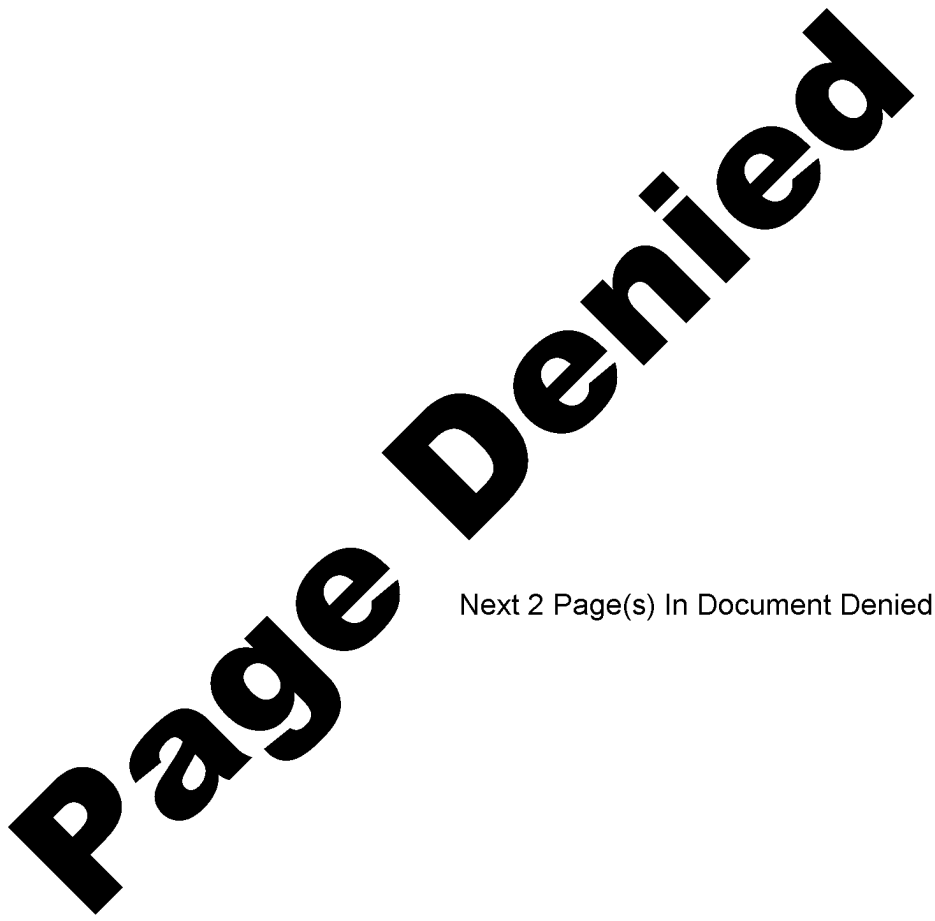

Next 2 Page(s) In Document Denied

Planning the Utilization of Nuclear/Missile Weapons in a Front Offensive Operation

by

Colonel-General V. Chizh

As is known, modern operations are characterized by the large scale utilization of nuclear/missile weapons, by highly mobile troop operations, and by sharp and rapid changes in the situation. The mass employment of nuclear/missile weapons promotes a more rapid attainment of operational goals than has been the case in the past. There is every reason to suppose that the duration of operations will be sharply curtailed. In any case, the protracted battles, lasting many days, which were characteristic of the Second World War have, we consider, become a thing of the past. According to the experience of a number of exercises, a front offensive operation will continue for an average of 8 to 10 calendar days.

Along with a significant curtailment in the duration of conducting an operation, its depth will increase sharply. Whereas in the last war the depth of a front offensive operation was within the limits of 250 to 300 km and only reached 500 km in exceptional cases, under modern conditions a front operation will be conducted to a depth of 800 to 1000 km. Such depth can and must be attained mainly as a result of the decisive exploitation of the results of nuclear/missile strikes. At the present time, the problem of increasing the rates of troop advance to 100 km in one calendar day has already been raised. High rates of advance will now play a decisive role in the attainment of operational goals.

However, in spite of the recognition of the dominant role of nuclear weapons, we still do not fully take into account all their capabilities in planning operations. We have cases in which many problems in the preparation and conduct of modern operations are decided from the standpoint of the past with insufficient regard for the particular features of a nuclear/missile war. The nuclear warheads released for an operation will, as the Minister of Defense

points out, often be hastily expended as quickly as possible by using obsolete methods of artillery preparation against insufficiently reconnoitered targets.

The enormous role of the new means of combat, which they can play in a future war, requires a new approach to the planning of their use. With the modern scales of using nuclear/missile weapons, they should not be looked upon as a means for supporting the combat operations of ground troops. Now, these weapons are the main and decisive means of combat, determining the possibility of accomplishing the majority of the tasks confronting the troops of a front in an offensive operation. Consequently, problems of the employment of nuclear weapons play a determining role in the planning of a front offensive operation.

The operational directive of the General Headquarters of the Supreme High Command on its conduct serves as the organizational impetus in the planning of a front offensive operation. Following the directive, after he has understood the task and has carefully appraised the situation, the troop commander of a front reaches an operational decision in which, in relation to the use of nuclear weapons, he defines:

--the aims and tasks for which nuclear/missile weapons are to be used in the operation and the allocation of nuclear warheads in accordance with the operational tasks;

--the objectives to be destroyed by nuclear weapons, and the sequence and timing for the delivery of nuclear strikes against them;

--the number of nuclear warheads allocated to the armies for the operation and the order of participation of the army missile units in the massed nuclear strikes of the front;

--the primary and alternate siting areas of the front's missile large units (units) and the airfields at which the delivery aircraft of the air army are based, the sequence and timing of their employment; the order of movement of the front's means for using nuclear weapons during the operation;

--the readiness periods of the missile units and aircraft for the delivery of nuclear strikes;

--the reserve of nuclear warheads;

--the measures for material-technical and combat support and other problems.

The authors of some articles, in considering the problems of planning an operation, express the opinion that, in connection with the appearance of nuclear/missile weapons in a front and army, two plans should be worked out: a plan for the front (army) offensive operation and a plan for the utilization of nuclear/missile weapons in the operation.

We share the point of view of Colonel-General Ye. Ivanov and consider with him that there can be no separate plan for the utilization of nuclear/missile weapons. Nuclear/missile weapons and combined-arms large units and formations cannot be used when isolated from one another. The main elements in the operational formation of the enemy's troops will be destroyed by nuclear/missile weapons, and, as is known, the combined-arms large units will complete their rout. Operations by ground troops are now impossible under any conditions without the aggressive use of nuclear/missile weapons in both operational and tactical elements. The basic problems for decision by the troop commander of a front on the operational use of nuclear weapons must be reflected in the plan for the front's offensive operation. The various special technical problems connected with the preparation and the delivery of nuclear strikes which do not come into the operational plan are reflected in the appropriate plans of the chief of the missile troops and artillery of the front (army) and of the commander of the air army.

In our opinion, it is necessary to introduce clarity into the problem of who must work and on what in planning for the use of nuclear/missile weapons in a front (army) offensive operation.

It is known that the main role in planning for the use of nuclear/missile weapons is played by the operational directorate (department) of the staff of a front (army), the staff of the missile troops and artillery of the front (army), and the staff of the air army. Let us examine their functional responsibilities in planning an operation.

The operational directorate (department) of the staff of a front (army), on the basis of the instructions of the commander and chief of staff of the front (army), works out the specific problems of the nuclear/missile preparation and support of a front troop offensive, allocates the objectives to be destroyed between the missile troops and aviation, determines the yield of the nuclear charges, the types and height of bursts, the safe distance of friendly troops, estimates the expected results from the nuclear strikes, and keeps a radiation situation map and a record of the irradiation of the large units.

In performing these tasks, the operational directorate (department) coordinates its work with other directorates (departments) and receives from them essential data. Thus,

a. with the intelligence directorate (department), the following are determined in detail:

--the locations of the enemy's weapons of nuclear attack, depots, and assembly bases for nuclear warheads and data on their preparation;

--the disposition areas of major operational reserves, the places in these areas where troops are most densely located, the degree of engineer preparation of the areas, and the probable directions of operations by the reserves;

--the locations of major control points (of armies and groups of armies), the nature and durability of the installations they occupy;

--the procedure for receiving intelligence data before and during the offensive operation, in support of the employment of nuclear/missile weapons.

Data on targets must be presented in the form of the precise topographic-geodetic coordinates of the targets (and not in the form of areas approximated on a map). Only then can the use of nuclear/missile weapons produce the desired result;

b. with the staff of the missile troops and artillery of a front (army) and the staff of an air army, the following are coordinated:

50X1-HUM

--the readiness periods of nuclear warheads for use in combat and their issue to the missile (aviation) large units and units of the front (army);

--the objectives for destruction by the missile units (large units) and delivery aircraft;

--problems in the allocation of nuclear warheads, according to the objectives to be destroyed;

--the timing for the delivery of nuclear strikes;

--the order and periods of time for the dispatch of the missile units and subunits to siting areas and aircraft to dispersal airfields (aerodrom rassredotocheniya) (or maneuvering airfields (aerodrom manevra));

--the system of cooperation between missile units and aviation;

--measures for ensuring the security of friendly troops during the delivery of nuclear strikes;

c. with the chief of the PVO troops of the front (army), the problems of protecting the troops of the front (army), especially the missile units (large units), against strikes by enemy aircraft in areas of concentration and during the operation, are determined in detail;

d. with the chief of engineer troops of the front (army), problems in the preparation of routes, the procedure for supplying troops, and especially missile units, with the elements of prefabricated structures and with other construction materials for the preparation of cover are coordinated;

e. with the chief of communication troops, problems in the organization of communications, primarily with the missile units (large units) and with aviation, are coordinated; in this, communications must be organized down to the duty battery (squadron) inclusively;

f. with the chief of chemical troops of the front (army), problems in the organization of radiation and chemical reconnaissance both by the means of the front (army) and by those of subordinate

troops are determined in detail; in addition, together with the operational directorate, the chief of chemical troops collaborates in keeping up the radiation situation map and the record of irradiation of large units; irradiation doses must be considered in an army for the regiment and in a front for the division and for front units (large units).

The staff of the missile troops and artillery of the front (army):

--in conjunction with the intelligence directorate (department), organizes reconnaissance against objectives on behalf of the missile troops of the front (army);

--on the basis of the tasks assigned by the commander of troops of the front (army) to the missile units (large units), allocates nuclear warheads among the missile units and subunits and designates specific objectives to be destroyed by them in accordance with their fire capabilities; conveys tasks to those who are to perform them;

--in accordance with the nature of the objectives designated for destruction, calculates the necessary yield and height of nuclear bursts, ensuring the specified degree of destruction of the objectives;

--organizes the preparation of siting areas and ensures the timely delivery of missiles to the missile units and subunits;

--together with the staff of the rear services decides the question of the procedure for the delivery of missile fuel;

--organizes the tour of duty for launch batteries in the siting areas.

In addition, the artillery staff of the front (army), in planning the combat use of the missile troops, decides such questions as the organization and carrying out of topographic-geodetical preparation and engineer preparation of the siting areas, meteorological support, ballistic and technical preparation; the organization and safeguarding of the movement of the missile units to the siting areas and of their movement during the course of the operation; the organization of direct

control of the missile units and of their fire; the clarification of problems of coordination by the missile troops with aircraft and cruise missiles in the joint destruction of objectives.

The staff of the air army:

--allocates nuclear warheads among delivery aircraft and cruise missiles, designates specific objectives for destruction by them and organizes the delivery of nuclear strikes in accordance with the plan of the front's offensive operation;

--makes the necessary calculations (yield and height of nuclear bursts) to ensure the prescribed degree of destruction of the objectives;

--organizes and provides for continuous duty by delivery aircraft and for the timely delivery of nuclear warheads to the airfields on which the aircraft are based;

--organizes direct control of the large units (units) using nuclear warheads and also their combat support and cover;

--clarifies problems of coordination by the aviation units and cruise missile units with the missile units of a front (army) in the joint delivery of nuclear strikes.

The procedure for planning the employment of nuclear/missile weapons in an operation, suggested by us, eliminates the necessity for preparation by the directorates and departments of the front's (army) staff of a series of memoranda and considerations for the front commander.

We have discussed only one side of planning, i.e., we have defined the role of the directorates and departments of the staff of a front (army) and have shown the content of their work in planning for the employment of nuclear weapons in an offensive operation by the front (army).

The other side of planning consists of the resolution of separate problems connected both with direct planning and with the execution of nuclear/missile strikes. Let us examine some of these:

In the allocation of nuclear warheads for the tasks of the operation and in the designation of specific objectives for destruction by them, it is necessary to proceed from a basic rule: it is better to destroy a smaller number of objectives with certainty, but those that are more important and have been well reconnoitered, than to hit at all or a large portion of the objectives without attaining the required result in doing so.

According to the experience of a series of exercises, nuclear warheads can be allotted for tasks as follows: for the first mass nuclear/missile strike (for the conduct of fire preparation)--20 to 30 percent; for accomplishing the immediate task of the front--30 to 40 percent; for accomplishing the subsequent task of the front--20 to 30 percent; for the front's reserves--10 to 20 percent. Of course, this is a most tentative calculation. The specific allocation of nuclear warheads in accordance with the tasks of an operation must be made according to the actual situation.

The nature of the objective and the particular features of the disposition of its separate elements have an exceptionally important significance in determining the type, amount, and yield of the nuclear warheads needed for its destruction. For example, the enemy's weapons of nuclear attack, battalions of "Honest John", "Corporal", "Redstone" and of many other weapons, can be deployed in concentration areas or assume combat formation, with their launching mounts, at the waiting or launch sites. The most profitable objective for a nuclear strike will be a concentration where these weapons are located more compactly and for a longer time. The destruction of weapons of nuclear attack at their launch sites will be impossible in most cases because of their short stay at these sites.

In all cases, one must strive in the first instance to destroy depots of nuclear warheads and their assembly bases, and also the radio-technical means of control and guidance of missiles, without which the launching mounts are nothing more than heaps of metal.

In the allocation of objectives for destruction to the various means of delivering nuclear warheads to their target, it is necessary to consider the distance of the objectives from the main line of resistance, the degree of their cover by PVO weapons, and the nature of the objectives (their mobility). The inclination to plan nuclear

strikes against mobile objectives beforehand, as was indicated by Marshal of the Soviet Union V. I. Chuykov in his critique of the 1960 command-staff exercises, is nothing more than self-deception.

For the destruction of stationary and relatively immobile objectives, it is advisable to designate missile units, and for the destruction of mobile objectives, aviation. To deliver strikes against objectives located near our troops and also against targets of small dimensions which refer primarily to the enemy's weapons of nuclear attack, it is necessary to select means of destruction which are more accurate in their combat characteristics (cruise missiles and solid fuel ballistic missiles).

In order to allocate objectives for destruction between the missile troops and aviation correctly, it is necessary, first, to consider fully their characteristics and combat potential; and second, from the total number of objectives, which almost always exceeds the capabilities for their destruction, to select the most important, the destruction of which will ensure the attainment of the assigned goals.

In determining the type and height of a nuclear burst it is necessary to consider not only the probability of destroying this or that objective, but also the possibility of radioactive contamination of the terrain in areas in which operations of front (army) troops are impending, as the result of one's own nuclear bursts.

As is known, depending on the location and nature of the objectives (targets) to be destroyed, and also on the level of destruction required, either surface or air bursts can be used.

Surface bursts should usually be planned for the destruction of troops located in solid shelters (dugouts), and also for putting out of commission military-industrial and other objectives with very sturdy structures. In addition, it is advisable to use surface bursts (along with the destruction of the objective) to create zones of radioactive contamination of the terrain, with high levels of radiation.

However, in each specific case it is necessary to consider carefully the meteorological conditions (mainly the wind direction), the location of friendly troops, and their subsequent operations,

together with the configuration of the front line. In delivering strikes against objectives located near our troops, surface bursts may be used only when there is a steady wind in the direction of the enemy and under conditions in which troops will not enter these areas before the level of radiation falls to within safe limits.

Air nuclear bursts should be planned for the destruction of troops without cover and also of objectives which do not have sturdy structures. In addition, air bursts are used in all other cases when it is necessary to exclude strong radioactive contamination of the terrain. Low air bursts can be planned when it is necessary to avoid strong radioactive contamination of terrain and, at the same time, to destroy as large a number of sturdy structures as possible.

The solution to the problem of selecting the type of burst to destroy one or another enemy rear area objective also depends on the task which has been assigned. If, for example, it is necessary to put a rail junction out of action for a short time, with the intention of using it subsequently for the needs of the front during the operation, it is more advisable to plan a high air burst.

In conducting an offensive operation, more air than surface bursts are usually planned and in the conduct of a defensive operation this is reversed. In mountains, it is more advisable to use air bursts, because the protective qualities of the ground configuration are thereby lessened.

Timing for the delivery of nuclear/missile strikes. It is known that the greatest effect from nuclear/missile strikes can be achieved if they are delivered simultaneously, or within a strictly limited time. Therefore, the troop commander of a front establishes the timing for a simultaneous nuclear strike against the target by all nuclear warhead delivery means. In accordance with this timing, the staff of the missile troops and artillery and the staff of the air army must calculate the time at which each missile (aviation) unit (large unit) should begin launchings (strikes), separately. The staffs of the missile and aviation large units (units), depending on the flight-time of the missile (delivery aircraft) to the target, calculates the launch-times for each launch assembly (take-off time of delivery aircraft).

50X1-HUM

The timing of nuclear/missile strikes during an operation is calculated so as to deliver the greatest destruction against this or that enemy objective. For example, it is most profitable to destroy infantry and tank groupings at the moment when they are deploying for a counterstrike or in concentration areas when they leave cover and prepare to move. It is advantageous to destroy airfields at which delivery aircraft are based at the moment when the greatest number of aircraft has built up or when nuclear bombs are being loaded, etc.

It is thus, in our opinion, that the planning for the use of nuclear/missile weapons in an offensive operation by a front (army) must be carried out.

50X1-HUM