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FIELD REGULATIONS OF THE RED ARMY, 1929

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USSR REPORT

MILITARY AFFAIRS

FIELD REGULATIONS OF THE RED ARMY, 1929

Moscow-Leningrad POLEVOY USTAV RKKA 1929, Vol 1, pp 1-262

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CONTENTS

USSR Revolutionary Military Council Order 154 1

Section One. Troop Control 3

Chapter I. General Principles 3

Chapter II. Military Formations and Their Command Elements 8

Chapter III. Decision-Making 11

Chapter IV. Organization of Control in Combat 13

Chapter V. Operations Documents 16

Chapter VI. Combat Security for Troop Operations 20

1. Reconnaissance 20
2. Security 25
3. Air and Anti-Gas Defense 25

Chapter VII. Political Support for the Troops' Combat Activity 27

1. Tasks of Political Work 27
2. Political Work Among the Troops 27
3. Political Work Among the Population 31

Chapter VIII. Logistical Support of Troops' Combat Activity 33

1. General Directives 33
2. Essence of the Establishment of Rear Services 35
3. The Supply Service 38
4. The Medical Service 41

[III - USSR - 4]

5. The Veterinary Service 42
6. Movement of Replenishments, Prisoners and the Draft Population 42

Section Two. Combat 44

Chapter IX. General Regulations 44

1. The Maneuver 44
2. Order of Battle 46

Chapter X. Meeting Battle 54

1. General Directives 54
2. Advance Guard Operations 57
3. Operations of the Main Forces 59
4. Integration of Column Operations 61

Chapter XI. Offensive Against a Defending Enemy 63

1. General Grounds 63
2. Reconnaissance of the Enemy Defense Zone and Liquidation of Enemy Security 66
3. Plan and Organization of an Offensive 70
4. Use of Resources Attached to Military Formations 77
5. Execution of an Offensive .....
6. Offensive Involving the Crossing of a Water Obstacle 86
7. Offensive at Night and Under Poor Visibility Conditions 91

Chapter XII. Pursuit .....

Chapter XIII. Defensive Battle 93

1. General Grounds. Plan and Organization of Defense 93
2. Conduct of a Defensive Battle 101
3. River Defense 104
4. Defense on a Broad Front 106
5. Mobile Defense 107
6. Defense at Night 108

Chapter XIV. Disengagement 109

Chapter XV. Operations Under Special Conditions 112

1. In Winter 112
2. In Mountains 115
3. In Forest and Swamp Areas 117
4. In Desert Steppe .....
5. Battle for Inhabited Localities 119
6. City Combat 121

Section Three. Movement of the Troops..... 124

Chapter XVI. Troop Transportation..... 124

1. By Rail and Waterway..... 124
2. Motor Transportation..... 127
3. Transportation by Cart..... 130

Chapter XVII. Route March (March)..... 130

1. General Directives..... 130
2. Schedule and Organization of the March..... 133
3. Control of the Route March..... 136
4. Execution of the March..... 138
5. Night March..... 139

Chapter XVIII. March Security..... 141

1. Protection of a March Toward the Front..... 141
2. Protection of a Retrograde March..... 144
3. Protection of a Flanking March..... 146
4. Measures To Secure a March Against Attacks by Enemy Motorized Units..... 147
5. Air Defense of the Route March..... 148

Section Four. Rest..... 151

Chapter XIX. Positions for Rest..... 151

Chapter XX. Protection of Troops at Rest (Security at the Halt)..... 157

Order of the USSR Revolutionary Military Council

21 June 1929

No 154

Moscow

I. To put into effect the published "Field Regulations of the Worker-Peasant Red Army" (Field Regulations 29). To cancel "Field Regulations of the Worker-Peasant Red Army, part II" published in 1925.

II. The field regulations contain directives concerning the command and combat of military formations (regiment, division, corps).

III. The regulations do not provide stereotypes, and their directives are to be applied in strict conformity with the situation.

IV. Modern combat demands of the Red Army:

1) class-based political education, which is the foundation of the healthy political morale of the unit and a guarantee of the revolutionary stanchness of the army and its fighters;

2) an endeavor to concentrate all forces and resources for an assault in the decisive sector;

3) formation of the tactical plan with regard for material potential;

4) strategic and tactical mobility of the troops, which is a most important attribute of a battleworthy army; the closest attention of the entire officer personnel must be paid to the inculcation of troop mobility and flexibility during army training;

5) bold and rapid attack and deft maneuver; the troops' offensive operations must be distinguished by swiftness, pressure and intrepidity;

6) stubborn and active defense; vigorous and stubborn fire resistance providing for decisive assault group counterattacks is counterposed to the enemy's envelopments and breakthroughs;

7) precision and rapidity of instructions which are issued, clarity in the formulation of combat assignments and unbending resolve to carry out the adopted decision;

8) the boldness and decisiveness of each officer in charge and fighter based on broad initiative in combination with revolutionary assertiveness and constant readiness to assume responsibility for a bold decision; and

9) the constant work of the officer personnel in the field of inculcation in the army of broad independence, perseverance and unshakable confidence in one's weapons.

V). Gas-attack weapons, directives for which are contained in the field regulations, will be used by the Worker-Peasant Red Army only if our class enemies use them first.

VI. In performing their combat assignments commanders and fighting men--conscious sons of the Worker-Peasant state--must remember their responsibility to the working people for the great cause entrusted to them of defense of the worker-peasant state.

Voroshilov, people's commissar for military and naval affairs and chairman of the USSR Revolutionary Military Council.

Section One. Troop Control

Chapter I. General Principles

1. The Red Army is an instrument of the proletarian state--the world's first and sole fatherland of working people.

It is called on to ensure and defend against all attempts of the enemies of socialism and the proletarian revolution the independence of the USSR and protect the socialist building, peaceful labor and freedom of the workers and peasants.

In defending the USSR it contributes by the mere fact of its existence to the struggle of the oppressed working people's masses of the whole world for their liberation.

The Red Army is strong in its class consciousness, selfless devotion to the cause of communism, ties to and support of the broad worker-peasant masses, constant combat readiness, discipline and ability to make full use of its weapons for the devastating rout of armed forces of the enemies of the Soviet Union.

2. Defending the interests of the working people, the Red Army must be ready for bold and decisive actions aimed at destroying the armed forces of class enemies. These actions, composed of a number of operations, by way of commitment to the engagement on a broad front of large-scale army masses, will inflict defeat on the enemy by a number of battles of individual military formations and units.

3. Combat is the most decisive means for achieving the goals of an operation. The defeat and annihilation of the enemy by way of his physical extermination or capture or the destruction of his technical means of warfare are achieved by combat. Furthermore, combat, given the vigorous development of operations, achieves the disintegration of the organizational unity of the enemy's army and its fortitude.

It is the task of all combat to inflict defeat on the enemy, but only a decisive offensive in the decisive sector culminating in persistent pursuit leads to the complete destruction of his forces and resources.

Defense can only weaken an enemy, but not destroy him. In order to inflict on the enemy a decisive defeat it is necessary to endeavor to conclude a defensive battle with a switch at the propitious moment to the offensive.

4. The combat cohesion and political stability of one's units, the disorganization (disintegration) of the combat might of the enemy and the enlistment on the side of the proletarian revolution of the worker-peasant masses of his army and the working population of the military theater are a most important condition of victory over the enemy. This is achieved by unflagging political work organized and performed both in the army and outside it by the political sections of the military formations.

The entire officer personnel of all ranks and all military control elements are obliged to ensure all the necessary conditions for the extensive and continuous promotion of political work in the Worker-Peasant Red Army and to put at the disposal of the political organizers and political staff all necessary means for successful work on strengthening the army's combat capability.

5. Success in combat is secured most by:

a) the political training of the troops and the persistent resolve of all fighters based on a revolutionary will to win;

b) the correct determination of the nature of the operations and the dispersal of the enemy's forces along the front and in depth;

c) clear formulation of the aim of the battle and the expedient organization of operations based on a thorough calculation of technical resources and personnel in conformity with their properties and the situation;

d) a readiness to assume responsibility for a bold decision; it is not he who in an endeavor to destroy the enemy suffers a reverse who is to be reproached but he who, shying away from responsibility, failed at the proper moment to throw in all his forces and resources for the achievement of victory;

e) the troops' training in the use of technical resources and rapid assimilation of new methods of combat brought about by the sophistication of technical resources or the appearance of new ones;

f) thorough support of operations with reconnaissance, observation and protection in order in the course of the combat to opportunely determine changes in the situation; and

g) the continuous work of the rear services aimed at satisfying the troops' need for all kinds of rations and the evacuation to the rear of sick and wounded and all property not needed by the troops.

6. It is not possible to be equally strong everywhere; to ensure success it is essential to gain by way of the appropriate regrouping of forces and resources decisive superiority over the enemy in the decisive sector, leaving in the secondary sectors lesser forces sufficient merely to contain the enemy. The activeness of units operating in the secondary sectors contains the enemy best and could confuse him concerning the direction of the main strike and thereby contribute to the freedom of action of the units in the main sector.

7. Surprise has a stunning effect on the enemy. For this reason all troop operations must be accomplished with the greatest concealment and speed. Rapidity of action combined with organization is the main guarantee of success in combat. Troops capable of responding swiftly to instructions received and changes in the situation and able to get up from rest swiftly, swiftly accomplish route marches, swiftly deploy in order of battle and swiftly attack and pursue the enemy can always count on success.

Surprise is also achieved by the sudden use, for the enemy, of new means of warfare and new methods of combat.

8. The simple concentration of superior forces and resources is insufficient for smashing the enemy. The interaction of arms of the service operating in a single sector in the entire depth of development of the battle and the concerted nature of the actions of units operating in different sectors are essential.

Given modern fire means and the depth of the order of battle, success is achieved by the strenuous efforts of units operating successively from depth in full interaction and concordance and defearing the enemy by unit by way of the successive neutralization of the parts of his order of battle. The success that has been achieved is developed to the complete annihilation of the enemy. The personal initiative of officers of all ranks and ordinary fighters displayed in the direction of the general target of the operations is of decisive significance here. The greatest exertion of all forces in pursuit of a defeated enemy to the point of his complete annihilation does not afford the enemy an opportunity to get set for new resistance. Decisive use is also made of success in the event of it being achieved in a different sector to the one supposed.

9. In organizing the actions of the troops for combat the commander takes into consideration the properties and possibilities of each arm of service individually and uses them in conformity with their properties and possibilities, the nature of the assignment and the situation.

Infantry is the main arm of service, victory or defeat of which determines the fate of the battle to a considerable extent. All the remaining arms of service assist the infantry in the performance of its combat missions. Infantry has the capacity for concluding a battle in hand-to-hand fighting, capturing the weapons of the enemy and holding a locality and fitting it out with its own forces. A combination of the March and assault of personnel with the powerful fire of all fire means is the basis of modern infantry operations.

Artillery is in terms of firepower the most powerful arm of service. By defeating the personnel and destroying or taking out the fire means of the enemy, both open and under cover, and combating the enemy's air forces artillery helps infantry (cavalry) perform its combat missions with the least losses.

By virtue of its mobility, strategic cavalry is most adapted to a combination of fire by a sudden mass attack in mounted formation against the enemy flank and rear. The modern armament of the cavalry enables it to prepare an attack and carry out combat assignments independently. The cavalry's attack and pursuit of a dispersed enemy infantry leads to the complete annihilation of the latter.

The main mission of organic cavalry is reconnaissance.

Armored forces, which can move right up close to the enemy, help the infantry (cavalry), increasing its firepower. The dependence of armored vehicles and armored trains on roads and their condition limits their use. Tanks, which are capable of moving without roads and destroying artificial obstacles, are, given mass use, a powerful means of destruction of the enemy's fire means and personnel; they operate with infantry and cavalry.

Aviation assists the ground forces carry out their combat missions, attacking the enemy's personnel from the air and protecting the former against air attack by taking on enemy aircraft; it paralyzes the enemy's rear; services the command and the troops by reconnaissance, observation of artillery fire and signals; and carries out independent operational assignments.

Chemical weapons in modern warfare serve as a powerful means of destroying enemy personnel and sharply restricting his combat activity both on the offensive and defensive and are employed by the main arms of service and by the chemical arms specially.

Engineer troops help the other arms of service perform their assignments by preparing the locality (namely, the building and repair of roads and bridges, the technical organization of river crossings, artificial camouflage, particularly complex fortification work, and so forth) and putting it in a condition making its use by the enemy difficult (damaging and destroying bridges and roads and putting up other obstacles).

The signals troops serve to organize communications and ensure control.

Military communications and various types of service ensure the organization of uninterrupted supply and services for the troops.

10. The successful nature of the control of the troops' combat operations is achieved by:

a) the tactical training of the military formations in peace time and the refinement of such in wartime--in a spirit of uniform and mutual understanding;

b) high troop discipline;

c) constant study of the situation and a correct evaluation of it; and a boldly, unhesitatingly adopted and clearly expressed decision;

d) an ability to correctly take account of the political situation;

e) the individual initiative of all commanders, firmness in fulfillment of the assignments they have been set and their display of enterprise in independent decision-making;

f) interaction of the combat and political leadership;

g) the precision and rapidity of the work of the control organs and the maintenance of uninterrupted communications; and

h) personal contact.

11. Existing means of warfare are being developed rapidly, and new weapons are appearing. All this is changing the forms and methods of combat operations, and for this reason commanders and Red Army men are obliged to attentively take into consideration the appearance of the new weapons and tactical methods of the enemy and report through channels their tactical conclusions and observations.

Commanders and political education workers are instructed to take advantage of the intervals between operations for classes in their units for the purpose of training them to handle their weapons, study of methods of combat and political training and education.

12. The complexity and intensity of modern combat and the dispersion and comminution of the modern order of battle make control more difficult, but at the same time urgently demand the planned nature and precision of leadership of the battle. Under such conditions live plan-based leadership is practicable only given a display by the entire order of the battle and all its components, right down to the individual fighter, of the strictest discipline, the greatest enterprise in the achievement of the set goals and initiative.

Firm will and unbending resolve to achieve the set goal are the surest guarantee of success. However, given a fundamental change in the situation, the previously prescribed goal of the operations also may change suddenly. In this event, if time is lacking or there are no communications with the superior commander, the commander is obliged, proceeding from the general goal of the higher formation and the local situation and in connection with adjacent operations, to adopt a bold decision on his own initiative.

13. For a correct consideration of the political situation in all work pertaining to leadership of the troops' combat activity the following is required of the commander:

a) class consciousness and political training cultivated by the practice of leadership and education of the Red Army men and active participation in public-political life and

b) the ability to make correct use at the time of decision-making of the assessment of the political situation of the Red Army's party-political organs.

14. The command maintains the combat capability of its formation by striving for:

a) the class consciousness of the entire personnel, a constant readiness to sacrifice oneself for Soviet power and the cause of communism, a clear understanding of the goals of the war, revolutionary will to win, courage and perseverance;

b) direct contact with and influence on subordinates; inner cohesion, discipline and trust in superiors and political leaders;

c) coordination and skill in the leadership of combat; victories strengthen trust in a commander and the unit's combat capability more than anything; and

d) solicitude for provisions and maintaining the freshness of the troops and the availability of battle reserves before combat and their expedient use in the fighting.

15. Most important means of strengthening discipline are: political work, the inculcation and development of a sense of revolutionary duty, strict observance of general military order in the units, the unswerving and strict demand for observance of the rules of military service and the personal example of the commander and political education worker.

A superior is obliged to maintain in his subordinates by all methods confidence in success and energy and cheerfulness in work and to evoke in them enterprise and resolve. This is essential both at the time of victories and, particularly, in cases of combat setbacks. In respect of those who have suffered a setback, which is a consequence of the inevitable accidents of war, a superior must display particular self-possession.

Chapter II. Military Formations and Their Command Elements

16. Military formations are composed of units of different arms of service; the rifle regiment and rifle division have a permanent strength; the rifle corps consists of two-four rifle divisions. If necessary, military formations are reinforced by artillery, armored, chemical, engineer, aviation and other units. The situation may also demand the temporary detachment or organic units from the strength of military formations.

Temporary tactical formations (advance guard, rear guard and so forth) are formed from units of different arms of service for the performance of auxiliary tactical assignments.

17. The military formation is headed by a commander and commissar. Control of the military formation consists of the HQ, political agency and the chiefs of the branches of the army and services.

The temporary tactical formation, depending on its size, is commanded either by the commander of the military formation or the commander of the infantry (cavalry) unit.

In the event of the sudden loss of the unit commander, his first deputy is the chief of staff and his second deputy is a commander of a subordinate unit appointed in advance by the commander of the military formation. The assistant for political affairs may also be a deputy commander if he simultaneously has the appropriate drill instruction certificate. In the event of the sudden loss of the commissar (assistant for political affairs), his deputies are: in the corps and division the deputy chiefs of the political sections and in the

regiment a political instructor or a secretary of the bureau of the All-Russian Communist Party (Bolsheviks) collective as appointed by the regimental commissar (assistant for political affairs).

18. The commander and commissar (assistant for political affairs) are entirely responsible for the state and combat capability of the military formation.

The commander is personally responsible for operational command of the troops.

The commissar (assistant for political affairs) ensures consideration of the political situation at the time of the commander's adoption of an operational decision and implements the necessary political measures in support of the troops' combat activity.

The commissar (assistant for political affairs) is obliged to be fully informed about the entire combat activity of his formation and all the commander's plans and intentions.

The commander must be conversant with the political work of the formation in order to best ensure the connection of the troops' combat activity and political work to strengthen the political morale of the formation, enhance military discipline and raise its combat capability.

19. The HQ is the element of command for the exercise of troop control and is headed by the chief of staff.

The chief of staff has the right to issue orders on behalf of the commander.

He is obliged to report to the commander his assessment of the situation and the decision ensuing therefrom; and, following the commander's adoption of a decision, to implement measures for its realization.

He has subordinate to him in the rifle corps an aviation detachment, in the rifle division an independent cavalry squadron and in the rifle regiment a platoon of mounted reconnaissance scouts and all the signals units which are a part of the strength of the given formation.

The commander initiates the chief of staff into all his assumptions and intentions, and the chief of staff is obliged to make provision for and opportunely prepare everything the commander needs for the adoption of a decision and its implementation.

Headquarters' duties are:

a) the organization of reconnaissance and observation and the application of other methods for the continuous receipt of information concerning the current situation;

b) study and processing of the information concerning the disposition and combat dispersal of the enemy and its own troops and the terrain for a report to the command and for briefing of the senior officers subordinate to the commander of the units, the political agency, the branches of the army and services, the higher staff and adjacent units;

c) the issuing of warning orders;

d) the drawing up of orders and their delivery to the addressees;

e) organization of the interaction of different arms of service in the combat process;

f) organization of the control of the combat in all its periods, the organization of communications and observation of the precise and timely fulfillment of orders;

g) leadership of the activity of the rear establishments; and

h) leadership of the work of the lower staffs.

HQ performs its work in close interaction with the political agency and the directorates of the chiefs of branches of the army and services.

20. As an integral part of the entire system of troop control, the political section implements the necessary political measures geared to the achievement of the troops' successful combat activity. The political section organizes and performs political work among its troops aimed at the army's grasp of a clear comprehension of the goals of the war and the inculcation of revolutionary duty, class consciousness and a constant readiness to sacrifice oneself for Soviet power and the worker-peasant cause.

The duties of the political agency are:

a) political and organizational leadership of the activity of all subordinate political agencies, commissars and the entire political personnel and also of the formation and unit party organizations;

b) organization of the receipt of information concerning the political morale of its units, of the enemy and of the local population; study of this information for the purpose of adopting the proper political measures and submitting the conclusions to the command;

c) the elaboration and implementation of a plan of political support for the troops' combat activity, its transmission to the military formations (units) and observation of the lower political agencies' precise and opportune fulfillment of instructions;

d) organizational-political and agitation-propaganda work among its troops, among the enemy troops and among the local population;

e) assistance to the appropriate organs in their work on organizing revolutionary committees and maintaining contact with the latter and the immediate organization of revolutionary committees in a locality cleared of the enemy;

f) general leadership of measures connected with the strengthening of the political morale and those exercised along political section and or agency lines: punitive, court, surveillance; and

g) exerting political influence and ensuring the correct class line in all spheres of military work and the life of the troops.

The political agencies' entire activity should proceed in close connection and interaction with the HQ and directorates of chiefs of the branches of the army and services.

21. The chiefs of special arms of services (in the division and corps: artillery and engineers) are the assistant commanders of the military formation for the combat use of the corresponding units. They are the direct chiefs of the units of the corresponding arms of service which are a part of the formation and temporarily attached and the technical leaders of all units of the formation for the corresponding type of activity. In the event of the attachment to a military formation for combat operations of a unit of an arm of service which is not a part of the formation, its commander acts as chief of this arm of service.

In the rifle corps and rifle division the chiefs of the arms of service and the senior signals officer act as chiefs of the corresponding supply services. In the rifle regiment the duties of chiefs of artillery and engineers are performed by the commanders of the regiment's corresponding special units.

22. The chiefs of services (chemical warfare, supplies, medical and veterinary) are in all respects directly subordinate to the military formation commander and in the sphere of technique of performance of the service carry out the instructions of the chiefs of the corresponding services. The chiefs of the services provide the troops with everything necessary and service them, in compliance with the commander's operational decision, in accordance with the instructions of the formation's chief of staff.

In the rifle regiment the supply services--artillery, chemical warfare, technical and quartermaster supply--are integrated by the assistant regimental commander for administrative affairs.

The senior signals officer and chief of the staging-transport service (in the corps) are subordinate to the formation's chief of staff.

Chapter III. Decision-Making

23. When studying the assignment he has been set or adopting an independent decision, the commander ascertains: the general goal of the actions of the higher formation, his assignment and its connection with the assignments, of adjacent units.

When studying the situation, the commander, from the viewpoint of the set assignment:

a) evaluates the disposition, actions, forces, strength and condition (political-moral and physical and in the supply respect) of the troops of the enemy and his own military formation and also the sociopolitical condition of the population of the area of combat operations;

b) determines to what extent the nature of the terrain, state of the weather and time of day and year impede or favor fulfillment of the assignment;

c) compiling all the data of the situation, determines how all these data in aggregate will be reflected in the fulfillment of the assignment (to what extent they will complicate or facilitate its fulfillment) and which of them require special measures; and

d) ascertains how much time will be needed for the performance of his assignment and how to ensure this time for himself.

In the assessment of the situation and the conclusions concerning the disposition and measures of the enemy the commander is greatly helped by a knowledge of the enemy's tactics and the attributes of his troops and their command staff.

On the basis of the evaluation of the enemy the commander determines the nature of the formation and dispersal of the order of battle, explains the disposition of its main grouping and determines by the defeat of which part of the enemy forces his overall defeat will be predetermined.

The result of the evaluation of the situation is a decision which incorporates: determination of the immediate goal of the operations (the immediate and further task); the distribution of forces for the main and auxiliary assaults; and determination of assignments for individual military formations (units) and technical means.

The commander should make the final evaluation of the situation and adopt a decision in the presence of the commissar (assistant for political affairs) and the chief of staff. The absence of the commissar (assistant for political affairs) must not delay the adoption of a decision. On questions of the use of special arms of services the commander receives, if he finds it necessary, the reports of the chiefs of arms of services, who prepare accurate and exhaustive estimates. Simultaneously the formation commissar (assistant for political affairs) notifies (report to) the commander of the political assessment of the situation. The commander adopts the decision personally.

24. The commander's decision determines: precisely the immediate task of the formation, the method of operations, the main and secondary sectors, the stages of the combat in terms of depth, distribution of the units by sector and by stages of the fighting (by echelon) and their tasks.

For the purpose of the speediest formulation of the decision as an order (orders) and its transmission to his troops and the timely elaboration of measures in support of the outlined combat operations the commander should, where possible, effect the final formulation of his decision in the presence of the persons directly elaborating the orders and measures for combat, political and material support of the operations of the military formation.

Incomplete information concerning the situation does not relieve the commander of responsibility for failure to adopt a timely decision. Deciding on nothing at all or deciding inopportunely is worst of all.

The rapidity of changes in a situation requires a commander continuous study and evaluation thereof (before the battle, during the battle and after the battle) and an ability to opportunely adopt independent decisions dictated by the situation without waiting for directives and instructions from his superior.

The commander immediately reports all decisions adopted on his personal initiative to his superior and notifies the adjacent units.

25. On the basis of the commander's decision the military formation HQ, political section and chiefs of branches of the army and services draw up a plan of operations in detail depending on the nature of the combat and the time available.

The battle plan drawn up by HQ incorporates:

a) the assignment of the given formation and the distribution of forces and resources per sector and the formulation of individual assignments for the executants (in conformity with the commander's decision);

b) distribution of the troops' efforts in depth per position; the sequence of the capture of positions during an offensive and the order of destruction of the enemy per position during defense;

c) organization of the interaction of different arms of service at different stages of the fighting and per position;

d) reconnaissance measures;

e) security and air and anti-gas defense measures;

f) the organization of tactical control and communications; and

g) measures for establishing rear services.

The battle plan is not a special document; it is expressed in operational documents, which are explained in Chapter V, and notes (if necessary) of staff commanders and formation (unit) commanders.

Chapter IV. Organization of Control in Combat

26. The manifold conditions of the situation determine various forms of control. The more the time for preparation for combat (for example, an offensive against a defending enemy), the more control is centralized; and, conversely, the less the time for preparation, the more control is decentralized (for example, in a meeting battle). Control is modified also in different periods of the fighting in conformity with the situation, for example, centralized control in the period of an offensive against a fortified enemy switches to decentralized control in the period of breakthrough and pursuit; and, conversely, decentralized control at the time of the rapid development of operations at the start of a meeting battle could in its subsequent development be modified into centralized control.

In the period of operations of a military formation it is sometimes necessary to combine in some sectors centralized and in others decentralized control. Where in accordance with the situation control cannot be centralized, the subordinate commanders are accorded complete independence of action, with the formulation for them of a certain goal of the operations.

The better control is organized, the greater the probability of winning the battle. Together with this the success of the battle depends to a considerable extent on the subordinates' capacity for a bold and immediate display of initiative in all instances of a breakdown in communications with the superior officer and an interruption of control on his part.

27. The organization of control in combat is formulated and undertaken by the military formation HQ.

For the organization of plan-oriented control it is necessary to provide for:

a) per stage of combat and position: command posts of the military formation commander with observation posts for personal observation or observation thanks to other persons and auxiliary observation posts;

b) the organization of a signals service in accordance with the battle plan and the control procedure, namely, a calculation of the forces and triple-throw means of communications, communications at the command posts, methods of transmitting the commander's decisions in the process of the battle, the procedure of the use of liaison agents and a single system; and

c) the collection of data on the enemy and the operations of his troops from military units and the security and reconnaissance organs.

The control methods expounded here are modified under different conditions of the combat situation.

28. Personal observation of the battlefield affords a commander an opportunity to see the intensity of the battle and, comparing his observations with the information coming in by various routes (from subordinates, adjacent units and the superior commander), to adopt the decisions most in conformity with the situation. Personal observation, the terrain permitting, alternated with observation by the staff commanders should be continuous throughout the battle. The commander of the military formation (divisional and regimental commander and sometimes corps commander) exercises control in combat from a command post consisting of a concealed location for the HQ, a communications post and the main observation post.

The command post is chosen at a distance from the forward units of the order of battle which enables the commander to personally see from the observation post the fighting of the units in the main sector.

In order for the observation to encompass the battlefield most fully auxiliary observation posts are selected, observation from which is performed by the formation staff commanders.

The command and observation posts are transferred depending on the progress of the battle. The chief of staff gives instructions in good time concerning their location to the formation's senior signals officer, who organizes communications at these posts up to the time when the commander and the observers reach them.

29. Huge significance in control is attached to the military formation commander's personal contact with subordinate commanders and the troops. Personal contact with subordinate commanders aimed at achieving a clear understanding of the set assignments and the plan for their fulfillment is made at any opportunity (direct telephone conversations if organizing a call on subordinates or summoning them to oneself are not possible).

30. In battle the formation commissar (assistant for political affairs) is stationed together with the commander at the command post. In instances when special measures are needed to strengthen the fighting men's stanchness and arouse fervor the commissar takes advantage of all opportunities to be among the fighters at the most important points of the battle.

31. The troops are notified of the plan of battle, for the timely organization thereof, in a certain procedure. First of all, immediately upon receipt of the assignment or reports eliciting decision-making the troops are warned of impending operations by warning orders. Immediately a decision has been adopted, for the purpose of the speediest realization of preparatory measures (for example, occupation of the initial position, the dispatch of reconnaissance and so forth) each executant is issued personal orders, sometimes in the form of warning orders. In the wake of this, immediately upon compilation, a general order (if necessary, with the enclosure of the operational timetable and a local reference map) is issued.

In the course of the battle the operations of units of the order of battle are regulated by individual orders.

32. Code signs (by colored flares and audio signals) are established for denoting the start of operations (an attack), for putting up a general smokescreen, upon the infantry line being reached (for the transfer of artillery fire), to request artillery fire and to hoist a general gas alert. A combination of a number and special color of flares is determined for each sign. The signals, which are determined by the senior signals officer, may not be prescribed by subordinates.

Besides the determination of code signs, for denoting the fact that certain positions have been reached HQ determines, in accordance with the situation and at different stages of the combat and positions, upon the dispatch of situation reports and also the dispatch to units of commanders from HQ (liaison agents) for the transmission of instructions or to ascertain the situation.

The locations of the command posts at all stages of the battle, the code signals and the time of the dispatch of situation reports should be known to the entire command staff of the formation, and the gas-alert signals to the rank and file also, and for this reason they are shown in the order and the operational timetable.

33. Continuous and plan-geared combat control is ensured by the signals service. The signals service must operate reliably (without failure and interruptions), faithfully and opportunely transmitting the necessary instructions, messages and so forth. The continuousness of the signals service is achieved by the simultaneous use of various means of communication (for example, the telephone, messengers, signals, liaison agents and so forth).

Communications are established:

a) from the senior officer to subordinates;

b) between adjacent units--right to left and from the rear to the front; and

c) between units of different arms of service--from the special arms of service to the infantry (for example, from artillery to the infantry and cavalry) and from the cavalry to the infantry.

If communications in accordance with the said rules are not established or are disrupted for some reason or other, each commander himself looks for communications with his superior and adjacent units, without waiting for communications to be established in accordance with the above-indicated rules.

The organization of signals in a military formation is undertaken by the senior signals officer, who is subordinate to the formation chief of staff.

To achieve the correct nature of the organization of signals and their continuousness the available communications forces and resources are numbered in three groups: operational, ready for operation and closing down. In each sector communications are established by several means (duplication of communications facilities). For the correct nature and timeliness of the organization of signals the senior signals officer is obliged to reconnoiter well ahead of time the sectors in which it is proposed to install communications.

The means of communication are used strictly in accordance with the situation and their properties. This use must with the development of operations provide a gradual improvement in and strengthening of the organization of communications with the enlistment of increasingly more means thereof.

The use of radio communications is authorized only given the complete impossibility of the use of other means and solely in the combat process or given complete encirclement by the enemy. Transmitting operational orders and messages concerning adopted decisions to military formations from the division and above, other than in a case of complete encirclement, is emphatically forbidden.

Chapter V. Operations Documents

34. Battle instructions are divided into:

a) operation orders and directives: general, pertaining to the entire formation, and individual, pertaining to individual executants;

b) warning orders issued to ensure the timely preparation of subordinates for impending operations; and

c) operational timetables and local reference maps appended to the orders.

35. The operation order incorporates a brief description of the situation and that which must be unconditionally and precisely fulfilled by the formation and subordinate units and also the assignments of each arm of service, namely:

1) the conclusion concerning the situation (description of the disposition and operations of the enemy);

2) the mission of the superior formation and adjacent units and the dividing lines with the latter;

3) formulation of the general assignment for the military formation and also subordinates' individual assignments, with indication of the attached forces and resources, time of the operations and the dividing lines;

4) security (when necessary);

5) assignments for air and anti-gas defense units; and

6) the commander's command post and as of when.

The order pertaining to political affairs (determining measures in support of the commander's operational decision) is drawn up by the formation's political agency and issued with the signature of the formation commissar.

Where necessary, an order is issued--an injunction or appeal--formulating the political tasks of Soviet power and the duties of the entire formation personnel in accomplishing them. Such an order is issued with the signatures of the formation commander and the commissar.

Directives pertaining to reconnaissance, communications and the organization of rear services are given to executants by the chief of staff.

An order must be concise. Vague expressions, justifications and the copying out of regulations are not permitted in an order.

The general operation orders of military formation commanders should for preference be written. Individual orders may be written and verbal. Orders issued and received verbally are recorded by HQ. In some cases diagrams containing brief explanations and charts may be substituted for orders.

36. Directives are issued in cases where the continuousness of control is impossible as a consequence of the difficulty of maintaining communications and to the formations which receive a multiday assignment for operations independently.

The directive indicates:

1) the conclusion concerning the situation;

2) the goal of the operations of the entire formation;

3) the goal of the operations of the executant; and

4) general desires of the superior commander concerning the nature of the activity of his subordinate (if necessary).

37. Warning orders are issued to warn the troops of impending operations and for the completion of all measures preparatory to the operations. Warning orders, which are issued prior to the military formation commander's adoption of a decision, should be of a form and content not predetermining the impending decision.

38. For the purpose of setting forth one's assumptions concerning the course of the combat, determining interaction between arms of service by stage and position, coordinating operations between individual units and organizing control in the combat in the process of its development, where necessary, an operational timetable is appended to the order or sent out in addition.

The operational timetable incorporates:

a) division of the fighting by stage;

b) the assignments of the military formations (units) and special arms of service in terms of positions and times;

c) the procedure of control of the special arms of service per stage of the fighting (centralized or decentralized) and the procedure of their movement;

d) when to send situation reports;

e) code signs for denoting the start of operations, reaching positions, transferring artillery fire, requesting artillery fire and raising a general gas alert; and

f) the locations of the formation commander's command posts per stage of the fighting.

Under conditions close to position warfare the times (in terms of positions) are determined precisely, in mobile warfare approximately.

39. A local reference map is appended to the operational timetable or sent out in addition on which is plotted the disposition of enemy units and individual elements of his defense zone. This map supplements the topographical chart with conventional signs--reference points facilitating the orienting of individual targets in the course of the fighting both on the offensive and on the defensive.

The local reference map is compiled by the military formation HQ on the basis of data gathered by all types of reconnaissance and sent out to all executants through company and battery commanders inclusively.

40. Operation instructions are issued in order of subordination. If in certain instances a commander, to avoid losing time, finds it necessary to issue an instruction which bypasses his immediate subordinate commander, he notifies the latter of this. The subordinate who has received the order executes it and simultaneously reports receipt thereof to his immediate superior.

Execution of any operation instruction must be checked; for this the executant notifies the staff of the superior commander of all his instructions issued in execution of an instruction he has received; the latter is obliged to inquire of the staff of the executing officer whether notification has not been received for some reason or other. Verbal instructions to recipients are repeated; if a verbal instruction is sent via a third person, the latter repeats it upon receipt and return.

41. Reports (to a superior) and notification (for adjacent units) are most important documents affording an opportunity for correctly determining the situation and adopting an expedient decision. The principal merit of any report and notification is authenticity and timeliness. A report should briefly answer the questions of: a) whether the enemy has been detected or not; b) when; c) where; d) of what kind, how many, how dispersed; e) what he is doing and has done; and f) what the reporting officer is doing or intends doing. The reports accurately indicate the source of the information (own observation, reports of subordinates, local inhabitants, adjacent units). Reports and notifications are dispatched predominantly in written form. Verbal reports and intimations are obligatorily recorded upon receipt. What has to be reported and when is determined by the situation, but it is obligatorily necessary to report: the establishment of contact with the enemy or his absence in the location he was assumed to be in; fulfillment of a set assignment; and a surprise enemy attack. Reports for whose submission a time is specified are termed periodic. The times and positions for submission are determined by the superior commander. Information necessary for a superior commander's comprehensive notification of subordinates and adjacent units is transmitted in the form of periodic intelligence summaries and operations reports, which, together with systematically expounded information, provide conclusions. The reports are submitted, as a general rule, strictly in order of subordination: to one's immediate superior or to him to whom, albeit temporarily, the sender of the report is directly subordinate. In addition, information concerning the enemy is communicated directly to the units threatened by the enemy.

42. The operations document must have a signature, number and the indications: 1) to whom it is being sent; 2) of time and place of compilation; 3) of the scale of the map which was used; and 4) of the time of dispatch. The addressee is designated either by position or name (if caution is necessary). The time of compilation is put down by the signatory at time of signing.

Upon general distribution of the text it is necessary to thereupon combine at one post everything pertaining to one and the same subject.

Upon compilation of a document it is necessary:

a) to strictly coordinate the names of the inhabited localities and terrain features with the map and not allow them to vary; when using foreign maps, to write names in the same characters as have been inscribed on the map and designate Russian pronunciation in parentheses; and when itemizing, to separate inhabited localities and terrain features by commas;

b) if the same names of localities or localities without names are encountered, they should be oriented in relation to the nearest large inhabited locality or sharply distinguished terrain feature according to the map;

c) to designate roads by an adequate number of inhabited localities, being particularly thorough in designating intersections;

d) to designate the sides of inhabited localities by cardinal points and the banks of rivers by the flow or by cardinal points;

e) to indicate terrain sectors and the disposition of one's own and enemy troops, beginning with one's own right flank; and

f) to indicate directions, instead of to the right, to the left and so forth, by cardinal points; this being impossible, to always designate right and left by one's hand, facing the enemy.

Chapter IV. Combat Security for Troop Operations

1. Reconnaissance

43. The gathering of information on the situation is a general duty of all military units, directorates and individuals in all instances of combat activity. All information on the situation (particularly on the enemy), by whoever it was obtained, is immediately conveyed to the superior commander and communicated to his and adjacent units. The most insignificant information often when juxtaposed to other information affords an opportunity for drawing correct conclusions; for this reason emphatically everything that has been obtained is communicated to the officer in charge.

Information is gathered on the enemy, the terrain, the population and local resources. Every commander of a military formation is obliged without waiting for instructions from above and regardless of whether reconnaissance has been sent out by the superior commander or not, for the gathering of information to reconnoiter by reconnaissance or specially appointed units and to conduct reconnaissance continuously throughout the breadth of the zone of operations of the formation and on the flanks.

The breadth of the reconnaissance front is determined by the mission of the military formation and the nature of the terrain.

The depth of the reconnaissance is determined by the possibility of obtaining from reconnaissance information so well ahead of time as to allow a commander to use it to adopt a decision.

44. The reconnaissance of a military formation is effected by:

a) aerial means (aircraft and captive balloons);

b) small cavalry units organic to units of a rifle division;

c) reconnaissance detachments from units of different arms of service and infantry units;

d) personal observation or thanks to the reconnaissance and observation of staff commanders and special service commanders;

e) means of communication;

f) political organizers;

g) agents; and

h) study of captured or found new items of armament of the enemy.

Units of arms of service incorporated in a military formation conduct reconnaissance for themselves with their own resources.

In addition, information is gathered by interrogating prisoners, deserters and the local population and studying foreign newspapers, correspondence and papers found on those who have been killed, deserters and prisoners.

45. Reconnaissance of the enemy is organized for specifying the available information on him. Aerial and agent reconnaissance shows the general disposition of the enemy's forces. Mounted reconnaissance accompanied by aerial reconnaissance specifies these data, particularly by way of the capture of prisoners. The disposition of the enemy is detailed even further by operations of the forward units. It is essential to establish the numbering of the regiments by the capture of prisoners. Infantry, artillery, engineer and other forms of reconnaissance should ascertain the dispersion of the infantry in the enemy's order of battle, right down to battalions and companies. Equally specific data on the enemy cannot be obtained under differing conditions of a combat situation: in a meeting battle this information will be minimal, but in an offensive against a defending enemy should be exhaustive. Contact which has been established with an enemy must not be broken. All possible forms of reconnaissance (reconnaissance in force, capture of prisoners, infantry and mounted reconnaissance) should be employed to obtain information on the political condition of the enemy's troops.

46. Reconnaissance efforts should not be scattered. The main efforts should be geared to ascertaining or verifying what is unclear or a link in the enemy's disposition which, following its reconnoitering, makes it possible to draw a definite conclusion concerning the entire disposition of the enemy. This is

best achieved by the taking of prisoners for interrogation in certain sectors. Upon ascertainment of the numbering of the regiments it is essential (chiefly by infantry and aerial reconnaissance) to establish the dispersion of the infantry (battalions, companies) of the enemy. In a meeting battle it is important first to determine the distance and front of the movement of the enemy and subsequently his disposition also.

47. When organizing reconnaissance it is essential to achieve its continuousness, the rapidity and security of the delivery of the reports, the interaction of the reconnaissance organs and possible economies in the expenditure of reconnaissance resources in order to maintain a reserve making it possible to additionally move up new reconnaissance organs when this is required by the course of operations.

The expedient organization of reconnaissance depends to a considerable extent on a sound knowledge of the enemy's tactics and his normal requirements.

48. The formation HQ compiles the reconnaissance plan, which establishes:

a) the goals of the reconnaissance in accordance with the mission of the formation and available information on the enemy;

b) for the achievement of which goal which reconnaissance unit is appointed, with indication of the front of the reconnaissance of each unit, the line up to which the reconnaissance should be carried out, the time of the reconnaissance, in what area prisoners for interrogation should be taken and so forth; and

c) the method of the delivery of the reports from the reconnaissance units.

When the plan is being drawn up, account should be taken of the tasks of the reconnaissance of the special branches of the army and services and also of the political organizers.

The reconnaissance plan is developed constantly as new information is accumulated.

49. The reconnaissance organs are set assignments by an order of the chief of staff, which incorporates:

a) information on the enemy;

b) information on the dispatch of one's own and adjacent-unit reconnaissance organs;

c) the mission of the given reconnaissance organ;

d) to whom, whither and how to send the report; urgent measures; if it is contemplated setting up an intermediate communications center, the location of it; and

e) if necessary, the prearranged signals for communications with aircraft.

The mission of the military formation is communicated to the chief of the reconnaissance unit only to the extent to which this is necessary for his correct elucidation of the reconnaissance mission and only in verbal form.

50. Terrain reconnaissance is aimed at determining its attributes and degree of influence on the disposition and operations of the troops. It is usually carried out simultaneously with reconnaissance of the enemy by the same organs.

Reconnaissance of the population and local resources is aimed at ascertaining the class stratification, political sentiments, particularly the attitude toward the belligerents, economic well-being and medical and veterinary safety.

51. Organic aviation reconnaissance in the enemy's service areas for the purpose of determining his operational disposition is carried out depending on the mission of the military formation and possible changes in the enemy's operational disposition to a depth of up to 4 days' march.

Reconnaissance of the battlefield is aimed at ascertaining in detail the disposition of the enemy's forces and resources for combat and his movements in the course of the fighting.

Organic aviation carries out reconnaissance by means of observation and photographic survey. A number of missions (no less than two per day) in the same areas or sectors is usually required to reveal by means of aircraft the disposition and direction of movement of the enemy.

Captive balloons are used for observing the battlefield and assigned to artillery.

52. Organic small cavalry unit reconnaissance (in a rifle division and rifle regiment) is usually carried out by individual mounted patrols, varying in strength from a squad to a platoon, in certain sections (routes). The depth of the reconnaissance is up to 15 kilometers (half a day's march) in a rifle regiment; up to 30 kilometers (1 day's march) from the security forces in a rifle division. With the establishment of close contact with the enemy organic small cavalry unit reconnaissance is carried out on his flanks. The reconnaissance is carried out in accordance with Cavalry Combat Regulations, part III.

53. Reconnaissance detachments from units of different arms of service are sent out to obtain information on the enemy by means of combat or for confusing the enemy concerning the disposition of one's own troops. Their strength and composition depend on the mission. The reconnaissance detachment is serviced by aircraft.

Infantry units for military reconnaissance are usually employed at a distance of up to half a day's march, mainly for raids, with artillery support.

The principal aim of the raids is the capture of prisoners for interrogation.

54. The personal reconnaissance of the military formation commander affords an opportunity for verifying the information that has been obtained on the disposition of the enemy and the terrain and thereby acquiring for himself the most complete idea of the conditions under which the planned combat will proceed.

55. Reconnaissance by means of communication affords an opportunity for:

a) determining the location of operating radio sets of the enemy and, in accordance with them, the location of the HQ and disposition of the enemy's forces (traffic analysis and position finding); and

b) receiving operational and other radiotelegrams of the enemy and various instructions, reports and conversations by radio and telephone (wire) disclosing the situation and also intercepting enemy press reports (radio intercept).

56. Agent reconnaissance is the basic means of strategic reconnaissance of the deep rear of the enemy and a most important means of reconnaissance in the process of individual operations and an auxiliary means in tactical operations. Agent reconnaissance is guided in its work by special sets of instructions.

It is carried out in complete interaction with other forms of reconnaissance and as part of the general reconnaissance plan.

57. Reconnaissance of branches of the army and services (infantry, artillery, engineer, chemical warfare, communications and such), which is organized by the corresponding senior officers for obtaining information necessary for the fulfillment of the assignments set them by the military formation commander, must be coordinated with the military reconnaissance by the formation HQ. All the information obtained by the reconnaissance of the branches of the army and services is obligatorily sent to the formation HQ, and, in addition, the branches of the army and HQ immediately reciprocally exchange information obtained by their reconnaissance which is both of interest and essential to other arms of service.

58. Interrogation of prisoners and enemy deserters is one of the most principal means of reconnaissance of the disposition, movements and intentions of the enemy and also of the condition of his troops. The following rules of interrogation are recommended:

a) upon capture, all papers should be taken from the prisoners (deserters), and the prisoners taken to HQ under escort; en route the prisoners should be prohibited from speaking to one another and with the escort; officers and NCO's should be separated from rank and file soldiers and from one another;

b) the interrogation should take place as soon as possible after capture, before the prisoner has had time to think out his answers; the interrogation should be conducted one at a time, in separate premises, in the form of a simple conversation and as little as possible should be noted down in the prisoner's presence; if it is discovered that the prisoner is lying, this should be made known to him immediately; and

c) each HQ should interrogate the prisoner only for information which could outline the situation at the given moment in the area of operations of the military formation; the prisoner is then sent immediately with the confiscated papers to a superior HQ.

No information from the interrogation may be taken on trust but must be compared with the data of the interrogation of other prisoners and deserters and data obtained by other means of reconnaissance.

2. Security

59. The tasks of security are:

a) to avert a surprise enemy attack;

b) to prevent the reconnoitering of the disposition of one's own forces; and

c) in the event of a clash with the enemy, to ensure for one's own forces the time needed to take up a position corresponding to the situation.

These tasks are performed by the reconnaissance units, which detect the enemy well ahead of time, and special units specially appointed for security (security units).

60. In whatever situation the troops may be (whether the enemy is close by or far off), they should always have the appropriate security.

Depending on the situation and the operations of one's own troops, security is divided into:

a) march security;

b) security at the halt; and

c) combat security.

In addition, all units of all arms of service post direct security on all sides.

All arms of service may be appointed to the security forces, depending on the situation. In prescribing units for security it is essential to strive for strict economies in forces; expenditure on security fluctuates from one-ninth to one-third of all the forces of a military formation.

3. Air and Anti-Gas Defense

61. The development of aviation requires of each unit the adoption of measures for timely warning of impending danger and its repulse.

Air defense under the conditions of modern warfare is of exceptional importance and is employed by all senior officers in all cases of a combat situation. Means of air defense are:

a) the aerial observation, warning and liaison service, which is effected by way of the setting up of a network of observation posts (sometimes reinforced by sound-locating stations and by way of the proper organization of liaison and warning of an air enemy;

b) concealment and dispersion of disposition;

c) anti-aircraft fire (anti-aircraft artillery and AA machineguns) and infantry fire; and

d) fighter aircraft operations.

Aerial observation is organized such that it encompass the whole horizon and so provided with specially allocated means of communication that the troops have time to employ measures of concealment, protection and struggle against an air enemy prepared in advance.

The military formation's air defense plan is drawn up by its HQ. The assignments of the anti-aircraft artillery and AA machinegun units and fighter aircraft are set by the formation commander.

Artillery anti-aircraft defense is organized by anti-aircraft artillery battalions or specially mounted 76-mm division artillery gun batteries.

The anti-aircraft artillery battalion (3 batteries) is capable of covering with dual-layer fire (the fire of two batteries) an area of up to 8 kilometers along the front and up to 7 kilometers in depth.

Two anti-aircraft mounted 76-mm field gun batteries can cover a sector up to 5 kilometers long and 1-2 kilometers wide.

62. Anti-gas defense is organized given any situation and is effected thanks to:

a) special mounted observation and liaison patrols;

b) the meteorological service;

c) our troops' active operations undertaken for the purpose of foiling a gas attack being prepared or carried out by the enemy;

d) the appropriate dispersion of the troops and rear establishments;

e) provision of the troops with anti-gas protection technical equipment;

f) the antichemical installation of shelters and premises;

g) decontamination operations;

h) medical and veterinary support; and

i) precise and unswerving observance of the rules of behavior established in the event of an enemy gas attack (chemical discipline).

The anti-gas defense plan is compiled by the military formation's chief of the chemical warfare service. The directions concerning air and anti-gas defense stipulate special instructions.

Chapter VII. Political Support for the Troops' Combat Activity

1. Tasks of Political Work

63. The main task of political work in the Worker-Peasant Red Army is ensuring and strengthening the combat capability of the Red Army as the armed support of the proletarian dictatorship.

This is achieved by the entire activity of the political organizers as most important conduits of the guiding influence of the proletarian leadership in the army, measures of an organizational-political nature and agitation-propaganda work providing in the army for proletarian leadership and the correct pursuit of class policy.

64. The basic task of agitation-propaganda work is inculcation in the army personnel of: the unconditional trust, devotion and cohesion of the entire personnel around the slogans and ideas of Soviet power, the masses' correct understanding of the leading role of the proletariat in the worker-peasant alliance, a correct understanding of the class aims of war and the international interests of the working class and all exploited people and also revolutionary will to win. All agitation-propaganda work in wartime should correspond to the demands of the strictest preservation of a military secret.

65. Political work should be based on the continuous and timely consideration of all details of the combat and political situation and on close liaison and interaction with the command and HQ.

Work on political support for an operation (combat) conducted by the political organizer and political staff is expressed in measures which encompass all one's own troops and also the troops of the enemy and the population of the frontal zone.

2. Political Work Among the Troops

66. All organizational-political and agitation-propaganda work in Red Army units in support of an operation and combat, proceeding from the general task--strengthening the combat capability of the Red Army as the support of the proletarian dictatorship--must contribute to the most successful accomplishment of the practical tasks which confront the units at each stage of the combat.

67. Political work must always be based on a knowledge by the leading personnel of the general condition (characterization) of the subordinate formations and units. The basis of the characterization of a unit are the sociopolitical data

of its personnel (age, party, social, national composition) with regard for political-economic information on the area in which the unit was built up to strength or whence it obtained a reinforcement.

Study of the general condition of the unit should lead to an evaluation of its political morale and combat readiness in terms of the following basic points:

a) state and mood of the Red Army men both politically and in connection with combat hardening and involvement, the results of previous combat and the singularities of the personnel of the unit and arm of service;

b) mutual relations within the personnel;

c) the service and personal mood (the intra-army mood and that connected with the state of the home); and

d) the state of the political organizations and their authority and influence.

68. A most important condition of the troops' combat capability is their strong and stable political morale.

Considering in this connection the entire significance of favorable administrative conditions (material support, concern for the wounded, concern to provide the necessary comforts during rest) and timely measures in this sphere, the political organizers are obliged to establish such organizational interaction and influence in the day-to-day work of the entire servicing machinery as ensures the material-everyday well-being of the unit, putting before the command or HQ the necessary measures to this end.

69. The political organizers and political personnel are obliged to immediately (both by way of communication with the command and by way of direct contact with the masses and study of their mood) reveal all complications which have confronted a unit at a given moment. Having ensured the removal of negative sentiments via the system of political mass work, the political organizers and political personnel must also display initiative in the business of the appropriate organs' implementation of the necessary administrative, organizational and economic measures. The command must be informed immediately of all negative phenomena.

70. Any deserter must be regarded as a traitor and betrayer of the cause of the working people and his comrades. In the struggle against desertion it is essential, relying on the public opinion of the Red Army personnel, to employ the severest punitive measures.

71. A display of heroism, intelligent initiative, operational enterprise and self-sacrifice for the sake of the common goal should be commended by the commanders, political organizers and political personnel by the appropriate measures of encouragement. Red Army units and the working population of the USSR should be extensively notified of all these cases and of the valiant exploits of entire units.

72. For strengthening the combat capability of the units and formations great significance is attached to the correct distribution of the proletarian stratum in the personnel.

The unit's proletarian density is raised, as a general rule, thanks to replenishment.

Following coordination with the command, a regrouping of the party personnel is permitted in exceptional cases.

73. In connection with the increased scale of agitation and propaganda and the enhanced significance of technical means (motion pictures, radio and so forth) the political organizers must pay special attention to the correct distribution and use of the political education supply forces and organization. The political organizers must strive here for the fullest possible provision of the decisive axes and sectors with agitation forces and resources, strictly considering the national, social and cultural level of individual contingents of the army, the local population and the troops of the enemy.

By its own resources a corps' political section publishes and distributes a newspaper and pamphlets directly in the regiments and individual units.

All available possibilities and means (HQ communications, messengers from the units and so forth) should be used for newspaper and pamphlet distribution in the regiment.

74. The political organizers and political personnel must use all means for organization, observation and work with the personnel on supply routes. In all the work performed in the service areas it is essential to pay particular attention to counteracting panic, rumors, incorrect information from the wounded about the course of the fighting and so forth.

The political agency organizes political work with the contingents enlisted by a given formation in defensive operations, using to this end the forces and resources of local civilian organizations.

75. In choosing the methods and means of agitation and propaganda the political and command staff must always conform strictly to the general situation, the condition of the Red Army men, the degree of their fatigue and their requirements.

In a direct combat situation decisive significance is attached to the personal example of the commander, political education worker, communist and Komsomol member. For this reason the commanders, political organizers and political education workers must always support and encourage the personal decisive initiative and combat example of each brave fighter both on an offensive surge and in perseverance during defense and by personal example and participation in the fighting influence the Red Army masses for the purpose of achieving operational success. The success of political influence on the fighters is directly dependent on the personal behavior of the political education worker in combat. For this reason a display of decisiveness and boldness in attack, preservation of intelligent self-possession and sang-froid under difficult

conditions and personal presence at the most difficult moments of the combat situation in the front line of the battle are an indispensable condition for political education workers of all levels.

76. When preparing an offensive all the attention of the political organizers and all political work should be directed toward the main goal--explaining the importance of the offensive, thereby creating a definite political mood and focusing attention on the methods needed in battle.

In performing common work on preparing an offensive among all Red Army men the command and political staff and political organizations must together with this prepare in advance all the model, stanchest and most exemplary fighters for rapidly winning the sentiments of the masses and leading them behind the commander at the decisive stages of the combat.

A negative influence on the mentality of the fighters could be exerted by any event arising in the process of the battle (the enemy's use of unfamiliar means of fighting or means aimed at producing a psychological effect). It will be the task of the command and political staff and the entire party-Komsomol nucleus in such cases to maintain by an example of calm and stanchness self-possession and stanchness among the Red Army men.

In defense the political organizers must develop its stubbornness in every possible way. In the event of an enemy breakthrough, the political organizers (political fighters) help raise the courage and stanchness of the fighters, who have to trap the enemy in a pincer of fire and thereby provide for counterattacks from deep. In the event of a breakthrough, the political organizers must render the command decisive assistance in the organization of fire defense by HQ personnel, the political organizers themselves, directorates, establishments and rear units.

77. Direct supply in the field is of tremendous significance. Political work among the personnel providing for supply in the field should inculcate a high consciousness of responsibility, stanchness, precision and dispatch.

78. Disengagement under any conditions must proceed in organized and planned manner. The political personnel and political organizations must take into consideration in their work the corresponding change in the situation and impart the proper direction to political agitation, endeavoring to ensure both the planned nature of the disengagement and the accomplishment of the impending new task (transition to a position of defense and counteroffensive).

A most important condition of the task of political support for disengagement is the maintenance of communications and the interaction and precision of the work of the command staff, political personnel and political fighters. Without losing his presence of mind for one minute, the person in charge of the political personnel must be present in the places where displays of weakness and panic are to be expected most.

Following the disengagement, when the entire personnel is in a state of extreme fatigue, it is essential together with the granting of possible physical relaxation to also employ forms of work which ensure moral relaxation and avert indifference and depression.

3. Political Work Among the Population

79. The main purpose of organizational-political and agitation-propaganda work among the population is the channeling of the entire activity and efforts of the local organizations and population toward utmost support for the victory of the Red Army.

This goal is achieved by work among the population expressed in political agitation and propaganda, political support for the successful and correct performance of obligations, the correct organization of material assistance to units on the part of local authorities and the population and the establishment of the military authorities' correct mutual relations with the local organs of power, public and political organizations and the population.

80. The correct organization of work among the local population demands the political organs' familiarization with its political condition and also with all the issues affecting the interests of the local population. This familiarization should be based on a systematic study of the corresponding areas of the formations' disposition.

The results of the study of these areas and the local population should provide the basic conclusions directly necessary for the work of the command, political organizers and political personnel on the following questions:

a) the general economic condition of the area;

b) the national and class composition of the population;

c) the material position of different social groups of the population; and

d) the political condition of the area (sentiments, political groupings, attitude toward the war and the Red Army).

81. A most important task of the political organs and political personnel is rational use of the initiative and endeavors of the local organs of power and public organizations to assist the cause of victory. All questions affecting the interests of the population and the work of the local organs of power and the public organizations should be settled by the command and the political organizers with the participation of representatives of the local authorities. All measures connected with work among the population are implemented by the local soviet and public organizations with the active participation of the political organizers and political personnel.

82. The duties of the army's political agencies include:

a) a display of guiding initiative in instances when the promotion of work connected with the army's immediate interests is delayed or is proceeding in the wrong direction or is lagging behind schedule;

b) rendering the local authorities and organizations the utmost assistance in their work; and

c) direct performance of work in areas where the local authorities have not yet had a change to initiate work.

83. The need for a rear which is politically strong and sufficiently organized administratively puts forward the task of unswerving assistance to the appropriate authorities in their work on organizing revolutionary committees.

The revolutionary committees operate on the basis of special regulations governing them.

84. The entire system of mutual relations with the population should be based on a knowledge of its national-social singularities, customs, morals and religion and on a sensitive, tactful and attentive attitude toward it.

This is of particular significance for enemy territory, where the population has a false idea of the actual policy of Soviet power and its nationality policy and religious tolerance in particular. All educational work among one's own troops should be conducted in accordance with this.

In ensuring normal mutual relations with the local population the political organizers and political personnel must systematically influence the line of punitive policy in respect of persons or bodies violating personal or property rights of the population, strive for the speediest investigation of individual instances and organize the correct notification of the population of the punishments meted out to the guilty parties.

Where necessary, units should render the population the appropriate assistance expressed in timely warning of an impending danger, the prevention of possible panic, instructions pertaining to self-protection against fire, gas and enemy air attack and so forth and in the allocation (temporary) of unit workers for work proper, mainly in the organizational period.

85. Political support for and help in the correct allocation of services frequently affecting the vital interests of the population and, on the other hand, of great importance to the army is a most important task performed by the political organizers. The class principle as the main and guiding principle should be observed at the time of allocation of obligations among different groups of the population. The biggest burden of obligations should be borne by nonworking elements, the least by the rural and urban poor.

Direct political support for the obligations is composed of:

a) the organization and performance of agitation-explanatory work and

b) political observation of the correct execution of obligations and the regulation of certain possible excesses.

The content of work among the population of areas liberated from the enemy is supplemented by an explanation of the essence of Soviet power, its policy in various walks of life aimed at satisfying the interests of the working people and nationality policy and also an exposure of the policy of the ruling classes of the enemy country.

86. In areas liberated from the enemy Red Army organizations are obliged to contribute to purging the area of counterrevolutionary and hostile elements and also render the working population the utmost assistance in its class struggle against the bourgeoisie, landowners and rich peasants.

87. On an offensive the rapid and complete political envelopment of the population as a most important condition of the consolidation of the rear is the more significant the more considerable is the depth of our troops' advance. The political organizers must determine in advance here the main organizational, political and economic measures which have to be implemented in the occupied areas.

As the troops advance, the political organizers, in conjunction with the military-revolutionary committees, adopt immediate measures (based on the corresponding statutes) for the consistent extension of the system of military-revolutionary committees from the highest administrative-territorial units to the lowest, first of all securing the most important centers.

88. Upon withdrawal, work among the population is performed in the following areas:

first, preparation of the population for the appropriate political influence on the troops of the enemy, second, preparation of measures for regulating the movement of refugees and, third, preparation of measures for closing down the local organs of power and evacuation.

Chapter VIII. Logistical Support of Troops' Combat Activity

1. General Directives

89. The condition of the rear of a military formation when adopting an operational decision is taken into consideration as a basic piece of data of the situation influencing the determination of the extent and methods of accomplishment of the operational mission.

When evaluating his forces, the military formation commander establishes:

a) what is required of the rear for accomplishment of the operational mission;

b) the extent to which the current state of the rear satisfies the demands made on it;

c) what the available possibilities are (including the resources made available by the superior commander) for bringing the rear in the interval of time available to the condition required by the mission; and

d) what influence the foregoing exerts on the operational decision.

The situation could require in operational interests the activity of the rear and the expenditure of resources being brought to the highest intensity, but it is necessary to be clearly aware of the possible consequences here and adopt measures in good time for the speediest restoration of the normal activity of the rear.

90. Overall responsibility for logistical support for the military formation's combat activity is also borne, besides the command, by its chief of staff; for this reason the latter must at any given moment know the state of the rear services of his formation and submit to the commander for adoption of the operational decision exhaustive data thereon.

Leadership of the activity of the rear services is exercised by:

a) in the rifle corps, the chief of staff via the chief of the staging-transport service;

b) in the rifle division, the chief of staff via the chief of the section for the establishment of rear services; and

c) in the rifle regiment, the assistant regimental commander for administrative affairs in conformity with the directives of the regimental commander or chief of staff.

Instructions pertaining to the establishment of rear services, following ratification of the plan for the establishment of rear services by the commander, are issued by the military formation chief of staff.

91. Prior to occupation of the areas for the accommodation of rear service establishments, reconnaissance of these areas is carried out by specially appointed persons of the command, political, administrative, medical and veterinary staff.

Reconnaissance of a rear service area consists of:

a) an inspection of communications routes and communications installations;

b) a survey of the state of any kind of local reserves and means of production;

c) military-political reconnaissance of the local population;

d) medical and veterinary reconnaissance; and

e) chemical reconnaissance.

On the basis of data of medical reconniassance:

in inhabited localities with substantial epidemic morbidity rear service establishments are not quartered at all;

it is also forbidden to occupy individual homes with patients suffering from infectious diseases, these homes being clearly denoted by the appropriate marking on the outside wall; and

wells containing water which is unfit to drink are closed up and other measures ensuring troops' medical well-being are adopted also.

2. Essence of the Establishment of Rear Services

92. The establishment of rear services is aimed at:

a) the organization of the regular and timely provision of the troops with ammunition, food and other supplies and the delivery to the rear of all property which is not needed by the troops and which is of value, including booty (the supply service);

b) organization of the evacuation and treatment of people and horses;

c) replenishment of people and horses;

d) organization of the evacuation of prisoners and in certain cases (during withdrawals) withdrawal of the population of draft age and regulation of the refugee flow; and

e) ensuring the political stability of the rear (elimination of espionage and counterrevolutionary activity, maintenance of revolutionary order and so forth).

93. The establishment of rear services is composed of:

a) determination of the areas of the military formations;

b) the organization of communications routes, their protection and communications thereon;

c) the accommodation of mobile reserves on the communications routes and the organization of the supply and delivery and collection of local resources;

d) the accommodation of medical establishments and organization of the evacuation of people and horses; and

e) organization of a staging service and the establishment of general order in the rear.

94. Rear services are established by the military formation HQ (in a regiment by the assistant regimental commander) within the confines of its area. The areas of the military formations are determined by the staff of the superior commander by dividing lines (lateral and rear) in accordance with the network of routes necessary for the organization of supply and evacuation and with the possible and most favorable extension of organic rear service establishments (in a division and regiment) and those attached by the army command (in a corps).

The areas of the military formations are confined on the front by the extended line of their troops, on the flanks by the dividing lines of the adjacent units and in the rear by the rear lines. The area of the rifle corps is divided into rifle division areas and a rear area of the corps; the area of the rifle division is divided into rifle regiment areas and the rear area of the division.

The normal depth of the area of a:

a) corps rear is 1 day's march;

b) divisional rear is 1 day's march; and

c) regimental rear is up to half a day's march.

In a period of intensive fighting, when the speedier turnaround of transport is required, the depth of the area of a military formation is reduced by order of the superior commander; in the event, on the other hand, of the transfer to a corps of army transport facilities, the depth of the corps' rear area is increased. As a rule, the depth of a corps' rear area is determined by the meeting point of the divisional and corps links in supply chain and the (word illegible) rear line running through the communications zone depot.

95. For the movement of unit trains and transport (artillery, food, medical and so forth), replenishments and prisoners the following are chosen within the confines of the area of the military formation:

a) supply routes;

b) evacuation routes;

c) rear roads; and

d) the unpaved section of the military road.

For purposes of concealment and the achievement of greater security against enemy air raids and convenience of movement it is profitable to select within the confines of the established dividing lines a large number of roads. Only a shortage of roads suitable for traffic may compel confinement for all purposes to a single road. Given a sufficient number of roads, for the purpose of achieving the greater plan-conformity of transport traffic two roads should be selected for this traffic: one for supply, the other for the return empty run. It is profitable in this case for the purpose of using the return empty to evacuate combat casualties (by no means patients with infectious diseases) to combine the evacuation route with the road selected for the empty runs. Given the availability of motor transport for it, a special road should be allocated.

96. The supply and evacuation routes begin:

a) for the rifle corps from the communications zone depot and

b) for the rifle division from the place where the operation of corps transport and divisional transport meets and extends to the junction with the baggage trains.

The choice of supply and evacuation routes, maintaining them in a state of good repair, organizing the movement of freight along them, protection of the routes and freight transported on them, the establishment of the order of movement on the supply routes and of human and horse replenishments and prisoners, the organization of communications and the maintenance of general order on the supply routes are part of the duties of the corresponding HQ's.

97. Rear roads are earmarked for the movement of troops and trains in the event of a withdrawal. Their direction is indicated for each division by the corps HQ, in accordance with the thinking of the corps commander concerning operations in the event of failure or a withdrawal contemplated in advance.

The plan of work to repair rear routes is drawn up by the corps engineer, under whose leadership this work is carried out.

Given the existence of several roads in the direction indicated for the division, these roads are allocated among regiments by divisional HQ and brought to a state of good repair by the divisional engineers.

98. The unpaved section of the military road serving the corps begins at the communications zone depot and extends to the corps HQ and is supplied with stages and communications. The head stage is located in the area of disposition of the corps HQ, but no further than 1 day's march from the extended line.

The unpaved sector of the military road incorporates the strip of territory adjacent to it which is determined by the corps' lateral dividing lines or particular directives of the army HQ (via the chief of military roads).

Incorporation of the adjacent territory in the unpaved sector is aimed at creating by way of military control a strong rear for the troops in the field and medical and veterinary well-being therein, providing for the control and safety of train and transport traffic and ensuring the uninterrupted and organized operation of local facilities (transport, housing, supply and others).

Resources for the fitting of the unpaved sector (stage units, means of communication, military road detachments and others) are allocated the chief of the unpaved section of the military road--the chief of the rifle corps staging-transport service (CSTS) by order of the chief of the military road.

As representative of the military transportation lines service in the corps, the CSTS is responsible for the organization of supply from the communications zone depot to the meeting point with the divisional link in the supply chain

and for the security of the corps rear. On the instructions of the chief of staff he directs the use of the organic means of transport and units and establishments servicing the unpaved sector of the military road and those which are attached to the corps and organizes: a) the work of the meeting point of the divisional and corps links in the supply chain; and b) continuous communications with the military road chief, who installs the communications zone depot for the corps, receiving from his directions pertaining to the linkage of the work of the junction of railroad supply with the unpaved sector of the military road.

Given a shortage of roads, the supply and evacuation routes could coincide fully or partially with the unpaved sector of the military road.

99. The rear establishments are located by the military formation HQ's on the unpaved sectors of the military roads and supply and evacuation routes in accordance with the nature of the given combat and operation and in places ensuring for them convenience of operation in terms of servicing the troops and concealment.

100. Measures for protecting the rear services amount to:

a) securing the rear establishments and communications installations against capture;

b) securing the rear against air and gas attack; and

c) maintaining general order in the rear area.

The rear is protected in areas of the unpaved sectors of military roads by the stage units and in others by fatigue details from the rear establishments.

Air and anti-gas defense is organized on a common basis with the troops.

3. The Supply Service

101. The mission of supply consists of the constant, plan-based and timely satisfaction of the troops with everything necessary both for combat operations and for maintaining vitality.

Supply in terms of the kind of items is subdivided into:

a) artillery and chemical warfare;

b) quartermaster supply; and

c) technical.

To ensure uninterrupted supply the military formations have in their transport facilities and men mobile reserves established by special tables of allowances.

The corresponding chiefs of branches of the army and services are in charge of the reserves and look after their replenishment.

Supply is normally effected by organic transport facilities, but, when necessary, the transport facilities of the military formations are strengthened by supply by the local population or the facilities of a higher formation.

102. The tasks of artillery supply consist of:

a) the supply of ammunition to the troops;

b) issuing to the troops items of armament, a special artillery ammunition train, artillery ammunition, instruments and lubricants; and

c) the maintenance, repair and collection from the battlefield of artillery equipment (including booty).

The continuousness and timeliness of replacing the expenditure of ammunition is achieved by the corresponding echelonment of the mobile reserves and the establishment of the circulation of the transport facilities in accordance with the nature of the combat operations.

Given a need for the rapid replenishment of ammunition spent in battle, the transport facilities of the military formations are moved up to the area of the primary military formation (the depth of the links of the supply chain is reduced).

In certain cases (given lengthy preparations for an offensive against an enemy fortified zone), besides mobile reserves, it is permitted to form reserves attached to the troops in special storage places or magazines set up in the artillery positions.

The weapons and other artillery items left on the battlefield both by the enemy and one's own troops are collected by special weapon-collecting teams. Such teams are organized in the regiments and divisions.

The regimental weapon-collecting teams collect from the battlefield weapons, ammunition and other artillery equipment and also weapons taken from prisoners. The collected property is immediately taken from the battlefield to a baggage train.

The regimental weapon-collecting teams work in the regimental area; the divisional teams collect the weapons not picked up by the regimental teams in the divisional area.

Besides what has been stated, the weapon-collecting teams accept weapons from the medical establishments and also make a thorough inspection of all inhabited localities in the area of disposition of the division (corps), taking from the local inhabitants weapons and artillery which they had concealed.

All the confiscated weapons and all the artillery items are sent by order of the divisional artillery chief to the nearest stage for forwarding to the military road chief.

The chemical-warfare equipment is supplied to the troop units by order of the chiefs of the chemical warfare service of the corresponding military formations with the exception of chemical artillery shells, chemical aerial bombs and gas hand grenades and rifle grenades, which are issued to the troops by the artillery supply organs. Chemical equipment is normally supplied to the corps and division by the corps chemical depot, appropriately echeloned.

Chemical warfare equipment is serviced in respect of anti-gas equipment by the chemical warfare supply organs and in respect of materiel by the artillery supply organs.

During a lengthy halt the troops are supplied with the chemical gear necessary for positional antichemical protective equipment through the corps chemical warfare depot.

Chemical gear is collected from the battlefield similarly to the way in which artillery equipment is collected. Particular attention is paid here to the speedy transfer of the captured chemical warfare devices to the appropriate chemical warfare service organs for study.

103. Provision of the troops with items of quartermaster rations (food, forage, clothing, footwear, personal equipment and transport) is based on supply from the rear and the use of local resources and equipment captured from the enemy. Supply items captured from the enemy correspondingly reduce the supply quota.

As a rule, supply is effected by the movement of transport facilities from the rear to the front; however, depending on the situation and local conditions, supply may be effected by the forward supply organs' dispatch of their own transport facilities to the nearest rear supply establishments.

The procedure for the use of local resources is determined by the military formation command.

Procurements are effected:

a) by purchase for cash and

b) by requisitions for cash.

On one's own territory requisitions are effected in accordance with the command's applications by the local civilian authorities, on enemy territory by the military formation administrative organs directly or via the revolutionary committees, when such have been organized. The use of local resources by way of obtaining provisions from apartment owners is employed mainly for the cavalry and small infantry units operating far from their units.

The surplus is carried from the organizational areas by the returning empty wagons, and upon withdrawal, if the organic transport facilities are fully loaded, by carts of the local population.

104. Engineer equipment (positional gear, wire, smoke pots, light river crossing equipment, blasting equipment and so forth) is supplied with the resources of the engineer depots.

Communications equipment (cable, telephone apparatus and such) is supplied via the signals company of a rifle division and the signals battalion of a rifle corps.

4. The Medical Service

105. The tasks of the medical service are:

a) the evacuation and treatment of wounded, war gas casualties and sick persons;

b) the implementation of measures to prevent the outbreak and spread of diseases among the troops and the local population, particularly by way of medical education work; and

c) replenishment of the troops with medical and sanitary personnel and equipment.

106. Medical assistance, treatment and the evacuation of wounded, war gas casulaties and the sick are performed:

a) in the regiment by the medical unit of the regiment, which at a time of combat details a forward (regimental) medical assistance center; if necessary, additional medical assistance centers may be detailed;

b) in the division by the divisional dressing detachment, which at a time of combat sets up a main (divisional) medical assistance center and in certain cases details auxiliary centers; the divisional hospital; the sanitary and epidemiologic detachment; and evacuation detachment; and

c) in the corps by the corps hospitals.

The main medical assistance center is located no more than half a day's march from the front. The distance from the main medical assistance center to the divisional hospital and from the latter to the corps hospital must not, as a rule, exceed a day's march each; in instances where this distance is increased and also given unsuitable traffic conditions (the poor quality of the roads, inclement weather and so forth) dressing-mess posts detailed by the divisional evacuation detachment are distributed on the route.

107. Wounded, war gas casualties and the sick are transported by the medical transport facilities of the regiment, division and corps and, as a rule, by each establishment from the front to itself.

If necessary, returning empty rations transports (trains) and local inhabitants' carts may be used to bring out wounded and war gas casualties.

The treatment of patients with infectious diseases and measures to improve the sanitary conditions of the divisional area are effected by the divisional epidemic detachment.

5. The Veterinary Service

108. The tasks of the veterinary service are:

a) the implementation of veterinary-preventive and anti-epizootic measures;

b) the treatment and evacuation of the supply of mounts and other organic animals;

c) veterinary supervision of the slaugher of livestock and of meat products;

d) observation of an area's veterinary well-being; and

e) replenishment of the troops with veterinary personnel and equipment.

109. Treatment and evacuation are effected by means:

a) in the regiment: of the veterinary hospital;

b) in the division: of the divisional veterinary hospital;

c) in the corps: of the corps veterinary hospital; and

d) in military units with a small supply of mounts: of the veterinary-medical assistant center.

110. The said establishments are stages of an evacuation which are usually echeloned in depth to a distance of one-half to 1 day's march.

The supply of mounts is evacuated in march formation up to the mounting station. The normal speed of movement of large horses is 3 kilometers an hour. Red Army men are detailed to accompany the evacuated horses on the basis of one per 3-5 horses, and, if necessary, persons of the veterinary service also. The evacuated horses are fed at the evacuation stages and military road stages.

6. Movement of Replenishments, Prisoners and the Draft Population

111. The human replenishment proceeds from the railroad station along the unpaved section of the military road, from stage to stage, to the corps reception (reserve regiment), where it undergoes medical processing and is allocated to divisions and other units. En route the replenishment receives

medical assistance and food at the stages. The reserve regiment is located near to corps HQ. The replenishment, which is sent from the corps reception to the military formations (units), is accompanied by acceptance officers (company grade personnel and political instructors) sent for this purpose by the command of the formation or unit to which it has been appointed. The replenishment should be infused into units with a lowered morale caused by unsuccessful combat after political work has been persistently carried out in them.

The horse replenishment moves by stages. It is fed at the stages.

112. The withdrawal of prisoners from the area of a regiment's operations is organized by the regimental HQ. The strictly necessary number of people from units not engaged in combat at the given moment is detailed for the escort. The captured prisoners are carefully inspected, and all weapons, paper and correspondence is taken from them. Prisoners should be moved in separate batches: officers, NCO's and rank and file.

Prisoners are taken under a commandant's command escort from divisional HQ to corps HQ and then by stage of the unpaved sector of the military road.

113. The population of draft age is (if necessary) withdrawn via the staging posts along the military road. Volunteers wishing to join the Red Army are moved the same way. Each military unit assists volunteers in terms of directing them to the military formation HQ; inducting them directly is forbidden. The volunteers are put at the disposal of the army command.

Section Two. Combat

Chapter IX. General Regulations

1. The Maneuver

114. A maneuver of a military formation is the sum total of all its movements and operations accomplished for the purpose of:

a) assuming the most favorable disposition with respect to the enemy for the combat of the entire military formation and

b) putting the enemy in a position unfavorable for the combat of his units.

Maneuvering in the combat of a military formation consists of the following interacting among themselves in the depth of the battle: the maneuver of infantry and the maneuver of artillery (firing and on wheels) and other weapons attached to the military formation.

A maneuver after the combat, in the event of success, should be aimed at ensuring the final annihilation of the enemy and, if unsuccessful, the occupation of a position making it possible to conduct the fighting under more favorable conditions or to avoid it.

Depending on the form of combat for which a maneuver is accomplished, the latter may be offensive, defense and retrograde.

115. On the offensive the most decisive form of maneuver are operations leading to the encirclement of the enemy. The following operations are such: wide envelopment of the enemy's disposition--on one or both flanks--for a decisive attack against his main forces, reaching their withdrawal routes, with simultaneous operations on the front.

Wide envelopment is accomplished by units operating in tactical coordination with those attacking on the front. The enveloping units must be sufficiently strong to strike a decisive blow against the enemy's main forces under the most dangerous conditions for him. The accomplishment of the envelopment should be a surprise for the enemy; for this reason its success may be achieved only by the extraordinary swiftness of the operations of the enveloping units.

It is beneficial to use mounted and motorized units for wide envelopment.

The close envelopment of a signle or both flanks carried out by units operating in a coordination of fire (artillery or machinegun) with those attacking on the front is employed in all cases where the situation does not permit a deep envelopment by substantial forces.

In both cases of wide or close envelopment it is essential while detailing superior forces to the wide enveloping or close enveloping groups to leave forces for an attack on the front capable by their active operations of

confusing the enemy concerning the strength of the wide or close envelopment and, pressing on, to tie him down, not affording him an opportunity of evading the assault of the wide enveloping or close enveloping units.

It is esential to employ wide (close) envelopment always when the enemy has an open flank permitting free maneuver.

Given any opportunity, it is essential to strive to develop close envelopment into wide envelopment in order, having cut off the enemy's withdrawal routes, to wipe out his main forces.

While primarily performing their main assignment the wide and close enveloping groups must at the same time carefully secure their flanks against enemy counterattacks: by echelon movement, the posting of blocking forces in the threatened directions, security and reconnaissance.

116. Given the impossibility of accomplishing wide envelopment (the continuous front of the enemy), the enemy's front is breached, this culminating in penetration in a certain direction deep into his defense zone, the defeat of his main forces and then the wide and narrow envelopment of the flanks which have formed for the purpose of expanding and deepening the breach and wiping out the fragmented units of the enemy's front.

A breach of the front requires superior forces in the zone of the offensive of the assault group, particularly fire (artillery) forces, and the indissoluble interaction of the infantry with the artillery and other attack resources (tanks). By way of concentrating superior forces in the assault group at the expense of other sectors of the front it is possible to successfully breach the enemy's front even without overall superiority in forces.

The units effecting the breach operate concertedly, continuously charging forward, assisting adjacent units and aligning themselves with the forward units. No other alignment is allowed.

117. In the event of success in an offensive battle in the sector of the holding force and failure in the sector of the operations of the assault group the maneuver consists of the development of the operations of the holding force by the second echelons from the assault group. Thus the order of battle should be flexibly mobile, making it possible to build an assault group in the sector of the decisive success. The superior commander and also the commander of the second echelon of the assault group must be able to display initiative at the necessary moment.

118. In defense maneuvering consists of repulsing an enemy offensive before the front and in counteracting it with wide and close envelopment (given open flanks) and breakthroughs.

During defensive operations aimed at switching to the offensive maneuvering consists of tying down the enemy's main forces in the forward edge of the defense zone, weakening him with fire from this zone and subsequently striking a flank with an assault group (groups).

During defensive operations which are aimed at gaining time and which are not connected with holding a certain position maneuvering consists of forcing the enemy's main forces to deploy by fire and individual counterattacks from the positions occupied, contain them and then secretly withdraw one's main forces to the next position.

119. During an enforced withdrawal the purpose of the maneuver is to rapidly disengage and withdraw one's main forces from the enemy attack in order in a new area to form a grouping for his decisive defeat.

120. A maneuver should be distinguished by flexibility and a capacity for combining, in connection with the situation, the different forms; offensive, defensive and retrograde.

The type of maneuver is chosen in precise accordance with the situation and is effected with the greatest concealment and swiftness, not allowing the enemy time upon discovery of the maneuver to adopt counteraction measures.

Concealment is achieved by:

a) confusion of the enemy by the active operations of the holding force;

b) adaptation to the terrain and camouflage;

c) performance of the maneuver swiftly and properly, particularly at night, in fog and so forth; and

d) keeping secret the preparations for the maneuver and its goals.

For its successful accomplishment a maneuver should consist, where possible, of direct and simple movements.

121. The accomplishment of a maneuver is supported by reconnaissance, security and concealment measures. Particular attention is paid to the organization of air defense. An enemy air raid should not halt the accomplishment of a maneuver: having assumed formations reducing losses and repelling the enemy aircraft with fire, the troops must perform their maneuver precisely at the time indicated.

2. Order of Battle

122. To conduct a battle in accordance with the commander's decision the military formation deploys in an order of battle which is intended to ensure:

a) defeat of the enemy by the grouping of main forces and resources in the decisive sector;

b) the interaction of all arms of service in achieving the set goal;

c) flexibility affording an opportunity, depending on changes in the situation, to change the assignment of units of the order of battle and the direction of their operations; and

d) the possibility of repulsing surprise enemy attacks.

The military formation's order of battle tactically consists of assault and holding forces, a reserve (sometimes) and fire (artillery) groups.

Units of special arms of service attached to the military formation are either incorporated in the tactical groups of the order of battle or constitute independent groups.

123. The assault group in an offensive battle, operating in the sector of the main strike, has the assignment of wiping out the enemy and capturing his weapons. No less than two-thirds of all the forces of the military formation are assigned to the assault group. Given considerable superiority in forces and given a particularly favorable situation, two assault groups may be appointed for wide envelopment of both enemy flanks.

The assault group (groups) in a defensive battle has the assignment of wiping out an enemy who has broken through deep into the defensive zone and, given favorable conditions, in front of it also and the repulse of his enveloping units.

124. The holding force in an offensive battle, which is intended for operations in the secondary sector, has the assignment of facilitating the operations of the assault group by taking individual points, tying down the enemy, diverting his attention to itself, thereby confusing the enemy concerning the direction of the main assault, and ensuring freedom of action for the assault group. When the main assault is launched against the enemy in the center, two holding forces are allocated.

The holding force in a defensive battle occupies the defense zone and has the assignment of hitting the enemy with fire, not allowing him to reach the foward edge of the defense zone, and, given his invasion to the forward edge, wiping him out with fire and individual counterattacks.

Units of the assault and holding forces are not integrated organizationally, and the designations of the forces (assault or holding) are not mentioned in the orders.

125. The reserve in an offensive and defensive battle, which is intended for counteracting accidents, if necessary, is detailed a small force (up to one-ninth of all forces of the formation).

On the offensive and defensive, given secured flanks and the availability of an assault group, a reserve is usually not detailed.

126. Artillery groups with the assignment of giving fire assistance to units of the assault and holding forces in fulfillment of their assignments are formed from organic and attached artillery (reinforcing artillery), strictly in accordance with the dispersion and tasks of the military formation's order of battle.

The tactical allotment of artillery should correspond strictly to the dispersion of the operational organism of the formations (infantry units) and make it possible to effect effective and continuous fire support for infantry and complete interaction throughout the battle.

Artillery groups are divided into:

a) infantry support (IS) groups and

b) groups for combating enemy artillery and shelling distant rear areas, reserves and such (LR--long range groups).

127. Regimental artillery (RA) operates, as a rule, with its regiment. It may be removed from subordination to the commander of a rifle regiment only in exceptional circumstances, namely:

a) in position warfare, given the need for an increase in the number of batteries required for the organization of a system of barrage fire (in defense) and given integration of the actions of artillery destroying artificial obstacles (on the offensive) and

b) in mobile warfare, given the need for a reinforcement of the artillery operating at the front at the expense of batteries temporarily taken from second echelon rifle regiments. In the latter case the batteries which are selected are used in the sectors of the probable use of the rifle regiments from which the batteries were taken and, upon their joining battle, are returned to them.

In a meeting battle, given operations deep into the enemy's defense zone and given defense on broken terrain, in fog and so forth, RA may be attached to battalions and companies by battery or in terms of individual guns.

RA's operations with individual guns should be customary for both infantry and artillery.

128. Divisional artillery forms an IS group. Each group is usually intended for support of one rifle regiment, the requirements of whose commander in the course of battle, irrespective of subordination, it is obliged to fulfill. The IS group carries the number of the corresponding rifle regiment (for example, the IS group attached to the 31st Rifle Regiment will be called IS31). IS group battalions and batteries obtain assignments for the support of certain infantry units (battalions and companies), with which they establish communications and the requirements of whose commanders they are obliged to fulfill.

129. Corps artillery is intended for the formation of LR corps or divisional groups, for which in the latter case it is allocated among divisions. The corps LR group is, if necessary, subdivided into subgroups, each of which obtains an assignment within the confines of the zone of a certain division. Divisional LR groups are usually formed from attached batteries of corps artillery and may be reinforced by batteries of divisional artillery. Given a shortage of artillery or if corps artillery units have not been detailed to a dvision, an LR group is not detailed, and combating enemy artillery is entrusted as far as possible to individual IS group batteries.

General HQ artillery units attached to military formations are used to reinforce the LR and IS groups.

130. The organization of artillery control depends on the nature of the combat and is determined by the acual possibilities of timely IS at different stages thereof. Centralized control, given the availability of time for preparation, ensures to the greatest extent the full use of artillery resources, but it has to be renounced when complete confidence in the possibility, given centralized control, of swift and uninterrupted IS is lacking.

Artillery control should be flexible, affording an opportunity for the rapid transition from one form of control to another, for example, from centralized, in the period of artillery preparation of an attack on the enemy's defense zone, to decentralized, given operations in its depth and during pursuit, and, conversely, from decentralized, given the joining of a meeting battle, to centralized, in the event of it being protracted (the enemy's occupation of defense zone) and so forth.

Integration of the actions of all corps artillery is permitted only upon the organization of a breach of the enemy's fortified zone, if the corps assault group attacks on a front no greater than 5 kilometers and given a long time of preparation.

Given time available for preparation, control of divisional artillery in a sector up to 5 kilometers is centralized in the hands of the divisional artillery chief.

Given the impossibility of centralized divisional artillery control (lack of time for preparation, a broad front, broken terrain, the regiment's performance of a special assignment and so forth), the divisional artillery regiment battalions are attached to the rifle regiments, but establish communications with the divisional artillery chief in the event of the divisional commander deeming necessary the fire of all artillery or the concentration of part of it in another sector (success in the sector of the holding force and so forth).

The LR groups are always subordinate to the corresponding artillery (corps or division) chief.

131. The unit commander determines the allocation of artillery per group and the zones of responsibility and supplementary sectors of these groups.

Each group, battalion and battery has, as a rule:

a zone or sector of responsibility and

a supplementary sector or area.

The zones (sectors) of responsibility are allocated depending on:

a) the importance of the sectors;

b) the system of guns; and

c) the conditions of observation.

The group chiefs allocated the zones of responsibility among subordinate subunits, as a rule, in accordance with local reference points.

The boundaries of the zones of responsibility should run such as to include in the zone all the points directly threatening the flank of the military unit being supported, that is, usually the edges of the adjacent zones are superimposed on one another.

The supplementary sector (area) is intended for effecting a concentration of fire.

The supplementary sector, as a rule, is superimposed entirely or partially on the contiguous part of the fire zone of responsibility of the adjacent group (battalion, battery).

The battery may be given a particular area:

for setting up barrage fire in position warfare and

for removing the dead zones of adjacent batteries (on the most important approaches).

132. To ensure interaction between infantry and artillery the commander's observation post must always be connected with the command post of the chief to whom the battery (battalion) is subordinate and the commander of the infantry unit (subunit) which the said battery (battalion) is supporting. Under the conditions of rapid battle the commander's observation post may be temporary for the immediate opening of fire through the completion of artillery reconnaissance and the organization of normal control.

For closer liaison with the forward infantry units and for adjustment of fire in terms of the closest targets artillery moves its forward observers up to the forward infantry units.

133. The disposition of artillery should ensure on the one hand the best use of firepower and, on the other, the closest liaison with infantry.

For the first of these demands the disposition of IS artillery is not confined to the area occupied by the infantry which this artillery is supporting. The battalions (batteries) are deployed in a place whence it is most profitable to conduct oblique and enfilade fire at their prescribed targets. However, the extensive scattering of the batteries, making control more difficult, requires time for its organization. In addition, telephone lines should not

extend along the front, but a great amount of cable is required for zigzag installation. For this reason the extensive use of oblique and enfilade fire must be made strictly conformable to time and resources. In mobile warfare, in an offensive battle, IS groups are usually deployed behind the infantry units they are supporting. The system of artillery positions is chosen by the chief of artillery and confirmed by the unit commander.

A change of artillery positions in battle requires a thoroughly conceived plan, initial reconnaissance of the new observation posts and positions and concealed routes to them for the move from the previous positions and also detailed familiarization of the entire battery personnel with the outlined battle plan.

Good organization, an aptly chosen route of movement and the rapidity of the relocation are the main conditions of the successful accompaniment of infantry.

Given a change of positions, the observations posts are occupied and communications between them and the planned new fire position are installed first of all.

134. Tanks are usually attached to infantry and operate with its assault groups, as an infantry weapon.

For operations against enemy artillery and other distant targets, given a large number of tanks, some of them may be detailed to individual long-range echelons (LR tank groups).

135. Mortar and chemical warfare units in an offensive battle always operate with infantry battalions and are attached to rifle regiments operating in the main sector.

136. Given the combat use of aviation, the latter performs assignments with respect to:

a) aerial reconnaissance, observation, liaison and servicing the command;

b) combat operations against ground targets (stationary and mobile); and

c) combat operations against an air enemy.

In terms of the extent of the missions it performs and in order of subordination aviation is subdivided into organic and army aviation.

Units of army combat aviation (bomber, attack and fighter), which are intended for combating an air enemy and for operational interaction with the troops, are merged into air detachments (AD) subordinate, as a rule, to the army command.

AD, which are intended for assistance to a military formation, may be transferred to operational subordination to the commander of this formation. AD assisting a military formation, regardless of subordination, must fulfill the demands of the commander of this formation.

The interaction of aviation and ground troops is achieved by way of precise coordination and the subordination of the actions of aviation to the general operational plan, complete mutual information and the unit HQ's uninterrupted communications with AD HQ and the airfield.

The availability of a developed airfield network contributes to facilitating the massing of combat aviation and interaction both in the air and with the military units.

137. Combat aviation operates en masse, as a rule.

It operates predominantly in groups for achieving power of attack and its increased defense capability, which is achieved by the mutual fire support of the following aircraft in the group.

Very often, particularly in meeting battles, big results are produced by attack aircraft during an attack on the enemy by contour flying (25-200 meters) adapted to the topography of the terrain, creating the surprise nature of the raid and inflicting big moral and material losses on the enemy.

Single-seater fighters fly in formation and sequence in order to have the opportunity, subordinating themselves to the single will of the commander, to jointly maneuver and simultaneously occupy an initial attack position and simultaneously fire at the enemy.

Reconnaissance aircraft and observation aircraft operate singly and in small formations (pairs, flights).

Typical altitudes for combat flights are respectively:

a) for army reconnaissance airplanes 2,500-5,000 meters;

b) for fighters 500-700 meters above the object of support if troops and aircraft in the air are such; 2,500-5,000 meters when providing close protection;

c) for bomber aviation 2,000-4,000 meters during day flights, 800-1,000 meters during night flights;

d) for attack aircraft from 25 to 200 meters during an attack involving machinegun fire and up to 2,000 meters when bombing; and

e) for organic aviation from 1,500 to 3,000 meters; reconnaissance and observation of the battlefield sometimes requires a descent to 600 meters.

138. In the military formation's order of battle its units are echeloned in depth. Each unit operates in the zone or sector indicated for it. Units of the first echelon are assigned zones, of subsequent echelons sectors.

The second (third) echelons of the assault group receive the combat assignment simultaneously with the first echelon. The second echelons develop the success and support the first echelons completely independently, without waiting for

any additional directives or orders. For this reason the second echelons must move in the direction of the main strike, not lagging behind the first echelon, completely independently; the officers in charge of these echelons are responsible for the timeliness and decisiveness of the development and support of the operations of the first echelon. It has to be considered that the movement of the second echelon generally encounters the same difficulties as the first and therefore cannot expect to overcome the sector with any desired speed. A second echelon which has lagged behind usually remains useless until the end of the battle.

The second echelons link up well ahead of time with the corresponding IS groups (battalions, batteries), which, until they reach the firing line, support the first echelon.

139. The breadth of the zone of operations of the military formation depends on the mission and the quantity of attached technical means.

On an offensive the breadth of the zone of the assault group is determined by available artillery and tank resources and also the degree of fortification equipment and saturation of the defense zone of the enemy with machineguns. A rifle division may with its artillery resources organize a breach of the enemy's defense zone (without wire entanglements) in mobile warfare on a front of up to 2 kilometers. A rifle regiment in a divisional assault group advances normally in a zone from 1 to 2 kilometers wide. Given wire entanglements in the enemy's defense zone, the time of the artillery preparation is lengthened and the front of the division's (regiment's) main strike reduced.

The rifle corps, upon breaching the defense zone, should normally build its assault group such that there be no gaps (or that the gaps be no more than half a kilometer) between the divisional assault groups. The breadth of the zone of the corps assault group is 4-6 kilometers. In a meeting battle the said norms increase; upon a breakthrough in position warfare, they diminish. Reinforcement by GHQ artillery or tanks enables these norms to be increased, depending on the quantity of attached resources.

In defense the breadth of zones on average is: for the regiment 3-4 kilometers, for the division 8-12 kilometers and for the corps 24-30 kilometers. These norms fluctuate in both directions depending on the assignments and nature of the terrain.

140. The order of battle is supported by reconnaissance, security (ground anti-aircraft and chemical warfare) and air defense measures.

Protection at the front is effected by order of the infantry commanders, for which under a platoon to a battalion of the first echelon is detailed. Security is supported by artillery from the defense zone.

For the protection of an open flank of a military formation an infantry or mounted unit is detailed at a distance securing the flank against being hit by the effective fire of artillery or heavy machineguns and affording the formation commander time to adopt measures against the detected enemy assault. Security and protection on an open flank are increased in the event of there being a defile in the rear of the formation.

If there is a possibility of enemy motorized units appearing on the flank, the protection should be moved out to a greater distance and be a force capable of forcing the enemy to detruck infantry.

In addition, independent mounted patrols are sent to the open flanks, in accordance with the general reconnaissance plan.

141. For the organization of air defense the military formation uses anti-aircraft machineguns and anti-aircraft artillery and fighter aircraft (if attached), and in addition, the infantry units provide themselves with their own fire means. The military formation's assault group is provided with air defense means primarily. The organization of air defense is entrusted to the formation's HQ.

The rules of the organization of air defense are set forth in the "Manual for Troops' Air Defense".

Chapter X. Meeting Battle

1. General Directives

142. The meeting battle is the result of a confrontation of the sides on the march, when each of them has for fulfillment of its set assignment to reach an area at the site or beyond the site of the confrontation.

The meeting battle is characterized by: a) a lack of complete clarity and certainty of the situation, frequently until the end of the combat, and b) the rapidity of the development of operations, which demands the utmost display of initiative.

143. Seizure of the initiative is achieved by: a) the rapid adoption of a decision and its speedy implementation and b) forestalling the enemy in the deployment of advance guards and the swiftness of their operations, and, furthermore, the rapid and mass deployment of artillery is of decisive significance in this case.

In a meeting battle the commander does not have the right to postpone the adoption of his operational decision unitl he has obtained data from the additionally dispatched reconnaissance for any delay in decision-making gives the enemy the advantage when it comes to seizing the initiative. The operational decision should be adopted on the basis of the data obtained by the fighting of the advance guard.

The commander's operational decision in a meeting battle is formulated gradually:

1) prior to the march, the plan of movement in different areas in the most favorable disposition in terms of the terrain is outlined;

2) the first reconnaissance data on the movement of the enemy (from small mounted patrols and aviation) afford an opportunity to outline the area and time of the meeting with him; the combat operations of the reconnaissance detachments sent on ahead and, in certain positions, forward detachments may

determine the strength of the enemy advance guard and win a certain amount of time for a necessary regrouping; and

3) the fighting of the advance guard and the reconnaissance data received prior to this provide conclusive data for adopting the operational decision.

144. Reconnaissance organized prior to the start of the route march should find the enemy and ascertain the direction and time of his movement to certain positions and the disposition of his forces by column. The speedy delivery of reports from the reconnaissance units assumes particular importance, and for this reason the reconnaissance detachments are furnished with rapid means of communication (radios, motorcycles, automobiles). Intermediate communications posts advance behind the reconnaissance units for collecting the reports from the automobiles, motorcycles and radio stations. Given the existence of government wire communications, the intermediate posts use them to transmit by telephone the incoming reports at the post, having first adopted measures against the enemy intercepting the transmission.

145. Organic aviation is used by a corps mainly in the interests of the divisions. If it is possible, it is essential to put part of the organic aviation at the divisions' disposal. If not, corps HQ is obliged to take into consideration the divisions' stated demands for aerial reconnaissance.

Aircraft returning from the first flight drop reports to the divisional commanders and wait for replies to them. The divisional commanders determine from the reports the position and time of the meeting with the enemy and communicate to the aircraft their assignments by the time of the formation's approach to the aforesaid position.

Subsequently corps HQ organizes sorties aimed at disclosing the main grouping of the enemy and opportunely notifying the divisional commanders of it. Not one detected enemy column may be left unobserved. Particularly thorugh observation should be established for motor columns and cavalry which have been detected.

For the military formations' communications with aircraft air liaison and observation posts are employed which are, as a rule, under the military formation (division, regiment) commanders. Aircraft returning upon fulfillment of a combat mission (reconnaissance) drop reports to the post that has been set up and wait for an answer from it.

146. In independent patrols small organic cavalry units conduct reconnaissance throughout the zone of a given formation and on the open flanks. The purpose of the reconnaissance is to find the enemy and detect the movement of his security units and main forces. For this reason the small organic cavalry patrols must endeavor to break through the network of the enemy's reconnaissance organs and make contact with his columns. On the basis of the information obtained from aviation and the patrols the formation commander and its HQ specify the reconnaissance plan to obtain more detailed information about the enemy, sending out new patrols and, in important sectors, reconnaissance detachments.

Irrespective of the higher formation's dispatch of reconnaissance units, each officer in charge of a column sends out his own reconnaissance.

The reconnaissance organs of special arms of service follow with march security detachments.

147. Even given aerial reconnaissance, it is not always possible to precisely determine ahead of time when, where and what enemy forces may be encountered. During the march reconnaissance of other kinds more often than not will be able to determine only the direction of the movement of the enemy columns, and his disposition for battle may be determined only by the fighting of the forward units, which develops rapidly and does not afford much time for preparation of the main forces for battle. This requires the particularly thorough organization of the march in orders ensuring rapidity of deployment under the most advantageous tactical conditions.

The commander of the formation (corps, division, regiment), studying the terrain and the roads in anticipation of a meeting battle, determines:

a) the areas and positions which must be taken earlier than the enemy as advantageous to the formation for conducting the battle;

b) the areas and positions which have to be crossed earlier than the enemy in order for it not to be necessary to conduct the battle under disadvantageous terrain conditions; and

c) the system of routes and their directions in accordance with the areas and positions which have been studied.

On the basis of a study of the terrain and in accordance with the mission, the formation commander outlines the plan of movement of his units with the hope of leading them to the studied areas and positions in the most advantageous grouping and to forestall the enemy in taking or crossing the said positions and areas.

148. For the purpose of rapidity of deployment it is more advantageous to lead the military formations in several columns and, for ensuring deployment with the winning of the enemy flanks, in echelon order.

The bulk of the artillery follows in the sector where its use is more advantageous both from the viewpoint of the assignments of individual columns and in respect of the nature of the terrain. Corps artillery is either allocated among the divisions of the main sector or attached to one of them. The divisional artillery regiment, which marches in the second echelon, may in instances when the terrain does not impede the deployment of a large quantity of artillery be attached to a division of the first echelon in order that by the time the division of the second echelon joins battle it be returned to where it belongs. Artillery is allocated in the column with the aim of ensuring rapid deployment and entry into the battle, that is, it is placed nearer to the head of the column. The advance guard is prescribed a quantity of artillery such as is capable of rapidly paving its way, containing

the deployment of the enemy's main forces and ensuring the deployment and maneuver of its own main forces (depending on the assignment and the terrain, half and more of the entire artillery of the column). It is essential to attach individual regimental artillery guns to the march security detachments.

The artillery and infantry commanders of the advance guard units establish communications among themselves while still on the march and consolidate them upon deployment in order of battle.

149. Measures for forestalling the enemy in the taking or crossing of positions and areas are:

a) appointment of the corresponding times of departure;

b) throwing ahead forward detachments from different arms of service with the infantry in motor vehicles or wagons and strategic cavalry units; and

c) delaying the enemy's movement by combat aviation attacks.

The forward detachments are constituted with the attachment of fire means (machinegun subunits, for example) which afford an opportunity to hold the said areas (positions) until the approach of the advance guard. The forward detachments occupy the said area with the hope of hitting the enemy with long-distance fire, for which it is necessary to attach to them regimental artillery, albeit in individual guns. If the enemy has anticipated and occupied the said position with security units, the forward detachment dislodges these security units. The forward detachments operate entirely independently outside of combat liaison with the advance guard.

Engaged in combat, the forward detachment is obliged to ascertain the strength, composition and direction of movement of the enemy's main forces.

150. Liaison on the march is maintained by: messengers (mounted, in motor vehicles and on motorcycles); liaison agenst sent to adjacent columns; commanders summoned from subordinate unit HQ's to the superior commander; visual signaling means; and aircraft, dogs and pigeons.

Upon the advance guard (guards) joining battle, communications are established immediately by field telephone, for which following attached to the advance guard (an independent column) is the corresponding part of the military formation's wire communications facilities.

Throughout the route march the radio sets, leapfrogging, should be ready to establish communications between the columns.

The plan for liaison on the march per position is determined by HQ of the corps and division and in the column by the officer in charge (staff) of such.

2. Advance Guard Operations

151. Upon the march security detachments (advance detachment) confronting the enemy, the officer in charge of the advance guard:

a) evaluates the terrain and determines the points and positions which are advantageous for observation and conduct of fire, particularly artillery;

b) assists the nonstop movement of the march security detachments (advance detachment) with the rapid commitment to battle of artillery and machineguns;

c) immediately deploys the advance guard and, switching to a swift offensive, throws back the enemy advance guard to his main forces and endeavors to ascertain the disposition of his main forces and to contain them; and

d) organizes protection of the flanks, reconnaissance on the flanks, observation of the battlefield and air and anti-gas defense and reports to the officer in charge of the column (if he is not attached to the advance guard) and notifies adjacent units about the situation.

In the event of the deployment and switch to the offensive of the main forces of the enemy, the advance guard, taking up defensive positions, holds the advantageous positions which it had seized, providing for the main forces' accomplishment of the planned maneuver.

In a meeting battle the advance guards of both sides are in an equally unclear situation. The situation is best ascertained by the fighting of the advance guard itself. For this reason the boldness and swiftness of the offensive are the basic rule for the combat of the advance guard. Only the presence of considerably superior enemy forces committed to the action can force an advance guard onto the defensive. In this case the advance guard should contain them and hold the position which has been seized until an order of the officer in charge of the column is received.

Continuing to carry out the set assignment, the advance guards of the adjacent columns assist each other as much as possible, particularly with artillery fire at the enemy flank operating against an adjacent unit.

152. Advance guards are deployed on a broad front. Advancing decisively, the advance guards endeavor to envelop a flank (flanks) of the enemy advance guards and completely defeat them.

Paying no heed to the convenience of the initial disposition and not waiting for the end of the artillery reconnaissance, the artillery of the advance guards swiftly moves into position and, having organized temporary observation posts, opens fire on the targets which are most impeding or harming the infantry. Under such conditions the artillery battalion, albeit in individual batteries, can open fire about 10 minutes after having received the order. The normal organization of control is established in addition (which takes up to 30 minutes for a battalion).

Infantry clears the road for artillery's advance. A large part of the heavy machinguns moves forward at once and opens fire. Under their cover the infantry, taking advantage of concealed routes of approach, endeavors to deploy as close to the enemy as possible for the speediest offensive and attack. Prior to deployment, the battalions close in in columns (or dispersed).

Advancing rapidly, the armored cars and tanks (if they were part of the advance guard) assist the advance of the infantry assault group enveloping the enemy flank.

If a forward detachment is operating in the area of operations of the advance guard, the former comes under the command of the officer in charge of the advance guard. Using it as a holding force and, if necessary, supporting it with part of his forces, the officer in charge of the advance guard endeavors with all the advance guard's remaining forces to attack the enemy on the flank, in accordance with the situation.

The officer in charge of the advance guard must demand of his subordinates decisive and independent action.

3. Operations of the Main Forces

153. When the advance guard joins battle, the officer in charge of the column:

a) moves up to the command (observation) post, which has been selected such as to ensure that he personally see the fighting of the advance guard;

b) evaluates the situation that has taken shape (terrain and enemy) and determines the points which have to be taken in order to contain the enemy in the sector of the advance guard's movement and thereby facilitate the deployment of the main forces, corresponding to which he sets the assignments for the officer in charge of the advance guard;

c) immediately deploys the artillery of the main forces for support of the advance guard and cover of the deployment of the main forces; and

d) immediately issues warning instructions (orders) to units of the main forces of the column concerning movement into areas from which it will be possible to deploy most conveniently and swiftly for launching the main assault.

Endeavoring to ascertain the disposition of the main forces of the enemy, hamper their deployment and contain them in the sector of the operations of the advance guard, the officer in charge of the column takes steps for the advance guard's development of the most decisive actions, supporting it with the artillery of the main forces of the enemy, until the start of the general offensive by the main forces.

154. The staff of the officer in charge of the column immediately embarks on the organization of combat control, developing liaison, establishing the interaction of the infantry and artillery, organizing observation, dispatching additional reconnaissance to the open flanks and to the meeting point with adjacent units and organizing protection of the flanks (meeting points) and air and anti-gas defense. The staff pays particular attention to methods of the rapid delivery of reports to the superior commander and the rapid notification of adjacent units.

155. Air defense should ensure for the column's main forces freedom of maneuver and deployment in order of battle. Regardless of the presence of active air defense means, the units must be able during raids to swiftly employ dispersed orders and move in them nonstop under fire from the air.

156. The officer in charge of the column makes the decision to deploy his main forces on the basis of information concerning the enemy received earlier and personal observation of the development of the fighting of the advance guard, without waiting for exhaustive reconnaissance data. Delay in adopting a decision for the purpose of ascertaining the situation can only result in the defeat of the column bit by bit. In making the decision it must be firmly remembered that in a meeting battle decisive and swift operations can result in success even given the overall superiority of the enemy forces. Even the difficult position of the advance guard, against which large forces of the enemy have switched to the offensive, and its partial withdrawal should not lead to abandonment of the offensive: a skillful assault by the column's main forces at the flank and rear of an enemy advancing against the advance guard could put him in a difficult position.

Only an offensive by overwhelming enemy forces can force a switch to the defensive. But in this case also the operations of the column should be organized such that the enemy breaks up against the rapidly organized defense, after which he is finished off by a decisive offensive.

157. In making the decision the officer in charge of the column determines where to launch the main assault.

The greatest results are achieved when the main assault is launched against the flank of the enemy with its wide envelopment. It is necessary to strive here to ensure that the assault against the enemy's flank knock him off his travel route and throw him back into an area disadvantageous for operations.

For achieving the greatest concentration of forces and resources in the assault group it is necessary to confine oneself in the sector of the holding force to as few forces as possible (usually to the advance guard). Each battalion of the first echelon of the assault group must be supported by at least one artillery battalion.

158. The formation of the order of battle in a meeting battle is characterized primarily by the speediest movement forward of fire means and the decisive advance under their cover of personnel.

Divisional artillery units in the first period of the battle are subordinate to the commanders of the regiments which they support. The artillery chief outlines a plan for the further use of artillery and its approximate allocation per IS group and determines for them supplementary fire sectors in the event of the battle being protracted. In view of the fact that a large part of the artillery in the first period of a meeting battle usually supports the advance guard, the formation HQ and the artillery chief prepare thoroughly and ahead of time communications and the transfer of artillery battalions for support of the battalions of the assault group.

The corps artillery attached to a column is partly incorporated in the advance guard for the long-range shelling of the enemy's columns. As the battle develops, it, integrating, conducts fire to neutralize the enemy infantry and his detected batteries. It is desirable to detail aircraft to work with it.

159. Given a forced switch to the defensive, the holding force is deployed either at the line at which the advance guard held or at another, more advantageous line.

4. Integration of Column Operations

Having received reports of the column advance guards having joined battle, the formation commander must decide against which enemy column it is necessary primarily to launch the main assault. The following serve as grounds for the decision: the overall mission of the formation, reconnaissance data, data on the initiation of combat, the situation in the sectors of adjacent units and the order of movement of the formation's columns.

On the basis of reconnaissance data and information concerning the fighting of the columns the formation commander endeavors to determine where (against which column) the main forces of the enemy are and the direction of their attack.

Even prior to the confrontation of the columns' forward units with the enemy, the formation commander endeavors by way of the corresponding dispatch of forward detachments and the operations of aviation, particularly attack aviation, to delay the movement of some enemy columns in order to ensure the defeat of the straggling other columns.

The formation commander's main methods of organizing the main assault are:

a) the appropriate targeting of the offensive of the columns (column) operating in the main sector for its development in the most advantageous direction;

b) an attack against the enemy flank by a column marching in the second echelon;

c) a flank attack by a column marching in echelon formation;

d) attachment to the columns inflicting the main assault of the formation artillery which has marched with the column in the holding sector;

e) extension of the front and active defense in the holding sector and also, if possible, assistance by part of the forces of the holding group by an offensive in the sector of the main assault;

f) increased supply of ammunition to the assault group; and

g) an air attack on the enemy in the sector of the main assault.

161. The most decisive and guaranteed results are achieved given an attack on the enemy column in the sector of the main assault on one or both flanks.

The enemy flanks are enveloped mainly by independent columns. In some cases the envelopment is effected by simple continuation of the columns' movement in their basic directions (routes).

Following the enemy's defeat in the sector of the main assault, the success is developed by an attack against the flank of the remaining enemy forces (columns).

162. In performing his set assignment the formation commander may meet the enemy on the flank or altogether in a sector threatening him in the performance of his assignment. In this case, if it is not possible for him to confine himself to posting a blocking force against the enemy who has hove into view, the formation commander must with a decisive offensive smash and throw back the threatening enemy column and, after this, having left a blocking force against it, carry out his set assignment.

In just the same way, when necessary, the formation commander can render an adjacent formation support with a brief assault by part of his forces or a fire assault.

163. When battle is joined, the formation HQ immediately embarks on organization of combat control and the organization of communications, adopts measures for the swift delivery of reports from the columns (sometimes dispatches agents thither with means of communication) and organizes reconnaissance in front of the columns which have not been drawn into combat and on the flanks, observation of the battlefield, air defense and the work of the rear services.

164. Divisional and corps artillery units operate with the columns with which they have moved. Artillery which has moved with the column forming the holding force, from which it could be withdrawn, time and distance permitting, constitutes the exception.

Strategic cavalry units (if they have been attached to a corps) are used for the wide envelopment of the enemy columns and an assault from the flank and the rear.

Tanks and armored cars and sometimes infantry also may be attached to them.

Attack and light bombardment aviation counteract the deployment of the main enemy forces in a sector disadvantageous to us and contain them.

Fighter aircraft ensure the work of other types of aviation and cover the deployment of the main forces.

Tanks (if attached) are used with the rifle regiments of a divisional assault group or with strategic cavalry units.

Corps anti-aircraft artillery is set up for combating enemy aircraft, providing air defense for the deploying corps assault group units and the bulk of the artillery.

165. If successful, a decisively developed offensive switches to pursuit. The columns, right down to small infantry units, pursue independently and without glancing back at the adjacent units. Leapfrogging, artillery accompanies the infantry pursuing the enemy.

The commanders take all steps to hold up the enemy's withdrawal and wipe out his main forces.

The best method would be wedging in his order of battle infantry units and detachments disorganizing and slowing his withdrawal.

In the event of the enemy, switching to the defensive, having had time to organize a powerful fire system, it is necessary to switch to a plan-based offensive thoroughly supported by artillery fire.

Chapter XI. Offensive Against a Defending Enemy

1. General Grounds

166. The nature of the preparation of an offensive and the offensive itself against a defending enemy are determined by:

a) the density of the enemy's defensive disposition;

b) the engineer equipment of his defense zone;

c) the system of defense, which depends on the enemy's tactical methods;

d) the availability of offensive resources;

e) the time allotted for preparation;

f) the time of year and day and the terrain conditions; and

g) the degree of the enemy's political stability and fighting efficiency.

167. The nature of the offensive depends abruptly on the nature of the enemy's defense. It assumes the most complex forms when the enemy defends himself in a fortified zone (in position and mobile warfare in periods of calm) occupied and reinforced more or less evenly and strengthened by security and rear service zones. Under these conditions it is necessary to employ the breakthrough, with its subsequent development in depth and in the directions of the flanks which have taken shape following the breakthrough.

In position warfare all three zones are consummately developed, and usually the distances between them are calculated such that the attacker cannot simultaneously hit two zones with his artillery.

Under conventional mobile conditions (given a switch to defense following extensive active operations or in intervals between offensive battles), when defense does not occupy a continuous front, wide and close envelopment combined with frontal attacks is employed extensively during offensive operations. Under these conditions an offensive battle against the enemy's security and defensive zone may be completed in a single day. The more the defensive front has held out and dug in, the more time is needed for preparing the breakthrough.

The absence of strong security advanced far in front of the defense zone makes it possible to reach its forward edge at once and, after the necessary preparation, to attack it. The existence of strong, advanced security preliminarily requires its plan-based organized destruction. Adroit and swift operations to wipe out the security support by strong artillery could lead to the enemy being defeated bit by bit.

It will usually be difficult to determine where the security ends and defense zone (forward edge) of the enemy begins. By virtue of this, it is essential to concentrate particular attention on reconnaissance of the forward edge.

168. The order of battle of a defending enemy is hit by the attacker consecutively bit by bit. By virtue of this, it is extraordinarily important to ascertain the flanks of the enemy and also how his defensive zone is dispersed. The enemy may occupy a continuous front, evenly dispersing his fire means, mainly infantry, along the front and in depth and carefully deploying some machinegun resources on the reverse slopes. Such deployment makes the attacker's reconnaissance and the use of his artillery more difficult. Often the enemy's disposition could be broken and dispersed into cores of defense: centers of resistance, strong points and others deployed at certain intervals. For the purpose of concealment of his dispersion the intervals could be filled with decoy strong points and such. The most important task of reconnaissance will be ascertaining the true disposition and strength of the cores of defense.

An offensive will be most successful if the dispersion and system of deployment of fire means along the front and in depth are ascertained. The locations of individual fire points, groups of points, fortified buildings and so forth are determined by reconnaissance and combat. In accordance with these data, which are frequently far from complete, it is necessary to draw a conclusion concerning the fire system of the enemy's defense. Knowledge of the enemy's tactics will help the drawing of the correct conclusion and correct organization of the combat.

169. The direction of the main assault is determined with regard for the assignment set the formation, the presence or absence of an open enemy flank, an outline of the forward edge of his defense zone, the density of his disposition in different sectors of the position, the degree of ruggedness of these latter, the existence in the rear of various sectors of natural obstacles impeding the enemy's withdrawal, the existence of concealed approach routes, artillery positions and observation posts on the part of the attacking formation, the degree of political stability and fighting efficiency of the enemy troops and so forth. The direction of the main assault should ensure the greatest conveniences of the offensive, the least losses and the most likely and most complete defeat of the enemy. The most advantageous form of an offensive is wide envelopment of the enemy's flank.

When organizing a breakthrough it is essential, having determined the system of defense and the degree of engineer equipment of the enemy defense zone, to reckon up the artillery, mortar, tank and chemical resources and, proceeding from this, determine the front of the breakthrough. Artillery weapons are designed usually for the simultaneous neutralization of enemy battalions deployed in the first echelon of defense. Battalions of the second echelon of defense are neutralized either simultaneously with this (if there are sufficient weapons) or after the battalions of the first echelon (limited artillery weapons) have been neutralized. Given the availability of a large number of tanks, a breakthrough could begin even without preliminary or following brief artillery preparation. A large number of neutralization resources affords an opportunity for breaking through on a broader front. The broader the front of the breakthrough which is planned, the more successful the offensive and maneuvering of the troops will be, but the front of the breakthrough should be expanded not at the expense of a reduction in the necessary density of the concentration of fire per kilometer of the breakthrough. This is achieved by the supply to the formation of neutralization means of GHQ reserve.

170. The time allotted for the preparation of a breakthrough is determined by the degree of engineer equipment and system of defense, the availability of neturalization means and operational demands. The stronger the defense zone is reinforced and system of fire organized, the more the time required for preparation of the offensive. But in certain cases operational demands compel a reduction in the time for preparation despite the considerable strength of the defense zone. In this case what is required is a corresponding strengthening of the military formation with neutralization means requiring less time for the organization of their control (predominantly tanks).

An unprepared or inadequately prepared breakthrough leads to an excessive, frequently fruitless loss of forces and undermines the troops' trust in the command.

171. An offensive may begin both from a position of close contact with the enemy (under conditions of a temporary stabilization of the front close to positional conditions) and from an approach to the enemy. In the latter case preparation for the offensive consists of: a) an approach to the enemy and reconnaissance of the security zone, b) destruction of the security zone and reconnaissance of the main defense zone and c) formulation of the plan of the offensive and the disposition of forces and resources for it.

The offensive of a military formation under mobile conditions takes shape from the approach and advance of the infantry and artillery preparation conducted at these stages; and attacks against the forward edge and struggle within the defense zone.

For the purpose of concealment and reduced losses, given time, the approach and advance to the initial position for the attack may be carried out at night. It is advantageous in this case to launch the attack at dawn following short artillery preparation, and given tanks, without such.

Under positional conditions an offensive usually begins from a position of close contact with the enemy, achieved as the result of preceding battles.

172. Under mobile conditions, given the need for a preliminary approach to the battlefield, the military formation commanders usually make their operational decisions on the offensive:

a) the corps commander prior to divisional forward units' contact with the enemy's security zone;

b) the divisional commander following the destruction of the enemy's security and reconnaissance of the main defense zone; prior to the adoption of the decision, the rifle regiments should not be drawn into the sphere of the enemy's effective artillery fire; however, in the event of the enemy switching to the offensive against the forward battalions, the regiments must be ready to support them; and

c) the regimental commander no later than the battalions reaching the position from which the infantry offensive begins.

2. Reconnaissance of the Enemy Defense Zone and Liquidation of Enemy Security

173. The military formation's reconnaissance of the enemy's defense zone begins immediately upon receipt of the operational order for an offensive or a warning order determining the zone of the military formation's offensive.

If the offensive is preceded by approach to the battlefield, reconnaissance is carried out in the periods of the approach and destruction of the security. The rifle corps conducts reconnaissance by organic aviation and strategic cavalry units (if attached).

The rifle division and regiment by small organic cavalry units, reconnaissance organs, the fighting of the advance guards (forward battalions) and direct observation by specially appointed commanders.

174. Reconnaissance by organic aviation should determine: the contours, depth and, possibly, detailed dispersion of the defense zone, the security zone and, if such exists, the rear service zone of the enemy. The zone in the sector of the formation's main assault should be reconnoitered particularly thoroughly. By order of the corps HQ organic aviation conducts reconnaissance of the defense zone in the interests of the divisions, for which the divisional HQ's communicate their requests to the corps HQ. All the information obtained by organic aviation is immediately communicated to the divisions. The best method of aerial reconnnaissance of the defense zone is photographing, the amount of which depends on the time allotted for preparation of the offensive. The photographic plans are duplicated on the basis of their being supplied to all commanders through battalion commanders and battery commanders inclusive (at least in the sector of the main assault).

175. It is highly useful to tie in reconnaissance by strategic cavalry with the aviation operations. The cavalry reconnaissance detachments determine by way of the capture of prisoners and interrogation of the local inhabitants which enemy units and where are defended in the zone of the corps' offensive. Decisive battle with concentrated forces is the main method of reconnaissance.

Reconnaissance by small organic cavalry units has as its immediate goal ascertainment of the general outline of the forward edge of the security zone and its flanks and the depth, strength and numbering of the units occupying it; and the system of dispersion of infantry in the security, natural and artificial obstacles in the security and so forth.

176. The reconnaissance detachments endeavor to capture in the security zone points from which it is possible to overlook the entire depth of the security and the forward edge of the defensive zone. If the security represents a line of weak posts, the reconnaissance detachments knock it down and approach as closely as possible the forward edge of the enemy's defensive zone, taking observation posts which overlook its depth. Taking prisoners is an indispensable condition of the operations of the reconnaissance detachments. Patrols and reconnaissance parties by special branches of the army and services are sent out with the reconnaissance detachments for special reconnaissance. The operations of the reconnaissance detachments must be enterprising and decisive. Only combat with concentrated forces makes it possible to obtain essential information. Particular attention is paid to the rapidity and timeliness of the delivery of reports.

The reconnaissance detachments may be organized from cavalry or infantry in motor vehicles or on wagons with the obligatory attachment of artillery and, if available, armored cars.

177. Commander's reconnaissance is in certain cases integrated with special reconnaissance. Commander's groups with special reconnaissance advance together with the first echelons of the forward battalions and conduct reconnaissance of the enemy by way of observation from observation posts.

178. The dispatch of any reconnaissance organs and personal observation are always undertaken with a definite purpose, namely: clearing up that which was still vague before the organs were sent out. For ascertaining specific questions reconnaissance is set precise limited assignments and is organized in accordance with the nature of the given assignments. Reconnaissance conducted in general and evenly along the entire front, without being broken down into a number of specific assignments, cannot produce satisfactory results.

Reconnaissance of all kinds should determine:

a) the contours of the terrain of the forward edge of the defense zone and its flanks;

b) the locations of the machinegun points and machinegun batteries, the fire sectors, the locations of artillery positions, antitank guns and observation posts, the system of strong points, centers of resistance and others;

c) the strength and location of defensive installations (artificial obstacles against infantry and tanks, trenches and dugouts); when determining the strength of the defensive installations and their locations it is essential to recognize dummy buildings and decoy strong points;

d) the nature of the terrain (routes and approaches for infantry and tanks) and the commanding heights;

e) areas favorable for gas attacks (if contemplated) and areas contaminated by war gas and dangerous in terms of their stagnation;

f) rear defense zones;

g) natural obstacles within and in the rear of the defense zone hampering a maneuver and withdrawal of the enemy in certain sectors; and

h) the locations of HQ, communications posts (with respect to the movement of messengers and telephone lines) and radio sets.

The reconnaissance organs precisely plot all the data obtained on local reference map sketches. The more accurate the plotting, the easier it is to determine the dispersion of the enemy infantry. Divisional HQ compiles a general local reference map, which must be ready and delivered to the infantry and artillery prior to the start of the offensive against the defense zone.

As a result of all the reconnaissance data it is necessary to ascertain the contours of the forward edge of the defense zone and its flanks; as precisely as possible the disposition on the terrain of the battalions, companies and platoons (centers of resistance, strong points, redoubts and support lines) along the front and deep in the defense zone; and the system of artillery and machinegun fire (the locations of the batteries and observation posts).

179. During the preparation for an offensive the political sections of the military formations determine:

a) the class and national composition of the enemy units and their political stability;

b) the mutual relations between the enemy's officer body and the rank and file;

c) the combat capability of enemy units; and

d) the attitude of the local population toward us and the enemy.

The political section must draw a conclusion concerning the relative fighting efficiency of the different enemy units occupying the defense zone.

180. Together with the order or warning instruction for an offensive the rifle regiments should usually receive all the data concerning the defense zone of the enemy processed by divisional HQ and depicted on a local reference map with explanations (if necessary). On the basis of these data

the regimental commander indicates to his chief of staff what still has to be ascertained for making the decision. Regimental HQ immediately organizes reconnaissance, which is performed in the period of the infantry's approach. The rifle regiment must specify the enemy infantry's dispersion even more precisely in order to decide on its assignments most expediently and specifically set the battalions and artillery such.

181. The enemy's security zone is wiped out by the reconnaissance and forward detachments and the advance guard and forward battalions supported by the artillery of the main forces (and, if such exist, armored forces) which is detailed in the event of the reconnaissance and forward detachments and the advance guard not having been capable of wiping out the security and breaking through to the forward edge of the defense zone.

The number of forward battalions depends on the breadth of the division's offensive zone and the strength of the enemy's security. Under normal conditions two forward battalions will usually be sufficient for the rifle division.

Strong artillery (preferably two battery groups per battalion) for the most successful and guaranteed performance of their set assignments should be attached to the forward battalions.

Zones should be allocated for the operations of the forward battalions such that the battalions' offensive threaten the withdrawal routes of the enemy's security and upon deployment of the main forces avoid, if possible, the intermingling of the units.

Throughout their struggle against the enemy's security the forward battalions are directly subordinate to the divisional commander. The regimental commanders detailing the battalions continue to maintain communications with them for the contingency of support for them given the enemy's switch to an offensive.

182. The offensive purpose of the forward battalions is destruction of the enemy's security. For this reason their operations must be extraordinarily bold, decisive, swift and entirely independent. On the basis of reconnaissance data and personal inspection of the enemy's disposition the batallion commander determines the nature of the dispersion of the infantry in the security. It is particularly important to determine where the fire groups and unoccupied intervals are and which routes within the security zone are most favorable for conducting an offensive and which fire centers will hamper this most. On the basis of an evaluation of the terrain and the disposition of the enemy the forward battalion commander makes a decision as to the direction of the main assault and in accordance with this organizes the order of battle, sets the companies their assignments and details the artillery. It should be considered that the companies' great independence of action is required in the struggle against the security, and for this reason artillery control in the battalion should often be decentralized.

The forward battalions strive to take prisoners along the entire front and hit the enemy's security such as to render it unsuitable for operations in the defense zone. If the enemy's security begins a general withdrawal, the forward battalions burst in on the heels of the security at the points of the forward edge of the defense zone whence it is possible to overlook the depth of the zone.

183. In line with the maturation of the divisional commander's plan for an offensive with the main forces, the artillery chief prepares the reconnaissance, observation and communications for the artillery battery groups operating with the forward battalions in the sector of the main assault in order for artillery to subsequently come to the ready in the minimum of time.

The artillery chief, reporting to the divisional commander, regulates the expenditure of ammunition by the forward battalions, with regard for the overall tactical plan.

3. Plan and Organization of an Offensive

184. In formulating the plan and organizing the offensive the unit commander evaluates the enemy's defensive disposition, ascertaining primarily the disposition of his open flanks for the accomplishment of wide envelopment and an assault against the flank with a simultaneous attack by part of the forces on the front. If a flank of the defender's main forces is inadequately covered by part of his forces, by way of their destruction it is possible to reach the flank of the enemy's main grouping.

In the event of the enemy's defense along a continuous front it is essential to reconnoiter the number of defense zones. If the enemy still has a rear zone, during the attack against the main defense zone it is necessary to endeavor to keep the rear zone under long-range artillery fire in order to take possession of the rear zone also on the heels of the smashed main forces. Tanks and aviation provide most important support in this assignment.

185. In organizing the wide envelopment of the enemy's flank it is essential to firmly contain him by a frontal attack, having summoned to the front as many of the enemy's reserves as possible. The envelopment must be accomplished with surprise and swiftly. It is essential to take steps to secure the exterior flank of the enveloping units against enemy reserve counterattacks.

186. The reconnaissance that has been carried out and the fighting of the forward battalions provide divisional HQ with information concerning the enemy's defense zone.

For the commander's adoption of an operational decision the military formation HQ processes all reconnaissance data and submits them to the commander in the form of a conclusion concerning the enemy's defense system. Reconnaissance may not always provide entirely exhaustive data (except for positional conditions, when there is a great deal of time for preparation). The true disposition has to be determined from far from complete data. This is attainable only given a correct evaluation of the terrain, well organized reconnaissance and knowledge of the enemy's defense tactics and his methods of concealment.

187. When making the decision the military formation commander determines:

a) the immediate mission which he sets himself;

b) the direct of the main assault and breadth of its front;

c) the sequence of the neutralization of enemy dispersals in depth (position assignments);

d) formation of the order of battle (assault and holding forces, echelonment, artillery groups and allocation of the technical means attached to the formation); and

e) assignments for subordinate artillery formations (units) and other technical means left under the direct control of the formation commander.

188. The correct choice of the direction of the main assault is of decisive significance for the success of the offensive. The direction of the main assault is chosen so as to defeat the enemy, gaining his rear, by the easiest and swiftest method under the given conditions of the situation. The direction of the main assault is determined by the military formation commander independently and may sometimes be indicated by superior commander grouping for an assault by his main forces in a certain sector.

The most sensitive, weak and dangerous places for the enemy of his order of battle determined both by the quality of his troops (fighting efficiency and political stability) and engineer equipment and the terrain are the most advantageous for launching the main assault during a breakthrough. An assault in such directions leads to significant results, bringing the attacking units swiftly and without significant losses on the flanks and in the rear to stronger sectors of the enemy's order of battle.

In accordance with terrain conditions, directions providing for the following are advantageous for launching the main assault:

a) the best use of fire means, the existence of good observation posts permitting the broadest survey along the front and deep into the enemy's defense zone and the existence of close and advantageously deployed artillery fire positions providing for the possibility of the full concentration of fire in the zone of the main assault and continuous fire support for infantry during its advance without a change in positions;

b) convenient and concealed approach routes ensuring the rapid and concealed approach of infantry and tanks (if the latter have been attached) and also the work of the rear services hidden from the enemy's sight;

c) the possibility during the advance of placing the enemy under disadvantageous local conditions;

d) the possibility of artillery's rapid accompaniment of infantry; and

e) the possibility of the use of war gas (if contemplated).

The choice of direction of the main assault is also greatly influenced by the outline of the defense zone (salients and re-entrant angles).

189. The breadth of the zone of the main assault, depending on the defense capability of the enemy's position (fortifications and depth and degree of organization of the fire system) and the nature of the terrain, is determined by the formation's artillery potential and the quantity of tanks and other attached means of neutralization. To expand the sector of the breakthrough of the defense zone the military formations operating in the sector of the main assault are reinforced by artillery, mortar, tank and other facilities.

190. Depending on the strength and depth of the enemy's defense zone, the mutual disposition therein of battalions and companies (centers of resistance, strong points, support lines and others) and on the terrain conditions, the military formation commander determines the sequence of the destruction of the enemy's infantry dispersals, establishing the positions and approximate times that they will be reached, depending on the time needed to neutralize fire points and tear down artificial obstacles by artillery and other weapons attached to the military formation.

A breach of the enemy's defense zone may be considered completed only when the area of the enemy's artillery positions and reserves (10-12 kilometers) is reached.

191. Given the existence of an enemy rear defense zone, a plan for taking possession of it is formulated on the basis of data on its distance and strength of the garrison and engineer reinforcement and also the availability in the rifle corps of means of neutralization.

Aerial reconnaissance provides the corps commander with data for selecting the sector of the surest breach of the rear service zone. Corps artillery is able with the aid of aviation to conduct partial preparation of the attack while still in the period of struggle against the first defense zone. In accordance with the directions of the corps commander, the divisional commanders prepare in the second echelons of the assault groups rifle battalions specially for an attack on the rear zone which, not being distracted by assignments of struggle against the first defense zone, must advance rapidly and attack the rear zone with active air support. Artillery accompaniment is detailed for the support of these battalions. Given the presence of tanks in the disposition of the formation, a special tank echelon may be detailed or an echelon may be appointed following the breach of the first zone for operations against the rear zone.

The main divisional forces must vigorously support the attack against the rear zone.

192. The order of battle is formed in accordance with the direction and breadth of the front of the main and auxiliary assaults and planned sequence of the defeat of the enemy dispersals.

In attacking the enemy's flank the rifle corps provides the divisions with zones which ensure that the enemy is contained on the front and that the main forces reach his flank and rear. Given a breach of a continuous front, the rifle corps narrows the zones for the assault group divisions, indicating to them the direction of their main assaults in order that a wide breach of the enemy's defense zone will be formed on the corps' front. In special cases, given a shortage of artillery, the formation of a division in the corps' second echelon is possible and, furthermore, its artillery regiment is attached to a division of the first echelon.

The rifle division conducts the offensive having the assault group in one echelon (the regiments alongside) or in two echelons (regiment after regiment). Given a breach of the front, the divisional assault group usually forms up in one echelon.

The rifle regiment advances having in the assault group usually two echelons, while in a narrow sector of the offensive the regiment may advance in three echelons (battalion after battalion).

Artillery and other technical means are allocated in the order of battle in accordance with articles 126-137. The question of support by the second echelon IS group must be worked out particularly thoroughly. Its diversion for support of the first echelon for the time for which the second echelon has no need of it requires the special prepartion of liaison and observation.

In the event of the subordination to the military formation of strategic cavalry units, they should be employed in the assault group enveloping the enemy flank, and the organic aviation aircraft should be linked with them. Upon a breach of the front, the cavalry should be used in the final echelons, it being committed to action following the breach of the enemy's defense zone. Barbed wire should have been cleared away by the time of the cavalry's approach, which could be done by combat engineers and tanks.

It is useful to attach motorized units and, if available, tanks to the cavalry.

The cavalry does not receive offensive zones, operating in certain directions.

193. The second echelons of the assault group receive assignments pertaining to development of the success (direction of movement in the depth of the defense zone or which area to capture) simultaneously with the formulation of assignments for the first echelon and holding force. Their timely joining of battle to develop the success is the responsibility of the echelon chiefs. The assignments for the second echelons are set such as to ensure that upon the development of operations deep in the enemy's defense zone the units do not intermingle, that is, the second echelons should develop the success from behind the flank of the first echelon.

194. In setting artillery's assignment under mobile conditions the divisional commander and regimental commander determine in accordance with the report of the artillery chief and chief of staff:

a) the number and composition of IS groups (in the regiment the distribution of battery groups and batteries for support of the battalions) and which part of the artillery is detailed to the regiments (battalions);

b) the procedure of the regrouping of artillery command in the course of combat (decentralization of control and which part is intended for support of the second echelon);

c) the zones of responsibility and supplementary sectors of the IS groups;

d) the assignments of the IS groups per area and stage of the fighting;

e) composition of the LR group (if assigned);

f) time and procedure of the opening of fire; and

g) the approximate expenditure of shells per stage of the battle.

The divisional order incorporates points "a", "b," "c" and "e" (and, if necessary, "f" also).

The remaining points are incorporated in the order of the artillery chief and the operational timetable.

Upon the assault group's accomplishment of the envelopment of the enemy flank it is usually beneficial to decentralize artillery control.

Upon the formation of a corps LR group the corps commander determines:

distribution into subgroups (if necessary);

the zones of responsibility of the subgroups and additional assignments by area (supplementary sectors) for reinforcing divisional artillery in the event of a need for the concentration of strong fire with respect to these areas; and

the time of the opening of fire.

The rifle regiment commander is stationed, as a rule, at a general command post with the IS group chief (regardless of the group's subordination), indicates to him his decision and the assignments of regimental artillery and together with him determines the distribution of the battery groups or batteries for the support of the battalions, with regard for the operations of regimental artillery.

195. The tactical plan and support therefor is drawn up in accordance with the commander's decision. The formation HQ issues the warning instructions and prepares the order and, given breaches of the front, the operational timetable and local reference map. Following the formulation of the tactical plan, given time, the formation (divisional and regimental) commander assembles in secret at a convenient observation post the directly subordinate formation (unit) commanders and arms of service chiefs (including attached unit commanders) and

specifies the developed tactical plan in terms of the terrain (positions) and time, endeavoring to ensure that complete mutual understanding of the course of the combat and the interaction procedure be established among the subordinate commanders.

196. To ensure personal observation of the course of the combat and the influence thereon of the military formation commander HQ is obliged to secure the best command and observation posts, which are connected with the command posts. The transfer of the command posts to new positions should be organized such that the military formation commander may personally observe the operations of the troops at the most important moments of the battle. The commander's transfers to new command posts must not be held up by an absence of communications with them; communications should have been prepared prior to this. Assignments for the organization of communications are given well in advance. The routes for the move to a new command post must be reconnoitered ahead of time.

To ensure reliable communications in an offensive battle all means are employed, with their unfailing duplication. The means of communications reserves must be ready to hand and moved up in the sector toward the areas where their use is most likely. Code signs (flares) are established for infantry's communications with artillery besides the use of the signals sections with infantry units. Communications lines (wire and the routes of movement of messengers) should cross the terrain such that they are not interrupted by enemy fire.

197. Engineer preparation for an offensive consists of:

a) engineer reconnaissance specifying and supplementing the data of military reconnaissance technically and, in particular, reconnaissance of antitank artificial obstacles; combat engineers are attached to military reconnaissance's command patrols for engineer reconnaissance;

b) the installation and equipping of the most important command and observation posts for the military formation commanders;

c) ensuring the uninterrupted movement of the troops for development of the success and for pursuit (preparation of all resources for the arrangement of column cross-country routes, repair of roads and bridges and so forth);

d) preparation of resources faciliating the securing, if necessary, of captured positions;

e) the organization of work to widen the passages made in the enemy's artificial obstacles and additions to them for the unimpeded advance of the second echelons and, if possible, the extensive destruction of the obstacles;

f) assistance by the repair of roads and bridges to the advance of heavy artillery;

g) assistance in the camouflaging of tanks in the initial position and in the procurement of means for the tanks overcoming artificial obstacles in the enemy's defensive disposition (fascines, faggots and such); and

h) organization of the most important general camouflage work (concealment of open spaces from ground observation and so forth).

The plan of engineer support is drawn up in accordance with the directions of the chief of staff; the main attention should be paid to preparation of the conditions for the rapid advance of artillery and tanks (if attached).

198. The advancing troops must be thoroughly secured against surprise enemy attacks by reconnaissance, observation, security and air defense.

199. Air and anti-gas defense is effected in accordance with plans providing for:

a) deployment of active means of air defense in the period of infantry's approach and offensive, as infantry penetrates deep into the enemy's defense zone, and in the period of pursuit; b) the deployment of air observation and liaison posts and their transfer upon forward movement; c) the procedure of the use of communications for air defense needs; d) the employment of smokescreens and other types of concealment; e) chemical reconnaissance measures, methods of overcoming and circumventing places contaminated by the enemy and decontamination measures; and f) the deployment of chemical observation and gas alert posts (in regimental plans), their transfer upon forward movement and the general gas alert procedure and so forth.

If fighter aircraft have been attached to the corps or assigned for observation, the air defense plan is drawn up by the chief of staff in conjunction with the artillery chief and figher aircraft unit commander.

The regimental commander is obliged to effect following coordination with the divisional artillery chief the reliable anti-aircraft defense of the artillery (IS group) supporting his regiment and the advance of its battalions, for which he indicates:

which machinegun weapons and from which battalions are detailed for air defense purposes and their allocation and deployment (second echelon machinegun weapons are employed usually) and

The procedure of their march ahead together with the advance of the battalions and transit of the batteries.

200. The formation HQ formulates the plan of work of the rear services. The supply of ammunition should be provided for in all positions of the offensive. First aid and medical evacuation must also be adjusted to the timing of the main stages of the battle. It is essential to stipulate the general procedure of the feeding of people and the horses and the supply of fuel (given the presence of mechanized traction).

201. The surprise nature of the assault, which ensures its success to a considerable extent, is achieved by maintaining the secrecy of all preparations for the offensive and the concealment of operations during the offensive.

202. Smokescreens are employed by all arms of service. Thorough observation of the wind direction by commanders of all levels is essential for the successful use of a smokescreen. Wind direction is emphasized on the map.

The use of smokescreens must not impede the work of one's own fire means and complicate the operations of one's own and adjacent units. Smokescreens are used following coordination with the IS group commanders.

203. Particular attention during the preparation of an offensive should be paid to strengthening the political morale of the troops. As far as possible, units should be replenished prior to combat and be guaranteed rest and good food.

4. Use of Resources Attached to the Military Formations

204. General headquarters artillery (GHA) attached to the corps and divisions is used, depending on the caliber and type of the guns, in IS or LR groups. A GHA division attached to a rifle corps makes it possible to increase the breadth of the front of the breakthrough of the corps and each division individually by way of the attachment to each division of a GHA regiment. In this case the rifle division may allocate three or two IS groups, in the latter case each in a strength of one artillery regiment. The fragmentation and intermingling of GHA regiments, as also of divisional artillery, is undesirable. The GHA division acquires no independent sector and is attached (subordinated) in regiments to the rifle divisions and the corps artillery chief (LR group).

Prepartion of an offensive with GHA resources is undertaken on the basis of the general regulations of the use of artillery.

Radio units for consolidating the batteries' interaction with the infantry should be attached to the corps with the GHA divisions.

205. Mortars are attached normally by battalion to rifle divisions for broadening the front of an offensive and for the more powerful neutralization of a defender. Medium mortar battalions, whose purpose is the destruction of artificial obstacles and fire points of the enemy, are attached by company to the rifle regiments. Heavy mortar battalions, whose purpose is the destruction of strong cover, are attached to rifle regiments or incorporated in IS groups. The use of mortars must be fully taken into consideration in the plan of the artillery neutralization of the enemy.

206. The attributes of modern tanks permit their use during an offensive by various methods.

Tanks can be employed:

a) for a joint attack with infantry units;

b) for the performance of independent assignments in the depth of the defense zone in connection with the operations of infantry and artillery;

c) for joint operations with cavalry on the enemy flanks; and

d) as part of motorized units on the flanks and in breakthroughs.

Tanks in offensives with decisive targets are employed in considerable masses and in a broad front.

Tanks are employed on terrain which does not have natural obstacles which are insuperable for them and which affords an opportunity for bringing tanks up to the attack area secretly.

Tanks approach at night or under cover of smokescreens separately from infantry, with which they catch up at the line at which the infantry attack begins.

The norm of the supply of tanks to military formations should be considered no less than one tank battalion per rifle division.

Tanks' main mission is paving the way for the advancing infantry by way of neutralizing the enemy's fire resistance and destroying his artificial obstacles. In this connection the bulk of the tanks is detailed primarily to IS tank echelons. LR echelons are detailed for combating enemy artillery and, given a large quantity of tanks, also for disorganizing the work of his rear services.

From the tank battalion which has been attached to it the rifle division organizes primarily IS echelons, transferring them to the rifle regiments, and only given the existence of powerful artillery resources capable of neutralizing the fire of the enemy's main centers or given the attachment of tanks of more than one battalion does the division detail LR echelons (each echelon being no less than a company).

The tank units are, as a rule, under the command of the infantry commanders whose units they are supporting. The smallest tank unit attached to infantry subunits (battalion, company) is the platoon. Tanks attached to a battalion (company) receive assignments of support of certain companies (in companies, of platoons), whose demands they are obliged to fulfill.

If possible, some of the tanks should be detailed to the second echelons of infantry.

208. Tanks' support of infantry is of great significance during an attack by infantry against the foward edge of the enemy's defense zone.

In this case the attack may begin after brief artillery preparation. An attack may begin without any artillery preparation at all only given the presence of a large number of tanks. A joint attack against the forward edge most ensures the firm interaction of tanks and infantry.

In the period of further development of the infantry's breakthrough tanks can play a decisive part, replacing artillery, communications with which in the course of the battle is complicated. The organization of a tank attack when infantry attacks the forward edge of the enemy following strong artillery preparation, while the tanks, as a surprise to the enemy, support the infantry by attacking strong points of the second line is possible. The disadvantage of such a form of attack is the difficulty of organizing interaction between the infantry and the tanks and also the weakening of the infantry's first assault.

A breakthrough by tanks in an adjacent sector and support of their infantry deep in the enemy's defense zone by way of an attack against the flank of the corresponding enemy dispersals is disadvantageous for the same considerations.

Upon the completion of the breakthrough and the capture of artillery positions and in positional sectors following the capture of the rear zone the tanks are drawn into the reserve, without lingering around for the occupied area to be secured.

209. For the organization of a tank attack it is essential to determine:

a) the areas and directions favorable in terms of terrain conditions for a tank attack and their average speed depending on the terrain conditions;

b) the breadth of the front of the attack and the number of echelons;

c) the assignments for the tank echelons;

d) the order and time of the attack (or signal); and

e) the area where the tanks rally after the attack.

The operational timetable of the military formation should take account of the interaction of the LR artillery group and the LR rank echelon.

Reconnaissance of the enemy's defense zone should ascertain the system and nature of artificial antitank obstacles.

The plan of attack should provide for a consumate system of measures to overcome these obstacles (procurement of fascines and faggots, attachment to the tanks of combat engineers, the destruction by artillery and other means of minefields and so forth).

210. Having assembled the commanders of the artillery companies (sometimes first echelon platoons) and batteries attached to him or supporting him and the tank commanders, the infantry battalion commander explains in advance from a well concealed point the solution of the task set the battalion and outlines the boundaries and the approximate times for reaching them and the maneuvers of the companies and tanks supporting them.

The interaction of the tanks with the rifle subunits is ensured by detailed mutual familiarization with the order of fulfillment of the combat assignments and the sound organization of communications. This familiarization is undertaken on the ground in the period of the joint reconnaissance of the commanders of the tank and rifle units before the start of the attack.

Infantry must grasp that tanks cannot capture and hold a locality and that they can only facilitate this task for infantry, which remains the decisive arm of service. Infantry employs its customary methods of breakthrough, but strengthens them with the powerful assistance of the tanks.

The stopping of the tanks or their being put out of action must not for one moment halt the advancing infantry, which must be capable even without tanks of accomplishing a breakthrough.

Infantry helps the tanks in their struggle against antitank weapons (machineguns, large-caliber rifles, artillery).

Considering the speed of movement of the tanks, infantry makes every effort to cross the zone as quickly as possible.

211. Tanks neutralize the enemy fire points impeding the advance of the infantry they are supporting, for which they move forward, to the side and so forth. While performing this basic assignment of theirs they also, if possible, support adjacent infantry units. Tanks halt only behind cover.

Tanks attacking with the second echelons of infantry endeavor to provide for them the greatest power of strike during the attack.

The LR tank echelon attacks primarily the enemy's artillery, destroying it and diverting it from combating the tanks supporting the infantry.

In advancing within the enemy's defensive disposition the tanks should, if possible, avoid moving in the zones not occupied by the enemy's defending infantry or cross them quickly, otherwise this will facilitate the conditions of its artillery's combating of the tanks.

212. Given time, it is essential to organize the joint tactical training of infantry and tanks on the eve of the offensive, but on condition that the secret of preparation of the offensive is not revealed.

A tank attack should be prepared under conditions of preservation of the strictest secrecy.

213. It is more profitable to use armored cars, which are capable of operating only on roads or across unbroken fields, with the enveloping group and the cavalry.

Armored trains, which are armed with field guns and machineguns, may be the time of the infantry attack have been moved up to the starting line for the attack and support the infantry's movement to the forward edge with its fire.

Subsequently, if the roads have not been destroyed, they can be used to assist the movement of infantry battalions by shelling the flanking points of the enemy.

Railroad batteries, which have artillery of great power, are used to reinforce the fire of artillery in the IS or LR group.

214. Army aviation, which is attached to the rifle corps or detailed to assist it, has the following assignments in an offensive battle:

light bomber aircraft: hitting with fragmentation and gas bombs artillery, personnel concentrations, headquarters and baggage trains in the immediate rear, particularly with ammunition, airfields and landing fields for enemy aviation operating on the battlefield;

attack aircraft: hitting with machinegun fire and bombing artillery, personnel concentrations, headquarters and baggage trains; and

fighter aircraft: combating the enemy's reconnaissance and combat aviation operating on the battlefield.

Control of the combat aviation units attached to a corps or intended for assistance to it is integrated in the hands of the air unit commander as appointed by the army command. The corps commander immediately establishes liaison with the air task force commander. The air task force should be stationed in the nearest landing sites or forward airfields.

The plan for operational use of the air force is based mainly on consideration of: the operational air situation; the assignments of the troops of aviation's area of operations; the distribution of the air forces of the enemy and one's own; the state of ground organization and organization of the rear services; the time available for preparing for operations; the state of the materiel and the possibility of the work of the flight and maintenance personnel; and meterological data.

When formulating the assignments of attached army aviation, the corps commander indicates:

a) in which areas (in the sector of which divisions), at what time (stage of the battle) or in accordance with what signal and whence aviation must operate;

b) in which areas enemy aircraft must not be permitted; and

c) aircraft prearranged signals (light signals) for recognizing their troops (code).

Aviation carries out the set assignments, depending on the strength and types thereof, by the entire group or the individual subgroups into which it is divided for this.

Light bomber aircraft, if attached to a corps, may also be detailed with the commander's permission for combating enemy aviation by the bombing of airfields and landing sites. The commander of the air task force (and the commanders of the subgroups) establish liaison with the divisional commanders in the sectors in which they will operate and ascertain what and at which stages of the combat must be subjected to air attack. In accordance with the directions of the corps commander and the divisional commanders' tactical plans, the targets are pinpointed and the precise moment of attack determined by the commander of the air task force.

Combat aviation is used strictly in accordance with its combat flight potential, primarily at the tensest moments of the combat, that is, upon the switch to an attack against the forward edge and penetration of the defense zone.

215. War gases are employed for hitting enemy personnel with the assistance of artillery shells, aerial bombs, mines and special devices for spraying and releasing gas from balloons and poison smoke candles. Persistent war gases are used for neutralizing enemy batteries and for paralyzing sectors (areas) of the enemy's disposition across which the advancing units do not have to move. Nonpersistent war gases are employed mainly for hitting enemy infantry. War gases are employed extensively both for attacking personnel in combat and hampering its maneuver and for disorganizing the work of the rear establishments. The use of war gases depends on atmospheric conditions, terrain conditions and the properties of the weapons by means of which they are discharged.

Gas shell bombardment from guns and mortars and with aerial bombs is employed during an offensive (two pages of text missing)

218. Having received the division's operational order, the rifle regiment begins the approach of infantry in dispersed order. Deployment in order of battle is effected upon the order of the regimental commander upon reaching the line from which the infantry offensive begins. The approach of the infantry battalions is supported by the fire of the entire artillery of the military formation.

219. Under conditions close to positional conditions, if the offensive begins from a position of close contact with the enemy, the initial position is chosen as close to the enemy as possible; it is essential to endeavor to occupy such a position in order to switch to an attack against the forward edge immediately following the artillery preparation. The area of the initial position, in conformity with the disposition of forces, is fitted out in an engineer respect. If under the said conditions for attack it is necessary to approach the enemy, it is more profitable to effect the approach to the line of attack at night, which could take several nights.

220. Infantry's general assignment in an offensive battle is to close right up to the enemy and inflict conclusive defeat on him by fire and silent weapons. Infantry's approach by day is effected: a) in an area affording concealment by the movement of undeployed rifle battalions along concealed approach routes right up to the line further than which concealed movement is impossible; and

b) in open terrain by movement in dispersed orders to the line from which the infantry can employ its fire means for neutralizing the enemy in the main defense zone (900-1,000 meters).

Upon the approach to this line the battalions should for deployment receive the combat assignments from the regimental commander.

Approach during envelopment of the enemy flank should be distinguished by particular concealment and swiftness.

221. In deploying infantry for an offensive it is essential to avoid the excessive concentration of the infantry leading to pointless losses. Under mobile conditions the front of a battalion's offensive should be no less than 500 meters. The distribution of infantry units in depth is determined by the degree of possible enemy resistance, the depth of his disposition and the breadth of the offensive zone.

Given a breadth of the offensive of a rifle regiment of no less than 1,000 meters, the latter advances in three echelons.

222. The rifle regiment commander controls infantry's movement in the period of the offensive by the concentration of artillery fire consistently on the enemy sectors from which the advancing units are encountering the greatest resistance. Each infantry unit must be firmly aware that concentrated fire on the enemy sector counteracting its movement is, as it were, an order of the officer in charge concerning immediate and vigorous advance.

223. It is profitable to carry out an attack simultaneously on a broad front for the purpose of dispersing the enemy's fire and resistance. For this reason it is necessary to strive for a general attack of the military formation (division, regiment). A general attack is carried out either at a precisely indicated time or upon a signal. The signal for a general attack is given by the battalions of the first echelons upon the order of the commander of the military formation switching to a general attack. The infantry is sent into the attack when the enemy has been morally neutralized sufficiently by artillery fire and when his system of rifle-machinegun fire has been disrupted.

An attack is also carried out on the initiative of infantry subdivisions which, for the purpose of supporting adjacent attacking units or availing themselves of the results of their own artillery fire, head for the weakest spots of the enemy's disposition in order to envelop, cut off and wipe out his resisting units.

For designating the start of an attack and transferring artillery fire signals are established in advance (prior to the start of the offensive) which are given to the commanders of the battalions switching to the attack.

224. Battalions of the first echelon, having breached the enemy's disposition, advance to their prescribed areas, wiping out the enemy putting up resistance from the front and covering their flanks with machinegun and mortar fire. The battalion commanders must know precisely which batteries and at which

position come under their command. The first echelon conducts continuous attacks until the enemy artillery is captured and his reserves overrun. The battalions should not halt in their movement, even though enemy fire points which have not been wiped out remain in their rear and on their flanks. Moving behind the first echelons and developing their success, the second echelons secure their flanks and rear.

The basic demands on infantry when breaching the enemy's defense zone are boldness, decisiveness, energy and the swiftness of action of the smallest infantry units. They must wait for no directives and instructions from above. It is essential to make decisions rapidly and independently. An independent attack and bold penetration of any interval not occupied by the enemy should be the basic method of the operations of small infantry units and the infantry as a whole.

225. With the support of the artillery attached to them and without waiting for any directives from the superior commander, the second echelons move up rapidly and entirely independently in the wake of the first; wipe out the remaining enemy fire points and neutralize the points conducting fire from the flanks; andward off enemy counterattacks by an assault against his flank. In the event of the enemy, having put up stubborn resistance to the first echelon, holding up the offensive, the officer in charge of the second echelon independently develops the success, attacking the enemy from behind the flank of the first echelon. In the event of development of the success and the possibility of turning it into a defeat for the enemy in a sector other than the one contemplated by the plan, the second echelon is used in this new sector.

The officer in charge of the second echelon maintains direct communications with the officer in charge of the first echelon.

226. Given operations on the enemy flank, the first echelon of the assault group, enveloping the flank, must to ensure the success of the envelopment ensure the surprise nature of the attack, for which the approach is made secretly. The second echelon, secretly moving up behind the first and not allowing contact with it to be broken, observes the course of the combat and the attack on the enemy and with an even deeper envelopment of his flank completes his defeat, cutting off his routes of withdrawal.

The second echelon conducts reconnaissance in the direction of the enemy flanks and rear, endeavoring to discover his reserves. Sending his unit into the attack, the officer in charge of the second echelon must take steps to secure his flank and rear (and that of the entire assault group) against possible enemy counterattacks.

Following the course of the battle, the military formation commander constantly informs the second echelon of the situation and gives immediate instructions concerning the attack as soon as the time for this is ripe as per the situation.

227. While still in the period of the infantry's approach regimental artillery moves up as close to the enemy as possible and has as its main task making passages in the artificial obstacles and, with the start of the infantry attack,

rendering the advancing companies direct support, accompanying them by wheel and shooting down pointblank the fire points of the enemy putting up resistance to the infantry. When making the passages, regimental artillery operates by battery; for the accompaniment of companies it may be distributed among them by gun.

Regimental artillery is usually insufficient for making the necessary number of passages; in this case the necessary number of batteries of divisional artillery is detailed to reinforce the regimental artillery. Given the presence of mortars, the destruction of the artificial obstacles should be entrusted to them.

228. With the start of infantry's approach for a short period (10-15 minutes) divisional and corps artillery (IS and LR groups) rain down all their forces, but to the extent of the existence and possibility of the allocation of shells for this purpose, on the discovered enemy batteries, which are at this time the most important obstacle for infantry's approach; the IS groups then transfer fire to the fire means of the enemy infantry, hitting and neutralizing them consistently and in planned manner with the hope that a large part of them will have been taken out by the start of the infantry attack. In any event, artillery must disrupt the machinegun system of defense organized by the enemy. It is very useful to reinforce the IS group with heavy howitzer artillery.

From the report of the artillery chief the commander of the corps and division determines the plan for the expenditure of ammunition for each day of the fighting (the divisional commander for stages of the combat also).

229. Prior to an attack, artillery attacks the fire means of the enemy's infantry with the highest intensity, developing the fire in short bursts, repeated and transferred in depth to confuse the enemy concerning the time of the attack and force him to emerge from cover and hit him outside of it. The infantry unit commanders must be informed of the transfers of fire.

With the start of the movement of infantry artillery transfers fire deep and against adjacent flanking machineguns and centers of resistance, having the task of isolating the centers of resistance thus attacked, counteracting enemy counterattacks, securing the flanks of the units which have invaded the defense zone by neutralizing the enemy's flanking points and neutralizing the enemy's fire points in depth, preparing the attack on the rear strong points.

To ensure effective support deep in the enemy's defense zone with the start of the infantry's advance in depth the batteries, in accordance with a plan adopted in advance, consistently change observation posts and positions with the advance. These batteries switch to the command of the infantry commanders.

Aircraft are attached to the LR groups for spotting the enemy batteries and adjusting fire.

230. For regulating the interaction of infantry and artillery during the advance deep into the defense zone signals are established by colored flare, and aircraft determining the whereabouts of units deep in the defense zone may also be used for this same purpose.

231. For preserving surprise the artillery preparation should be as powerful as possible, but brief, pursuing the goal of demoralizing the defenders and hitting machinegun nests. Its duration, depending on the number of the formation's batteries at hand, the depth of the defense zone and the targets therein, the wire entanglements and the infantry forces of the enemy, is determined on average by a time of 3-5 hours. Given the enemy's lack of barbed wire and a situation which is unfolding favorably, the time for artillery preparation may be reduced.

6. Offensive Involving the Crossing of a Water Obstacle

232. For the forced crossing of a river obstacle the most favorable areas are:

a) bends of the river curving toward the attacker as permitting fire on the enemy flank and crossfire and cover from the fire of the flanks of the crossing units;

b) those having on their bank observation posts which see in depth the disposition of the enemy and concealed approach routes and cover for the units preparing for the crossing; and

c) those having convenient places for erecting bridges.

It is beneficial for accelerating the crossing of military formations to make it in several areas. For the purpose of forcing the enemy to scatter his forces it is essential to accompany the preparation of crossings with demonstrations.

The distance of one crossing area from another should permit the tactical interaction of the crossing units.

The following are essential for the success of the crossing:

its thorough organization and provision with sufficient crossing facilities for the rapid crossing of considerable forces;

attachment to the crossing units of means of neutralization in an amount sufficient to ensure the speediest crossing with the least losses;

the surprise nature of the crossing; and

thorough security against attacks from the air and the proper organization of anti-gas defense.

233. During the approach to the river (of a division and regiment) it is essential to consider the possibility of the crossing of advance guards on the heels of the enemy's security which he has moved up to the bank of the attacker; for this reason the advance guards should be furnished with light crossing means necessary for a swift crossing and means of neutralization (artillery) sufficient for support of the advance guards in their struggle on the bank of the enemy until the approach of the main forces.

The advance guards' assignments are:

a) wiping out the enemy's security and reaching the river bank, having ensured the possibility of reconnaissance and preparation for the crossing and

b) seizing bridges and ferrying means on the river.

234. It is essential when preparing a crossing:

a) to make a timely study of the nature of the river obstacle and the area of the adjacent terrain: in terms of descriptions of the theaters, large-scale maps and local data;

b) to calculate the material resources for ensuring the crossing (engineer pontoon units, crossing equipment, building materials, ropes, anchors and so forth) and to requisition them;

c) to collect local resources, boats, ropes, anchors and building materials and secretly deliver them to the location of the crossing;

d) to reconnoiter the areas of the crossings with the assistance of aviation, which must determine the presence and nature of existing bridges (pontoon, temporary, permanent), roads and defense lines;

e) to conduct reconnaissance of the locations of the crossings and the enemy's defensive disposition in the period of approach to the river and after the approach;

f) to process all reconnaissance data and other information on the river obstacle and dispatch them to the chiefs of the arms of service and subordinate subunits;

g) to prepare measures to set up communications during the crossing; and

h) to formulate a plan of air and anti-gas defense.

235. A military formation (unit) with all the engineer and artillery means intended for the said crossing under its command operates at each crossing. The unit commander is the officer in charge of the crossing, the engineer chief of the units attached to him is the technical leader of the crossing. The crossing materiel is led by specially appointed engineer unit commanders.

Upon the taking of a beachhead securing the crossing against machinegun fire and artillery observation and also adequate for the buildup of a second echelon an offensive is organized against the defending enemy, as under conventional conditions.

A crossing that has begun should be conducted continuously. In the event of failure at one crossing, the success is developed at an adjacent crossing. A crossing in a sector where it has failed should not be repeated--the enemy will be vigilant there.

Artillery, machinegun and smoke weapons are used for air defense. Machinegun units are designated for air defense from the second echelon. Fighter aircraft, if attached, are made familiar ahead of time with the area of the crossing and plan of operations.

236. On the basis of the commander's decision the formation HQ with the enlistment of the artillery chief, engineers, senior signals officer and chief of the chemical warfare service draws up the plan for the crossing in the form of an operational timetable.

The plan of the crossing is calculated on the basis of:

a) the capacity of the ferrying resources for transferring the infantry in one trip;

b) the time required for each trip;

c) the distance of the position with the taking of which it is possible to embark on the erection of light bridges;

d) the distance of the position with the taking of which it is possible to embark on the building of a bridge for all arms of service;

e) the time required for erecting each bridge and the organization of communications; and

f) the forces and resources of infantry, artillery and others.

The plan of the crossing strictly takes account of the topographical nature of the opposite bank, the existence over the water of a dead zone depending on the height and steepness of the bank, which centers of fire could shoot over the race of the river and which could open fire only on the infantry which has completed the crossing and begun to develop the offensive and so forth. Artillery and heavy machinegun fire primarily neutralizes the enemy's machineguns and riflemen hampering the infantry crossing and is subsequently transferred to the fire centers preventing the infantry expanding the beachhead for securing the building of a bridge and the subsequent crossing. Signals sections with the infantry and gas instructors are transferred with the first trip and provide for telephone communications and decontamination.

The plan of the crossing provides for the transfer of individual guns in the wake of the transferred infantry units, the subsequent crossing of all the artillery and also the subsequent organization of command posts, communications and other elements of control of different stages of the crossing, the subsequent offensive and the building of additional bridges on a broad front after the crossing and so forth.

237. With respect to individual arms of service the plan stipulates:

for the engineer unit:

a) which engineer units come under whose command, the time and place of reporting and subordination, the technical leaders of the crossings and the commandant of bridges;

b) the area to which the crossing equipment is moved up and by what time, which units (if necessary) are attached for assisting the engineer unit to transfer the crossing equipment, the routes for the transfer of the equipment and to which points on the river and concealment measures;

c) the methods of the crossing of the units (a landing operation on pontoons, boats or ferry, on assault bridges from light crossing equipment and so forth);

d) methods of ferrying machineguns and artillery (on rafts and in ferries or by attaching floats to the guns);

e) which bridges are built after the enemy has been ousted from the bank, when and in accordance with whose instructions these bridges are erected, enlistment of the local population in the work and so forth; and

f) what reserve of combat engineers (pontoon engineers) and crossing equipment remains in the event of losses and for the organization of crossings in other places.

The bridges must be secured against their destruction by incendiary rafts, floating mines and from the operations of enemy river flotillas by the organization of the corresponding observation of the river service and the installation of various barricades--booms, nets and so forth--and the detailing of fire means for the defense of the approach routes to the bridges.

For infantry:

a) which units are ferried first of all and which are appointed to support the crossing units with fire from their bank; which engineer and artillery units are attached and where (at what points) they come under whose command;

b) the areas and time of concentration of the units scheduled for the crossing first of all (assembly points);

c) the disposition of the units appointed for fire support of the crossing, on what targets and at what signal they open fire, which machinegun units of the second echelons are detailed for combating enemy aircraft, the location of their positions and their subordination;

d) the points and time of the landing of the crossing units on pontoons, ferries, boats and so forth, the routes of their movement to the landing places and the order of the crossing of the units with a precise echelon schedule; and

e) the method of the units' operations after the crossing, to which areas they move and their liaison with the officer in charge of the crossing.

For artillery:

a) distribution of artillery into IS and LR groups and for combating enemy aviation;

b) the targets to be neutralized during the infantry crossing;

c) the targets to which fire should be transferred with the infantry's capture of the opposite bank and the sequence of the subsequent transfer of fire in accordance with the infantry's advance from point to point;

d) the code signs for designating infantry's advance;

e) the subordination and crossing of individual guns;

f) the procedure of the successive crossing of artillery; and

g) the organization of communications and such.

In respect of air and anti-gas defense measures are also provided for during the offensive against a defending enemy, and the locations of the crossings are secured primarily, furthermore. Smokescreens are organized in coordination with the chiefs of the artillery groups.

For the signals troops:

a) which units and means of communication are transferred with the forward infantry units for the organization of communications on the other bank and where the message collection point is established;

b) which units remain behind in the old location; and

c) the methods of maintaining communications during the crossing of the troops itself, considering that optical means of communication are specially applicable under the given conditions.

238. A river may crossed by stealth or following artillery preparation. Given a surprise crossing, all the preparatory measures are usually carried out under the cover of night and are completed in order that the assault crossing and the erection of light bridges be carried out in darkness. Combat operations should be developed by day.

All the preparatory measures for the crossing are carried out with the observance of the strictest secrecy.

7. Offensive at Night and Under Poor Visibility Conditions

239. Darkness, fog, rain and blizzard weaken to a considerable extent the effect of modern technical resources and for this reason afford an opportunity for success to be won in battle by the side which is technically less strong (or lacking sufficiently strong technical means in a given area), but with hardy military units which are well trained for operations under the above conditions.

Combat operations at night are attended by the troops' great impressionability, difficulty of getting one's bearings and maintaining direction (maneuvering) and difficulty of leadership, and the difficulty is increased, furthermore, given the operations of large-scale military formations.

In this connection the operations are accomplished in more concentrated orders and formations, the plan of battle (attack) is compiled more simply and movement is carried out only rectilinearly (straight ahead).

A military formation's operations are undertaken at night for:

a) closing with the enemy up to the distance of effective machinegun fire and the starting line for the attack and

b) an attack against individual points of the enemy's defense zone by units of the military formation.

240. A night attack of the whole military formation (particularly a division and corps) is an exception and in this case begins only prior to dawn itself in order that penetration deep (two pages missing)

The enemy's security forces must not divert the pursuer from the direction he has adopted. It is essential to seek by enveloping or breaching them to wipe them out and approach the enemy's main forces.

244. Parallel pursuit (from one or both flanks) leads to the greatest success.

It is possible:

a) if there are good roads making it possible to forestall the enemy at the most important road junctions, at river crossings and in defiles and throw him back to an area which is difficult to traverse or press him against an impassable obstacle and

b) given time and the resources for a movement, to swiftly reach the enemy's flanks (cavalry with tanks and motorized units).

Given the absence of these conditions, it is better to avoid losing time, to pursue the enemy by nonstop movement, using for operations on the flanks and to hold him up mobile units with the most mobile artillery.

245. Strategic cavalry (if attached) with tanks, batteries and even individual guns of LR artillery is sent into the breach for an assault against the flanks which have formed, for attacking the enemy closing up into columns or for parallel pursuit, if the enemy has managed to break off.

Small organic cavalry units and infantry in motor vehicles and also bicyclists, pressing hard on the enemy, slow his movement with strikes from the flanks and by reaching the rear of the enemy's forming columns. Particularly significant for these purposes are small detachments with howitzer artillery, which exert great moral influence on the retreating force.

246. Artillery has the tasks of:

a) the final disorganization of the enemy;

b) depriving him of the opportunity of assembling in columns; and

c) combating armored forces and aviation (air defense).

RA is attached to the infantry battalions. Divisional and corps artillery partly remains in position (batteries disposed close to the enemy) and fires on the retreating enemy, albeit with long-range fire; the bulk, however, advances behind the infantry, maintaining constant communications with it and being ready to open fire immediately even from open positions. It is profitable to use LR artillery (107-mm guns) for shelling road junctions, river crossings and defiles. Continuous shelling even by long-range fire exerts a demoralizing influence on the enemy.

247. Armored cars operate with the cavalry and the forward infantry subunits.

Tanks operate with the infantry and cavalry against the enemy's main forces.

248. Attack and light bomber aircraft operate against the retreating enemy columns, particularly at river crossings and in defiles.

Fighter aviation is used depending on the situation for securing the operations of attack and light bomber aircraft and for covering the pursuing columns against enemy air attack.

During pursuit all types of aviation, organic included, should be used with full intensity for operations against the retreating enemy columns.

249. From the time of the start of the pursuit the combat engineer units must embark on the repair and restoration of the roads of the occupied area to ensure the rapid movement primarily of artillery.

250. Reconnaissance of all kinds during pursuit should ascertain:

a) by which routes and in what strength the withdrawal is being carried out;

b) the strength and location of the disposition of covering units; and

c) what regroupings the enemy is effecting during the withdrawal (approach of reserves, direction of the columns' withdrawal, work on the preparation of defense lines and their occupation).

Chemical reconnaissance is sent out with the infantry reconnaissance units for the purpose of opportunely warning its units about areas contaminated by war gas.

251. The basic means of communication are: radios, motor vehicles, motorcycles, bicycles and mounted communications. Wire means of communication should be employed in the event of unforeseen delays. No complications in the establishment of communications should lead to a slowing and delay of the pursuit. In this case each officer in charge must want and be able to adopt the independent decision required by the situation and implement it with all vigor.

252. Only the higher command, considering the state of the communications and forces of the military formations, their provision with ammunition, the conditions of all types of supply, the appearance of fresh enemy troops, the strengthening of his resistance and other considerations of an operational nature, has the right to halt pursuit. Prior to receiving an order from above concerning a halt to the pursuit, each commander endeavors to finish off the enemy with the full exertion of forces of his formation. Pursuit should continue at night also.

253. The political organizers embark immediately on the organization of revolutionary committees in the locality cleared of the enemy. The swift establishment of authority in a locality cleared of the enemy, given the enlistment in construction of workers, farm hands and the peasant poor, is the best security for one's own rear.

Chapter XIII. Defensive Battle

1. General Grounds, Plan and Organization of Defense

254. Defense is employed for the purpose of:

a) saving forces on a broad front for an assault in the decisive direction;

b) gaining time to carry out the necessary grouping of forces for an offensive;

c) holding a zone (areas, lines and routes); and

d) disorganizing an attacking enemy for a subsequent switch to the offensive.

The strength of defense consists of the most profitable use of firearms, the terrain and engineering.

Defense combined with offensive operations or with a subsequent switch to the offensive could lead to the total defeat of the enemy forces.

Given defense with open flanks, it is necessary to select a defense front which requires the enemy's expenditure of considerable time on envelopment and combat on the flank, which makes it possible to gain the necessary time or defeat him with a counterstrike.

Military formations occupy the following for defense: the rifle corps and rifle division: defense zones; the rifle regiment: a sector consisting of battalion areas.

255. The defense of a military formation is based on:

a) a system of rifle and machinegun fire with its reinforcement by artillery fire and

b) a combination of the fire system with assault group counterattacks.

The mutual disposition of the battalions (with their rifle-machinegun system) and artillery (IS groups) should provide for:

the creation of a continuous hitting zone before the front, predominantly by cross and flanking fire and

the capacity of each battalion area to independently continue the defense following the enemy's capture of adjacent areas.

Given defense on a normal front, intervals between areas not being hit by effective machinegun fire are not permitted.

256. The choice of defense zone is made according to the map and is supplemented by the reconnoitering of the terrain.

The forward edge of the defense zone is chosen in the hope of conditions being created complicating for the enemy the successful use of large artillery forces and a tank attack.

This is achieved by choice of the appropriate terrain and concealment. The entire system of defense should confuse the enemy concerning the contours of the forward edge, its fire strength, the depth of the defense zone and so forth.

For the purpose of complicating for the enemy the successful use of his artillery the forward edge of the defense zone should be chosen by proceeding from considerations of depriving the enemy of good observation posts and artillery positions.

For combating enemy tanks it is necessary to endeavor to ensure for oneself, if possible:

a) the absence on the enemy's side of concealed approach routes for the approach and concentration of tanks;

b) the existence at the forward edge and deep in the defense zone of obstacles which are insurmountable for tanks or difficult to overcome like rivers, swamps, big forests and such;

c) the existence deep in the defense zone of areas inaccessible for tanks and advantageous for the deployment of assault groups; and

d) the existence of such areas advantageous for the deployment of antitank fire means.

At the same time the forward edge of the defense zone should ensure the best organization of infantry's rifle-machinegun fire and also the directions most convenient for a switch to the offensive.

If a transition to defense is effected in the course of battle, the defense zone is chosen depending on the goal of continued operations and the convenience of the defense. In any event, "at all costs" it is essential not to stop in the chance positions in which the recent fighting came to a standstill.

257. The rear zone is chosen by the corps commander as directed by the army command such that the distance between the forward edges of the first and rear zones is not less than 12-13 kilometers.

258. The disposition of infantry in the defense zone should be such that it is difficult for enemy artillery to determine the areas of disposition of the battalions and companies and for tanks to determine natural and artificial obstacles. For this it is necessary to avoid occupying sharply prominent lines and points, filling them with dummy buildings and obstacles, and to prevent the disposition of infantry subunits in sharply expressed pockets.

Infantry defending against tanks should be firm in the knowledge that the tank is no threat to it as long as it remains in appropriately organized and concealed trenches. The main danger to it is the infantry accompanying the tanks, and for this reason during a tank attack infantry should keep cool and, letting the tanks pass by, fall on the accompanying infantry. For this the infantry subunits must be thoroughly camouflaged and try not to reveal themselves during the movement of the tanks in order to let them pass. Infantry joins the struggle against the tanks only when the tanks have discovered the infantry subunits and are attacking them.

Infantry should consider that the tank has very limited observation and encounters great difficulties in maintaining communications with its infantry. This should be used for the basic task of the defending infantry: separating the attacking infantry from the tanks and hitting it with fire.

Infantry is deployed in respect of antitank obstacles such as to leave unoccupied zones (in accordance with a special plan) permitting its artillery to fire at the tanks surmounting or circumventing the obstacles.

Infantry's methods of repulsing a tank attack are:

a) hitting the tanks with battalion artillery firing pointblank;

b) fire of armor-piercing bullets from machineguns;

c) use of special rifles and machineguns and also special rifle and hand grenades;

d) hitting the tankmen with rifle and machinegun fire through the lookout slits;

e) hitting the tankmen through the slits with flamethrowers;

f) deployment of infantry subunits in sectors making the tanks' movement difficult;

g) the organization of trenches withstanding the tanks' weight; and

h) The organization of special machinegun batteries for combating the enemy infantry deployed behind natural and artificial obstacles inaccessible for tank attack.

259. Artillery in defense is echeloned in depth on the basis of the most deeply deployed batteries hitting the enemy infantry and tanks with effective fire at the approaches to the defense zone.

Given correct deployment and the expedient distribution of fire, artillery is the most powerful means of combating tanks.

The distribution of artillery in the defense zone depends on the nature of the terrain and the breadth of the front.

Corps artillery may form a LR group only given a corps defense undertaken for the purpose of a subsequent switch to the offensive (disposition on a narrow front) and in this case is deployed such that at the necessary moment (upon transition to the offensive) it can operate with the assault group. In other cases of defensive combat corps artillery is distributed among the divisions of the main sector.

The control of divisional artillery on a divisional front of up to 8 kilometers on open terrain is usually centralized; on a front of more than 8 kilometers and on broken terrain with narrower fronts also the artillery is attached to the rifle regiments.

Artillery is allocated per IS group depending on the assignments which it may perform in different sectors of the front. When artillery is being allocated, the part of it intended for operations with the assault group is stipulated in advance.

For combating tanks which have broken through deep into the defense zone batteries and individual guns are detailed from divisional and corps artillery, for which positions for firing in sectors not occupied by infantry, in accordance with the plan for antitank defense, are prepared well ahead of time. These positions are chosen in order that the tanks will be unable to attack them or, at least, that the tanks' movement during the attack will be slowed considerably (the existence of natural or the creation of artificial obstacles). The detailed batteries and guns take up these positions as soon as the direction of the tank attack is ascertained. The distances from these positions to the areas of the tanks' possible movement are gauged in advance. Fire is conducted by direct laying. It is also useful to deploy the main artillery positions such that they are protected against tank attacks (are behind obstacles).

RA is used by battery or gun for combating tanks as close-range batteries and guns and is deployed in concealed manner on the flanks of the directions convenient for tank attack. Battalion and regimental artillery is deployed per the plan of the regiment's antitank defense, but battalion artillery is deployed in the area of its battalion or on the flanks so that, if necessary, it can operate with it.

Decoy batteries are set up to attract the tanks in the wrong direction.

Besides the artillery deployed for firing at tanks in positions prepared in advance, successful use may also be made of mobile batteries (tractor-drawn) and heavy tanks armed with 76-mm guns. In instances where the enemy lacks tanks, regimental and battalion artillery is used for combating live enemy targets in the sectors inaccessible to the fire of divisional artillery.

260. Engineer preparation in the defense zone consists of:

a) work on the building of defense zones aimed at creating favorable conditions for the best use of one's own fire and for counteracting the fire and movement of the enemy;

b) setting up the organizational area consisting of the restoration and building of bridges, the maintenance and building of roads, the organization of landing sites, the installation of storehouses, the digging of wells and so forth; and

c) the concealment of defense installations, the disposition of the troops and establishments, roads and so forth.

Under mobile conditions it is difficiult to precisely determine in advance how much time the enemy will afford for defense work; for this reason it is essential in the building of the defense zone to provide for the proper sequence of the performance of defense work ensuring the combat readiness of the defense zone at each given moment of work.

Organization of the ground by engineer work is normally carried out in the following sequence:

the work of the first stage: building of actual and dummy trenches with the clearing of the field of view and fire, the erection of command and observation posts, the installation of artificial obstacles and a concealed communications route in the most important sectors;

the work of the second stage: the installation of communications trenches with the rear, the building of a variety of shelters and the development of work of the first stage; and

the work of the third stage: the building of field roads necessary for the combat and administrative supply of the troops and the repair of existing roads and development of the work of the first and second stages.

All engineer work must be carried out with the observance of concealment measures. The soundness of the concealment of engineer work should be verified by aerial assessment photographs.

The distances to the various points and lines at which it is particularly advantageous to meet the enemy with fire are gauged simultaneously with the defense work.

The defense areas are reinforced by the units occupying them. Engineer units are used for the installation of command and observation posts, the erection of artificial obstacles (dummy included) for the tanks and leadership of the installation of portable obstacles, the repair and building of bridges and roads, artificial concealment, the creation of rear defense zones and so forth. For the creation of rear zones and road repair in the organizational area units of the rear and the local population are enlisted.

The unit engineers (and the commander of the combat engineer-concealment platoon) draw up the plans for engineer work, which are confirmed by the formation commanders.

261. Engineer preparation against tanks consists of the erection, depending on terrain conditions and available time and resources, of a variety of obstacles, namely:

a) swamping the terrain in front of the forward edge and within the defense zone;

b) an increase in the steepness of the slopes in order to make them inaccessible for tanks;

c) the digging of ditches, preferably concealed from above; and

d) the laying of minefields and so forth.

These obstacles, together with the natural obstacles, should create a system reinforced with dummy obstacles constructed such that the tanks, even having recognized the obstacles when approaching them, cannot enjoy rectilinear movement but are forced to move slowly and in zigzags and to reform in narrow formations.

262. The sum total of all the measures for combating tanks, namely, a system of natural and artificial barriers corresponding to the disposition of individual fire points and areas and the organization of concentrated fire in the most dangerous directions, should create the conditions under which:

a) the movement of tanks, as they penetrate deep into the defense zone, is slowed or they have to reform in narrow formations;

b) the infantry following the tanks is separated from them by machinegun and rifle crossfire from the sectors the tanks' attack on which has been made complicated or completely impossible (the existence of natural obstacles or artificial ones); and

c) the tanks, having run up against concealed artificial or natural obstacles, are met with direct-laying artillery fire.

The natural and artificial obstacles should have a direction not only along the front but also across, creating switch trenches protecting different sectors of infantry against tank attacks against the flank. The artificial obstacles should supplement the outline of natural obstacles such that the movement of tanks be either precluded altogether (or, at least, slowed) or made possible only in certain directions. These directions and also the antitank obstacles should be subjected to fire by antitank fire means. The antitank fire means are placed under concealment no nearer than 300 meters from the area being fired at (the distance of good visibility and observation from the tank).

263. All remaining technical means of neutralization are also employed in the struggle against tanks:

a) the armored train and railroad batteries are used as mobile artillery;

b) aviation is used for bombing tanks with heavy demolition and gas bombs in their assembly area and at the time of deployment; and

c) chemical troops can spray the tanks with war gas and thus weaken their observation and fire.

Reconnaissance must simultaneously reveal the concentration of tanks and their deployment in the starting position: this is achieved by interception and the work of aircraft.

Upon discovery of a tank attack, all troops are immediately notified of this, for which, apart from conventional means of communication, special signals by colored flares are established.

264. Defense against motorized units is conducted with reference to what has been set forth above. Given open flanks, they must be thoroughly secured: by not only unit but also army reconnaissance, artillery fire and the corresponding engineer reinforcement. Operations of motorized units on the flanks and in the rear are the most probable. The reconnaissance units should use high-speed means of movement (motor vehicles) and should be supplied with fast-transmitting means of communication (radio telephones, motor vehicles and motorcycles).

265. In accordance with the formation commander's decision, the formation HQ with the chiefs of branches of the army and services draws up the defense plan, which determines:

a) the forward edge of the defense zone and the combat security line;

b) the defense areas and assault groups;

c) the allocation of artillery and other attached resources and determination of the sectors within the defense zone not occupied by infantry for firing at the tanks by direct laying;

d) the start and end of defense work (trenches, obstacles, roads and so forth);

e) the assignments of arms of service and their interaction at different stages of the combat: upon the approach of the enemy, upon the closing and offensive of his infantry and tanks, upon wide and close envelopment and upon the enemy's breakthrough into the defense zone;

f) the plans for a counterattack or plans for switching to the offensive; security for the assault group dispositions against tanks attack;

g) protection of the flanks and security of the points where the regiments meet; (two pages of text missing)

and is accompanied by assaults of short duration against the enemy's reconnaissance and forward units. The paucity of rifle units in the combat security must be supplemented with artillery support. Besides the signals sections with the infantry, it is beneficial having observers from the LR group in the combat security units for the purpose of a timely and surprise artillery attack on the enemy columns. The distance of the combat security is determined by the nature of the terrain and the possibility of securing the defense zone against surprise enemy machinegun fire.

The combat security line is indicated during defense on a normal front by the divisional commander and on a broad front by the regimental commanders such that the line of observation be continuous.

270. Air defense is organized such that enemy aviation is unable to contain the counterattacks of the assault group and conduct reconnaissance and the adjustment of its artillery's fire with impunity.

271. Reconnaissance is aimed at the timely discovery of the enemy's movement toward the defense zone and his disposition (numbering of the units). Individual small cavalry unit patrols create a continuous line of observation over a distance of one-half to 1 day's march from the defense zone. Reconnaissance detachments are sent to the most important sectors with the assignment of ascertaining the direction of movement of the enemy's main forces, his disposition and the numbering of the units and by their operations diverting them into a direction favorable to the defender.

Organic aviation, for the purpose of detecting the enemy's movement, conducts reconnaissance to a depth of up to 4 days' march, making flights no less than twice a day. As the enemy approaches, the flights are increased in order that not one detected column slip from constant observation.

272. Command posts are chosen in a location whence it is easiest to establish communications and organize control. In addition to the command post, which has its own observation post, auxiliary observation posts should be chosen for observation of the battlefield by the staff commanders. Reserve command posts are selected in advance for the contingency of an enemy breakthrough.

273. Wire entanglements and radios are employed extensively in defense, and use is made of dogs, visual communication means and air liaison and observation posts. Traffic analysis of the work of the enemy's radio sets is established. To avoid interception all telepone lines within a 5-kilometer zone from the enemy should be double wire lines; and in the most important sectors laid underground. Monitoring stations are deployed and work on intercepting the enemy's telegraph-telephone intercourse.

274. The command indicates to the local population the least dangerous places in respect of shelling and instructs it in questions of the building of shelters and the simplest protection against war gas.

2. Conduct of a Defensive Battle

275. Organic aviation, cavalry and reconnaissance and outpost detachments (the latter three if there has been no contact with the enemy) determine the direction of the movement and disposition of the enemy's main forces and his artillery. The reconnaissance detachments delay the enemy, using positions convenient for defense, force him to deploy, gain time for the preparation for defense and confuse him with the decoy direction of their withdrawal; given a defense undertaken for the purpose of a subsequent switch to the offensive, they direct the enemy into the defense zone in the desired direction.

The security at the halt (if posted) delays the enemy for as long as it is necessary for the military formation to occupy the defense zone. It is supported by artillery fire from the defense zone. Its withdrawal is effected in directions prescribed in advance in accordance with the order of the officer in charge by whom it was posted.

276. Combat security, notified by reconnaissance, meets the advance of the enemy's forward units, endeavoring to inflict the biggest losses on him and take prisoners for interrogation. The enemy units endeavoring to circumvent the combat security units must be hit with fire against the flank from the forward edge of the defense zone. The withdrawal of the combat security units is covered by artillery and subsequently heavy machineguns from the defense zone. The withdrawal is effected such as to prevent the enemy rushing forward on the heels of the security units into the defense zone and ensure that the security units not impede the timely opening of fire from the forward edge of the defense zone.

277. All the forward units (reconnaissance detachments, outpost detachments and combat security) endeavor to take prisoners. Prisoners captured consistently (particularly commanders) are a great help in ascertaining the enemy's disposition. The usual method for taking prisoners is to allow an enemy forward unit to approach to a close distance and, having suddenly neutralized it with open machinegun and strong artillery fire, to attack swiftly and, having taken prisoners, to withdraw.

278. An advancing enemy must be smashed before he approaches the forward edge of the defense zone with the fire of fire means successively joining the combat (artillery, machineguns and rifles) concentrated in positions outlined in advance.

The firing of artillery at distant targets and also support of the combat security is effected from special positions which are evacuated as of the start of the enemy's offensive against the forward edge of the zone. As of the start of the enemy's artillery preparation artillery endeavors to ascertain the location of the batteries conducting fire against the wire entanglements and the forward edge and, by shelling a number of batteries, to disrupt the system of the enemy's artillery preparation. As soon as the offensive of the enemy infantry is discovered, the bulk of the artillery transfers fire against it. A tank offensive is repulsed by the fire of all the artillery.

279. In the period of the enemy's artillery preparation infantry's premature disclosure of its fire means is disadvantageous since this makes it easier for enemy artillery to neutralize it. In any event, one's fire forces and dispositions should not be revealed to the enemy's forward units. For this purpose it is recommended that the infantry units intended for combating the enemy's forward units change their disposition, if possible, after firing (transfer to alternate trenches).

280. The enemy attack is beaten back by combined fire of all kinds (artillery, machinegun and rifle) raised to the highest intensity.

Given the enemy's penetration deep into the defense zone, the task of the holding force is to halt the enemy's break-in and capture him in a fire pocket and of the assault groups to wipe him out by immediate and surprise counter-attacks, predominantly against the flanks.

In the event of the considerable superiority of the enemy forces which have broken through, the assault groups envelop them in a band of fire, providing for a counterattack by stronger assault groups.

In the event of a tank attack, the infantry and, particularly, the machinegun groups concealed from the tanks endeavor to separate the enemy infantry from his tanks.

All the antitank weapons conduct fire at the tanks.

The artillery deployed in the battalion areas fires pointblank at the enemy who has broken through and, in the event of a withdrawal of the infantry units, covers them to the last necessity.

Divisional and corps artillery concentrate the most powerful fire (with as large as possible a number of heavy guns, whose shell fragments are the most dangerous for tanks) against the tanks at the time when they are in the most compact groups or moving slowly:

a) when they take up their starting position for movement onto the attack;

b) when they cross areas in which movement is slowed; and

c) when they are forced to reform in narrow formation or reduce the intervals for the passage of narrow zones convenient for traffic or to overcome obstacles.

In the event of tanks breaking through the forward edge, the batteries and individual guns quickly move into positions prepared in advance and train fire against the areas not occupied by infantry determined and studied in advance.

The general endeavor of all is to hold up the enemy, for which even enveloped and cut-off units continue to defend stubbornly; and to disorganize and wipe out the enemy by fire and assault and win back the part of the defense zone which he has captured.

The adjacent and rear areas, special units, staffs and armed commands from the rear establishments meet an enemy who has broken through with fire, endeavoring to halt and disorganize him.

If the enemy attack is supported by tanks, the assault group, allowing the tanks to pass, suddenly attacks the infantry accompanying them on the flank. Heavy machineguns could render great assistance in combating the tanks (three machineguns can conduct a successful struggle against one individual tank).

281. The regimental assault group switches to the counterattack on the order of the regimental commander, for which he, as soon as the direction of the enemy's assault is revealed, gives the order for preparation of a counterattack, in which he indicates:

a) the direction of the assault group's counterattack and

b) the tasks of the IS group (or a unit thereof) appointed for support of the assault group.

The assault group, depending on the situation, occupies its defense area or moves into an area whence it is most convenient to switch to the counterattack. The machineguns of the assault group take up positions for firing at the enemy breaking through into the forward edge and for support of the counterattack. Given favorable opportunities for defeating the enemy, the assault group switches to the counterattack on the initiative of its officer in charge. The commanders of the adjacent regiments support the counterattack with fire and the switch of their groups to the counterattack.

282. The divisional assault group (groups) switches to the counterattack on the order of the divisional commander or on the individual initative of its officer in charge if the situation so demands. Having determined the direction of the breakthrough, the divisional commander organizes the general counterattack, for which he:

a) sets the assignments of the artillery unit intended, in accordance with the plan, for support of the counterattack;

b) sets the assignments of the holding force regiments for support of the counterattack; and

d) organizes from all the special units and rear establishments, without disrupting combat control and the work on the supply of ammunition, a group for covering the sector in which the enemy is spreading.

Tanks, armored cars, armored trains and combat aviation attack the enemy together (simultaneously) with the divisional assault group.

Given failure of the counterattack, it is necessary to create a new fire front enveloping the enemy and hold up his further spread, creating a new forward edge in front of him.

3. River Defense

283. In accordance with the further goal of operations, river defense is effected either with the evacuation of fortifications covering bridges to the opposite side of the river (active defense) or with deployment of the foward edge of the defense on one's own bank of the river (passive defense).

If the river is an effective obstacle for the enemy, it increases the strength of the defense considerably.

284. Active defense of a river is organized with observance of the following conditions:

a) one's own bank of the river is chosen as the forward edge of the defense zone, in the main, and

b) a subsequent switch to the offensive is secured by the building and retention of a number of bridges on a broad front.

The organization of active defense should ensue from the plan of the impending switch to the offensive.

The disposition of bridges is chosen with the intention of the direct switch to the offensive from each of them leading the troops toward advantageous tactical interaction. The sector of the main assault is provided with the largest number of crossings. All favorable bends of the river are used to this end. The disposition of artillery should correspond to the idea of the switch to the offensive and also the flank shelling of the enemy during his advance on any bridge and support of counterattacks from adjacent bridges.

The mutual disposition of the bridges should provide for a counterattack on the part of adjacent bridges against the flank of the enemy attacking on any bridge.

It is most beneficial to build the bridge in the bend of the river turning in toward the defense zone. The fortified bridgehead (tete de pont) should cover the bridge against the machinegun fire of the enemy and his artillery observation (but not against artillery fire) and also cater for concentration of the unit scheduled for the offensive. The excessive forward extension of the fortified bridgehead weakens defense of the river. The fortified bridgehead is ensured the support of flank machinegun and artillery fire from its side of the river.

Bridges should be concealed against ground observation and provided with air defense.

The defense zone along a river is provided with concealed roads and a communications system providing for the maneuver of the troops both for counterattacks and for transition to the offensive.

285. Given passive defense, as a general rule, one's own bank of the river is chosen as the forward edge of the defense zone.

If the river does not represent a serious obstacle and is fordable everywhere and the defense zone does not have at the river a concealed rear, only a security detachment is moved up to the river, and the forward edge is pulled back.

If the river is a serious obstacle, even if it is not, from the viewpoint of customary standards, the most advantageous forward edge, the forward edge should usually be chosen along its bank.

286. Engineer reconnaissance should determine the nature of the flow of the river, the fords and the most advantageous places for the binding of rafts and bridges on the enemy side (inflowing streams and such). Beyond these points observation is established and the data for shelling them are computed.

Considering the profile of the banks and the course of the river, the battalion comannders determine how to organize the system of machinegun fire for fire on the river, the depth of the fire and so forth. The machineguns firing at the river are thoroughly concealed and do not reveal their disposition right until the start of the crossing of large-scale enemy units. Special rifle and machinegun units are detailed for combating enemy reconnaissance.

In the event of it not being possible thanks to the steepness of the banks to fire at the river from depth, the fire should be based on flank fire in order to make it more difficult for the enemy to discover the machineguns harming him.

In the operational timetable the course of the river is divided into squares. The batteries should be prepared to fire at any of them, which is particularly important at night.

All bridges are destroyed and local crossing facilities of the opposite bank are collected and transferred to one's own bank.

The assault groups immediately throw the enemy units which have crossed back into the river with counterattacks.

Communications, reconnaissance, observation and notification, particularly at night, must be organized thoroughly.

4. Defense on a Broad Front

287. When a military formation is given for defense a front considerably greater than the normal front, a general defense zone is not set up, and the defense is based on the resistance of individual areas created in the sectors of the enemy's likely movement and on interaction between them and with the assault groups deployed behind.

The intervals between the areas should be occupied by individual machineguns (security) and decoy installations in order to confuse the enemy concerning infantry's true disposition.

The intervals should, in addition, find themselves under the cross machinegun fire of the adjacent areas.

The intervals may be contaminated with war gas stakes.

288. The military formations may organize a defense having along the entire front effective machinegun and artillery fire on the front thus (approximately):

a) a rifle regiment--8-12 kilometers and

b) a rifle division--20-24 kilometers.

The rifle corps, defending on a broad front, will have sectors of varying density: some divisions on a normal front, others on a broad front.

The overall extent of the corps' defense zone could reach 50-60 kilometers.

Battalion areas, depending on the importance of the sector and the terrain conditions, have a varying front expanse, but not more than 5 kilometers. The intervals between the platoon areas should be fired at with the effective fire of light machineguns (up to 750 meters) and between company areas by the effective fire of heavy machineguns (1,000 meters). The battalions should represent independent detachments from all arms of service.

Corps and divisional artillery is allocated accordingly among regimental and battalion areas, coming completely under the command of the regimental and battalion commanders.

289. The basis of defense on a broad front are the battalion areas. Their tasks are to throw back the enemy with fire or contain him until the approach of the assault group. Adjacent battalion areas should render each other the utmost assistance with fire and counterattacks against the enemy's flank and rear. The military formation's assault group may be deployed in several places, but such that counterattacks in the main sectors may be carried out in concentrated fashion (from different directions against the flanks of an enemy who has broken through).

Given an offensive of large-scale enemy forces, it is usually necessary to switch from defense on a broad front to mobile defense.

5. Mobile Defense

290. Mobile defense, which consists of defensive combat not brought to a conclusion and accompanied by an escape from the enemy and consolidation in new defense positions, is employed when for operational considerations it is possible to sacrifice some territory, but gain the necessary time and preserve the personnel in organized shape.

291. In mobile defense the holding force is detailed fewer forces than usual. When selecting the forward edge great significance is attached to considerations concerning the existence of concealed withdrawal routes and open terrain in the direction of the enemy. For the purpose of gaining time the combat security could be reinforced somewhat. Control of divisional artillery is usually decentralized, and artillery is allocated among the regiments and frequently among the battalions. Disengagement is effected on general grounds.

292. During withdrawals for the occupation of a new defense zone great significance is attached to rear guard combat allowing considerable time to be gained, inflicting losses on the enemy and preserving the formation's main forces. Contamination of individual ares of the most important sectors, defiles and such with war gas stakes could be employed considerably during rear guard combat.

6. Defense at Night

293. An enemy night offensive is repulsed in accordance with a plan drawn up in advance providing for:

a) the locations of the security units moved up at night;

b) the choice of points for the installation at night of heavy and light machineguns and the organization of machinegun fire given artificial lighting and without it;

c) the locations for the night disposition of the assault groups;

d) the organization of the illumination of the terrain with searchlights and flares;

e) measures to repulse a gas attack; and

f) the preparation of artillery fire in individual sectors (squares).

294. In order to avoid artillery fire (prepared in advance) it is beneficial at night to deploy the machineguns elsewhere than in daytime. Machineguns deployed by day in depth are brought up close to the forward edge in intervals between fire points in excess of 300 meters. Infantry reconnaissance and combat security consisting of listening posts and observation posts (with guard dogs) are sent on ahead. Reconnaissance should maintain direct contact with the enemy. The withdrawal of the reconnaissance and security units should be effected such as not to obstruct the fire of the machinegun points.

295. Artillery prepares all the data for opening fire by day. Fire is opened against an advancing enemy in accordance with signals (colored flares) determined by the divisional commander and given from the side of the sector against which the offensive is being conducted. The terrain in front of the forward edge is broken down into sectors, which are plotted on the map; artillery prepares the data for opening fire on these sectors ahead of time (by day).

296. Artificial lighting is effected by illuminating flares, illuminating shells and searchlights. The searchlights are set up such that the beams of light do not illuminate the positions occupied by one's own troops. It is possible to conceal from the enemy the front of the sector being attacked by the enemy by the intersection of the beams in front of it and blind him and simultaneously illuminate him for the fire of one's own artillery by training the beams against the enemy.

Illumination by searchlight begins in accordance with the signals established for calling up artillery fire.

297. In the event of an enemy breakthrough into the defense zone, the assault groups must drive him out immediately with a counterattack, not allowing him a chance to dig in.

Chapter XIV. Disengagement

298. A decision on withdrawal is made when it is ascertained that continued fighting is pointless and disadvantageous.

The withdrawal of a military formation may be effected only by order of the superior commander. The military formation commander may on his own initiative pull back only certain units of his formation for the purpose of adopting the most advantageous disposition for continuation of the combat with the enemy in accordance with the assignment set previously by the superior commander. Only the absence of communications with the superior commander, given a clear threat of suffering a total defeat, gives the military formation commander the right to make the decision to withdraw earlier than the time which the superior commander had counted on gaining by combat, but this withdrawal may be permitted only for a distance whereby adjacent units are not put in a critical position.

299. Disengagement may be:

a) under pressure of an enemy successfully developing an offensive and

b) without enemy pressure, as a surprise for him, in the period of a lull in the fighting.

Under whatever conditions disengagement is accomplished, it must be of a plan-oriented nature, which is most easily achieved upon disengagement with the onset of darkness; for this reason it is essential even under complicated conditions to endeavor to hold out on the spot until the onset of dusk. The plan-based nature of a withdrawal is facilitated by the absence of delays en route, for which it is necessary to adopt timely measures to clear the rear routes.

300. Upon the transition from defense to disengagement the formation's holding force should be weakened to a strength not exceeding one-third of formation personnel. Units are withdrawn from the holding force by a maneuver combined with successive withdrawal to a number of rear positions.

As soon as the main forces have disengaged, they form up in columns and withdraw, while the holding force becomes the rear guard.

The rear guard should have powerful fire means.

Strategic cavalry and armored units, if present, are used for an attack on the flank and rear of the advancing enemy columns or for the organization of mobile defense at the lines, covering the withdrawal of the infantry units.

Combat aviation assists the rear guard in containing the advancing enemy and secures the withdrawal of the main forces against aerial reconnaissance and air attack.

301. In making the decision to disengage the unit commander endeavors to withdraw the units to a number of positions which, making it possible to inflict by fire the greatest losses on the enemy, ensure at the same time the most concealed maneuver for the withdrawal in each position of increasingly new units from the holding force. In withdrawing the troops to a new position it is essential to strive to create second echelons in these positions.

Artillery control is, as a rule, decentralized.

The rifle regiments independently pull back to a rear zone indicated by the divisional commander. During pullbacks to intermediate lines the regimental commanders adopt measures to secure the flanks of adjacent units and constantly inform them of execution of the withdrawal.

In issuing an order for withdrawal to an intermediate line the regimental commander, if he has not used up his assault group, occupies this line with it in order that it secure the withdrawal of the holding force battalions beyond this line and itself receive further enemy assaults. If the assault group has been used up, the battalions are withdrawn successively under cover of the companies constituting them.

At each line regimental HQ organizes control in advance. All commanders of subordinate and attached units must know at each line where the regimental commander's command post will be and as of when.

Upon disengagement the main detachments comprising the various arms of service are the battalions. The combine fire of all types and maneuver.

Considering the possible operations of enemy aviation against the retreating units it is necessary to provide ahead of time for air defense (the regrouping of anti-aircraft artillery and machineguns, reinforcement of the air defense of the defiles on the withdrawal routes, avoidance of troop, artillery and baggage train concentrations in open areas and other measures).

302. The plan of withdrawal provides for:

a) a new defense (rear) zone with the distribution therein of forces and resources for defense;

b) the routes and order of withdrawal for each unit of the military formation;

c) the routes, order and areas of the withdrawal of the rear establishments and the order of the evacuation of equipment;

d) the order of the evacuation of combat casualties and the sick;

e) the appointment of the units securing the disengagement;

f) the composition of the rear guard (in individual columns) and the positions at which the rear guards must hold;

g) the organization of air and anti-gas defense;

h) measures for combating parallel pursuit;

i) measures for the repair of withdrawal routes and bridges and destroying them in one's wake;

j) communications during departure and their destruction in one's wake; and

k) the transfer of airfields and landing sites.

A general order to disengage is not usually given and is replaced by individual instructions, except for instances of mobile defense.

303. Given a nighttime disengagement, it is possible to confine oneself to cover by small reconnaissance units and patrols supported by machineguns. For the purpose of confusing the enemy the units left behind for cover maintain the same activity as that preceding the withdrawal.

304. A number of points for the assembly and fixing up of the disengaged units is outlined in the rear of the line chosen for cover, beyond the fire of enemy artillery. The withdrawing units should be opportunely provided with food.

The political organizers adopt all measures to maintain the troops' spirits.

Panic and desertion are cut short by immediate and decisive measures.

The commanders personally influence their units, setting an example of courage and calm.

305. The general destruction of bridges, roads and installations in accordance with a general plan confirmed by the superior commander ahead of time is carried out for the purpose of delaying the movement of the pursuing enemy. The plan indicates the list of installations to be destroyed and by whose order the destruction is performed and the moment of the destruction. For the destruction of railroad stations and their installations, crossings and routes special teams are detailed from the main forces, if railroad units have not been detailed or are temporarily absent. The bridges over which the rear guard has to cross are left unexploded, but primed for explosion. The teams of left on these bridges blow them up after the rear guard has crossed the bridge. Small units may be withdrawan to the other bank by bridges of light crossing equipment if a bridge has to be blown up in advance.

306. Communications during movement between withdrawing units are maintained predominantly with the aid of messengers; and in the new positions by telephone, telegraph and radio. The signals units and means of communication operating at the time of the start of the retreat remain for use by the withdrawing units and close up only as the rear guard withdraws and then follows it; the remaining signals units move at the head of the column of the main forces.

Chapter XV. Operations Under Special Conditions

1. In Winter

307. The particular features of winter operations ensue from the existence of snow cover, cold and the short day. The cold exerts a strong influence on the expenditure of people's forces and complicates the use of technical facilities. Thick snow cover seriously complicates and sometimes renders almost impossible the movement of people (without skis and snowshoes), horses, baggage trains and powered facilities without roads. The short days influence combat operations in the direction of a diminution in the scale of combat.

Whence: a) the low mobility and attachment of the troops to roads and slowness of movement (the paucity of roads and the elongation of march columns); b) the difficulty of deployment (the roads acquire the significance of defiles); and c) the vulnerability of the flanks and rear.

Given a depth of the snow of more than 40-50 centimeters, it is essential to supply infantry units with skis and to put artillery and wheeled wagons on runners or replace them with sledges. Machineguns and battalion infantry must, in addition, be adapted for movement without roads manually (on sleds).

Cavalry cannot function at all in mounted formation given a snow depth of over 30 centimeters.

Armored units--wheeled (armored cars)--cannot operate at all given thick snow and for this reason they can be used only on smoothed roads.

Tanks can be used without roads, the snow depth permitting, but their speed is reduced considerably.

Severe cold and cloud conditions limit the use of aviation.

By virtue of the physical properties of war gas and meterological conditions, the persistence of the majority of war gases is greater than in summer. Individual protection against war gases (icing up of the mask and the flaps and so forth) is made more complex.

Given an absence of snow or a small amount thereof and cold, the terrain becomes more accessible since water obstacles, swamps and so forth freeze.

An unstable winter leads to even greater difficulties for the measures adopted to remove the complications at a time of thick snow are entirely unsuitable during thaws.

308. The march schedule in winter is determined by the winter conditions and the distances between inhabited localities. In sparsely populated areas marches are accomplished from one inhabited locality to another, but the duration of the march in winter should usually be no more than 6 or 7 hours of movement.

The size of the column is determined by the capacity of the inhabited localities in which the rest of the columns is contemplated and the need to ensure the combat independence of each column. Usually the size of the column fluctuates from a regiment to a battalion reinforced with artillery.

When selecting the roads it is essential to consider that summer roads are often piled up in winter, but to make up for it new ones appear; for this reason it is necessary to carry out a preliminary reconnaissance of the roads and interrogate the inhabitants thoroughly. If the number of roads does not permit extensive dispersal along the front, it is essential to echelon the military formation in depth.

The columns are usually created from infantry with artillery. The cavalry, given thick snow and ice-covered ground, moves either at the tail of the column or independently, securing its movement with ski soldiers. Large-scale ski detachments (battalions) move in independent columns along the roads and without roads. Their speed of movement is 6-8 kph.

Reconnaissance, security and communications on the march are performed by ski soldiers.

The time of departure should usually be set for early in the morning in order to arrive at the night halt before nightfall; during a night march it is necessary to set out with the intention of reaching the rest area at dawn.

A meteorological service must be well organized during operations in winter.

309. It is essential to grant rest in wintertime, even in direct proximity to the enemy, in inhabited localities, organizing strong all-around security. It is also essential to endeavor to deploy the security unit at small posts (homesteads, individual farms and so forth). But in sparsely populated areas there may be instances when it is necessary to deploy for rest outside of inhabited localities; in this case it is necessary to choose locations protected from the wind, build huts from the material to hand and dugouts and have fuel.

310. During combat operations in winter it is necessary to reckon with the following singularities:

In defense:

a) cold attracts defense toward inhabited localities;

b) the enemy's aspiration to close and wide envelopment brings about the need for the more thorough organization of security of the flanks and rear and the allocation of up to half of the forces for assault groups (on skis);

c) in consequence of the fact that the direction of the enemy's assaults will be based on the roads it is essential when organizing the system of fire to pay special attention to the road network; ambushes, tree obstacles and damage to the roads are useful;

c) the building of fortifications on forzen ground is slowed down considerably; the success of the work diminishes roughly threefold; pickaxes and crowbars are needed for excavation and earth moving;

e) given rushed fortification, it is possible to dig trenches in the snow, bearing in mind that for protection against bullets the thickness of the parapet, depending on the density of the snow, should be from 2 to 4 meters; the snow should be tamped down;

f) particularly thorough concealment of the trenches is necessary since the black line of the trenches and wire entanglements becomes very pronounced against the background of the snow; and

g) a particular concern of the command should be to provide the troops in the trenches with fuel and bedding.

On the offensive:

a) the tactical property of terrain features such as defiles, forests, bushes and so forth, like approach routes and covers, could change considerably compared with summer;

b) movement over snow even at night unmasks advancing units, and for this reason white coats are highly desirable;

c) reconnaissance must above all other assignments determine the degree of passability of the terrain, the state of the roads and the significance of terrain features;

d) for envelopment of the enemy it is necessary to use ski teams and units, instructing them to attack the enemy flanks and rear; the ski units produce particularly big results when pursuing a retreating enemy, catching defiles in the rear, attacking baggage trains and so forth;

e) artillery control under mobile conditions is usually decentralized; particular significance is attached to bold, enterprising operations of detachments from different arms of service (battalions with artillery); attacks against the flank of defending enemy detachments (not on continuous fronts) are the basic conditions of a decisive success; given the existence of roads, enveloping columns on skis may be transferred by cavalry (in blinders); and

f) the existence, given a blanket of snow, of considerable open spaces (the absence of foliage and a relief smoothed by the snow) in the period of an offensive makes rushes difficult and virtually precludes concealed crawling; open space should be crossed swiftly on skis from one concealed position to another under cover of artillery and machinegun fire.

2. In Mountains

311. Mountain areas are characterized by severely broken terrain, different climatic conditions at different heights, a different degree of population and a small number of good paths and such.

312. Infantry equipped in conformity with the special conditions of mountain areas is the most capable for operations in the mountains. Machineguns, mortars and battalion artillery should be on packs. Part of the combat train and rations transport should also be on packs. The pack train requires a larger number of animals than wheeled transport, increasing the depth of the columns; for this reason, given the existence of roads for vehicular traffic, only the part of the baggage train essential for the units sent along the pack trails should be shifted to the packs.

Artillery is most suitable, specially mountain and howitzer artillery (with steep trajectory). Part of the artillery (and sometimes all of it) should be on packs.

The combat activity of the cavalry in the mountains is severely restricted, although given roads for vehicular traffic, cavalry still has greater speed of movement than infantry.

Armored units (armored cars and tanks), given roads for vehicular traffic, may be employed successfully, but in small units.

Aircraft operations are severely hampered by the almost complete absence in mountain areas of landing sites and in the high mountain areas by the height of the mountains, the frequent winds and fog and the rarefied air, but aviation can, nonetheless, be used successfully for combat operations and reconnaissance and liaison and sometimes for supplying the troops with ammunition.

313. The development of combat operations in difficult mountain areas is usually possible only in the direction of existing roads. For operations along paths it is necessary to appoint individual detachments capable of conducting combat entirely independently. The size of the detachments (columns) and their composition are determined by the quality of the route (highway, dirt road for vehicular traffic, pack road) and the mission.

314. When organizing a march it is essential:

a) to thoroughly ascertain the state of the route (particularly the width and ascents and descents); guides should be taken when moving along circuitous routes;

b) to determine speed of movement in the mountains (1.5-2 kph, even less along footpaths; a day's march under difficult conditions is often not more than 10-15 kilometers);

c) to determine the order of movement of the columns; movement in the mountains is accomplished in echelons of small composition (companies with machineguns) proceeding at such a distance from one another as not to press one another on ascents and descents; owing to this, the depth of the column is increased considerably: of a battalion to 2-3 kilometers and of a rifle regiment to 8-10 kilometers.

Artillery is distributed by battery or by gun among companies.

Cavalry usually moves in an independent echelon at the tail (if it has not been moved up to a forward or reconnaissance detachment). The combat train and field kitchens move with the column in an independent echelon with cover.

315. Halts are prescribed on the ascents every 15-20 minutes of movement. They may be prescribed on descents every 1-1.5 hours. Each echelon halts independently. A long halt of 1.5-2 hours is appointed on marches of more than 6 hours. At a long halt the animals are unpacked, and if a long halt is made on the road (there is no chance of leaving it), the animals must be placed facing the precipice.

316. Infantry units with machineguns and combat engineer units for repairing the paths and removing obstacles are sent to the advance security detachment. Under mountain conditions negligible enemy units (even groups of several riflemen with a machinegun) can block a road and hold up the columns' movement for a considerable time; for this reason it is necessary in many instances for clearing the route of enemy ambushes to send out forward or reconnaissance detachments. Flank protection is usually effected by way of the consistent dispatch of small units with machineguns laterally from the route of the column's march upward (to the distance of effective machinegun fire); these units, having let the column pass, join up with its tail.

317. The resting troops are protected by individual outposts usually dispatched the distance of heavy machinegun fire. Heights even a greater distance away (the distance of effective artillery fire), from which the disposition of the troops can be surveyed, should also be occupied by outposts.

318. The combat operations of the troops, which usually develop along the routes, are expressed under mountain conditions in the struggle for passes (capturing or holding them). Owing to the lack of opportunity for the detachments' mutual support, their operations have to be independent and based on an extensive display of boldness, pressure and the initiative of their commanding officers. The interaction of infantry and artillery in individual detachments must be faultless. Only directive leadership is required of the superior commander uniting the individual detachments.

An offensive for capturing mountain passes amounts to taking the heights commanding the passes. For taking heights and passes envelopments of them are usually required, although by negligible forces. Mutual support between detachments, which is usually impossible in the course of combat, is best achieved by the swift seizure of the passes and emergence on the other side of the ridge for operations in the rear of enemy units continuing to hold passes in sectors of adjacent units. During an offensive it is essential to have thoroughly organized reconnaissance and security of the flanks; the heights on the flanks from which an attack may be expected should be occupied by infantry units with machineguns.

For defense both the routes themselves and the commanding heights are occupied. The areas through which the routes run are occupied particularly strongly. The directions by which the enemy could envelop the position and the intervals between the areas are occupied by infantry (dismounted cavalry) units with machineguns and are thoroughly illuminated by reconnaissance. For barring the routes of an offensive and, particularly, in narrow valleys war gas may be used successfully. The assault groups of the military formations and detachments are deployed such that they may be the shortest directions operate in the main sectors and against the enveloping enemy units.

319. Communications between individual detachments in mountain areas are possible:

a) by messengers (mounted, in motor vehicles and on motorcycles) only on some intersecting roads and is sometimes completely impossible;

b) by telegraph via the starting positions (unreliable since the lines can easily be intercepted and cut);

c) by radio;

d) by optical means: signal lamps and flashing lights, flares, burning stakes and bonfires from the commanding heights;

e) by audio signals; and

f) by aircraft.

The superior commander's communications with the detachments are maintained by the same means.

During operations in the mountains by units unfamiliar with mountain warfare conditions it is useful to attach to their staffs commanders with experience of operations in the mountains.

3. In Forest and Swamp Areas

320. Given movement without roads in a forest, it is easy, thanks to the concealed expanses, to lose one's way; movement in this event should be effected by compass or with a guide from the local population.

All operations in a forest require the organization of the most thorough reconnaissance and security on the front, the flanks and the rear.

321. Infantry and howitzer artillery are the most suitable for operations in a forest. Cavalry operations are severely complicated by the small number of roads and the difficulty of deploying without roads. Cavalry in a forest is forced to conduct combat in dismounted manner. Armored units can operate usually only along roads, and tanks in a small or sparse forest.

322. It is profitable to use forest and swamp expanses for the organization of partisan operations on the enemy's flanks and in his rear. The operations of large-scale military formations (corps and division) will consist of operations of individual columns. In attacking an enemy's disposition in a forest it is essential to endeavor to envelop him if only with small infantry units.

An offensive through a forest is carried out in closer order than an open terrain, modified depending on the density of the forest. (Two pages of text missing)

The most profitable transport under desert steepe conditions is pack transport--camel. The camel can carry two persons or 190 kilos; the unit of fire for a 76-mm gun is lifted by 15 camels. For reducing the number of transport animals it is essential to take rations and forage in concentrated form (sugar, preserves, rice and so forth and oats) and batch livestock (predominantly sheep).

Given the existence of routes for vehicular traffic, the calculations of transport facilities change correspondingly, but, nonetheless, the size of the detachment will fluctuate depending on conditions from 500 to 1,000 men with the corresponding number of animals.

326. Almost all arms of service may be employed in desert steppe, but their use is limited by terrain conditions and the difficulties in supplying them. Infantry operations are complicated considerably thanks to the substantial distances between water sources (more than a day's march) and the need, because of this, to carry out day's marches which are longer than normal. Measures facilitating infantry operations are: a) transportation of infantry on camels, affording an opportunity to make the day's journeys from well to well and b) the conveyance of a supply of water with one, affording an opportunity to make a night halt and not at wells. Both measures increase the number of animals, which, given the limited water supply, reduces the numbers of the combat strength of the detachment. Cavalry (particularly that with local horses accustomed to the steppe) is the most adapted for operations in the steppe. Thanks to its considerable speed of movement, cavalry can for movement take in a large number of roads and, consequently, avail itself of a large number of wells. But the use of cavalry, on the other hand, is complicated by the limited nature (and sometimes complete absence even) of forage en route; therefore in dispatching cavalry for operations in desert steppe it is necessary to display concern for the organization of forage supply, and, furthermore, portage of the forage with one increases the number of transport animals at the expense of a reduction in the cavalry's combat

strength. Artillery should be included in a small quantity (predominantly field 76-mm or mountain) since the supplies for it require a large number of animals for transportation, which again leads to a reduction in the detachment's combat strength. The use of tank units is complicated by the great fuel requirement over long distances and the difficulty of organizing supply for them. Combat engineer units must obligatorily be included in each detachment (for digging wells).

327. A route march in the steppe is possible not only by road but also alongside them. A column moves in the following order: in front is the cavalry (infantry) unit, artillery, behind artillery part of the cavalry (infantry), then the trains with the ammunition in several rows, mounted (infantry) units, rations trains and a mounted (infantry) unit; mounted (infantry) units along the sides of the trains. On a route march it is essential to pay particular attention to the order in transport, for which superiors from each unit of the column for which the freight is intended are appointed to the transport. It is preferable to send on the cavalry in individual columns. The protection consists of march security patrols (infantry or mounted) dispatched 2-4 kilometers in all directions. On entirely open terrain it is possible to confine oneself to the dispatch of small mounted patrols and the establishment of observation from the column.

328. The disposition of troops for rest will most often be at wells and oases. The trains, artillery and cavalry are quartered inside, the infantry (dismounted cavalry units) outside, around the entire disposition. Security is posted by outpost supports in all directions to a distance of 2-4 kilometers from the resting detachment. Part of the artillery, ready to open fire, is deployed under infantry cover. In taking up positions for rest it is essential to pay particular attention to organization of the use of water and fuel; it is essential to post guards at the wells and to distribute water to the personnel strictly in accordance with the available supply of water in the wells. Teams are detailed to collect fuel per the detachment duty officer's fatigue instructions. The resting place should be reached 1-2 hours before dark in order to have time to graze the camels.

329. Combat operations are conducted according to general rules. On the offensive it is always necessary to strive to envelop the enemy's disposition, simultaneously containing him at the front. It is always perimeter defense which is organized.

330. Communications between the column and security is maintained by mounted messengers and visual communications; between individual columns by small mounted patrols, lamps, by radio and with aircraft; and between columns and the superior commander by small mounted patrols, by radio and with aircraft.

5. Battle for Inhabited Localities

331. Settlements, particularly with stone buildings, represent very durable strong points even after considerable damage from artillery fire. Therefore, avoiding a frontal attack on the settlement itself, it is necessary to direct the assault against the sectors adjoining the settlement in order, following the breach of these sectors and defeat of the enemy's reserves, to capture the inhabited locality from the flanks and the rear.

332. An attack on a stongly fortified settlement should be preceded by thorough reconnaissance, particularly aerial reconnaissance with aerial surveying.

It is essential in the period preceding the attack, besides demolition of the settlement by artillery fire, to subject it to aerial bombing and shelling with nonpersistent war gas.

333. An attack on an inhabited locality, if it is carried out from the front simultaneously with an attack against the sectors lateral to this locality, is usually composed of:

a) capture of the outskirts;

b) the storming of the strong point (redoubt); and

c) emergence at the opposite edge of the settlement.

Progress within the settlement is made not by the streets, which are usually covered by enemy machinegun fire, but by gardens, truck gardens, yards and gaps in the walls of houses.

An attack within the settlement is supported by the fire of machineguns (set up on house roofs and in attics), individual guns, mortars and grenade launchers. Armored cars and tanks can render great assistance.

Special units are appointed for taking strong points discovered within the settlement or individual buildings adapted for defense (redoubts) to which combat engineers with blasting equipment, individual guns, flamethrowers, heavy machineguns and armored cars and tanks are attached.

As the taking of the inhabited locality progresses, a thorough search is conducted with the assistance of the workers, the poor and the strata of the population close to us of all buildings, sheds and cellars of the village for the purpose of capturing both hostile groups and individual fighters in hiding and telephones, radio telephones and other facilities left behind by the enemy.

In an attack on an inhabited locality small infantry units must display completely spontaneous initiative and resolve.

334. Inhabited localities located in the defense zone are occupied by large-scale units for defense only given the existence in the settlement of solid stone buildings with their appropriate disposition and given the possibility of concealing these structures.

For concealment purposes the forward fire points are deployed either in front of the outskirts of the settlement or within the settlement, leaving the forward buildings as covers. In the latter case it is very useful to dig dummy trenches in front of the settlement.

Within the settlement it is beneficial to adapt the strongest homes and buildings for particularly stubborn defense.

The units defending the settlement acquire well ahead of time all means of protection against war gas.

When the outskirts of the settlement or part of it fall into enemy hands, a vigorous and short counterattack by the assault group is immediately thrown against this latter.

Given the failure of the counterattack, the combat switches to within the settlement, and the defender, furthermore, must stubbornly defend each house and each quarter.

6. City Combat

335. The singularities of combat in a city are determined by its layout (plan of the city, type of buildings and its size) and the configuration of the ground.

The preparation of an offensive consists of reconnaissance and the formulation of the plan of the offensive and disposition of the forces.

Reconnaissance is aimed as ascertaining:

a) the political condition of the urban population and the possibility of enlisting the workers in active struggle; and the possibility and expediency of the use of worker areas as strong (from the tactical aspect) points;

b) the composition and fighting efficiency of enemy units (bourgeois military organizations and regular troops or insurgent forces);

c) the location of public utilities (power station, water mains);

d) transport facilities (streetcars, motor vehicles, railroad stations);

e) communications establishments;

f) military equipment stores and plants;

g) the location of control centers;

h) the system of the city's food supply;

i) the plan of the city (street system, squares, avenues, buildings);

j) the nature of the terrain surrounding the city; and

k) its communications with other centers of population (dirt roads, railroads, telegraph and telephone main circuits).

336. The plan of operations stipulates:

a) which areas and points have to be taken for capture of the city;

b) the distribution of detachments per point and area and the sequence of their capture;

c) measures to isolate the city from the rest of the enemy's forces; and

d) measures to prepare an explosion (uprising) from within.

337. Street combat is conducted by individual detachments each operating on one street. The strength of the detachment, depending on the direction of the street and the assignment, ranges from one infantry platoon with machineguns, mortars, armored cars or tanks to a company with the same resources and battalion and individual regimental artillery guns. The operations of these detachments are unified within the limits of a battalion reinforced by gun and howitzer artillery, mortars, tanks, armored cars, cavalry for protecting the flanks (along adjacent streets) and bicyclists for liaison.

The battalion is given an independent assignment in respect of capturing a certain area or major point. Attainment of the positions is denoted by various code signs. The battalions conduct the combat entirely independently, rendering one another mutual support.

The advance along a street of individual detachments is composed of the successive capture of groups of houses and squares and the destruction of barricades.

338. In the captured parts of the city it is essential for securing it and maintaining order therein:

a) to set up area commandant's offices;

b) to set up posts for the protection of the most important buildings, enterprises and warehouses;

c) to send out strong patrols or mounted reconnaissance through the streets (cavalry or infantry in trucks);

d) to post armored cars or individual guns with infantry security detachments at the intersections of streets leading to important areas and on squares;

e) to create assault groups under the auspices of the commandant's offices provided with trucks for rapid transfer to the necessary locations; streetcars also may be used for this same purpose.

f) to organize the confiscation of weapons from the population, determining strict material and personal responsibility for a failure to surrender them;

g) to organize the impounding of counterrevolutionary elements; and

h) to take hostages from the bourgeoisie.

As local soviet power is organized, administrative functions are transferred to it.

339. For defense the city is divided into sectors entrusted for defense to detachments composed of a battalion or company with machineguns, armored units, mortars and artillery for fire by direct laying. The sectors should be divided such that they encompass certain important directions and, if possible, coincide with the administrative division of the city. The staff and political organizer of the sector (detachment) establish close communications with the local soviet and party authorities of the city and the plants and factories. Worker detachments are organized and used for defense.

Artillery control is decentralized.

The defense of a group of houses, squares and streets is organized such that all streets leading to this area come under fire; houses (corner ones predominantly) are adapted for defense and barricades are set up for this purpose. It is more advantageous to deploy machineguns in basement premises than on high points. For firing from rifles it is profitable to occupy houses of the left side since when firing from windows along the street the torso barely has to lean out of the window in this case. The attached guns are deployed in concealed manner (for firing along the streets at the enemy's armored units). Individual guns are employed extensively. It is useful to dig up the streets (against the enemy's armored units).

Section Three. Movement of the Troops

Chapter XVI. Troop Transportation

1. By Railroad and Waterway

340. Transportation by railroad and waterway is usually performed upon concentration of the troops for an operation or upon the realization of a large-scale strategic maneuver (operational transportation); given favorable conditions, transportation may also be undertaken to transfer troops when preparing for combat or in the process thereof (tactical transportation). Troops should be transported by railroad and waterway in all instances when this saves this compared with movement in march formation.

When determining the method of movement of a military formation, it is essential to consider:

a) the time by which transport may be made ready;

b) the number oftrains per day which may be detailed for a given transfer (number and capacity of ships);

c) the distance and time of the journey to the detraining point; and

d) the time needed to reach the boarding point, the time needed for boarding and detraining and the time needed for the march from the detraining point to the destination and to compare this with the time needed for movement in march formation.

The expediency of transportation by railroad given single-track and two-track sectors varies; roughly transportation may be considered beneficial:

for a rifle regiment: in single-track and two-track sectors for a distance of a day's march only if no more than 3-4 hours are required to get the rolling stock ready and if no more than 4 hours are spent on the approach to the boarding points, the boarding, the detraining and the route march to the designated area;

for a rifle division: given a single-track sector, for a distance of no less than 3 days' march and, given a two-track sector, of no less than 2 days' march; and

for a rifle corps: given a single-track sector, for a distance of no less than 8 days' march and, given a two-track sector, of no less than 4 days' march.

These calculations will be correct given the adequate development of the loading and unloading stations and the existence of materials handling apparatus, dirt approach roads to the stations and strict fulfillment of the transportation schedule.

In some cases it is beneficial to combine the transportation of certain units of the formation with the route march of others.

341. Upon receiving the order for a transfer of the formation its commander ascertains from the military communications authorities the precise times of the arrival of trains and the boarding points and distributes the subordinate units by echelon, and, furthermore, air defense units (if such exist) for organizing air defense at the detraining point and, if necessary, units capable of covering the detraining of the military formation are usually appointed to the first echelon.

The order for the transfer indicates:

a) the distribution of units by echelon and the time and place of boarding;

b) the travel routes to the boarding point (points) and the assembly points near it (but not at the station);

c) the procedure of ensuring food and medical services en route;

d) the fatigue detail of the work crews for loading and unloading the guns, baggage trains, horses and freight; and

e) air defense measures at the point of boarding, detraining and en route.

For concealment purposes only the echelon chief is notified by individual order of the destination, and then only given short transportation. It is best to convey this en route, not long before arrival at the place of detraining (on the day of the detraining).

The political organizers must organize political work on the echelon's travel route.

342. The air defense of the boarding and detraining stations (if there are no fixed air defense means or in addition to them) is organized by order of the corps commander (if anti-aircraft artillery is detailed) or the divisional and regimental commander. The units of the formation being transported which were appointed to be dispatched with the final echelons are used for air defense of the boarding point; the anti-aircraft artillery (if available) and heavy machineguns of the echelons which have arrived are used for defense of the detraining points. For warding off descending enemy aircraft some of the heavy machineguns adapted for this purpose on platforms are used in each echelon. In the event of an air attack it is useful to change the speed of movement of the train or halt it even. If the boarding or detraining station is the point or object of the point of air defense, the air defense means allocated the troops come under the temporary command of the officer in charge of the point. Particularly important points of the troops' detraining are covered by fighter aircraft operating in concert with the air defense of the given point. It is essential to provide in the air defense plan for special measures for protection against war gas employed by aviation.

343. If in accordance with the situation protection of the echelon en route not only against an air but also a ground enemy is necessary, armored trains and armored platforms may be employed for this purpose; in addition, a certain number of heavy machineguns should be allocated and be constantly ready to open fire. Particular attention needs to be paid to protection of steam locomotives (installation of machineguns thereon, protection of the engineer).

344. Responsibility for the boarding, order en route and detraining of each unit of a military formation lies with its commander. He must:

a) prior to the start of the boarding attach to the station a person of the command staff to obtain information on the measures adopted by the railroad administration for preparing the transportation;

b) adopt measures for fulfillment of the directives of the railroad transport officer in order that the boarding proceed swiftly and in the established order; and

c) upon the completion of the boarding personally or via the person of the command staff thus empowered check that the unit is provided with everything necessary for the journey and take the necessary steps to maintain the combat readiness and safety of the unit.

The officer in charge of the echelon monitors observance en route and during stops of all the rules established for transfers. The officer in charge of the echelon does not have the right to interfere in the instructions of the railroad administration. Demands on it can only be made via the military communications authorities.

For the uninterrupted operation of railroad transport it is essential that the troops observe the boarding and detraining times precisely.

345. The troops are usually fed en route from the field kitchens following the echelon, for which halts of no less than 30 minutes for dinner and supper are made at stations indicated in advance. Units lacking field kitchens receive a hot meal at the ration distributing points, for which the officers in charge of the echelon must order dinner and supper at them well ahead of time.

346. The detraining and unloading of the military formation echelons should be carried out under the observation of a representative of the command of this formation, for which this latter must travel to the detraining point well ahead of time or with the first echelon. He should have a list of the units arriving at the given point indicating the time of arrival of the echelons at the unloading station, the itinerary and the assembly areas. The representative greets each arriving unit and informs its commander whither the unit should head for the unloading. It is his duty to monitor the correct manner of organization of air and anti-gas defense, if it is being organized by order of the command of the transported formation included. If it appears necessary to conduct a reconnaissance of the assembly areas, specialist commanders, political education workers and representatives of the supply, medical and veterinary services are sent out together with the said representative.

If the operational situation demands and technical possibilities permit the unloading of the echelon not at the station but at an intermediate stage, the stocks of material for the installation of unloading apparatus must by order of the military communications authorities be concentrated ahead of time at the scene of the unloading. In an extreme case these materials could be delivered to the unloading venue from the station nearest to it with the first echelon bound hither for the unloading.

2. Motor Transportation

347. Motor transportation is employed:

a) for the rapid transfer of infantry units to particularly important points or threatened areas and for the transfer of small infantry units operating in forward and reconnaissance detachments and infantry attached to the cavalry and

b) for the transfer of military formations supplementing (over short distances and as a substitute for) railroad transfers (given a strongly developed road system and a sufficient quantity of motor vehicles).

348. When determining the advantageousness of motor transportation, what is pointed out in article 340 should be taken into consideration.

In any event, given the possibility of using the railroad for transportation, motor transportation of military formations should be effected only for distances not in excess of 250 kilometers. Furthermore, it has to be considered that in motor vehicles only a negligible part of the artillery with a limited number of animal teams and combat trains can be transferred together with the infantry; consequently, following the transfer, the military formation's combat strength is reduced for a certain time (until the arrival of all the rest of the artillery and baggage trains). For this reason when organizing the transfer of a military formation in motor vehicles, it is essential to consider whether the military formation could prior to the arrival of the entire artillery and baggage trains put up the necessary resistance to the enemy. To remove the said inconveniences during transfers over a distance of more than a day's march it is essential to attach to the units being transferred artillery on mechanical traction and motor transport or temporarily detail part of the transport from the formations quartered in the unloading area.

Given the existence of motor vehicles locally or given a possibility of assembling them by the time of the departure, it is advantageous to effect motor transportation for distances:

a) for infantry units (not more than a battalion): of no less than 10 kilometers;

b) for a rifle regiment: of not less than a day's march; and

c) for a rifle division: of not less than 1½-2 days' march (depending on the number of roads).

349. When organizing motor transportation the formation commander must, considering the general existence and state of the MT companies and roads:

a) determine the number of MT companies required with regard for the type of vehicles, which units need to be transported and which units and trains to send in march formation;

b) conduct reconnaissance of the roads (if possible in terms of the situation), choose the best of them (even if longer) and adopt measures for protecting them and keeping them in a state of good repair during the movement of the motor columns (assigning combat engineer units to the roads);

c) remove as far as possible all extraneous traffic on the roads along which the transfer of troops in the motor vehicles will proceed;

d) schedule the boarding and loading points and areas and the order of the forming of columns;

e) estimate the time necessary for the assembly of the motor vehicles, the boarding of people and horses, artillery and trains and movement (the speed of movement of motor vehicles is 10-15 kph by day; the daily run given 8-10 working hours is 80-120 kilometers; at night the speed is halved);

f) determine the method of transportation, depending on the situation; and

g) take steps to secure the unloading, boarding and traffic areas against air and gas attack.

350. Motor transportation may be effected by two methods:

a) the transfer of the entire formation immediately to the designated area (given a sufficient quantity of motor vehicles) and

b) the shuttling of the motor columns (given a sufficient quantity of motor vehicles).

The first method is always employed for the transportation of infantry units. For the transfer of military formations both methods are employed, depending on the number of motor vehicles and the distance. When organizing the transportation it is essential to consider precisely whether the second method will save time compared with the transfer of some units in motor vehicles and in others in march formation. The distance between the echelons and between the motor vehicles is determined by the quality of the roads, the degree of danger of air attack and the time of day. Given good roads and the slight danger of air attack, the distances diminish, otherwise they increase. On average, the following distances are established: between columns from 200 to 500 meters; between motor vehicles from 10 to 45 kilometers meters. Posts monitoring observance of the established distances and regulating the traffic are established for arranging the movement of the motor columns throughout the travel route (and on the return travel route given shuttle traffic).

The first halt for an insepction of the vehicles is made after the first half hour of movement for 15 minutes; subsequently every 2 hours and following difficult sectors of road for straightening out the columns. Given halts of long duration, the troops are quartered in stealth, and the motor vehicles are taken off to the side also to concealed spots. A breakdown en route as a consequence of damage to individual motor units must not hold up the movement of the columns. Damaged vehicles are set on the shoulder of the road.

351. Usually motor transportation is covered and concealed by the troops of the front; otherwise armored cars, heavy machineguns on motor vehicles and self-propelled artillery are employed to protect the motor columns and echelons. The advance guard of the motor column can move out to a distance of 1 hour of movement, that is, 10-15 kilometers. In the event of a meeting with the enemy, the areas of the detrucking of the main forces and the covering positions for the advance guard should be outlined.

352. The air defense of the echelons and areas of boarding and, particularly, detrucking is entrusted to anti-aircraft machineguns or heavy machineguns on motor vehicles, motor- or tractor-drawn anti-aircraft artillery and aviation. In some cases artillery, machineguns and crews with anti-gas defense means may be sent in to threatened areas (defiles, bridges and so forth) well ahead of time.

353. The motor vehicles intended for transportation of the troops must arrive at precisely the time indicated at the place of boarding, where they are met by persons of the command staff sent from the units to be transferred. Given transportation of units greater than a battalion, several boarding points are chosen. The units to be transferred assemble in concealed manner near the place of boarding, line up in the formation determined in advance and are led up successively to the motor vehicles to prevent their being any accumulation of people at the places of boarding.

The vehicles line up either along the road at intervals of 15 meters or in line in an area 3 meters from one another, facing the direction of movement. People are seated with unloaded weapons (rifles) and unfixed bayonets. The wagons, guns and limbers being loaded are braked and secured. The horses are boarded in twos and threes with one Red Army man per vehicle.

354. The units being transported are broken down into echelons, which incorporate entire tactical units with the minimum quantity of "A" trains, occupying, as far as possible, entire MT companies. The advance guard consists of one-two infantry battalions with armored vehicles, material and a combat engineer crew in light pickup trucks. The artillery is in the tail of the advance guard. The main forces move at a distance of 10-15 kilometers from the advance guard and consist of infantry units, field artillery, combat engineer crews and a motorized medical detachment. The cavalry, the baggage trains and the remaining units not being transported march independently in the tail of the main forces or, if this is possible, along adjacent side roads. Heavy artillery, if possible, should be transported by railroad. If the cavalry can be used as an advance guard, it should be sent on ahead before the officer in charge of the motor traffic. Rations during the transporation are distributed from the

field kitchens on trucks. The number of roads is fixed depending on the depth of the column with regard for the fact that no more than one division may be transported along one road, preferably not more than one-two rifle regiments. In addition, the additional number of vehicles for providing the transported units with food should be considered. The superior commander draws up on the basis of all the conditions set forth above the timetable of the columns' movement.

3. Transportation by Cart

355. The transportation of troops on carts in more than battalion strength is permitted only in exceptional instances. Carts are usually used to transport small units (company, platoon) and to transport equipment for the purpose of conserving the strength of infantry on a route march.

356. The use of unit trains for transporting troops is inadvisable. The population's transport is usually used to transfer troops. Officers of all levels must prevent the disorderly and arbitrary use of carts; and collect the carts in organized fashion, adhering to the proper sequence of supply for the purpose of the even distribution of the cart obligations of the population. It is essential to alleviate to the utmost the burden of cart obligations for the poor, making full use of the carts of the well-to-do elements.

357. When calculating the use of the population's carts, it has to be borne in mind that the load of a two-horse cart is 4-5 persons, but that of a one-horse cart 2-3 persons. The daily coverage, depending on the state of the roads, the supply of mounts and the weather, is from 30 to 45 kilometers with a speed of movement of 3 to 5 kph.

Carts should not be used for more than a day's journey, relief mounts having been prepared well ahead of time.

Chapter XVII. Route March (March)

1. General Directives

358. A march is divided into march toward the front and retrograde; both may be flank marches.

359. The purpose of the route march is to arrive at the prescribed area as quickly as possible (or by the appointed time), given the greatest possible conservation of forces and resources for combat. The schedule of any route march under normal conditions should correspond to both these requirements. The greatest conservation of forces is achieved given movements by small individual columns each consisting of one company of troops, but such movement is possible only in the rear of one's troops, when the possibility of a confrontation with the enemy is precluded. Given the likelihood of a confrontation with the enemy (possible, given the existence of good roads, even at a large distance away from the enemy), the greatest combat readiness, that is, consisting of different arms of service distributed in accordance with the situation and the mission. In this case the order of march is the basis of the future order of battle.

360. The modern development of means of air observation and attack forces military formations to carry out route marches in dispersed orders at the front and in depth--in several columns (by several roads) and in echelon (in each column). Movement in several columns contributes to a conservation of forces and rapid deployment for combat, but complicates control. Movement in one column (along one road) is more tiring for the troops and requires more time for deployment in order of battle, but, on the other hand, facilitates control. The echelonment of the column (in depth) contributes to a conservation of forces and reduces the danger of being hit from the air, but slows down deployment in order of battle. The order of march of a military formation (columns and echelons and their composition) is determined by the situation and the mission, but given an inadequately developed network of roads, dispersal in columns is often predetermined by the number of suitable roads.

361. The most profitable order of march of a rifle division is an order of two columns permitting by the movement in the necessary direction of a rifle regiment of the second echelon one column to form any disposition of forces and resources brought about by the situation. Given the rifle division's movement in three columns for the same purpose, it is profitable to adopt echelon order. Given the need for the division to move a single column (along one road), a distance of 1 kilometer is established between the rifle regiments for more even movement; in the event of a danger of air attack, the distances are increased to 2-3 kilometers and more.

Given an undeveloped road network and the movement of large-scale military formations, it is necessary to consider the need for the movement along one road of two divisions.

In the event of a danger of air attack a rifle regiment may be dispersed into battalion echelons with artillery with distances between them of up to 1 kilometer. In determining the dispersion in depth it has to be considered that such dispersion increases the depth of the column and slows down deployment considerably. Therefore, given the likelihood of a confrontation with the enemy, when readiness for swift deployment in order of battle is essential, particularly given the movement in a single column of several rifle regiments, minimal distances between the echelons should be prescribed, and the column's air defense needs to be exercised by active means. During marches in several columns such need to be conducted at such a distance from one another as to ensure in the event of a confrontation with the enemy mutual support and their timely deployment for combat.

362. The speed of movement of a military formation is determined by the speed of movement of infantry--4 kph under normal conditions. Speed of movement diminishes on difficult terrain, given the inadequate state of the roads(swampy or hilly terrain, sandy ground), given the poor state of the weather (rain, heat, cold), given movement at night and given the poor condition of the troops insufficient closeness in movement, tiredness and low morale).

363. The normal day's march is 6-7½ hours of movement or, under normal conditions, 25-30 kilometers. The magnitude of the day's march may, if necessary, be increased considerably.

An increse in the day's march (forced march) is achieved by an increase in the duration of movement to 10-12 hours per day and more (with several long halts). Forced marches are permissible only given a particularly important operational goal, whose achievement could justify the exertion of the troops' forces and their certain inevitable disorganization upon these marches.

364. A conservation of forces is achieved by:

a) prescribing long halts of 1½-2 hours (up to 4-5 hours given forced marches) in the second half of the day's march; given marches of less than 20 kilometers, long halts are not prescribed under usual conditions; day's halts after 2-3 day's marches and short halts of 10 minutes after every 50 minutes of movement; the first short halt for the adjustment of equipment is prescribed 15 minutes after the start of movement;

b) the granting for sleep of no less than 8 hours per day and the application of sanitary-hygiene measures (washing of feet, bathing, putting one's feet up at short halts) and the timely distribution of food;

c) putting the roads in a condition suitable for traffic;

d) lightening the infantrymen's burden by the transportation of their equipment on carts (given the movement of small units);

e) the absence of aimless movements and idle waiting when preparing for a march and during the deployment of units for a night halt;

f) observance of the order and evenness of movement; all fighters and wagons must proceed to the places determined for them in the formation and the units must move at an even and tranquil pace, keeping the distances between them determined by the regulations or indicated by the commanders;

g) authorization for the fighters of various reliefs during movement (the "ordinary step" command, the unbuttoning of collars and others); and

h) relief of the units moving at the head of the column and observation by the entire command personnel of the state of the footwear, equipment, ammunition and so forth.

365. Ensuring the troops' constant combat readiness is achieved by movement in an order which:

a) precludes the possibility of a surprise confrontation with the enemy, which is achieved by the dispatch of reconnaissance and security units; given the existence of good roads suitable for the motor column traffic, it is essential to be constantly ready to repulse motorized enemy units;

b) swift, tranquil and expedient deployment is achieved, for which the units move in an order and sequence corresponding to probable operations upon a meeting with the enemy;

c) constant communications in depth and at the front are maintained between the units; and

d) air and anti-gas defense measures are adopted.

366. The acceleration of deployment is achieved by parallel movement along as large a number of roads as possible and, given favorable terrain conditions, partially beside the roads also. In the latter case measures are adopted in good time to put in a passable condition for artillery and carts the directions in which movement without roads (cross-country routes) is contemplated. In very rare instances accelerated deployment may be achieved by a reduction in the depth of the column--by movement in wide formations and by using, besides the roads, the shoulders, but recourse must be had to this with great circumspection only given an absence of the danger of air attack.

2. Schedule and Organization of the March

367. For the schedule and organization of the march it is essential:

a) to select the shortest and most convenient roads and determine the extent thereof, considering both the distances from the resting place to the initial points and measures to repair roads and bridges;

b) to determine the speed of movement, considering the properties of the roads and the destruction caused by the enemy, the time of day, the weather, the activeness of the enemy air force and the organization of combat with it, the necessary concealment measures, transport facilities and the possibility of the enemy's contamination of certain sectors on the traffic route;

c) to calculate the time required for the movement and the duration of a long halt and to determine the areas of the night halts (the situation permitting);

d) to establish the composition of the columns (echelons) and the time for the head (given a retrograde march, the tail) to clear the initial point of each column (or echelon);

e) to determine the area of a long halt (up to what time) and the time to clear the intermediate points chosen for regulating the traffic; and

f) given the inevitability of the intersecting of the columns, to determine the time and order of clearance and rest of the units and baggage trains at the points of intersection (when organizing the movement, it is essential to endeavor in every possible way to avoid intersections).

368. For movement the rifle corps acquires a zone. The rifle divisions are given zones or certain roads. The rifle regiments are usually given roads and, more rarely, zones. Battalions are given roads.

369. The roads for traffic are selected depending on the situation and the mission. Their choice is usually made according to the map, and information about them is supplemented by military geography descriptions, interrogation of the local inhabitants and reconnaissance. Given the likelihood of a confrontation with the enemy, roads are chosen which run over terrain

satisfying primarily the most favorable conditions of deployment. Given the activeness of the enemy's air force, more concealed roads are chosen predominantly.

If the troops move along several roads:

a) on a march toward the front the roads should not be separated by difficult obstacles and be two far away from one another;

b) on a retrograde march it is more profitable to move along several roads, even if separated by difficult obstacles; and

c) on flank marches it is essential to select, if possible, no more than three roads: for the security unit, for the main forces and for the baggage trains.

370. When calculating the time needed for movement to an appointed area, it is essential on each occasion to study most thoroughly the conditions influencing the speed of movement for errors in calculation lead to the exhaustion of the forces of the formation and its incapacity for fulfilling the assignment.

371. When distributing the troops in columns and by echelon, it is necessary:

a) to bring closer to the enemy the arm of service which can operate more comfortably in terms of the terrain properties;

b) to bring the artillery between the infantry and cavalry units as close as possible to the head of the march columns; given the considerable depth of the artillery column (more than 1,000 meters), independent cover (predominantly heavy machineguns), which comes under the command of the corresponding artillery chief, is assigned to it by order of the officer in charge of the column; and

c) in anticipation of combat to move forward some of the means of communication in order by the time battle is joined to have a chance to begin work on establishing the proper communications; on retrograde marches the means of communication march at the head and can be sent well ahead of time independently into the areas where the retreat has been brought to a halt.

Artillery which is not a part of the rifle divisions and corps, armored, engineer and maintenance units, cavalry units, motorized units and so forth usually follow in independent columns (echelons). Some of these units may also be a part of unit march columns, and, furthermore, their place in the march column is determined depending on the situation. In anticipation of a meeting battle armored units may move between the advance guard and the main forces (by bounds). When the said units (except for the cavalry and motorized units) travel in independent columns (echelons), they are assigned special cover if a meeting with the enemy is possible.

The "A" trains move with their units: on a march toward the front at the tail, on a retrograde march at the head.

Baggage trains move at such a distance behind as not to catch up with the military units at a long halt. The depots, transport and other rear establishments usually move in independent echelons which are composed depending on the situation.

372. The officer in charge of the column's movement computes the time needed for the head (on a retrograde march, the tail) of the column's main forces to clear the initial point. The time needed for the next echelon to clear the initial point is prescribed depending on the depth of the preceding echelon and the distance established between them. In instances when it is necessary to regulate the movement of the columns (given the probability of a confrontation with the enemy) on the march intermediate points on the travel route of each column and the time needed to cear them are indicated. The time of the start of movement from a long halt (of the head of the column or echelon) is indicated to all columns and echelons for this purpose.

373. In sectors of the army's main assault a corps reinforced with a general headquarters artillery division frequently has to move only along three or even two roads.

In this case the following distribution of forces by column is recommended:

a) given the availability to the corps of three roads.

Each rifle division acquires an independent road. For movement the general headquarters artillery division is allocated in regiments (one artillery regiment each among the rifle divisions). The corps artillery regiment is allocated among the divisional columns or travels entirely with one division. The fourth regiment of the general headquarters artillery division follows one of the rifle divisions in an independent echelon in front of the baggage trains.

The corps rear services are evenly distributed on the three roads.

The overall depth of each column will be: of combat units approximately 25 kilometers; given the movement of baggage and "C" trains directly one after the other, the depth of the entire column will be approximately 35 kilometers; given a large distance between the trains and counting the corps rear services distributed per divisional column, up to 50 kilometers.

b) Given the availability to the corps of two roads;

The two head divisions proceed as the first echelon, each having a general headquarters artillery regiment and one or two corps artillery regiment battalions.

Immediately behind these divisions' combat units come the remaining general headquarters artillery regiments in independent echelons and, if the route march is being carried out far from the enemy, behind them come divisional baggage trains and corps rear services servicing the head divisions.

The third division with its artillery regiment follows in the second echelon (behind the corps rear services servicing the head divisions), allocating its forces to both roads. It is followed by its transport and the part of the corps rear services intended for servicing it. In proximity to the enemy, when there is a likelihood of confrontation, at first the corps rear services servicing the head divisions and then their divisional baggage trains drop back, and the divisions of the second echelon move up to take their place.

The overall depth of the columns is: of the divisions of the first echelon, as in the preceding instance; of the entire order of march of the corps, up to 75 kilometers, depending on the distances between the echelons.

374. In each head division the general headquarters artillery regiment, if attached for combat use, is distributed in the column in conformity with tactical requirements. In this case the entire divisional artillery may be moved up to the advance guard, while the general headquarters artillery regiment follows with the main forces. In cases where the general headquarters artillery regiment is attached to a division only for the time of the route march, it proceeds as an independent echelon at the tail of the divisional combat units.

The general headquarters artillery regiment not attached to the divisions is used by the corps commander to reinforce the divisions launching the main assault.

375. Movement is effected, as a rule, in echelon formation at different times of the day. The first echelon moves predominantly at night, the second echelon by day or the following night.

376. Corps with a narrow front of movement are reinforced by additional air defense means--one or two anti-aircraft battalions on mechanical traction from the general headquarters artillery. In addition, by order of the army command the corps columns are covered in particularly crucial sectors by fighter aircraft.

3. Control of the Route March

377. Immediately upon receipt of the order for the march from the superior commander the military formation commander warns the commanders of the impending movement for preparation of their units for departure. In drawing up the march schedule the formation commander assembles, if possible, his immediate subordinate commanders and announces the order to them personally.

378. The order to the formation indicates in respect of the movement:

a) the formation's overall assignment;

b) the composition of each column, the final areas of the movement (the night halt), the initial points (or positions) and the time for clearing them, the direction of the movement of each column, the itineraries, intermediate points or positions (if needed), the areas of a long halt and until what time and the dividing lines between the columns; in some cases, in accordance with the

situation, the formation commander may indicate, instead of initial points and the time for clearing them, by what time the columns should reach the areas prescribed for them; given the likelihood of a confrontation with the enemy on the march, an order is given for each day's march; and

c) air defense measures.

379. The order to the column indicates:

a) the column's assignment, the itinerary and the order of clearance of the initial point;

b) in order of movement: the forward detachment (if sent out), the advance guard, the main forces and rear security, their chiefs and their composition, initial points and time of clearing them, the location of the long halt and until what time; the mission of the forward detachment is indicated also;

c) flank protection (detachment or guards), the chief, composition, initial point and time of its clearance, itinerary and the long halt; if flank protection is sent out for the purpose of occupying a certain point, this point and until what time it has to be occupied are indicated; and

d) air defense measures.

On a retrograde march the positions and the time until which they must be held are indicated to the rear guard (to the column rear guards when movement is by several roads).

Given the likelihood of a confrontation with the enemy, a separate order is issued at the long halt.

The order to the advance guard is similar to the order of the officer in charge of the column.

For route marches lacking the likelihood of a confrontation with the enemy a timetable of the route march is drawn up instead of an order which indicates the itineraries, the time of departure from halts and the areas of the night halts.

380. The commander, commissar and assistant for political affairs of a military formation (division and regiment) are to be found during the movement where their presence is, in accordance with the situation, most needed: predominantly attached to the advance guard or at the head of the column of the main forces. The corps commander consistently travels to the points from which controlling the columns is most convenient.

381. Upon movement far from the enemy communications in the columns and between them are maintained by column transmission, messengers (mounted, on bicycles and so forth), liaison agents and aviation (the superior commander's communications with the columns). In anticipation of a confrontation with the enemy on the march a certain part of the means of communication (except for

those intended for communications with the adjacent unit and the rear) is allocated to the columns in advance. The remaining part of the means of communication moves at the head of the main forces.

Given retrograde movement, part of the means of communication is sent in ahead of time to the area scheduled to be taken.

4. Execution of the March

382. Movement is accomplished in march formation along the side of the road which is more convenient for the movement of infantry (predominantly the right-hand side). The other side is left free. Given the danger of air attack, movement is effected along the side of the road which provides the most cover; along a road planted round with trees those on foot proceed along the sides in the shade of the trees.

383. At the start of the movement the officer in charge of the column (of the main forces of the column and the echelons) is obliged to see for himself that the column (echelon) has assumed the order prescribed for it, for which he lets the column (echelon) go past him at the initial point.

384. The plan conformity of the movement, which contributes considerably to conserving forces, depends on the even speed of movement; for this reason the head unit should endeavor to maintain an even pace. Given chance halts, the units proceeding behind approach the tail of the units proceeding in front to within half the established distance between them in order with the start of movement to assume the established distance.

Approaching right up close to the tail of the units proceeding in front is prohibited. If the distance has increased over and above the norm, the running of infantry is not allowed: the distance is reduced on the march (sometimes by a halt of the units proceeding in front).

385. When clearing a variety of defiles and river crossings it is essential:

a) to adopt air defense measures.

b) to also send together with general reconnaissance chemical reconnaissance to the defile or crossing well ahead of time;

c) if necessary, to occupy well ahead of time with forward security units a position convenient for ensuring concealed and safe passage of the defile or crossing of the main forces; when dispatching forward security units to them, a sufficient number of engineer units of the appropriate specialty (pontoneers, combat engineer-camouflage soldiers and such) is detailed to them; and

d) to organize the clearance of a river preventing continuous movement of a large-scale column in order to move up the units consecutively one after the other, having halted the column, apart from its head part, in the settlement nearest to the crossing, in a forest or in another place concealed against the enemy's ground and aerial reconnaissance in order that the head of each successive unit approach the crossing when the preceding unit has already crossed.

The units which have crossed (in the event of continuation of the movement) deploy in concealed locations in order, following the crossing of the entire formation, to adopt for movement the order required by the situation. For leadership of crossings by pontoon bridge, in ferries and boats and by wading it is necessary to appoint a crossing officer (the commander of the engineer unit).

Narrow locations of negligible extent (portable bridges and such) requiring reorganization into narrower formation are crossed at the double.

386. Given chance meetings and intersectings, infantry lets through cavalry (at a trot); artillery lets through infantry; depots and baggage trains let through the troops, the medical and rations trains let through the depots and trains with ammunition and the rations trains let through medical trains.

Upon meetings and intersectings of units of the same arm of service, the unit which has either the more important mission or a mission which has to be carried out as quickly as possible is let through. The decision here is entrusted to the officer in charge of the numerically stronger of the two units.

387. For a long halt the troops leave the road and are quartered thus:

a) upon movement in the rear of one's forces, in the order in which movement at closed-up distances was effected (along the road) and

b) given the likelihood of a confrontation with the enemy, the echelons proceeding behind move up and take up positions in the order most ensuring rapidity of deployment; for a long halt the advance guard always occupies the area affording the most conveniences for deployment in the event of an enemy offensive.

The units should receive an order for a halt no later than 1 hour prior to the approach to the location of the halt in order to have time to send quartering officers to the areas indicated for distributing the units in this area.

At the end of the day's march the military formations proceed to the areas prescribed for the night halt by the shortest routes.

5. Night March

388. Given the current development of aviation, the most reliable means of concealing the movement of troops are night marches, which for this reason it is essential to employ in all instances permitted by operational conditions. In accomplishing a night march it is essential to bear in mind that the enemy can detect movement with searchlights from aircraft and with respect to transport and baggage train traffic if carried out by day. Nonetheless, given the correct and skillful organization of a night march, it is possible to conceal the dimensions of the movement being undertaken.

389. Movement at night is fatiguing; its speed is reduced to 2-3 kph; order and communications are rapidly disrupted; and reconnaissance is hampered severely.

Among the measures adopted to do away with the inconveniences inherent in night marches are:

a) a preliminary study, as thorough as possible, of the terrain and roads;

b) finding reliable guides among the local inhabitants;

c) detailing for protection exclusively infantry (at closed-up distances), and horsemen only for liaison;

d) the appropriate division of the troops into columns and their distribution in columns; the military formations move in more concentrated manner, the echelons at closed-up distances; in an offensive artillery follows the infantry with the cavalry behind in an independent echelon; on the retreat, the other way about; artillery is assigned independent cover; if the movement is effected for the purpose of an attack on the enemy or when a meeting with him may be expected, the baggage wagons must not be in the middle of the march column between the troops;

e) reinforcement of the means of communication, irrespective of the lessening of the intervals and distances between the reconnaissance and protection units; communications are maintained by a chain of double posts and mounted messengers; the organs dispatched for local protection of the column are made stronger; in order that the troops not lose their way at road intersections as many noticeable signs as possible, namely, posts with indicators, furrows, notches and so forth, are fixed in the direction of movement or guides (posts, preferably mounted), who accompany the head of the column to the next guide, remain behind from a special team traveling with the head security unit;

f) a possible reduction in and renunciation even of long halts and observation of the fact that people do not fall asleep at short halts; it is necessary here for short halts to choose places preferably in depressions, but by no means on the crests of hills; the unit closest to the enemy is appointed the duty unit;

g) observance of the strictest march discipline: smoking, conversing and issuing commands loudly, sending signals by audio and visual means, lighting fires and so forth are prohibited;

h) an unconditional ban on firing without the commanders' permission;

i) concealment behind terrain features or an immediate halt (to lie down) when caught in a searchlight beam and upon the approach of enemy aircraft; and

j) the lighting of lamps only with the special permission of the superior commander; upon the appearance of enemy aircraft, lamps are swiftly extinguished or their light is screened off.

Chapter XVIII. March Security

1. Protection of A March Toward the Front

390. On a march toward the front the column of a military formation, depending on the situation, is protected:

a) by the advance guard, from the front;

b) by large flank detachments or outposts, from the side of the open flanks;

c) by rear detachments (if there is a danger of attack) or outposts, from the rear; and

d) outposts or patrols sent directly by the main forces in all directions (local security).

The second and subsequent echelons of the column dispatch to the open flanks, besides local security (point "d"), large flank detachments or outposts. Given the threat of an enemy attack against the flank, the commander of a military formation moving in several columns may organize flank protection on his own behalf.

For the contingency of an attack by enemy motorized units duty units (artillery and machinegun) are appointed in the column which are from the column upon receipt of a report on the movement of the enemy's motorized units.

Columns on the march secure themselves against the surprise appearance of an air enemy by moving observation posts forward, to the rear and along the sides of the route of their movement.

391. The appointment of an advance guard:

a) to ensure the column's plan-oriented movement by overrunning the enemy's reconnaissance detachments and removing various obstacles on the route;

b) preventing the enemy's reconnaissance units reconnoitering the movement of the column's main forces;

c) securing the column's main forces against surprise attack; and

d) upon meeting the enemy, by decisive and swift operations on a broad front to throw back the enemy's security units, ascertain the direction of the movement and disposition of his main forces, contain them and secure for the main forces of the column time and space for accomplishing a maneuver and deploying in order of battle.

392. The strength and composition of the advance guard is determined by:

a) the assignment;

b) the size of the column being protected (the time needed for it to deploy); and

c) terrain conditions.

Up to one-third of infantry and up to one-half (and more) of the artillery, including howitzers and LR artillery, are assigned to the advance guard. In addition, cavalry, armored units, engineer units (combat engineers--for removing obstacles--obligatorily) and chemical warfare service units (for decontamination and chemical protection) may be attached to the advance guard.

393. The distance of the advance guard (the tail thereof) from the head of the main forces depends on the column's assignment, the properties of the terrain, the size of the column and its depth, the strength of the advance guard, the time of day and atmospheric conditions.

Usually the advance guard is sent ahead such a distance as:

a) to protect the main forces against the enemy's effective artillery fire and ground observation;

b) to secure freedom of action for the main forces; and

c) to ensure for the advance guard timely support by the main forces.

The great depth of a column (and, consequently, the long time it takes to deploy) compels an increase in the distance between the advance guard and the main forces and also the strength of the advance guard.

On considerably concealed or broken terrain the advance guards are sent out at closer distances.

On average, the advance guards are sent out 3-5 kilometers from the main forces (from the tail of the advance guard to the head of the main forces).

394. For its own security the advance guard sends out:

a) an advance guard in a strength of a rifle regiment: an advance detachment consisting of a reinforced company through a battalion and flank guards (to the open flanks) in a strength of a platoon through a company;

b) an advance guard in a strength of less than a rifle regiment (reinforced battalion): advance and flank guards consisting of a reinforced rifle company or platoon; and

c) local security.

The advance detachment sends out from itself advance and flank guards.

395. Given the existence on the column's travel route of positions or points in whose seizure it is essential to forestall the enemy, the officer in charge of the column sends out a forward detachment for this purpose. The forward detachments are composed of cavalry, infantry and artillery units, armored forces and others. To detachments whose basic nucleus is infantry it is obligatory to assign at least small cavalry units for reconnaissance.

The infantry moves by motor vehicle or cart; given an absence of these, the detachment is dispatched several hours ahead of the time of departure of the column's advance guard. Artillery is attached obligatorily even during transportation by motor vehicle (if only in individual guns).

396. On a march toward the front the large flank detachments (in a strength from a reinforced company to a battalion) have as their purpose:

a) securing the troops against surprise attacks and artillery fire from the flank and

b) in the event of a confrontation with large-scale enemy forces, ensuring that the troops being protected fulfill their assignment.

Flank security is sent out given the existence of side routes on the open flank. In proximity to the enemy, given an inevitable meeting with him, flank guards are sent out even without roads (if the terrain permits movement). Given the manifest threat of an enemy offensive against the flank, even if there are no parallel roads, large-scale columns send out in the sectors most convenient for the enemy offensive large flank detachments, which occupy points favorable for observation and defense and which let through the column being protected. Given the existence of good transverse roads, infantry in motor vehicles and cavalry with armored units may be employed successfully for this purpose. The large flank detachments and guards are appointed from different units of the formation, if possible, so that with the start of the combat, upon deployment of the main forces, they joint their own units. The number of security units depends on the degree of danger and the depth of the column being protected; given a large depth and an open flank, several security units may be appointed. The distance of the flank security units is often determined by the distance of parallel roads from the column's travel route; on average, the detachments move 2-4 kilometers away and the guards 1-3 kilometers, depending on the terrain, the roads and the strength of the security unit. Given the absence of parallel roads, instead of large flank detachments and guards, if the movement is far away from the enemy, patrols (from two men to a squad) may be posted consistently at certain points convenient for observation to forestall an attack against the column by small units of the enemy which, after the protected unit has passed, move off to join up with its tail; the infantry unit intended for the posting of flank patrols moves with the advance security unit; the strength of this unit is determined by the number of patrols sent forward throughout the travel route.

397. The intervals between columns are protected by infantry patrols and small mounted patrols in visual communication with each other.

398. When a column takes up positions for a long halt, the advance guard and large flank detachments stop for rest close to positions favorable for defense and occupy them with march security detachments. The main forces of the advance guard and the nuclei of the large flank detachments take up concealed positions so that in the event of an enemy offensive they may prepare themselves rapidly for a counterassault. The advance and flank march security detachments take up concealed positions directly in the chosen position.

399. The rear party has the task of:

a) covering the rear of the column (echelon) against small enemy units and

b) maintaining order in the rear of the column.

The rear party usually moves 1 kilometer behind the tail of the column and sends out from itself patrols to the sides and the rear.

2. Protection of a Retrograde March

400. For protection of a retrograde march a column of a military formation sends:

a) back (toward the enemy) a rear guard;

b) in the direction of the open flank large flank detachments or guards;

c) ahead (along the withdrawal route) an advance detachment or outpost; and

d) local security.

Upon the withdrawal of a military formation in several columns each column organizes security independently. The superior commander (commander of the corps and division) regulates the operations of the security units with an indication of the positions at which the rear guards must hold and the time that they must be held. Flank security, if there is a danger of parallel pursuit, is organized by order of the superior commander (division commander).

401. It is the purpose of the rear guard:

a) to afford the column's main forces an opportunity to break away from the enemy;

b) to ensure the calm, plan-oriented movement of the main forces, holding the enemy at certain lines for the time needed and slowing his movement by destroying and damaging routes, bridges and means of communication and contamination of areas along his travel route with war gas; and

c) holding up the enemy and ascertaining the direction of the movement and disposition of his forces.

402. The strength and composition of the rear guard is determined by the same conditions as of the advance guard, merely with the difference that in view of the special assignments of the rear guard and the conditions of its struggle against the enemy (without the support of the main forces), the rear guard should be reinforced with:

a) a large quantity of fire means (long-range and rapid-fire artillery, armored means and heavy machineguns);

b) chemical means for the extensive contamination of routes convenient for the enemy's movement;

c) combat engineer units for the destruction of routes and bridges; and

d) cavalry for securing the flanks and for reconnaissance for the purpose of detecting enemy attempts at envelopment and parallel pursuit.

The availability of motor resources for transporting infantry affords the rear guard the opportunity, engaged in combat with the enemy for a longer time, to rapidly break away from him and rapidly withdraw to a new line. In some cases the fire means of the rear guard, particularly artillery, may be changed during withdrawal; by order of the officer in charge of the column artillery from the main forces (and sometimes machineguns also) is left at the line at which, in the event of an enemy offensive, the rear guard has to fight and is prepared for defense by the time of the rear guard's withdrawal to this line; artillery operating with the rear guard, when this line has been crossed, catches up with the main forces and joins them.

403. The distance of the rear guard from the tail of a column's main forces is not constant since upon each stop to detain the enemy it increases. In any event, it should be no less than 3 kilometers.

404. For its own security the rear guard, depending on its strength, sends out thus:

a) a rear guard consisting of a regiment: a rear party (in strength from a reinforced company to a battalion) and flank guards (to the open flanks);

b) a rear guard consisting of less than a rifle regiment (up to a reinforced battalion): a rear party and flank guards; and

c) local security.

The rear guard support sends out from itself outposts.

405. On a retrograde march the flank security units are sent out on the same grounds as on a march toward the front. The roads parallel to the withdrawal routes are covered particularly strongly to counteract parallel pursuit, particularly by motorized units. In the latter case (given the danger of parallel pursuit by motorized units) all the good roads, even if at greater distances away than flank security's normal distance, must be occupied by security units.

406. The advance detachment and outpost have the task of:

a) removing obstacles on the route of march of the main forces and

b) repulsing an offensive by the enemy's enveloping parties.

The advance security units move at such a distance from the head of the main forces as to have time to remove obstacles on the route of march (3-5 kilometers). For the removal of obstacles combat engineers are attached to them. In cases where there is a danger of enemy units' capture through an enveloping maneuver of a crossing, defile and other important points on the route, forward detachments are sent out to secure them against capture.

3. Protection of a Flanking March

407. For protecting a flanking march the column of a military formation sends:

a) toward the threatened flank: a flank guard (given a parallel route) or large flank detachments or outposts dispatched successively to certain points and in certain directions (given a lack of parallel routes);

b) in the direction of movement on a march toward the front: an advance guard; on a retrograde march a rear guard;

c) to the rear: outposts; and

d) local security.

408. The purpose of any flanking march is to reach a certain area for performing the set assignment past the enemy situated on the flank; in conformity with this and regardless of whether it is a march toward the front or a retrograde march which is being undertaken, flank security has the task of:

a) covering the main forces against an attack by weak enemy units;

b) in the event of an offensive by the main forces, containing them for as long as is needed for the main forces to reach the prescribed area; and

c) engaging in combat with the enemy, ascertaining the disposition of his forces.

409. The purpose, distance and composition of the advance and rear security units are the same as on a march toward the front and a retrograde march (depending on the type of march). The strength and composition of a flank guard are determined by the same considerations as on a retrograde march.

410. The distance of the flank guard from the main forces is conditioned by the distance to the enemy, the depth of the column being protected and the distance of the road appointed for the movement of the guard, but in any event the distance separating it from the column being protected must secure the latter against effective enemy artillery fire.

411. Performing its assignment, the flank guard moves either nonstop (not counting essential halts) or by bounds, gradually occupying up to a certain time points lying on the roads intersecting the route of march of the main forces. The first method is employed when the road prescribed for the flank

guard is equal to or longer than the route of the main forces and the baggage train, the second when the routes of the flank guard are shorter than the route of the column being protected and the baggage trains.

The guard is protected on the enemy side, depending on its strength, by a large flank detachment or outpost sent along a parallel road; if there is no road, patrols and outposts are sent along the travel route to points convenient for observation which, remaining at these points with a certain time, join the guard at a long halt or night halt.

412. Given the absence of a parallel road in certain directions whence an enemy offensive may be expected, instead of a flank guard, detachments or outposts are dispatched to occupy positions and points favorable for observation and defense. The detachments and outposts hold these positions and points until the tail of the column passes (until the time determined by the officer in charge of the column).

4. Measures To Secure a March Against Attacks by Enemy Motorized Units

413. In all instances when the terrain in the area of march of a military formation permits the movement of motorized units it is essential when organizing the march to take account of the possibility of their appearance and to take steps to counteract them. For the timely adoption by the officer in charge of the column of measures against rapidly moving motorized units it is essential:

a) to detect them as far from the column as possible;

b) rapidly report their appearance to the column;

c) contain them with forward units and force the enemy's infantry to detruck as far from the column as possible; and

d) prepare to combat the enemy's armored forces.

414. It is essential to attach to the small organic cavalry units sent out up to a day's march from the security units (1-2 hours of the movement of a motorized unit) particularly high-speed means of communication: radio telephones, motor vehicles, motorcycles and so forth. In addition, it is essential to send the patrols of small organic cavalry units (of a stronger composition) along roads suitable for the movement of motorized units greater distances (up to 1½-2 days' marches), also furnishing them with high-speed means of transmitting reports.

415. The most favorable means of ground reconnaissance in the event of the danger of the appearance of motorized units is the dispatch for 1-2 days' march of reconnaissance detachments consisting of infantry on trucks with heavy machineguns and battalion guns, armored units (light tanks), artillery on mechanical traction, chemical warfare units for contaminating sectors of the roads and combat engineer units for destroying roads and bridges. For transmitting reports the reconnaissance detachments should be furnished with

radio telephones, motorcycles and passenger automobiles. The reconnaissance detachments should, besides reconnaissance, also perform the duties of forward detachments, that is, contain the movement of the enemy's motorized units by all means. For this purpose the detachments should endeavor:

a) with LR machinegun and artillery fire to force the enemy to detruck the infantry and

b) destroy sectors of the roads and bridges in the areas where envelopment of demolished sites is impossible.

416. Only aviation can spot motorized units at great distances and most successfully communicate this in good time to the column. Roads suitable for the movement of motorized units should be thoroughly inspected by organic aviation for no less than 100 kilometers ahead and on the flanks. In the event of an enemy motorized column being spotted, this is immediately communicated to the troops by radio and code signs; it should be monitored continuously.

417. In the event of an attack by a motorized column on the security units the latter endeavor to force the enemy by artillery and LR machinegun fire to detruck the infantry and to separate the infantry from the armored units of the motorized column.

418. Upon receiving a report concerning the appearance of an enemy motorized column, the officer in charge of the column details a detachment consisting of artillery and machinegun weapons to repulse the enemy. The column continues its march. If the motorized enemy shows up with large-scale forces and compels the entire column to involve itself in the battle, such is conducted in accordance with Chapter XIII.

5. Air Defense of the Route March

419. Measures for securing a route march against air attack are:

a) concealment;

b) dispersal of the march columns;

c) fighter aircraft operations against the enemy aircraft;

d) fire of anti-aircraft (or adapted) artillery and machineguns;

e) infantry fire; and

f) special measures for protection against war gas.

420. Concealment is achieved by:

a) movement at night, at dusk and under other poor visibility conditions and the creation of artificial smoke and fog; the situation permitting, it is always necessary to endeavor to take advantage for movement of poor visibility conditions and

b) movement along concealed roads (in a forest); given enemy aircraft activity, more concealed roads should be chosen; it is easier to achieve concealment of movement given movement in small echelons at considerable distances from one another (the situation permitting).

421. The dispersion of the order of march along the front and in depth affording an opportunity to achieve greater concealment through the use of short cover reduces, in addition, losses from enemy air attacks and makes it more difficult for the latter to find the columns. In the event of an enemy air attack, the column should continue nonstop movement, adopting a dispersed formation.

422. Fighter aircraft may be employed to protect a route march, depending on the quantity thereof, by two methods:

a) the consistent dispatch of aircraft patrols throughout the march and

b) the dispatch of aircraft only to the areas where an enemy air raid is most dangerous (defile, crossing and so forth); in this case it is indicated to aviation in advance at what time and to which areas it should take off.

423. No passive measures without the use of active means (fire) will protect against enemy air attack. The absence of fire affords aviation an opportunity to descend to any altitude it pleases with impunity. For this reason fire of all arms against attacking aviation must be thoroughly organized in all columns and echelons. Rifle corps which have marched in a narrow front are obligatorily reinforced by additional anti-aircraft artillery and, in addition, are covered, if possible, by the operations of fighter aircraft.

424. Anti-aircraft artillery is employed to cover the most important columns in the period of their movement in the most threatened sectors of the route, which are: open terrain, bridges, defiles and so forth.

The size of the sector of the route in which the fire of anti-aircraft artillery must be ensured is conditioned by:

a) the speed of movement of anti-aircraft artillery (type of traction);

b) the depth of the column; and

c) the speed of movement of the columns.

Horse-drawn anti-aircraft artillery (a three-battery battalion) can cover a sector of the route up to 18 kilometers, of these, with the concentrated fire of two-three batteries up to 8 kilometers.

An anti-aircraft battalion of mechanical traction can consecutively cover two such sectors--prior to a long halt and after it.

Taking up position for the reliable defense of a defile, one artillery battalion can secure a defile up to 5 kilometers long.

One anti-aircraft battalion on the march can also cover two columns in instances when the interval between the axes of the columns' movement is not more than 4 kilometers; here the batteries position themselves roughly in the middle of the routes of the columns being covered.

Given the absence of anti-aircraft artillery for covering a route march, field batteries on anti-aircraft mounts are employed. They are positioned for the defense only of particularly dangerous sectors of the route (defiles). Two batteries can cover a sector of the route up to 5 kilometers.

The batteries proceed in the areas of their positions along roads not occupied by troops. If this is not possible, overtaking them.

The batteries move, as a general rule, in the tail of the advance guard, which ensures the timely occupation of the position.

425. Anti-aircraft machineguns (or adapted machineguns) move with the column since it is advantageous to train fire from them head-on or in the rear of an attacking aircraft. It is essential that a battalion (small battery group) have four machineguns on average.

Besides the above-mentioned means, infantry has the opportunity of successfully training rifle fire at aircraft flying low for attack, for which it is essential that each company have duty squads or platoons at the ready.

426. Aviation frequently operates, together with fragmentation bombs, with machinegun fire and gas bombs and also the spraying of war gas from special devices, and for this reason a chemical warfare observation service (reconnaissance and gas alert) should be organized and measures to counteract war gas (gas masks and decontamination measures, medical assistance) adopted throughout the depth of the column.

Section Four. Rest

Chapter XIX. Positions for Rest

427. The troops take up positions for rest:

a) in inhabited localities (in quarters);

b) outside of inhabited localities (bivouacking); and

c) by the mixed method (quarters-bivouac).

For the purpose of affording the troops the most rest and obtaining the best cover against enemy air attack it is essential to strive to quarter the troops in inhabited localities. Only given an absence of inhabited localities and their unhygienic condition or their being shelled by enemy artillery are the troops billeted outside of them. Given a shortage of inhabited localities, the troops are quartered partly in them, partly outside of them.

428. Positions for rest should satisfy the following requirements:

a) ensure the best conditions for rest (convenience of disposition and feeding);

b) afford an opportunity for swift transition to the order of march and battle; and

c) conceal the troops from the enemy's aerial reconnaissance.

When taking up positions for rest in the rear of one's troops, day-to-day service conditions take pride of place; in proximity to the enemy, combat conditions. Concealed disposition is required in the sphere of operation of enemy aviation, that is, deep in the rear of one's own troops also.

429. For ensuring the best conditions of rest it is essential:

a) to indicate well ahead of time the places of rest (night halt, day's halt) to the subordinate units; the places of night halts and day's halts are indicated no later than reveille on a long halt;

b) to send well ahead of time to the places indicated for rest quartering officers (as of a long halt at the latest); if, owing to the situation, it is not possible to send out quartering officers ahead of time, the quartering officers should march with the forward security units;

c) to prevent troops' waiting on the road prior to their taking up positions for rest; as they arrive at the point determined, the approaching units must immediately move to the places appointed for rest;

d) to quarter the troops such that it is not necessary to make excessive movements when switching to the order of march (that is, to quarter them in conformity with the plan of impending operations);

e) to prevent the relocation of units which have already taken up rest positions, without this being extremely necessary;

f) to select for rest sites which are convenient from the supply aspect and satisfactory in terms of sanitary-hygiene conditions (water, firm ground, absence of swamps, cleanliness in the homes, absence of epidemic disease in the inhabited localities and so forth);

g) to quarter the units of arms of service such as to afford them the greatest conveniences from the supply aspect, for example: to quarter the cavalry and artillery near abundant watering places; and

h) to create the conditions for tranquil rest, securing the troops against surprise attacks by enemy ground and air units.

Depending on its duration, rest should be used for political work and cultural entertainment.

430. Combat readiness is ensured by:

a) the quartering of the troops in orders providing for the rapid joining of battle--in detachments of different arms of service, in accordance with the conditions of the situation--and in proximity to the enemy, more closely (for rapid assembly);

b) the formulation of a plan of operations for the contingency of a surprise enemy attack (particularly by motorized units) and choice of the line for deployment given a surprise enemy attack and the routes toward it;

c) security at the halt and reconnaissance;

d) local security, the detailing of a duty unit and strict observance of the rules of interior routine; and

e) the establishment of measures of the rapid transmission of instructions and the assembly of the units: alarm signals, assembly points and the routes to them, the fighters' readiness for rapid assembly (the weapons, gas masks and equipment, given the likelihood of attack, near one) and the existence at the HQ sites of the appropriate signals flags and, at night, lanterns (company, battalion, regimental and so forth).

431. Concealment of the quartering is achieved by:

a) the quartering of the units in conformity with terrain conditions and the banning of the creation at the bivouacs and on the grounds of inhabited localities of proper geometric figures (quartering in small groups with incorrect outlines);

b) the billeting of people, horses and wagons under roofs and under trees, in bushes and near high terrain features, taking advantage of the shady sides on sunny days;

c) the concealment of tents and wagons by available and special means and camouflage (in conformity with the nature of the terrain features in the billeting area);

d) the establishment of an order least revealing the disposition (the removal of revealing signs; concealed roads for movement, concealed spots for the drying of underwear, the places and time for the lighting of fires, the time for the heating of stoves, the places of riding schools, the banning of the making of new paths on open ground, the procedure of the movement of people, horses and wagons and so forth); and

e) the establishment of signals from air liaison and observation posts and the procedure of operations upon the appearance of aircraft (halting movement, taking advantage of cover and so forth).

432. Besides the above-mentioned measures of concealment from the enemy's aerial reconnaissance, it is essential to adopt measures to preserve military secrecy (against enemy intelligence agents). Such measures are:

a) prohibiting conversation with local inhabitants and among oneself in their presence about the composition, number and assignments of one's own and adjacent units;

b) supervision of the fulfillment of this demand on the part of all commanding officers and patrols sent to inhabited localities;

c) the quartering of the military formations HQ's and communications centers in public buildings not accommodating local inhabitants and isolated from them (if the HQ's and communications centers are quartered in houses of local inhabitants, the latter should be evicted from them);

d) given quartering outside of inhabited localities, prevention of the local inhabitants from entering the quartering areas (beyond the limits of local security);

e) banning the writing of the name of units on the walls of houses and fences;

f) upon withdrawal, the destruction of all signs capable of giving out undesirable information (the burning of rough copies and so forth); and

g) monitoring to ensure that the inhabitants do not have technical and other means of communication.

433. The billeting of units for rest (night halt, day's halt) when marching in the rear of one's troops may be provided for by the order for the route march (or the schedule of the route march). Given the likelihood of a confrontation with the enemy (given the absence ahead of a front of one's own troops), individual orders are given for the quartering of the troops for rest (night halt, day's halt) which indicate to the subordinate formations (columns) the areas of their quartering and up to what line to conduct reconnaissance. The officer in charge of the column (divisional and

regimental commander) indicates, in addition: at what line the march security detachments stop (for covering the units' deployment on the spot and setting up security at the halt); the composition of the security at the halt, the line of the security at the halt, the time by which it is set up and the position held by the security in the event of an enemy attack. The order for the night is given no later than reveille at a long halt.

Upon the arrival of the military formation (column) at its destination, the commander of it (the division, regiment) is obliged, in accordance with the order of the superior commander and the situation:

a) to compile a plan of operations for the contingency of an enemy offensive indicating the sectors or zones of operations for the units;

b) to indicate to whom which individual terrain features have to be prepared as stong points in the event of combat;

c) to indicate what work has to be done by whom to remove obstacles in the way of the troops' impending movement;

d) to allocate to the units areas of local security;

e) to adopt air and anti-gas defense measures; and

f) to prescribe (if necessary) special concealment measures.

434. Following the formation's arrival at its destination, the commander of the formation quartering in an inhabited locality (garrison commander) and, given quartering outside of the inhabited locality, the commander of the unit quartering separately issue the order for the garrison of the point (or area), which indicates:

a) the composition of the unit on duty and its tasks in the event of an alarm;

b) operations in the event of a surprise attack (particularly by motorized units) and the allocation of local security areas;

c) the assembly points for the units;

d) the allocation of terrain features as strong points in the event of combat;

e) work on the repair of the routes toward the assembly points and from them to the deployment areas;

f) air defense and chemical protection measures;

g) concealment measures; and

h) other instructions necessary for the establishment and preservation of order and safety at the points or in the area (in accordance with the Worker-Peasant Red Army Interior Service Regulations).

435. In each garrison the unit on duty is composed of infantry with artillery and is quartered on the side closest to the enemy. The officer in charge of the unit on duty conducts reconnaissance of the area prescribed for him for defense and compiles a plan of defense. If the unit on duty marches off from the inhabited locality, a new one is appointed immediately. The duty unit is prepared on the order of the garrison commander.

The strength, composition and degree of combat readiness of the unit on duty are determined depending on the distance of the enemy, the size of the point or area, the size of the garrison and the attitude of the local population (approximately one-ninth of the garrison's forces).

436. For maintaining interior order in the garrison a garrison duty officer is appointed, guards for protecting public establishments are posted, street patrolling is organized, the locations of drinking water, preparation of food (the procedure of lighting fires outside of the homes and the heating of stoves inside the homes), the watering place, bathing and the laundering of underwear, the slaughtering of livestock and the latrines are indicated, instructions in the event of fire are given and measures pertaining to use of baths, washhouses, bakeries and so forth are adopted. Given the population's hostile attitude, guards are posted at the wells and other sources of water supply. If inhabitants are unreliable, observation of them is established, hostages are taken, suspicious persons are arrested and restrictions (a ban on leaving the house after a certain time, the closing of telephone exchanges and radio and pigeon stations and other communications installations, a curtailment of private automobile traffic and others) are imposed. If the inhabited locality is taken by force, search measures for individual hostile persons who have gone into hiding are adopted and weapons, means of communication and such are confiscated.

437. The units at rest assemble at the alarm by order of the garrison commander in accordance with an order or the "alarm" signal (if there is no time to issue an order). The units' assembly points are prescribed in concealed localities and are scattered: each assembly point should be no more than an infantry battalion (artillery battalion). The units form up in concealed manner by company (battery, troop). Departure from the assembly points is effected in accordance with the individual order of the garrison commander.

438. For assigning quarters when billeted in inhabited localities and for allocating sites when billeted outside of them quartering officers are dispatched thus:

a) upon quartering for rest in the rear of one's troops the quartering officers are dispatched immediately at the start of the march (sometimes even earlier, as soon as the order for quartering for rest is received) and

b) when quartering for rest, in the event of an open front, the quartering officers are dispatched as of the long halt and travel with the advance march security detachments.

A senior quartering officer is appointed in each rifle regiment and other units quartering separately (in artillery battalions, tank battalions, cavalry units and so forth). Upon the billeting at one point of units of several regimental columns or echelons, the senior quartering officer is appointed by the divisional chief of staff. The quartering officers are dispatched on the basis of one company grade commander from each battalion, battery group and other individual units of different arms of service and one NCO from each company, battery and troop. Upon quartering outside of inhabited localities it is possible to confine oneself to the dispatch of just one commander from each battalion, battery group and so forth with the attachment for assistance of one-two riflemen each. Political workers and medical and veterinary personnel are sent with the quartering officers. Having arrived at the destination, the senior quartering officer allocates the billeting area (or finds concealed locations for the units when quartering outside of the inhabited localities). The other quartering officers continue this work for their units.

439. The quartering officers' duties are:

a) a survey of the inhabited localities (or areas) and ascertainment of their sanitary and veterinary condition, the number of wells and the quality of the water both in them and in other sources (running waters, springs);

b) allocation of inhabited localities and water-supply sources among the units (distribution of units per concealed locality);

c) choice of premises for the staffs, communications posts and medical establishments;

d) ascertainment of the class composition and attitude of the local population toward the troops; and

e) organization of the meeting of the units and their posting as per quarters (per billeting location); making incriptions on fences, gates, walls and trees denoting the units is prohibited.

440. When quartering in inhabited localities infantry usually occupies the side closest to the enemy. Artillery is quartered together with infantry, divisional and corps artillery immediately behind the infantry units (usually with the rifle regiments). The guns and wagons of the batteries are placed within the inhabited locality or outside of it, but unfailingly in concealment or with camouflage measures. Cavalry is quartered where there are more farm buildings which are safe in respect of infectious diseases and close to a watering place. The signals units are quartered close to the HQ. The chemical warfare unit wagons with war gas are quartered outside of the inhabited locality in concealed locations. In proximity to the enemy the units are billeted closer together (for rapid assembly). The kitchens and wagons are quartered with their units under awnings or camouflaged, the remaining wagons and stores of all kinds are quartered predominantly on the outskirts concealed against an air enemy; people are billeted under roofs. The HQ's are quartered, as far as possible, in the center of the quartering of their formation at road intersections and in the most important sector.

441. When taking up positions outside of inhabited localities it is essential to endeavor to do so in small units. The place of the billeting should be dry (but, if possible, not with sandy ground and not on the site of previous unit bivouacs). Places along the course of rivers are prescribed in the following order:

a) for people to drink and for preparing food;

b) for a watering place;

c) for the bathing of people and the horses; and

d) for washing underwear.

The locations for livestock and the slaughter thereof are allocated separately, in the rear. Latrine trenches are located no closer than 100 meters from where people are quartered, but by no means between units.

442. The officer in charge maintains communications with subordinate units quartered in one inhabited locality by messengers (mounted, on foot and on bicycle), telephone and code signs. Given the existence of a local telephone system, it may be used, but it is essential to take precautionary steps against interception and listening in. In proximity to the enemy, in addition to messengers, telephone (telegraph) communications are established obligatorily and air liaison and communication posts and radio stations are deployed.

Chapter XX. Protection of Troops at Rest (Security at the Halt)

443. When taking up positions for rest in zones not exceeding the normal defensive front of military formations, the system of security at the halt is organized within the limits of a rifle division; upon quartering on broad front, within the limits of a rifle regiment.

The rifle division is protected:

a) when the enemy is 2 days' march and less away, by outpost detachments on terrain which is accessible everywhere and by individual outposts on terrain passable only in certain directions;

b) when the enemy is over 2 days' march away (under conditions precluding the possibility of the operation of enemy motorized units), by individual outpost supports; and

c) by outposts and outguards posted in all directions of a group of troops resting directly in one inhabited locality of in one area outside of an inhabited locality (local security); the latter form of security is also posted by military formations covered on the enemy side by the disposition of other formations.

Upon quartering on a broad front, the rifle regiment is protected by individual outpost supports and local security.

444. The purpose of security at the halt is:

a) to ensure the troops' tranquil rest, repulsing an attack by weak enemy units and preventing their surprise shelling with rifle, machinegun and artillery fire;

b) to prevent the reconnoitering of the disposition of the troops at rest by enemy reconnaissance units, repelling them and taking them prisoner; and

c) in the event of an enemy offensive, delaying him until the resting troops have prepared for action and, while containing him, ascertain the disposition of his forces and the direction of his main assault.

445. The strength and composition of the security at the halt is determined by:

a) the distance away from the enemy;

b) the mission of the military formation;

c) the size of the military formation being protected and the breadth and depth of its disposition (the time it needs to deploy);

d) the breadth of the zone of operations of the military formation; and

e) terrain conditions.

To the outpost detachment is usually appointed a reinforced company to a battalion of infantry with artillery, cavalry, armored forces and other units; individual outpost supports may be of a strength ranging from a platoon of infantry (cavalry) to a company (troop) with heavy machineguns.

446. The distance away of the security at the halt (forward edge of the line at which the security holds up the enemy) should be such as to protect the resting troops against effective enemy artillery fire and secure for them space to deploy in order of battle or the possibility of assembling in columns (if, following the rest, a retrograde march is planned).

The distance depends on:

a) the mission of the resting troops;

b) their size;

c) the strength of the security at the halt; and

d) the properties of the terrain.

On average the forward edge of the defensive line of the security at the halt should be 3-5 kilometers away from the resting military formation.

447. Security at the halt takes up positions, in accordance with the rules of defense, on a broad front; the width of the zone of the outpost detachment in battalion strength is up to 5 kilometers; in reinforced company strength (with heavy machineguns and individual guns or a battery) is up to 3 kilometers. Security at the halt is posted both at the front and to the side of open flanks. When detailing for security at the halt more than one outpost detachment it is essential to appoint the individual units of the security at the halt from different regiments in order, upon deployment for action of the entire division, that these units may become part of their own regiments.

448. Each individual unit of the security at the halt (outpost detachments and individual outpost supports) is shown: the zone of the security, the line of resistance in the event of an enemy offensive and the line up to which they must conduct reconnaissance; and the reply and password.

449. The units appointed to relieve the security assemble at the place of deployment of the outpost reserve and effect the relief by sector. Individual outpost supports are relieved directly where they are deployed. At the changeover the officer in charge of each security unit being relieved is obliged to report to the officer in charge of the new security unit relieving him all his available information concerning the enemy and terrain. The units which have been relieved preliminarily assemble at the outpost reserve of the detachment or proceed immediately to join their resting troops.

When a military formation switches from a route march to positions for rest, the security detail is usually made up from the units protecting the route march. The officer in charge of the column gives the instruction concerning the line at which march security must halt. The security at the halt is deployed under cover of the latter, after which the march security units join their units.

450. When troops, after having taken up positions for rest (night halt), resume the march, the security at the halt units become march security, or new units are sent up for march security. Upon switching to march security, both on the offensive and during a withdrawal, security at the halt assumes the order of march and begins to move off in the direction prescribed at the appointed time. When new units are moved up to march security, they cross the zone of the security at the halt in deployed form, after which the security at the halt units close up and occupy in the column the place prescribed by the officer in charge of the column. The order of the officer in charge of the column must indicate precisely the time that march security crosses the zone occupied by security at the halt and, depending on this, determine the place in the column and the point where it is joined by the closed-up security at the halt units. When, upon withdrawal, the security at the halt is replaced by new units for the purpose of march security, this latter is preliminarily deployed behind the line of security at the halt in the prescribed position, and, having let the withdrawing closed-up security at the halt units pass through, begins to march at the appointed time behind the main forces.

451. Measures against motorized unit attacks are:

a) aerial reconnaissance;

b) the dispatch of reconnaissance detachments along the roads suitable for motor transport traffic;

c) the posting of LR artillery in the security at the halt for shelling the roads suitable for motorized unit traffic;

d) the posting of individual guns and batteries at the line of the outpost supports for fire by direct laying at motorized units and tanks, particularly as they cross narrow places convenient for movement;

e) digging holes in the roads, organizing traps and such;

f) the positioning of chemical warfare units in places convenient for the traffic of motorized units and tanks and for contaminating these areas in the event of their appearance;

g) the positioning of security at the halt in accordance with the rules established for combating tanks; and

h) the organization of high-speed communications with the reconnaissance units and security at the halt (motor vehicles, motorcycles, radio and signals).

452. Air and anti-gas defense in inhabited localities is organized in accordance with the directives of the unit command; the unit commander either assumes direct leadership of air defense personally or entrusts it to a specially appointed air defense point chief.

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