The diversity of tasks which may be assigned to long range aviation, the extensive maneuvering of it in both depth and direction of operations, as well as the complexity of delivering strikes under conditions of a rapidly changing situation, require organizing and carrying out precise control of its forces. For this purpose forward command posts from those air large units assigned to a front commander are deployed near the command posts of the fronts (as a rule at the air army command posts of the fronts). It is possible that in a number of cases it will be desirable to set up the forward command post of the long range aviation commander near the command post of the front carrying out the main task.

Each forward command post of long range aviation must have the means to provide:
communications with the commander and staff of the front, with the commander and staff of the air army, with the long range aviation command posts of its own air large unit, and with similar long range aviation forward command posts located in the zones of adjacent fronts;

-- control of the combat formations of its own air large unit and also of other air large units assigned to carry out tasks in the zone of one front or another;

-- receipt of reconnaissance data from reconnaissance aircraft.

The means of communications for long range aviation forward command posts must be allocated by a front or front air army, which requires providing for the necessary reserves of these means in peacetime.

The senior officer at a forward command post usually is the deputy commander of an air large unit, who has an operations group of officers made up of operations officers, navigators, reconnaissance personnel, communications personnel and cipher-code clerks. As a rule, radio operators from long range aviation, who have had a great deal of experience in radio traffic with in-flight air crews, are allocated to the radio station. The total strength of such a group, according to experience gained in exercises, is 8 to 12 officers and 10 to 15 noncommissioned officers and enlisted men.

An operations group located at a forward command post of an air large unit must be charged with the following basic functions:

-- working out proposals for the combat employment of allocated long range aviation forces and reporting them to the front commander, transmitting the decisions of the front commander to the staffs of long range aviation and its own air large unit, and working out, in conjunction with the front staff, a plan for the combat employment of the allocated forces;
organizing and implementing the cooperation of all long range aviation forces operating in or overflying the zone of a given front, with air army forces and other front forces; participating in the working out of cooperation plans;

- collecting and collating data on the ground and air situation, as well as on possible targets of air operations, on the basis of data from the front and air army staffs; transmitting these data to the staffs of long range aviation and its own air large unit;

- collecting data obtained by aerial reconnaissance by long range aviation in the front zone, and reporting these data to the front staff and other staffs concerned;

- requesting long range aviation air large units and units to deliver strikes, performing target indication and retargeting; continuously observing the air situation (using air army means for this purpose); controlling combat formations in accordance with the air situation which has developed;

- cooperating with the forward command posts of long range aviation large units operating in the zones of adjacent fronts;

- reporting to the front commander the results of the fulfilment of combat tasks by aviation.

In conclusion we will mention that the actions of forces allocated from long range aviation have to be supported by the forces and means of the fronts. Thus, the destruction and neutralization of active air defense means on the flight paths of long range aviation, first of all the neutralization of enemy radio and radar means, requires allocating the rocket troops, artillery and aviation of the fronts, and their jamming means.

Cooperation among reconnaissance forces, specifically defining for them flight altitudes, time and routes, and
establishing the procedure for mutual recognition and allocation of alternate airfields, for providing ground navigation means, etc., will play a role of no small importance in the success of long range aviation operations. Cooperation will be organized on the basis of orders from the front commander, as a rule, to the air army commander, who is the senior aviation commander on a given axis of a theater of military operations.

The air army staff, with the participation of a representative of long range aviation, develops the plan for the cooperation of forces and means as they carry out their assigned tasks.