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THE VOROSHILOV LECTURES

MATERIALS FROM THE SOVIET GENERAL STAFF ACADEMY

ISSUES OF SOVIET MILITARY STRATEGY

COMPILED BY
GHULAM DASTAGIR WARDAK
GENERAL EDITOR
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WITH AN INTRODUCTION BY
RAYMOND L. GARTHOFF

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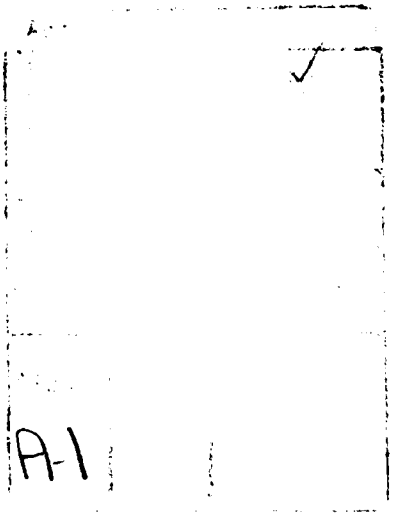

THE VOROSHILOV LECTURES

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VOLUME I

Issues of Soviet Military Strategy

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Foreword

IN 1939 WINSTON CHURCHILL REFUSED to predict Soviet behavior, calling the Soviet Union a "riddle wrapped in a mystery inside an enigma." Soviet behavior today is no less puzzling. *Glasnost* and *perestroika* focus our attention on reform apparently underway in many areas of Soviet life. The armed forces themselves seem to be in the midst of profound change, such as announced unilateral troop reductions, changes in senior military leadership, declared adjustments to war-fighting doctrine, and possible force restructuring. These real, asserted, and potential changes have fueled and shaped Western debate over the direction of Soviet military development. To understand and evaluate these events—to sort out the real from the apparent—authoritative information on Soviet military theory and practice is essential.

The Voroshilov Lectures offers such information. Prepared by a group of specialists on the Soviet military, this book is the first publication of primary source material presented at the Soviet Voroshilov General Staff Academy dealing with military doctrine, strategy, operational art, and tactics. The lectures, compiled by Colonel Ghulam Dastagir Wardak, formerly of the Afghan Armed Forces, provide insight into Soviet concepts and planning for a period not previously available for public review. Readers have the rare opportunity here to study material originally intended only for the eyes of senior Soviet officers and carefully screened officers of close Soviet allies.

This and subsequent volumes of Voroshilov lectures should build a baseline for assessing change in the Soviet Armed

Forces. Readers may agree with the appraisal of this volume's editors: these cohesive, well-argued views on war – tested over seven decades of theory and practice – call for healthy caution and critical scrutiny when interpreting Soviet statements about unfolding events. The National Defense University considers this lecture collection to be uniquely useful information that will serve both the defense community and the general public at this important juncture in Soviet-American relations.

BRADLEY C. HOSMER
Lieutenant General, U.S. Air Force
President, National Defense University

Preface

THIS BOOK IS THE FIRST in a multivolume series of publications reproducing lecture materials presented at the Voroshilov Academy of the General Staff of the USSR Armed Forces in the 1973-75 course of study. This extensive body of materials, prepared in a project conducted under the joint auspices of the Deputy Under Secretary of Defense for Policy/Policy Support Programs (DUSD[P]/PSP) and the U.S. Army's Soviet Army Studies Office (SASO), addresses a broad range of issues integral to Soviet thinking on strategic, operational, and tactical levels of war. It is among the most authoritative and detailed information on the Soviet Armed Forces to become available publicly, promising to be of lasting value in the study of Soviet military affairs. For this reason, it is especially important that individuals using the material understand its origins, the context in which it was presented, the nature of the material itself, and how the lectures were prepared for publication.

How the Lecture Materials Were Acquired

In the late summer of 1973, Lieutenant Colonel Ghulam Dastagir Wardak, a General Staff Officer of the Afghan Armed Forces, began an undertaking that at the very least threatened his promising career as a professional military officer. Lieutenant Colonel Wardak, after nomination by the Afghan Ministry of Defense earlier that year, and upon

successfully passing an intensive Soviet screening process, was admitted to the Voroshilov General Staff Academy of the Armed Forces of the USSR, the premier Soviet military educational institution. From the beginning of his studies there, Lieutenant Colonel Wardak resolved to clandestinely transcribe all lecture and other documentary materials presented in the Soviet General Staff Academy's two-year course of study. His intention was to capture in detail an extensive body of knowledge spanning virtually every aspect of Soviet military theory and practice for subsequent use in the Afghan Armed Forces' military educational system. It was Lieutenant Colonel Wardak's belief that if the Afghan Armed Forces had this knowledge, the Soviet military's clearly growing and direct involvement in training and supporting Afghanistan's Armed Forces and in influencing Afghanistan's defense policy overall could be reduced, with no loss in the valuable military expertise required to modernize and develop the Afghan military establishment.

Lieutenant Colonel Wardak was also cognizant of the problems that would be his should this act of patriotism become known to the Soviets—however openly supportive of his efforts the Afghan Ministry of Defense and Government chose to be. The material presented at the General Staff Academy constituted Soviet State secrets, and dissemination was tightly controlled and monitored. While both Soviet and foreign students at the Academy were given access to detailed conceptual and planning data during class hours, and successful graduates would leave thoroughly steeped in Soviet warfighting approaches, the classified lectures and textbooks themselves were carefully guarded and secured at the end of regular duty days. In short, the extensive body of material comprising the Voroshilov curriculum in all its detail was never intended to leave the direct control of Academy authorities. Soviet success in this regard is evident in this and subsequent volumes. That is, in terms of authority, scope, and level of detail, much of the information presented has never been available before to Western defense specialists in government and academia—

or to the general public—for whom engagement in informed debate on national defense issues is essential.

When he entered the Academy in September 1973, Lieutenant Colonel Wardak was well-prepared as an experienced military commander, staff officer, and educator and as a student of Soviet military affairs as well. The scope and quality of his experience is reflected in the remarkable effort he made in transcribing the Voroshilov lecture materials.

In the several years prior to his selection for the General Staff Academy, Lieutenant Colonel Wardak served in the Education Department of the Afghan General Staff, taught tactics and operational art in a course designed for senior officers of the air and air defense forces, and from 1969-73 worked with a commission charged with translating classified Soviet field manuals from Russian into Dari. Prior to this, from 1965-68, he attended the Frunze Military Academy in Moscow, where he successfully completed the regular three-year course of instruction there. During attendance at the Frunze Academy, Wardak held the Afghan rank of senior captain, and upon graduation he was promoted to major. In earlier years of service, beginning in 1950, his assignments included duty as a battalion and company commander in infantry units and instructor in various aspects of combined arms operations; he graduated from a number of Afghan military schools as well as the Soviet tactics course, "Course A" as it was designated, taught in Afghanistan in 1963-64.

Thus, Lieutenant Colonel Wardak entered the student body at the Voroshilov General Staff Academy fluent in spoken and written Russian, and with a broad and specialized understanding of Soviet military matters in the realm of theory, tactics, and operational art; well-versed in the intricacies of translating and rendering military documents in two very different languages; and in addition as a veteran professional military officer with experience in field and educational settings. He successfully completed the two-year Academy course—including a defense of his dissertation on army operations in a mountainous environment—and graduated in August

1975. The extensive material he transcribed during this period was returned safely to Afghanistan.

The years following Lieutenant Colonel Wardak's return to Afghanistan were tumultuous ones for his country—designated in the Voroshilov lecture materials as a "neutral" nation—and for him personally. The experiences of these important years can only be briefly highlighted here in discussing the eventual disposition of the Voroshilov lecture notes, though clearly they are instructive in many other respects as well.

From 1975-78, Lieutenant Colonel Wardak served first as a General Director of the Afghan Military Universities, then as commander of the 81st Mechanized Regiment, 77th Infantry Division, and in 1978 as Chief of Operations of the 7th Infantry Division west of Kabul. After the Communist coup in April 1978, this anti-Communist officer was first imprisoned and then released, promoted as scheduled to colonel (an apparent effort by the regime to win his support), and subsequently given assignments of reduced responsibility. He was imprisoned again twice (and tortured) and finally allowed to retire by order of the Minister of Defense. During this period, he maintained copies of the lecture materials in a secure location.

In the winter of 1979, as Afghan resistance to the Communist revolution took shape, the retired Colonel Wardak was asked by the local corps commander in Wardak Province to assist him in putting down a revolt by a neighboring tribe. This Communist officer offered to provide light arms to Colonel Wardak and his supporters for this purpose. Taking advantage of this extraordinarily bad judgment on the Communist corps commander's part, Colonel Wardak succeeded in distributing 6,000 British .303-caliber Lee Enfield rifles to his people and shortly thereafter occupied all the Communist government centers in the region. Thereafter elected as a general commander of the Mujahedeen in the area, Colonel Wardak successfully defeated five of the Kabul regime's largest offensives and on one occasion successfully engaged Soviet forces. Upon being badly wounded in August 1980, Colonel Wardak went to Pakistan for medical attention and

continued to serve his people in the Mujahedeen leadership there. In this role, he served initially as military advisor to the National Islamic Front of Afghanistan, and subsequently he assumed the post of Military Assistant to the leader of the Front. In October 1981, Colonel Wardak established residence in the United States, returning periodically to Pakistan where he continued to serve as a military advisor to the National Islamic Front of Afghanistan, as well as a member of the Military Council of the Front.

Colonel Wardak brought with him to the United States the Voroshilov General Staff Academy lecture materials that he had so meticulously transcribed and so carefully safeguarded through many years of rapidly changing circumstances. In an act of friendship to the United States and to ensure that nations around the world facing Soviet – or Soviet-sponsored – military aggression would be armed with a more complete understanding of the USSR's approaches to waging war, Colonel Wardak made the lecture materials available to the U.S. Government. In addition, he agreed to serve as a consultant during the process of preparing the lecture materials for publication.

Description of the Lecture Materials

The lecture materials that Colonel Wardak provided comprise hundreds of pages of handwritten text and charts, organized principally by lecture or seminar topic and bound in folders of several lectures each. In addition to the lecture materials themselves, Colonel Wardak took substantial additional notes that supplement the lectures or in some cases address other topics raised in Academy seminar sessions or exercises. These notes are also a valuable source of information on Soviet military affairs, even though they were not an integral part of the major lectures delivered.

The bulk of the lecture materials and other notes were transcribed in Dari, Colonel Wardak's native language, although he recorded several lectures in Russian as well.

In an effort to ensure that key concepts and terminology were captured in full, the Dari text was sometimes supplemented by Russian (or the Russian by Dari), occasionally with words from the Pashtun language being added for further clarification. Colonel Wardak's intent in this effort was to render the lectures with such precision that no nuances in usage were lost, a task that was greatly facilitated by his previous work in translating Soviet field manuals from Russian to Dari. Two pages of the lecture materials recorded in Dari and Russian by Colonel Wardark are shown on pages 408 and 410.

The two-year course of study at the General Staff Academy focused principally on army and *front* operations during the first and second years respectively, together with a series of lectures on issues of strategy that spanned both years. Most of the lecture materials deal with issues addressed in these three broad areas, though material from some of the shorter, more specialized courses was transcribed as well.

The lecture materials can be characterized by how thoroughly they replicate the full lectures delivered at the Academy. First, a large number of lectures, and all those in this first volume, are essentially full text renditions of the lectures as presented. On rare occasions, Colonel Wardak chose not to transcribe a small portion of a lecture in this category because the topic was not pertinent to his or Afghanistan's needs. (In this volume, a section on a naval topic was omitted, for example.) For those few lectures where this was the case, it will be so noted in the translated text. Virtually all of the strategy lecture series and the major lectures dealing with *front* and army offensive and defensive operations fall into the first category.

A second category includes lecture topics for which substantial notes are available, including detailed operational and tactical norms and other key data, but the material was grouped and arranged by Colonel Wardak and the editors to constitute as full and coherent a treatment of the topic as is possible. Some future volumes will include lectures in this category, and an explanation of any editorial actions taken in this regard will be provided in each case. A third and last category of

material comprises lecture or seminar topics on which only limited notes were taken, but Colonel Wardak's knowledge of the subject as taught at the General Staff Academy served to expand his notes into a more complete treatment of the topic. In such cases, Colonel Wardak was asked to reconstitute the lecture based on his notes and knowledge. Any lectures falling into this category will be designated and annotated to ensure that the reader understands how the lecture was reconstituted.

Preparing the Lecture Materials for Publication

The guiding principle in preparing the lecture materials for publication has been to render each lecture into a form that as closely as possible reflects the original Russian language version. Thus, in addition to emphasizing precision in language, only minimal editorial changes for clarity have been made, and corrections of obvious errors or inconsistencies in the original notes have been verified in consultation with Colonel Wardak. When any other than minor changes have been made, these have been indicated in the text through footnotes or the inclusion of supplemental or clarifying data in brackets. On occasion, when a Russian word or phrase is judged useful in clarifying a term translated into English—particularly terms that have never or rarely appeared in open source writings—the Russian is included in parentheses. The use of parentheses otherwise reflects their use in the original text. In addition, a glossary of key terms for this and subsequent volumes begins on page 347. The Library of Congress system of transliteration from Russian to English has been used for all primary source material.

The manner in which titles of the various lecture sections were rendered in the original notes varied from lecture to lecture. To give consistency in format, without distorting the original material, a standard form of rendering headings and titles was employed. Primary titles are centered; secondary headings are flush with the left margins; and tertiary headings

are indented. This method proved workable for all of the lectures, allowing the material to be presented coherently and consistently, without departing from the basic organizational scheme of the original lecture.

The translation, editing, and further preparation of the lecture materials for publication has been accomplished by a project team comprising specialists in Soviet military affairs, Russian linguists and native Dari speakers, and individuals having direct experience in the Soviet military educational system. The project is managed by Dr. Graham H. Turbiville, Jr., with specialists drawn from John Sloan Associates,* Dr. Phillip A. Petersen's Policy Support Programs Soviet Research Team, and the Soviet Army Studies Office.

Former Afghan military officer Colonel Ali Ahmad Jalali played an essential role in translating Dari and Russian material into English and in the editorial process overall. Colonel Jalali, a native Dari speaker and fluent in Russian and English, among other languages, is a graduate of the Army Operations Course at the Frunze Military Academy in Moscow; the British Army Staff College, Camberley, England; the Infantry Officer's Career Course, Ft. Benning, Georgia; the Naval Postgraduate School, Monterey, California; and a distinguished graduate of the Military Academy in Kabul. He is the author of numerous books and articles on military affairs including a three-volume military history of Afghanistan. He has been closely associated with Colonel Wardak, both in the Afghan Armed Forces and subsequently in the resistance. During his military career, Colonel Jalali was instrumental in the development of precise Dari language terms to convey the Russian language meaning of Soviet military terms, facilitating the translation of lecture materials from Dari to Russian to English.

Colonel Jalali, like Colonel Wardak, also served as a field commander with the Mujahedeen and as a senior military advisor to the National Islamic Front of Afghanistan. Thus,

* John Sloan Associates was formed specifically to assist in the preparation of the Voroshilov General Staff lecture materials for publication and to draw on the extensive experience of Colonel Wardak and Colonel Jalali in the material's further application.

he and Colonel Wardak bring a wealth of practical military experience, language skills, and specialized knowledge of Soviet military affairs to the task of translating the Voroshilov General Staff Academy lecture materials.

Lectures Published in This Volume

The lecture materials published in this first volume comprise 8 of the 16 lectures on strategic issues delivered to the entire assembled Voroshilov Academy student body over the two-year course of study. The remaining eight lectures in this series, together with supplementary material, will be published in the second volume of lecture materials. These lectures on strategic issues were intended to provide the students with a broader context for understanding and integrating the extensive and detailed material dealing with operational art and tactics. The lectures were considered vitally important components of the Voroshilov curriculum, an importance underlined by the fact that a number of them were presented by the Chief of the Academy, Army General I. E. Shavrov (about whom more is said below). Of those lectures included here, General Shavrov delivered "Principles and Content of Military Strategy" and "Principles of Strategic Actions of the Armed Forces." The lecture entitled "The Principles of the Employment of Military Space Means" (to be published in volume II) was delivered by Major General I. V. Shaposhnikov, the son of the former Chief of the General Staff, Marshal of the Soviet Union, B. M. Shaposhnikov.

In the years since 1973-75, when the instructional material was presented at the Voroshilov General Staff Academy, organizational changes have taken place in the Soviet Armed Forces. Thus, for example, Soviet Long-Range Aviation, for which an important role is so often cited in the lecture materials, was subsequently disbanded and its assets incorporated largely into strategic air armies. However, the missions and employment concepts for these important assets remain essentially unchanged, and their role in theater

strategic operations described in the mid-1970s is as applicable today as before. This is true as well for the National Air Defense Forces, for which organization and name have changed since the mid-1970s but roles, missions, and interaction with other Services of the Armed Forces remain as described in the lecture materials.

Of particular importance is the insight into strategic operations in a theater of strategic military action (TSMA) provided by the lecture materials years before the concept was publicly articulated. All of the components of theater strategic operations are discussed in detail in the lecture materials. Thus, *front*, air and air defense, naval, and airborne operations are all addressed, as is the strategic nuclear strike in theater should an enemy escalate a conflict to that level. The careful attention given to the conduct of operations without the use of nuclear weapons highlights the importance being given then, as now, to this preferred Soviet warfighting option. Soviet planning approaches for conducting operations in the event nuclear weapons were employed are also spelled out, with Soviet planners clearly concerned about effectively dealing with any NATO use of such weapons. The focus on the theater of strategic military action in military planning is reflected throughout these lecture materials. For example, as the lecture "Principles and Content of Military Strategy" was updated during the 1973-75 course, military strategy was divided into two components. These were "general strategy" (*obshchaia strategiia*), dealing with broad issues of preparing for and conducting military operations, and "partial strategy" (*chastnaia strategiia*), which focused on studying, assessing, and preparing TSMAs and conducting operations within them. The importance of this theater focus is evident in the other lectures as well.

In using the lecture materials, it is important to consider them not only in terms of when they were presented but also in recognition of the important place occupied by the Voroshilov General Staff Academy in formulating Soviet military thought and in serving as the USSR's premier military educational

institution. This essential context—and a recognition of the evolutionary nature of Soviet military thought—are provided in the following introduction by Raymond L. Garthoff and in the overview of the Academy and its curriculum prepared by Dr. John J. Yurechko and Colonel Wardak.

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* * *

Ms. Kimberly Franklin, John Sloan Associates, and **Ms. Penny Mellies,** Soviet Army Studies Office, provided word processing and editorial assistance.

THE VOROSHILOV LECTURES

PART I

The Voroshilov Academy

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Introduction: U.S. Considerations of Soviet Military Thinking

THE VALUE OF THE MATERIAL in this volume for informing our understanding of Soviet military doctrine is inestimable. To be sure, there are other useful sources, including a substantial body of openly published professional Soviet military writings, and restricted-circulation writings in the General Staff journal *Military Thought* are sometimes available. All such materials are studied in conjunction with observation of Soviet military programs—weapons development and procurement, force structure, deployment, and training. In all these areas we have a great deal of information—not everything we would like to know, but essentially what we need to know. What, then, has been lacking?

Deliberations of the Politburo, Defense Council, and Collegium of the Ministry of Defense on plans and discussions concerning future development of Soviet military power and current decisions concerning its use are obviously not accessible or liable to become so. Similarly, actual contingent war plans prepared by the General Staff in accordance with guidance by the leadership will not be available. There remains for us one additional category of information: authoritative, concrete military doctrine on how a war would be waged.

Soviet military doctrine is conceived of as embracing two basic aspects or dimensions: a political one, stemming from the political sources and purposes of war, and a "military-technical" one, concerning the science and employment of military power. The "military-technical" aspect of military doctrine embraces three levels of military art: strategy, operational art, and tactics. These three levels correspond primarily to the significance of objectives of military action and broadly to levels of military forces committed to action. "Strategic" operations are generally considered to be carried out by one or more *fronts* (Army groups); "operational" engagements are at the Army level; and division and lower level units engage at the "tactical" level. This three-level delineation of military doctrine has long been ingrained in Soviet thinking; in fact, it was inherited from prerevolutionary Imperial Russian Army (and derivatively German) origins. The American view, in contrast, has traditionally distinguished between "strategic" and "tactical" levels, embracing a wide range of actions under each. Only recently, since 1982, has the U.S. Army officially adopted the "operational art" level, paralleling the Soviet classification. An important difference, however, remains. The "operational" level in the U.S. Army is equated to corps or division level, and the "strategic" level is still regarded as overall conduct of military operations and not specifically applied to (rare) multiple Army group level operations.

The Soviet Armed Forces have the most extensive and intensive military staff and command training system of any major power. The course at the U.S. Army Command and Staff College (CGSC), preparing officers, usually at the rank of senior captain or major, for what the Soviets would still regard as the tactical level, is nine months, with a "second-year" course recently added for a limited number of students selected to attend the CGSC School for Advanced Military Studies. So, too, are classes at the higher level War Colleges (National, Army, Air Force, and Navy) for lieutenant colonels and Navy commanders. The Soviet training system equivalents are far more thorough with a three-year course at the operational command and staff college level (the Frunze Academy for the

ground and air forces, with a navy equivalent) and a two-year course at the "strategic" level at the Voroshilov Academy of the General Staff of the Armed Forces (all Services). This two-year course covers the full range of military operations at the strategic level by all elements of the Armed Forces. It provides the theoretical matrix applied in concrete peacetime plans for war contingencies ("war plans"), training, and actual wartime planning governing operations. Graduates assume the principal General Staff and senior field command and staff positions. Virtually all of the recent senior Soviet military leaders are graduates of the General Staff Academy. For example, Marshal Sergei Sokolov was in the class of 1951; Marshals Nikolai Ogarkov and Viktor Kulikov were both in the class of 1959; Marshal Sergei Akhromeev and General Dmitri Yazov were in the class of 1967, and Admiral of the Fleet Vladimir Chernavin was in the class of 1969; and the new Chief of the General Staff, Army General M. A. Moiseev, graduated in 1982 with the Academy's Gold Medal.

Now, for the first time, in this volume the key course materials of the Soviet General Staff Academy on strategy and strategic operations are made available on an unclassified basis for Western analysts of Soviet military affairs. This volume (with a series of other volumes on more detailed aspects of the whole curriculum slated to follow) will fill this important gap in previously available materials. These General Staff Academy lecture materials on strategy provide *authentic, authoritative, currently relevant,* and in large measure *new* information that should greatly assist in broadening understanding of Soviet military doctrine and strategy.

The fascinating tale of how these materials were acquired is told in the preface. In a few words, an exceptionally well-qualified Afghan student attending the Academy—Lieutenant Colonel Ghulam Dastagir Wardak—succeeded in surreptitiously recording most of the lectures in the 1973-75 course, and preserving this material throughout a turbulent period later in Afghanistan.

There is no question as to the authenticity of the materials, and only in a few cases (mostly in later planned volumes, and always clearly indicated) is there possibility of minor

inadvertent error from transcription and translation. These detailed and complete expositions are authoritative. Representing, as they do, the corpus of military doctrine taught to rising Soviet officers, the materials in this volume represent the accepted, official Soviet position. Even articles in *Military Thought,* also authentic and authoritative, do not always represent accepted doctrine. Signed articles by Soviet military men (many of them, incidentally, on the faculty of the General Staff Academy) in *Military Thought* are intended to advance and *develop* Soviet military thought, not to present accepted and codified doctrine for teaching purposes. Thus journal articles dealing with strategy and operational art often advance new ideas, going beyond established doctrine. Other articles cover broader military and political-military matters; all are valuable in gauging emerging trends in Soviet military thinking. They do not, however, provide the range of accepted strategic and operational doctrine. The materials provided here are established doctrine, as presented in the Academy in 1973-75. Moreover, they cover the full gamut.

Soviet military doctrine has continued to evolve, and in some respects it has changed. At the level of strategic operations, however, the changes from the mid-1970s have so far not been great. The doctrine set forth in the 1973-75 lectures does reflect an important basic change that had begun in the mid-1960s and was well established by the mid-1970s: a shift to preparation for *alternatives* to war waged with, or without, nuclear weapons. From the late 1950s to the mid-1960s Soviet doctrine had been based on the premise that any major war would be an all-out nuclear war. From the late 1960s on, and reflected in these lectures, the premise was changing, incorporating the possibility that nuclear weapons might not be employed, and the clear Soviet preference for keeping any war that might occur non-nuclear. It was, however, well understood that decisions on whether nuclear weapons would be used did not depend on the Soviet Union alone. Accordingly, Soviet military doctrine had to encompass also the possibilities that a war would commence with a Western nuclear attack or escalate through Western first use of nuclear weapons, probably in a limited nuclear war in a theater of military action.

This basic doctrinal framework continues, and these materials thus represent a currently relevant distillation of Soviet military doctrine. It seemed justified—on the basis of all other sources, including other military writings—to regard these materials as still valid in 1983-85, a decade later.

Since 1985, there have been signs of "new thinking" in overall Soviet military doctrine, and since 1987, important changes toward a more defensive strategic concept have begun to take place. These lecture materials, however, serve as the baseline from which changes are being made.

In suggesting that these materials provide a wealth of new information, a few explanatory comments may be in order. In the past, the broad picture presented has, to one or another degree, been set forth in various official and unofficial Western analyses of Soviet military thinking. Because such studies have, however, varied radically in their conclusions, this new authoritative evidence will bear quite differently on them. For those that have been most close to the mark, the new data provided here serve to fill out in much greater detail what could before only be sketched in more or less correct general configuration on the basis of other sources. Not all controversies will be stilled. One can hope, however, that studies that are now shown to be in error will recede into the shadows. Certainly future studies can be more solidly grounded by virtue of these materials.

These materials have been available for several years to American analysts in the intelligence agencies and some others working and writing on a classified basis. Now, of course, these materials can also be used by those analyzing Soviet military thinking without benefit of classified information and in published analyses by those who if they earlier had access to these materials usually could not cite them in open publication. In both cases, the new availability broadens the basis for analysis by all. Moreover, debate and understanding in publicly available discussion will be enriched, as will classified analysis within the Government. The wider opportunities for long-term research and study often enjoyed by those outside the classified community sometimes permit important new findings. And

it is, of course, useful to have the data available to a wider range of analysts.

Without in any way seeking to summarize the lecture materials, several important general aspects of these lectures on strategy require brief comment.

Defensive Context, Offensive Content

The 1973-75 lectures clearly and flatly state as a basic "principle" that "the Soviet Union will not initiate war" (p. 70 and p. 263), and this is reflected throughout in specific ways such as in stressing the need for "detailed study of the methods of initiation of war by the aggressor" (p. 233 and p. 70). I do not believe this claim of defensive purpose should be discarded as mere propaganda, but it is also not conclusive. The lecture materials represent authoritative Soviet views at the "Secret" level on military doctrine and strategy for waging a war if war should occur; they are simply not a source for evaluating Soviet State policy decisions on war and peace, defensive or offensive, under various political contingencies.

The nonaggressive declared context for Soviet military strategy is accompanied by a strong emphasis on seeking to wrest the *strategic initiative* from the enemy at the outset and to retain it throughout a war (see pp. 233 and 253).

On another plane, while avowing a defensive role for the Soviet Union at the political level of military doctrine, the lectures abundantly reflect an *offensive orientation* at the military-technical level—strategy, operational art, and tactics. This does not necessarily contradict protestations of defensive intent of State policy, but it does mean that in the Soviet view "the offensive constitutes the principal form of strategic actions of the Armed Forces" (p. 83). Indeed, it is stated that the "defense is assumed only when forces and means are not sufficient to attack or when gaining time may be necessary in order to concentrate forces and provide favorable conditions for the initiation of a decisive offensive operation" (p. 264).

This stress on the offensive conduct of military actions in war is reflected throughout the 1973-75 lectures and also in other sources such as *Military Thought* and openly published

military texts and writings. There has been a reevaluation of the defense-offense relationship in theater strategic operations in recent years that still requires study. On the whole, however, the primacy accorded to the offense has been clear throughout the decade or so after the lectures and, in fact, until a rather sharp change in declaratory doctrine in mid-1987. The scope, meaning, and implications of that change are still unfolding. In any case, in this as in most respects, the lecture materials seem to represent a valid reflection of doctrine not only in the mid-1970s but at least up until the mid-1980s.

Although not identical with the offensive orientation of a war-waging strategy, a clear stress on seeking to attain victory in war is also manifest (e.g., pp. 83, 90, and 233). Again, while not inconsistent with the political doctrine that nuclear war can have no victors, authoritatively stated throughout the 1980s, there has been a disjunction with continuing references to seeking victory in strategic, operational, and tactical conduct of war, with or without use of nuclear weapons. The lectures do acknowledge that "the characteristics of nuclear war [lead] us to conclude that in a nuclear war there will be no winner or loser" (p. 72). They then go on, however, to suggest incongruously that advantages of the Socialist *system* (the high morale, better economic system, and just aims) would bring victory. This, however, is a "political-military" subject mentioned only in passing. What is more significant is that these lectures of the mid-1970s clearly set forth the traditional Soviet (and, for that matter, worldwide traditional military) view on seeking victory as an objective of the conduct of a war, if war should come.

Nuclear and Non-Nuclear Warfare

The lecture materials classify possible wars in several categories, including a basic distinction in terms of East-West (Socialist-Capitalist) conflicts, and also between possible nuclear and conventional wars. General nuclear war needs no special comment, except to note that the lectures do not assume it to be the most likely, much less the only, form of war

between East and West. They also posit wars of varying scale using only conventional weapons, although with a probability of developing into limited nuclear wars (pp. 72-77, 247, and 261). Local wars other than East-West conflicts, mainly conventional but possibly with use of nuclear weapons, are also recognized.

In general, throughout the lectures, as in other available Soviet military writings since the late 1960s, military operations of various levels and kinds are discussed in terms of the two basic alternatives: under conditions of the use of nuclear weapons, and with only conventional arms employed. For example, only in a nuclear war would widespread strikes be made against the full range of targets deep in the enemy rear areas, including military-industrial targets (pp. 260-61 and 265-66). And, on a different level, an operational-tactical airborne assault by an airborne division would normally be planned for a depth behind the enemy forward line of about 100-150 km in a conventional war but 250-300 km in a nuclear war.

The distinction between waging a nuclear war and one with only conventional weapons extends beyond such targeting and operational planning differences. For example, in a war using only conventional weapons the seizure and occupation of territory is of greater significance: "When a war is initiated using nuclear weapons, many territorial areas will lose their significance after nuclear weapons are employed against them"; with widespread radioactive contamination, "it is better to seize and occupy only those areas left relatively intact and which, by occupation, may place the enemy in a hopeless situation" (p. 266).

The 1973-75 lectures make abundantly clear that use of nuclear weapons at various levels would only occur in a situation of initial use by the other side. For example, nuclear weapons would be used and become "the main weapons for conducting strategic operations and achieving objectives" in a theater only "in case of initiation of nuclear war by the aggressors" (p. 258). The lectures do not explicitly declare a Soviet no-first-use policy because that was the subject of a policy debate decided coincidentally during the period of these

lectures. We know from a disclosure in *Military Thought* (January 1975, p. 66) that since 1974 the Soviet military have been "guided by instructions of the Central Committee of the CPSU that the Soviet Union shall not be the first to employ nuclear weapons." This guidance was not made in a public pledge until June 1982. The lecture materials clearly reflect that decision, without explicitly stating it.

The Soviets do not, however, regard launch on warning or preemption after enemy decision to use nuclear weapons as "first use." The materials explicitly note the possibility of tactical/operational preemption in a theater: "Depending on the situation, enemy use of nuclear weapons should be foiled through launching of strikes by operational and tactical nuclear delivery means," as well as conventional air strikes and ground force advance (p. 248). On the level of initiation of a general nuclear war, "the most important task is the timely detection of enemy direct preparation for launching a nuclear attack" in order to enable the *political* leadership to "make a timely decision on committing friendly nuclear forces into action" (p. 246). If an enemy missile attack is launched, the warning system must "inform the Supreme High Command within three to four minutes, so that it can make a decision on committing friendly Armed Forces into action" (p. 246). Other materials, including later discussions in *Military Thought* (e.g., October 1979, p. 25), suggest a general policy of launch on warning rather than strategic preemption.

The 1973-75 lectures decisively answer another question debated in the West. It is clear that in the mid-1970s, and I am aware of nothing indicating a later change on this matter, in a conventional war Soviet forces would not spare, but on the contrary would make a priority target of, the opponent's theater nuclear delivery systems. "In a conventional war without the employment of nuclear weapons, the most important enemy targets to be engaged at the beginning of strategic [theater] operations are enemy ground and aviation groupings, including nuclear delivery means" (p. 261, and see p. 249).

Another issue in Western debate over Soviet military doctrine has been whether the Soviets contemplate the possibility

of limited nuclear war. Soviet military as well as political leaders and commentators have frequently denounced limited nuclear war and often declared it impossible. Such public statements reflect a political purpose of dissuading the West from ever planning and preparing to initiate limited use of nuclear weapons. Moreover, it is very clear from the whole thrust of the General Staff Academy lecture materials that the Soviets would strongly prefer that no nuclear weapons be used, and have prepared their own forces so as not to require such use. At the same time, these materials make equally clear, as their public statements do not, that if NATO turned to limited use of nuclear weapons in the theater, the Soviet Union would respond in kind but not escalate beyond the theater. Earlier noted was the Soviet guideline that in responding to or preempting theater use of nuclear weapons only "operational-tactical" systems would be used. The Soviet military planning assumption, made evident in the lecture materials, is that while a geographic limitation to a given theater might be possible and would be respected, use of tactical nuclear weapons would be expected to be on a large scale. The lectures cite an illustrative allocation of "several thousand nuclear rounds of different yields, delivered by various nuclear delivery means" to the main, Western European, theater (p. 259).

Finally, it need only be noted that those Western analysts who have insisted that the Soviets have doggedly pursued an all-out nuclear strategy, and even that they have planned to launch a nuclear attack, are refuted by the evidence of the General Staff Academy lectures. So, too, are those who have believed that the Soviets have ruled out limited nuclear warfare. The Soviet desire to keep hostilities non-nuclear is evident, but substantial doubts about Western preparedness to keep that limitation are documented.

Theaters of (Strategic) Military Action

The geopolitical and "geomilitary" framework for strategic military planning is an essential element for applying strategic, operational, and tactical principles to concrete geographical realities. "Defining possible theaters of strategic military

action (TSMAs) and the many-faceted aspects of their strategic assessment is one of the important tasks of Soviet military strategy" (p. 93). Before discussing this subject further, it is necessary to clarify key terms. "Theaters of strategic military action," or TSMAs is the term used by the editors of the lecture materials in this volume. The original Russian-language term is *teatr voennykh deistvii* (TVD), literally, "theater of military actions." Most Western analysts use the Russian acronym, TVD, and translate the term as "theater of military operations," more consonant with Western terminology. Some translate it as "theater of military actions," with deference to the difference in Soviet and Western terminology of the word "operations," which in English-language usage is quite broad. The editors have chosen to expand this term to "theater of strategic military action," to take account of the fact that large-scale military operations in the theater are termed "strategic" by the Soviets. It *is* important to bear in mind that the Soviet classification of "strategic" operations basically means Army and *front* (Army group) actions, and air operations in the theater, in sharp contrast to the American concept of "strategic" operations as those directed against the U.S. and Soviet homelands, essentially equivalent to intercontinental operations. Nonetheless, I believe it would be better to refer to "theaters of military actions," and will do so; I also prefer to use the Soviet acronym TVD, but to avoid confusion I shall here follow the editors and refer to TSMAs.

The 1973-75 lectures describe the Soviet concept of a TSMA in detail and note that it deals with a changing phenomenon, depending on change in "the means of conducting war, the character of war itself, and the correlation of military and political forces in the world arena" (p. 94). Virtually the whole world is divided into potential TSMAs, including in 1975 a North American TSMA; Atlantic, Pacific, and Indian Ocean TSMAs; Northeastern (NE Siberian-Alaskan), Far Eastern, Middle Eastern, and Near Eastern TSMAs; and European Northwestern, Western, and Southwestern TSMAs. Except for the transoceanic North American theater and the oceanic theaters, all of the others are termed "continental" TSMAs.

In each applicable case, the adjoining portions of the USSR and its allies, as well as potential enemies and neutrals, were included. All these TSMAs were discussed in the lectures, including information on the armed forces of the key states. It is known from other sources that several changes in Soviet General Staff delineation of TSMAs have occurred since the 1975 lectures. For example, a Southern TSMA has absorbed most of the former Near Eastern and part of the f ɔrmer Middle Eastern theaters; a Southeast Asian TSMA may have absorbed the rest of the Middle Eastern and part of the Far Eastern TSMAs; and the Far Eastern TSMA absorbed the Northeastern. The specific selection and scope of particular theaters has thus changed over time since the 1973-75 Academy lectures. The concept, the system, of TSMAs, however, remains and constitutes a key element in Soviet military strategic thinking and planning.

Within each theater, "strategic regions" of varying significance are identified, based on geostrategic importance. So, too, are "strategic directions" (or axes) and "operational directions" within them corresponding to potential areas of military action and avenues of advance. Thus, for example, the Western TSMA had two "strategic directions," North German and South German, each with one or two *fronts* (Army groups). In this case, the breakdown into "operational directions" was not given in the lecture.

The lecture materials give a great deal of attention to the "preparation" of TSMAs, including strategic assessment and military planning, concrete preparation through establishing communication lines and infrastructure, military deployments, and backup supply. Although not discussed in detail, it was also made clear that political actions were another form of "preparation" of potential theaters of military actions.

"Planning for a strategic operation in a continental TSMA is conducted well in advance in peacetime by the General Staff of the Armed Forces on the basis of a decision made by the Supreme High Command" (p. 267). All plans are contingent and open to revision. "The content of the strategic operation in each TSMA is dependent primarily on the political aim of

the war . . . relative correlation of opposing forces . . . and other factors" (p. 264). One aim is "elimination" of individual enemy countries from the war (pp. 251 and 265) altnough the means may vary from annihilation in a nuclear war, to induced neutrality. "Political reasons may affect the selection of areas of the TSMAs for action, the selection of countries to be hit by nuclear strikes, or nations not to be attacked or temporarily [not to be] attacked by nuclear weapons" (p. 266). One of the missions for strategic airborne operations is seizure of enemy political and administrative centers to interrupt governmental command and control, and this may include "taking over individual governments of enemy allied nations" (p. 277). While not further discussed in the 1973-75 lectures, these political objectives include diplomatic efforts to detach members of the enemy coalition and to ensure the neutrality of key neutral states or, if necessary, their neutralization through attack.

The Western Theater of Military Actions—the area from the Baltic to the Carpathians and Alps, broadening westward to extend from Norway to Morocco—is central in Soviet attention. It is often referred to in the lectures as "the main" TSMA. The lectures reveal that at least at that time the Soviet General Staff envisaged strategic operations in the Western TSMA as extending to a depth of some 1,200-1,800 km, which with a planned advance of 40-60 km per day would mean an operation to be completed within 25-30 days. As component elements of that strategic operation, each *front* (Army group) component operation would cover some 600-800 km depth in 15 to 20 days, thus involving a two-echelon operation, albeit in a continuous advance.

"Strategic operations" in a theater are planned in terms of conventional as well as nuclear war contingencies. Although not explicitly stated in these materials, the Soviet conclusion is that while the introduction of the use of nuclear weapons by the two sides could have critically important consequences, the net effect on the course and outcome of a planned strategic operation could not be calculated, and therefore the planning factor for advance was unchanged for nuclear warfare. Although the planned 40-60 km advance in Western Europe

was ambitious, it was less than a 100 km per day planning factor advanced in Soviet internal war planning discussions in the early 1960s when all-out use of nuclear weapons from the outset was assumed. It also contrasts with a planned advance of 70-80 or even 100 km in the Far Eastern TSMA, that is, in northern and western China (p. 274).

Since the time of these lectures, the Soviet Union has established in peacetime four key TSMAs: in 1978 one in the Far East and in 1984 Western and Southwestern TSMAs in Europe and the Southern TSMA in the Middle East-Southwest Asia. The Academy lectures make clear the Soviet view that war could involve one, or several, or all TSMAs.

Some Western analysts have speculated that Soviet military doctrine in the 1970s held that any engagement of Soviet and American military forces would inevitably entail a non-nuclear world war, thus "requiring" Soviet initiation of hostilities in Europe if such engagement arose in a local war elsewhere. There is nothing in the Academy lecture materials to support such a view and a great deal to support its rejection. The one possibility that is declared to be excluded is a Western local war waged against one of the Warsaw Pact countries; the Soviets could not appear to be ready to let that occur, but even then with "assistance" rendered by other Socialist allies such a war was still expected to remain local and non-nuclear (pp. 76-77).

Combined Arms Action

Reliance on the coordinated employment of all arms and forces has been a traditional hallmark of Soviet military doctrine, and the lectures show that this remains so. Strategic intercontinental, air force, naval, and ground forces are all seen as working in close conjunction. "Strategic operations" in a theater of military actions include not only all arms of the Soviet Army ground forces but also all appropriate air and naval forces. The "air operation" as a component of a strategic operation in a continental theater of military actions is given

particular attention. Air supremacy is assumed to require destruction of 50-60 percent of the 1,400-2,500 enemy aircraft posited in 1975 in the Western TSMA (p. 319). The "air operation" would concentrate on attacking enemy air bases and other targets within a span of some 800-1,000 km width and 1,000-1,200 km depth concentrated over a period of 24-36 hours at the beginning of the campaign (pp. 260, 273, and 320). The lecture materials represent by far the most complete Soviet discussion of the air operation available to Western analysts.

In the early 1980s Long-Range Aviation and Frontal Aviation were dissolved and replaced by tactical aviation and five "strategic air armies." One, which inherited the Bear and Bison heavy bombers, was evidently designated to support operations against the North American TSMA. The other four acquired both the medium bombers (including Backfires) and long-range strike fighter bombers (Fencers), for conducting the air portion of strategic operations in continental TSMAs (two to back up the Western and Southwestern theaters in Europe, one for the Southern TSMA in the Middle East, and one for the Far Eastern TSMA). This later development strengthens the concept of theater strategic operations set forth in the lectures a decade earlier.

The role of naval operations as part of the strategic operations in a given theater depends of course on the presence, and relative importance, of coasts and adjoining sea or ocean areas. Although covered in the Academy lectures, the portions dealing with naval matters were not of direct interest to the Afghan course participant and therefore not recorded.

Airborne operations are given some significance, and apart from an example earlier cited of possible use to seize control (or at least disrupt) government and command centers of some enemy countries, other roles envisaged include "creating an internal military front in the rear of the enemy" or on a new axis, "foiling enemy mobilization," "preventing the movement of enemy reserves," and "seizing and destroying enemy nuclear delivery means" (p. 277). All of these, it should be noted, are possible uses of airborne assault operations in a non-nuclear

war. (Incidentally, there is no reference to special forces [*spetsnaz*] commando forces in airborne or other roles, an absence subject to various interpretations.)

The unity of combined arms action preached in the curriculum of the Academy is also reflected in its composition. As appropriate for the Academy of the General Staff of the Armed Forces, its faculty and student body are composed of members of all the armed services taking the same curriculum. This arrangement also facilitates personal acquaintance with an officer's peers in other branches and Services.

Comprehensiveness of Military Doctrine

The comprehensive, systematic, and coherent nature of Soviet military doctrine embracing strategy, operational art, and tactics is evident in these lecture materials, essentially an overview of strategic conceptions. Soviet military doctrine is not only internally consistent, covering all Services of the Soviet Armed Forces, but also basically the doctrine of all member countries of the Warsaw Pact. Selected officers from all the Pact countries attend the Voroshilov Academy and carry its doctrine back to their own national academies as well as to general staffs and field command and staff work. (Afghanistan, incidentally, was the only non-Socialist country permitted to send a student in the mid-1970s.)

A comprehensive and systematic strategic and operational military doctrine helps to ensure coordination, consistency, and interchangeability. It also raises questions regarding stifled initiative from providing *too* thorough a set "school solution." Moreover, intended to remain secret, if compromised, a set-piece doctrine can permit an opponent to anticipate and to some extent work around a plan of operations based on the doctrine. Nonetheless, although the Soviet system does place a high premium on conformity it does not preclude initiative within the system framework. For better or worse Soviet military strategy and operational art is systematic, and is most comprehensively laid out in the courses of the General Staff Academy.

Soviet Estimates of NATO Strength

The lecture materials include very interesting and instructive data showing the Soviet image of Western military capabilities. While in some cases the general Western reaction to the Soviet view as represented here would be to object that it overstates Western capabilities, this would involve judgments (e.g., on the number of NATO divisions that should be considered in an assessment—whether to include French divisions) more than differences over basic data.

The Soviet tally of Western forces in 1975 included over 1,000 ICBMs, 656 SLBMS, and up to 500 strategic bombers with a salvo of 4,000 warheads. The ICBMs were said to be on 1- to 2-minute alert, and bombers and submarines on combat patrol at 15-minute alert. In the Western TSMA, the nuclear-capable force was said to be 750 aircraft and 1,000 nuclear missile launchers and artillery pieces. The overall NATO force in the Western theater was said to number 50 divisions, increasing to 65; 10,000 tanks; 12,000 artillery pieces (including heavy mortars); and 2,000 to 2,600 aircraft, enabling NATO to "initiate combat actions, even without the employment of nuclear weapons, to achieve large political and military aims," and with the capability to "achieve great successes on the first day of operation" (p. 183, and see p. 239).

In the overall European theaters, NATO forces were said to total 62 divisions and 250 independent brigades and regiments, 16,500 tanks, 4,200 combat aircraft (plus 500 naval), 3 aircraft carriers and 500 combat ships, and other forces (p. 105). More detailed deployments are discussed within each TSMA (pp. 105-18 for the three European TSMAs).

Warsaw Pact forces and capabilities were not detailed. While NATO was said to possess formidable capabilities, the implied Warsaw Pact strength was presumably sufficient to support the doctrine. And the doctrine called for gaining the initiative and undertaking a sustained advance westward. The main danger from the Soviet standpoint was that Warsaw Pact advance would be so successful that after five or six days NATO might initiate use of tactical nuclear weapons (p. 74).

No overall assessments of the results expected in various TSMAs were given. In general, the student received the impression of a very formidable array of potential hostile forces that could, however, be dealt with by sound military planning, preparation, and active conduct of strategic operations. And that task was the focus of the whole course curriculum.

In concluding these prefatory observations, I would simply stress the character of this material as authoritative Soviet instructional military doctrine in the mid-1970s. It provides a valuable window into an important part of the overall span of Soviet military thinking. This material can and should be applied along with data on Soviet weapons, forces, and capabilities in measuring military performance, for evaluating possible arms reductions and confidence-building measures, and in a wide range of military and politico-military analyses.

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The Military Academy of the General Staff of the Armed Forces of the USSR

MARSHAL OF THE SOVIET UNION B. M. Shaposhnikov's description of the General Staff as "the brain of the army" remains an accurate characterization of one of the most important military command establishments in the world today.[1] Shaposhnikov was Chief of the General Staff in the years preceding the Great Patriotic War and during its initial phases (1937-40 and 1941-42) and served the last three years of the war as Chief of the General Staff Academy. During this period, Shaposhnikov witnessed the elite of the Soviet military establishment experience a most grueling and demanding test. In a Soviet officer corps devastated by the prewar Stalinist purges, surviving officers trained in the General Staff, for example, Marshal of the Soviet Union M. V. Zakharov, Army General S. M. Shtemenko, and Marshal of the Soviet Union A. M. Vasilevskii, took pre-eminent roles in the campaigns and battles that culminated with the victory in Berlin, and in the subsequent strategic offensive against the Japanese in Manchuria. The General Staff itself helped to formulate the strategy and plan the dramatic series of operations that are milestones in Russian military history. It worked as the command "brain,"

coordinating the maneuvers of ground, air, and naval forces stretched over vast fronts of thousands of miles. It deserves credit for salvaging success from a catastrophic series of initial defeats (for which it must bear some blame as well) and for mobilizing the resources of the entire Russian State in support of the war effort.

To capture and perpetuate this high standard of military competence and to ensure that it will be applied to the assessment, planning, preparation, and conduct of future war in its likely manifestations, the General Staff selects the most promising members of the Soviet officer corps and immerses them in the best military training programs the Ministry of Defense can provide. The pinnacle of this extensive military educational system, the key to the General Staff officer training program, is the two-year course at the Voroshilov General Staff Academy, which in the mid-1970s was located on Khol'zunov Pereulok, Dom 14, in Moscow.

The Academy, which traces its lineage back to the Tsarist Academy of the General Staff and the Military Academy of the Workers and Peasants Red Army, was founded in 1936, barely a year before Stalin's great purge decimated the ranks of the Soviet military. The faculty itself did not escape the ravages of the purge—teachers and students alike were consumed. To fill the depleted ranks of the Soviet officer corps, the members of the first class graduated early and found themselves moving quickly up the table of ranks as more and more vacancies appeared. In 1941, the Academy was named after Stalin's most loyal supporter, Marshal of the Soviet Union K. E. Voroshilov, one of the architects of the military purge. During the Great Patriotic War, streamlined measures were employed to meet the demands of the war. In this regard, courses were shortened and the graduation requirements reduced in order to accelerate the flow of officers to the front.

After the war the name of the Academy was changed to the "Higher Military Academy named for K. E. Voroshilov." A two-year program for officers was established, which focused

initially on generalizing and disseminating the lessons learned from the Second World War. Following the Soviet-designated "revolution in military affairs" of the mid-1950s, however, this focus shifted to the role of nuclear weapons in modern warfare, and initial efforts were made to assess how the threat and potential of these new weapons systems would shape military operations. Additional changes in the curriculum and organization of the Academy occurred in 1958, and it was renamed, as it had originally been called in 1936, the "Military Academy of the General Staff of the Armed Forces of the USSR." The honorific name of K. E. Voroshilov was retained as well, and the full name of this institution rendered in Russian became *Voennaia akademiia General'nogo shtaba Vooruzhennykh Sil SSSR imeni K. E. Voroshilova.* According to Army General I. E. Shavrov, Chief of the Academy from 1973-78, the Academy at this time was assigned the mission of "preparing cadres for working in the central apparatus of the Ministry of Defense and the General Staff, [and] in formations and large units of all Services of the Armed Forces." [2] In addition, the Military Academy of the General Staff was also given an important role in formulating Soviet military thought by "working out the most important problems of contemporary military art in combat employing both nuclear weapons and conventional means of destruction." [3]

Throughout the 1960s, the General Staff Academy continued to prosper and grow. It remained in the forefront of the official formulation of the military-technical components of Soviet military doctrine. This is exemplified by its role in shaping the new nuclear-oriented doctrine expounded by Nikita S. Khrushchev in 1960, and the extensive participation of its faculty in the preparation of the initial and subsequent editions of *Voennaia strategiia* (Military Strategy) (Moscow: Voenizdat, 1962, 1963, 1968), under the editorship of former Chief of the General Staff (1952-60), Marshal of the Soviet Union V. D. Sokolovskii.[4]

One of the principal authors of *Military Strategy* was Colonel General A. I. Gastilovich, who from 1958-64 was

Deputy Chief of the General Staff Academy.[5] His work during this period is instructive for what it reveals about the important role that the Academy and its personnel play in the formulation of Soviet military thought. The three editions of *Military Strategy* were, of course, among the most important works of the period in that they set out Soviet views of modern war and those many Soviet-perceived issues associated with preparing for and waging future conflicts. Gastilovich, however, was also the author of the lead article (1960) in the top secret "Special Collection of *Military Thought*" (*Voennaia mysl'*), which assessed how the introduction of nuclear weapons and long-range delivery systems would shape the nature of a future war and postulated the ways this could or should change the structure and roles of the various Services of the Armed Forces.[6] Whether by conviction or in a calculated effort to evoke a spirited dialectical response from other senior military personnel in subsequent articles, the Gastilovich article posited radical changes for the Soviet Armed Forces, calling for an almost exclusive reliance on nuclear weapons to accomplish those missions formerly assigned to other combat arms. In this article, "The Theory of Operational Art Needs Review," he posed the kind of arguments that have surely been framed in the General Staff during the 1970s and 1980s in regard to reassessments of the role and military utility of nuclear weapons; recent technological advances in conventional weapons, automation, and troop control; and an emerging family of new weapons and military technologies whose diversity and potential are only now beginning to be revealed.[7]

Gastilovich set out the problem, proposing radical changes in the way the Soviet Armed Forces should prepare for and conduct war:

> We will concede that nuclear weapons and missiles alter the conditions of war, but having said "a" we shrink from saying "b." After making our bow in the direction of missiles and introducing some minor revisions in the theory of the military art, we still maintain the old positions we held at the end of World War II. We strive without success to fit missile-nuclear weapons into the framework of the familiar needs of our military doctrine, only modernizing it

slightly. We forget that this doctrine bases itself on the use of weapons not comparable with contemporary weapons.[8]

The most extreme nuclear-oriented variants of war and the radical changes in Soviet military strategy put forth by Gastilovich and others were at least tempered by subsequent discussions in the General Staff and the Ministry of Defense, a process apparently reflected in the "Special Collection of *Military Thought*." [9] This was also evident in the editions of *Military Strategy*, in other textbooks on operational art and related issues published by Academy professors and other military professionals from the mid-1960s on, and in military exercises. That is, beginning in the mid-1960s, Soviet planners were beginning to pay closer attention to the possibility that general war could have at least conventional phases, and beginning to draw implications for what this could mean in the conduct of future war. By the early 1970s, the "old positions . . . held at the end of World War II" and dismissed by Gastilovich as no longer relevant were receiving far closer attention throughout the Soviet Armed Forces generally, and at the General Staff Academy in particular.

The General Staff Academy in the Mid-1970s

The lecture materials presented in this and subsequent volumes were acquired at the Military Academy of the General Staff in the 1973-75 period, a time when the Academy was entering a new phase in its history. The Academy had grown to include a faculty of about 300 colonels and 200 generals spread throughout 22 different departments. Approximately 240 Soviet and about 100 Warsaw Pact students divided into two classes were in attendance, resulting in a rather remarkable faculty-to-student ratio of nearly 2 to 1. However, many of the faculty members had no teaching duties. They were analysts, researchers, and individuals completing their doctorate degrees.

Army General (and later Marshal of the Soviet Union) Viktor Kulikov, newly appointed Chief of the General Staff, provided

a remarkable snapshot of the Academy in his 1976 book, *Akademiia General'nogo shtaba* (Academy of the General Staff).[10] This work has supplemented the first-hand observations and details provided by Colonel Wardak. Kulikov pointed out that the Academy faculty was staffed by a host of famous military theoreticians. Many of these authoritative military theorists are still active as authors and teachers today. The Academy Chief, as noted above, was Army General I. E. Shavrov, a highly regarded author and theoretician in his own right. His predecessor, Army General S. P. Ivanov, remained at the Academy during the 1970s and published his famous book, *Nachal'nyi period voiny* (The Initial Period of War) (Moscow: Voenizdat, 1974) during Shavrov's tenure. Among the other notable instructors, department heads, and associates of the Academy in the 1970s were P. K. Altukhov, noted for his publications on issues of troop control; A. I. Radzievskii, Chief of the Frunze Military Academy (1969-78) and author of important works on armor and combined arms operations; V. G. Kozlov, a well-known specialist on military theory and the nature of war; E. Grebish and I. I. Anureev, both of whom engaged in intense debates on the use of mathematical models for correlation of forces calculations; and many others whose names are recognizable to specialists in Soviet military affairs.

According to Kulikov, Academy students also received the benefit of a series of important guest lecturers. These included famous heroes of the Great Patriotic War, such as Army General S. M. Shtemenko and Marshal of the Soviet Union M. V. Zakharov, both former Chiefs of the General Staff. Kulikov notes that the entire command echelon of the Ministry of Defense (constituting the key members of the Collegium) all delivered special lectures at the Academy. Thus, in addition to the General Staff Chief, Kulikov himself, students were exposed to the Chief of the Main Political Administration, Army General A. A. Epishev; the Commander-in-Chief (CINC) of the Strategic Rocket Forces, Chief Marshal of Artillery V. F. Tolubko; CINC of the Ground Forces, General

of the Army I. G. Pavlovskii; CINC of the Air Forces, Marshal of Aviation P. S. Kutakhov; CINC of the Air Defense Forces, Marshal of the Soviet Union P. F. Batitskii; CINC of the Navy and principal architect of Soviet naval strategy, Admiral of the Fleet S. G. Gorshkov; Chief of the Rear Services, Army General (later Marshal of the Soviet Union) S. K. Kurkotkin; Chief of Civil Defense, Army General A. T. Altunin; and Chief of the Main Intelligence Directorate (GRU) of the General Staff, Army General P. I. Ivashutin.[11] (See the appendix for 1973-75 Academy staff members.)

Students attending the Academy in the mid-1970s also experienced a dramatic renovation of the curriculum. After a 20-year hiatus, training of military historians was resumed in 1973. The military history department continued to expand, as military historical research took on greater importance in both the academic and actual operational arenas. In part, this was a direct outgrowth of a renewed interest in the character of conventional warfare. War games conducted at the Academy began to explore conventional variants in increasing detail. Kulikov notes that these games were conducted on an annual basis and that they included command-staff exercises in which Academy faculty and students participated:

> The conditions of the scenario were created in relation to the specific theater of strategic military action, the state of friendly and enemy forces, as well as training goals. Problems, at war games, were handled both under conditions of employment of nuclear weapons and with utilization of conventional weapons. Proceeding from the strategic concepts of the capitalist countries, which have refused to repudiate the employment of nuclear weapons, different variants of possible escalation of nonnuclear into nuclear military operations were studied. The most effective methods of defeating the aggressor in any situation were sought in the process of these exercises.[12]

This type of educational training was considered to be especially important, occupying up to 37 percent of the instructional time. Some exercises were actually conducted in the field, such as the following 1970 case cited by Kulikov:

> Command officers of military districts have the most favorable comments on the performance of students at exercises. In 1970, for

example, the commanding officer and the Military Council of the Carpathian Military District, positively grading the performance of academy students at an exercise conducted in that district, stressed their high degree of organization, their ability to work rapidly and with precision, to estimate the situation and to submit intelligent suggestions on decision-making under the complex situational conditions created at the exercise.[13]

This practice has continued, with Academy personnel acting in various capacities in support of exercises, ranging from traditional command positions to exercise referees and judges. Students frequently base their dissertations on exercise critiques. Furthermore, the faculty used this experience to update a number of textbooks on operational art, which had initially been prepared by the Academy faculty in the mid-1960s.

Another topic, local wars, gained prominence during the mid-1970s, according to Kulikov. In particular, it appears that the 1967 and 1973 wars in the Middle East and the Korean and Vietnam wars were studied at length. Issues such as the role of air power, armor, antitank weapons, and munitions consumption rates were discussed, both in the pages of the Ministry of Defense journal, *Military Thought*, and at various Academy lectures and seminars. Academy Chief Shavrov wrote two benchmark articles on local war in *Voenno-istoricheskii zhurnal* (Military-Historical Journal) in 1975 and was the editor of the 1981 volume, *Lokal'nye voiny: istoriia i sovremennost'* (Local Wars: History and Contemporary Times).[14] Doctoral and candidate dissertations explored this area as well.

Of course a major portion of the renewed interest in military history focused on the Great Patriotic War itself. Ivanov's earlier cited book is an excellent example of the type of concentrated historical research used for such current operational analysis. His study of the initial period of war (which, in addition to its primary focus on World War II, also analyzed the initial periods of World War I and the Russo-Japanese War) clearly had a significant influence on the lectures being presented at the Academy during this period. Other issues of the Great Patriotic War, such as the importance of the strategic offensive, the wartime system of troop control and overall

control of the Armed Forces, air, airborne, and amphibious operations, and strategic deployment and combat readiness are also reflected in the historical content of all these lecture materials.

Role and Mission of the Academy

The overall mission of the Voroshilov General Staff Academy is basically twofold. Its first responsibility is to train the elite of the Soviet officer corps (along with a large contingent of visiting foreign officers from states allied with or having special ties to the Soviet Union), providing them with a detailed education spanning the entire scope of Soviet military doctrine, military science, and military art (which in itself includes such fields as military strategy, military geography, military pedagogy, and others). The second part of the Academy mission is to operate as a center for discussions and debates on the full range of military-technical issues encompassed by military doctrine and to apply the judgments and conclusions reached to the continued development of military strategy, operational art, and tactics. The Academy also provides a special refresher course, known as the Higher Academic Course (*Vysshii akademicheskii kurs* [VAK]), for senior Soviet commanders.

Attendance at the two-year Academy course marks both ending and beginning phases in the career of the General Staff officer. To reach this point he must go through a rigorous selection process, in which both his professional and political backgrounds are carefully scrutinized by several Ministry of Defense elements, including the Main Political Administration and the Main Personnel Directorate (formerly headed by the current Minister of Defense, Army General D. T. Iazov), as well as by the Personnel and Political Departments of the General Staff itself. The Chief of the General Staff also plays a central role in this selection process, reviewing and approving the list of candidates for entrance into the student body. Foreign students who are accepted into the Academy have

undergone a similar review. First the Defense Ministries of eligible countries nominate students for admittance to the Academy course. These nominees are then examined within the Soviet system, and a select few are approved for admittance. In both the cases of Soviet and foreign candidates, several departments of the Central Committee of the Communist Party of the Soviet Union (CPSU) play a key role in approving the final choices.

This meticulous weeding-out process reflects the important standing of the General Staff officer corps in the military "*nomenklatura*" system. The officers who graduate from the Academy go on to fill most of the top command and staff positions in the Soviet military structure. Foreign students return to their homelands to similar high-level posts in their own armed forces. For the Soviet officer, selection as a candidate to the General Staff means a dramatic career boost. Regardless of Service (and students at the Academy come from all five Services, as well as a few from the KGB Border Troops and possibly the MVD Internal Troops) admission to the General Staff is a lifelong career commitment.[15] Although the officer retains the uniform of his Service, his Academy graduation medal identifies him as first and foremost an officer of the General Staff. That status carries with it certain privileges as well as an enhanced authority over non-General Staff officers of equal and sometimes even higher rank. Graduates of the Academy, as full General Staff officers, are assigned to the most important positions in the Soviet Armed Forces, including all of the division commander slots and all of the command and senior staff positions at the army and military district (*front*) levels. Upon graduation they are often immediately promoted to their next highest rank. Senior General Staff officers usually become members of the Party Central Committee later in their careers.

One need not look far to get a sense of the power and prestige of General Staff officers who graduated from the Academy. The current Soviet Defense Minister, Army General D. T. Iazov, was a member of the class of 1967. The Chief of the General Staff, Colonel General M.A. Moiseev, was a member of the class of 1982. Former Chief of the General Staff,

Marshal S. F. Akhromeev is a 1967 Academy graduate. Akhromeev's predecessor as Chief of the General Staff, Marshal of the Soviet Union N. V. Ogarkov, graduated in 1959, as did his predecessor, Viktor Kulikov. Among many other notable Academy graduates are First Deputy Minister of Defense, Army General P. G. Lushev (1966); General Staff First Deputy Chief, Army General V. I. Varennikov (1967); Navy CINC, Admiral of the Fleet V. I. Chernavin (1969); and current General Staff Academy Chief, Army General G.I. Salmanov (1964), to name a few. The list of foreign students who have attended the Academy is equally notable. It includes most of the defense ministers, the chiefs of staff, and military district commanders of all of the East European states in the Warsaw Pact. Military leaders from Vietnam, Mongolia, Cuba, and Afghanistan have also graduated from the two-year course.

As regards the development of military strategy, the Academy has been—and continues to be--the center of a number of significant discussions and debates. As noted earlier, it played a central role in the formulation of Soviet military strategy, when nuclear variants of war preoccupied Soviet planners. The Academy's role in refining that strategy in the 1970s was reflected in the publication of collective and individual treatises of a number of faculty and students. Many works of book or monograph size, like Ivanov's *The Initial Period of War* (published in 1974) or Shavrov's *Metodologiia voenno-nauchnogo poznaniia* (The Methodology of Military-Scientific Cognition [published in 1977]), were published by Voenizdat or, less frequently, by other Soviet publishing houses. Numerous articles on important issues of military doctrine and operational art were published by Academy authors in the major military journals. Of course, as is also done now, many of the books and published studies dealing with particularly sensitive topics were not made available outside of strictly controlled channels.

The General Staff officers and professors whose publications are now standard reading for Western specialists on Soviet military affairs, as well as other Academy personnel, discussed, debated, and published in forums that were closed to

outsiders and tightly restricted within the military establishment itself. Many of these General Staff officers, for example, together with the most innovative military commanders, theorists, staff officers, engineers, and scientists, were frequent contributors to the various versions of the General Staff journal, *Military Thought*. S. P. Ivanov's openly published book, *The Initial Period of War,* was preceded by his articles in the May and June 1971 "restricted" issues of *Military Thought* entitled, respectively, "The Initial Period of War" and "The Initial Period of the Great Patriotic War of the Soviet Union." A. K. Slobodenko, an instructor in intelligence matters and foreign forces at the Academy in the 1973-75 time frame, coauthored an article (with V. Ivanov) in the June 1968 issue of *Military Thought* entitled "The Bankruptcy of Fascist Policy and Strategy," a small and briefly surfacing portion of his research that was reflected more deeply in the lectures he prepared and delivered at the Academy. Shavrov himself authored an October 1973 article, "Soviet Operational Art," in the restricted *Military Thought,* while the Soviet military's growing examination of non-nuclear variants and areas of operational art that required a more intense study was reflected in articles like D. Samorukov's "Concerning the Intensification of Troop Efforts in an Offensive," (October 1973), V. Rezhnichenko's "Tactics—A Component Part of the Art of Warfare" (December 1973), and many others by officers associated with the General Staff Academy, the Frunze Military Academy, other military educational institutions, and throughout the Ministry of Defense.

The lectures delivered at the Academy, as those presented in this and subsequent volumes will indicate, were far more detailed and insightful regarding Soviet thinking about modern war and its requirements than the literature available openly. As a consequence, they were classified "Secret" by the Soviets. The force modernization programs, reorganizations, new operational concepts, and the development of theater-strategic control entities that emerged in the 1980s were no doubt discussed, debated, and tested within even more tightly restricted

circles at the General Staff Academy, other military educational institutions, and the General Staff/Ministry of Defense. Overall, through its publications, lectures, seminars, and conferences and through exercises and war games, the Voroshilov General Staff Academy exerted and continues to exert a strong influence on the content and direction of Soviet military strategy and the military-technical components of doctrine. In this regard, it constitutes the foremost scientific research center within the Soviet military higher academic system for the development of military science and the resolution of current military problems.

Organization and Basic Operations of the General Staff Academy in the Mid-1970s

The command echelon of the Academy was organized much like a field command staff. That is, the Academy Chief, with the rank of army general, was served by three deputies, each a colonel general. There was a First Deputy for Scientific Matters and Training, who supervised the faculty and operated the Training Department. The Training Department itself prepared course schedules, lesson plans, and books and lectures and arranged for the translation of foreign documents. The Second Deputy was in charge of Political Matters, to include ensuring that the political education of student officers met the standards set by the Main Political Administration and the Central Committee. The Third Deputy operated the Administration and Rear Services of the Academy and its various facilities.

The Academy faculty of 300 colonels and 200 generals was organized into 22 departments (*kafedry*). Each department was chaired by a major general or a lieutenant general, who in turn were supported by two assistants. Department faculty staff was composed of about 25 colonels and generals who were lecturers or professors and who usually held higher degrees. Typically, such faculty members would hold a "candidate" degree in military science, historical science, or another discipline

(a degree roughly between the U.S. master's and doctoral level) or more advanced doctoral degrees. Some faculty members were officers who were either approaching retirement or physically unable to serve in the field elements; their experience had been determined valuable in Academy curricula. Not all of the faculty officers at the Academy were instructors. Some were there solely to perform research and write on selected topics of military science.

In spite of the high faculty to student ratio, there was little interaction between faculty members and students outside of the classroom environment. Both groups worked a long day (7:00 a.m. to 7:00 p.m.), and neither had much time to converse outside of class (see the appendix for a class schedule). Faculty members shared offices in pairs and stored their own classified materials in locked safes. The lectures themselves were classified, and student notes and papers were also treated as such.

The 22 Academy departments reflected the scope and depth of the Academy's curriculum. In the realm of military science and art, there were four departments: strategy, military art, general tactics, and military history. Nine departments covered arms and services and special troop issues. There were departments for Rocket and Artillery Troops, Air Defense, Air Forces, the Navy, Rear Services, Engineer Troops, Chemical Troops, Signal Troops, and Radio-Electronic Warfare.

Staff operations and related issues were handled by the Staff Work (Operations) Department with military intelligence and foreign armed forces covered by the Intelligence and Foreign Armies Department. There were separate departments for Marxism-Leninism and physical education. In the Academy's language program, oriented entirely towards Western languages, the five language departments covered Russian (which is required of all foreign students), English (the most popular among the Soviet students), German, French, and Spanish. Department heads and instructors in these language departments were all female civilians.

THE STUDENT BODY The student body at the Academy in the mid-1970s was divided into two groups: Soviet officers and foreign officers. Each group was supervised by a group chief (a lieutenant general) who had two colonels as deputies, one for political matters and one for administrative matters and general nationality issues. The foreign student group was divided into study sections along national lines, with the larger national contingents having more than one study section. The class of 1975, for example, had about 120 students, approximately half of which were Soviet officers. Students were usually at the rank of major, lieutenant colonel, and colonel although two of the Soviet students in that class were generals. The students were relatively young, most being between 35 and 40 years old. The oldest student was 45 and the youngest 32. As noted earlier, graduation from the Academy usually resulted in a one-grade promotion for these students and an assignment to a position as a division commander or equivalent general officer position, even if they were not yet general officers.

The Soviet student contingent represented a cross section of all Services of the Armed Forces and their various integral branch arms and services. These students were usually nominated first by their military district commander. As indicated earlier, the greatest representation came from the combined arms and tank troop branches.

The foreign student contingent in the class of 1975 came primarily from the Warsaw Pact states: 12 students from East Germany; 10 from Cuba; 10 from Poland; 8 from Czechoslovakia; 7 from Bulgaria; 6 from Hungary; 3 from Afghanistan; 3 from Vietnam; and 1 from Mongolia. These students, as part of the entrance requirement for Voroshilov, had already attended another military academy and were fluent in Russian. By the mid-1970s, the foreign students were not of the same senior-level rank as their predecessors; i.e., there were no longer any generals in their group, but principally colonels, lieutenant colonels, and a few majors.

Most of the foreign students with families could bring them if they so desired (with the exception of the Cubans and the Vietnamese). The families of foreign students were provided with small apartments in the Moscow University district. Unaccompanied students were billeted in the four-story facility for single officers at Sechenovskii Pereulok. Students were provided with a single room, and the building itself had kitchenettes where students could prepare their own meals. Evening and weekend meals were available in the building's dining room and were ordered the day before. Daytime meals were available at the Academy buffet (breakfast) and cafeteria (lunch). For one to two rubles, students could order a meal of rather poor quality. Students and faculty ate in separate sections of the mess hall.

The Academy had only limited service facilities. A small military store offered toilet articles, cigarettes, shoes, shirts, and other items, all of good quality. Although there were no officers' club facilities, students were authorized to use the club at the Frunze Academy on weekends and holidays.

Soviet students received regular military pay, i.e., rank pay plus function pay (for the job held before entering the Academy). Students from Warsaw Pact countries were paid their regular salaries converted into rubles. The result of this pay system was that officers of the same rank but from different countries received varied monthly pay in rubles. Polish officers were the highest paid. For example, a Polish colonel received 350-400 rubles monthly. Among the Warsaw Pact countries, the Bulgarians received the lowest pay of Warsaw Pact officers. Cuban and Vietnamese officers were paid only 120 rubles per month, the lowest salaries among the students. This amount evidently was not sufficient for their needs, so Cubans and Vietnamese would frequently solicit or borrow money from other students.

OTHER SUPPORT ELEMENTS The general support elements of the Academy are directly subordinated to the Academy Chief. These consisted of a Soviet infantry guard

unit; a motor transport department which provided buses, cars, and drivers to transport the faculty and students; and a repair shop to support the transport department. The Rear Services Department provided a range of other support services, including a finance section, a quartermaster, a fuel supply element, billeting (described above), and a military trade component (*voentorg*) that had a book store and a general merchandise store.

The Academy had administrative-support elements for the students:

- a typing pool, which had a large number of female civilians who provided typing support to the faculty and students. Each typist was assigned to three or four students;
- three libraries (open, secret, and map), run by female civilians. Obtaining books from the libraries was a very elaborate procedure in which the students were required to sign for the individually numbered books when checking them out, and the cadre was required to sign for them upon their return;
- the translation department, employing female civilians. It had three sections—English, German, and French—that translated military books, articles, manuals, and instructions into Russian for Academy use;
- a print shop that printed and published Academy writings. It had female civilian employees.

The Academy Memorial Hall displayed pictures of all the past graduating classes and faculty members.

ACADEMY SECURITY As was and is typical of Soviet civil and military facilities generally, and those involved in sensitive work and research in particular, security at the General Staff Academy was quite intense. Access to the grounds was strictly controlled. The main guard gate monitored all traffic, and identification documents for all personnel entering or leaving the Academy were checked. Students were required to display their photo identification cards to enter or leave the Academy grounds.

Soviet students were required to serve as duty officers at the Academy. The tour of duty was 24 hours, and these student officers worked from a duty room where the keys to all classrooms were secured after the regular working day. In addition to this duty assignment, both the Soviet and foreign student groups had separate duty officers who picked up classroom keys in the morning at the duty room, opened classrooms for the day's work, locked the classrooms in the evening, and then took the keys to the duty room. The group duty assignment rotated among the students.

All classrooms, halls, and corridors were under closed circuit television surveillance. Four female civilians were employed in billeting administrative roles at the foreign students quarters; these individuals (who spoke Russian and English) controlled access to the quarters on a round-the-clock basis. They also helped foreign officers solve minor problems during their stay at the Academy.

THE ACADEMY STUDY PROGRAM AND CURRICULUM

When students were transported to the Academy for their 6-days-a-week, 10-hours-a-day schedule, they were plunged into an extraordinarily strenuous, highly structured educational environment. Except for those key lectures given to the entire student body by the Academy Chief and senior faculty (and dealing principally with larger issues of military strategy and operational art), as well as some guest lectures delivered in the main hall, the Soviet and foreign student groups were taught separately in lecture sections of three to five students. A lecture was usually followed by one or more seminar/question-and-answer periods. Some of these seminars were conducted during the mandatory late-afternoon study periods. In the judgment of Colonel Wardak, the segregation of the Soviet and foreign student groups, aside from the practical considerations in teaching small groups of the same nationality, permitted instructors to present Soviet students with lectures incorporating the latest model equipment and its technical capabilities and the concepts governing its employment. On one occasion, a lecture accidentally given to Colonel

Wardak, but intended for a Soviet student, featured the employment of later generation aircraft than the lecture he received when the mistake was rectified. In general, however, Colonel Wardak believed that the material presented to all General Staff Academy students was (with the exception of new technology not yet provided outside the Soviet Armed Forces) essentially the same.

The instructional method used at the Voroshilov Academy was a combination of lecture, seminar, and practical exercise. As noted above, for some subjects the entire class—Soviet and foreign—was assembled in the auditorium to hear an important lecture. In most cases the lecture on a particular subject was given to the small national study group by the individual instructor. The lecture would be followed and supplemented by a group seminar for which the students prepared ahead of time. In this seminar, the instructor generally was quite demanding in his expectations of student preparation for class. In the seminars there was pressure to work quickly, and students were expected to study reference books and write down their answers within short deadlines. The students were required to answer detailed specific questions on the course material. Students who did not satisfy the instructor's expectations in their seminar work would be reported to the department head. The next day, during the general lecture, there would be an announcement that these individuals did not fulfill their duty the previous day.

The majority of time devoted to each topic was spent working out practical exercises. These practical exercises would be focused on specific narrow aspects of a tactical or operational problem, or would be concerned with a more complex and general problem. In these exercises the students assumed, in turn, the role of unit commander or staff officer or chief of a particular arm or service. The exercises generally involved considerable map work, extensive mathematical calculation, and analysis of the individual components of complex issues in their overall context. During the academic year the students participated in several command and staff exercises. These were

conducted in the mock command post in the Academy basement.

Two to three times or more during the year, the students were given tests of their ability. The day before they were told to prepare by sharpening their pencils and otherwise getting their materials in order. Then on test day they went to the library, where they were given a combat situation with maps and texts. In this examination, they were asked one question or given one task. The students then wrote out their concepts of the operation, their decisions, and the battle organizations upon which they decided. The task might be to commit a second echelon, conduct a counterattack, or conduct a road march or another task in accordance with the parameters and situation they were given. All the information was placed on a map, as was most usually the case, and given to the instructor within the established deadline for his evaluation. The test served as a form of control to check on student progress.

The two-year program at the Academy followed an academic-year schedule, running from September to July, with a one-month vacation in August at the end of the first year. The program was divided into four semesters. There were required courses in strategy, language training, and military history during each of the four semesters. The principal portion of the curriculum covered four topics of operational art: army offensive operations, army defensive operations, *front* offensive operations, and *front* defensive operations. Each of these topics was covered separately as a unit during the two-year program. Other shorter courses dealt with the motorized rifle division, the Soviet air army, a special six-week course on the strategic march of an army, the air defense army, foreign armies, staff training, and naval operations. Towards the end of the second year, student officers had to prepare a dissertation and take a series of final examinations.

At the beginning of the first year, the new students were given a short familiarization course on the Soviet military. The two-week course included a discussion of the role of each of the Services of the Armed Forces, and the arms and services

associated with each. In addition, demonstrations of military technology, weapons, and equipment were given. A day was devoted to a discussion of combined arms in the ground forces. Then rocket and artillery troops, chemical, air, air defense, engineer, signal, radio-electronic warfare, and other components were treated. The class went on field trips to various bases near Moscow and Gorkii, at which the equipment and materiel associated with the various arms and services were displayed and demonstrated. The tactical-technical characteristics of weapons were highlighted in small tactical lessons. The course included a three-day trip to Sevastopol to view elements of the Soviet Navy's Black Sea Fleet.

The instructional program basically moved from tactics, starting at the division level, through army operations, and then finished with *front* operations. After the two-week introductory course, the first two months of the first semester were devoted to a study of the motorized rifle division, including general tactics, equipment, organization, divisional subunits, and combat actions. In this course the employment of each of the individual components of the division was examined both separately and in the context of integrated division employment. There were separate lessons on the roles and missions of combined arms (motorized rifle) and tank troops, rocket and artillery troops, air defense, reconnaissance, and special troops (signal, engineer, and chemical), and the rear services. The students were divided into small groups to work out division tactical exercises on a map. At the end of the two months they were tested in a large-scale map exercise. The students assumed the role of division commander, in which they were responsible for clarifying the mission, evaluating the situation, formulating a decision, and preparing orders. They wrote the decision on paper and displayed it graphically on their maps. The course also dealt briefly with the organization, equipment, and strength of U.S., British, German, French, and Turkish divisions.

Students were tested on the material at the end of this study phase. As with all examinations, this was graded on a

scale of 0-5. Two was a failure and could result in expulsion from the Academy, although this seldom happened.

The major course objective of the rest of the first semester dealt with offensive operations of the Soviet combined arms army. During this period, students participated in a staff exercise on army offensive operations. They also studied organizational, planning, and employment issues associated with army elements other than ground maneuver forces in support of the army offensive, e.g., aviation, engineer, signal, rear services, and others.

The course on army offensive operations addressed the general characteristics, including the size of participating forces, their organization, and the context in which such offensives were to be conducted; the preparation for army offensive operations, particularly the planning process in all its dimensions, requirements for reconnaissance, *maskirovka*, rear service and special troop support, and other branch arm and service issues, and the coordination of forces. The course also addressed the conduct of offensive operations with the use of nuclear weapons, the conduct of offensive operations without the use of nuclear weapons, the preparation of written documents for the plan of operations, and numerous issues associated with the above broader topics.

During the course, the students took the role of the army commander, as well as that of the major staff officers and chiefs of branch arms and services. They studied complex army missions by breaking them into components. In every case they examined the situation from the viewpoint of each participant separately. For instance, when studying the role of artillery in support of army operations they considered it from the point of view of the army commander and what he expected to obtain from the use of artillery. Then they studied the role of the artillery commander and how he provided artillery support to the army. They worked through each army operation from start to finish by phases, making the appropriate decisions, creating the necessary plans, and reacting to possible enemy actions. For example, an army offensive operation had

four or five parts, such as making the initial decision, planning the start of operations, defeating the enemy counterattack, and committing the second echelon.

The primary focus of the second semester was the operational and tactical aspects of the Soviet combined arms army on the defense. The secondary subject for this semester was the organization and operations of a Soviet air army. Students were taught the mission, duties, and functions of an air army commander and his staff. This class lasted about three months; as with the army offensive operation course of instruction, each specialty was studied in the context of a combined arms operation.

The final course for the first year concerned the strategic march of an army over long distances. This course lasted about six weeks. In it, the class studied the move of a Soviet army from the USSR to East Germany. The students carried out all the planning as if for an actual move. This included the plans for support by all branches and services, including air defense, air, rear services, engineer, etc.

In addition to the courses addressed above, during the first-year program students also took classes on language, strategy, military history, and Marxism-Leninism. In the language course, Soviet officers studied English, German, Spanish, or French, while the foreign officers studied Russian. The general course on strategy continued throughout the first and second years and included those lectures presented in this volume, as well as those that will be published in the second volume of this series.

There were final examinations in each subject at the end of the first year. The Ministry of Defense also sent a special State commission to examine students on issues of Marxism-Leninism. This examination had to be passed in order to graduate. After examinations, the students took a month's vacation, with the second academic year beginning in September.

The main objective of the first semester of the second year of study was to address all aspects of Soviet *front* offensive

operations, a course of study that was conducted in a fashion similar to the army course taught the first year. Classes on strategy and Marxism-Leninism began again, and a new class on combat readiness was also initiated.

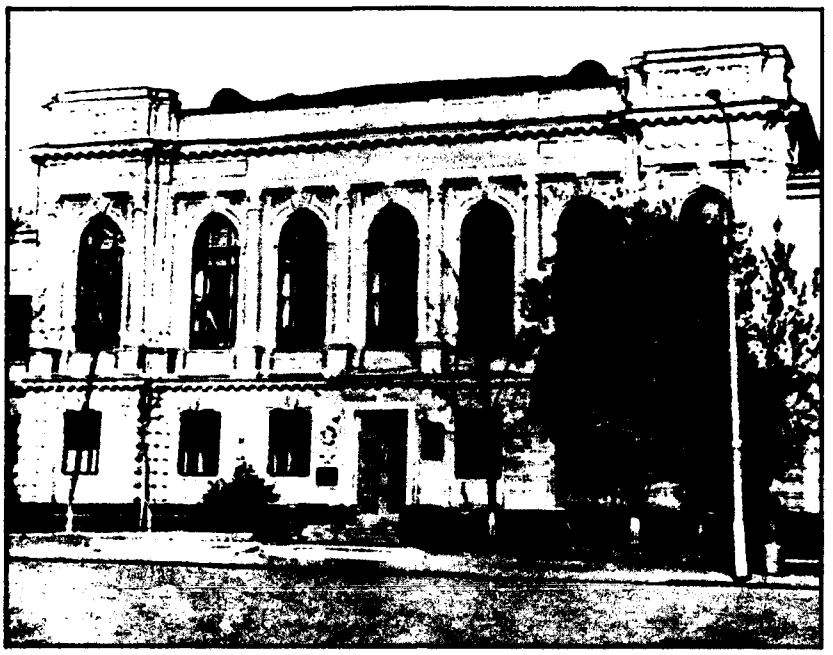
The content of the course on *front* offensive operations, as with the army courses, included general characteristics of the *front* offensive; preparations for the offensive operation; the conduct of the *front* offensive with and without the use of nuclear weapons; and the preparation of maps, documents, and annexes. All of these topics were addressed in extraordinary detail.

The primary subject of the last semester of study was the Soviet *front* defensive operation. Like the army defensive operation, this was the companion course to the material presented in the third semester on *front* offensive operations. In addition, a number of other courses were taught, covering staff training, naval operations, air, and air defense operations. Courses in strategy, military history, language, and Marxism-Leninism continued as well.

The Staff Operations Department taught staff procedures at the division, army, and *front* level. Students received simulated wartime staff training in a replica of an army/*front* command post in the basement of the Academy headquarters building. Students performed all staff functions during practical exercises and generally learned all staff functions applicable to Soviet operations.

For the course on air army operations, topics addressed included the organization and preparation of combat actions by the air army in the *front* offensive operation, planning of the combat actions of the air army in the *front* offensive, issues of coordinating air army combat actions with other force components, and the command post and control point system of the air army.

Another of the important topics studied in the second year was the air defense army. This course lasted for two to three days. This formation consisted of operational subunits of the National Air Defense Forces whose missions were the defense



The site of the General Staff Academy in the 1970s.

K. E. Voroshilov

In 1941, the Academy was named after one of Stalin's most loyal supporters, Marshal of the Soviet Union K. E. Voroshilov. The full name of the institution is Voennaia akademiia General'nogo shtaba Vooruzhennykh Sil SSSR imeni K. E. Voroshilova. A new Academy building was opened in 1988 at Prospekt Vernadskogo 100, Moscow.

and protection of areas, important installations, and concentrations of the Armed Forces. Among the topics discussed in this course were the organization and equipment of National Air Defense Forces, planning approaches, deployment considerations, basic employment principles, troop control, and support requirements. The organization, combat characteristics, and capabilities of NATO air forces also were covered in this course.

The lectures and discussion on the conduct of air defense operations, another short course taught in the second semester of the second year, addressed, among many other issues, the combat reconnaissance of the air enemy and his space assets, repulsion of enemy air attacks, regrouping maneuvers of air defense forces in support of various *front* and naval operations, and reconstitution of air defense assets after enemy strikes.

A 20-day block of instruction was devoted to naval operational art. Among the topics discussed in this course were the operational formations of the Navy, general missions for naval forces, types of naval operations, and naval participation in amphibious operations. Close attention was given to the cooperation of naval forces with other components of the Armed Forces in theater operations. The subcourse on amphibious operations, for example, encompassed the missions and basis for amphibious operations and their organization, including decisionmaking, assignment of combat means, the combat estimate, planning of combat operations, deployment of naval forces, organization of joint operations, control, and operational support. It also covered assault landings and their defense from enemy air attack, transport of amphibious forces and their air defense, over-the-beach operations, assault landings and their defense from ground and naval attack, and the conduct of amphibious operations and joint operations.

The military history course, which ran concurrently with the other courses for the entire two-year program, briefly summarized the history of warfare from ancient times to the

present. The discussion of World War II included a review of the German invasion of Poland in 1939 and France in 1940, but operations by the Western Allies were covered very quickly. The German plan for the invasion of the Soviet Union, Operation Barbarossa, was examined, but the effects of the German attack on Soviet forces were not mentioned. The defense of Moscow and Leningrad and the 1942 Caucasus campaign were the subjects of greater attention, but the most detailed teaching of the military history course began with a study of the Soviet counterattack at Stalingrad. Additional detailed study focused on the battle of Kursk in 1943 and all of the main operations of the later period of the war. The 1945 Manchurian campaign was used as an example of an offensive operation with particular applications for the modern period. There were also reviews of the Korean and Vietnamese wars.

Graduation of the Class of 1975

About two months prior to the end of the last semester, each student was assigned a theme for his dissertation work. The assignment was in the field of Soviet *front* operations. Although an instructor was assigned to assist each student in the preparation of his project, each student conducted his own research and prepared all operational planning materials and documents related to his particular topic. This was a major research project devoted to a single theme. The project could concern the offensive or the defensive phases of combat and could be focused on a specialized area such as rear service or artillery support, and its topic roughly corresponded to the officer's branch of service and country of origin. The typical product was written as a lengthy document and was depicted on maps. More theoretical topics were preferred. In addition to presenting written materials, the student had to explain his decisions and planning and discuss tactics and command performance with the class and instructor. For example, a student may have prepared a study of the offensive operations of the Soviet combined arms army in the mountains.

The officers defended their dissertations before commissions of department faculty members and the Academy administration. Then they again gave an oral defense before a commission sent from the Ministry of Defense. Using maps, charts, and orders, the student would explain his planning, decisions, use of supporting elements, and the execution of the operation. A passing grade on this phase of the testing was required for graduation.

In addition, students took a Government examination, also judged by general officers from the Academy and the Ministry of Defense. For this examination, each student drew a five-question list. He had to present answers to the examining group in about 30 minutes. The student could draw a second list if he did not know answers to the questions but lost one point on his final evaluation. The questions were on material taught at the Academy.

All of the students in the class of 1975 who took the final examination graduated from the Academy. The graduation ceremony was held at the Kremlin. The graduates, driven there on military buses, were escorted to a large hall on the third floor where the Minister of Defense, accompanied by the Deputy Minister for Political Matters, the Chief of the Academy, and several other high ranking generals were among those present. In 1975 Marshal Grechko, the graduation speaker, also presented the top graduates with gold medals. The graduates were given diplomas which certified that they had successfully completed the Academy's course. The diplomas presented to foreign graduates were printed in two languages, Russian and English. The four top graduates (two Soviet, one East German, and one Polish officer in 1975) were awarded gold medals. After the ceremony, appetizers, vodka, and brandy were served to graduates and guests, and the students were then driven back to the Academy. The next day, the graduates departed from Moscow and either went home or on to their assignments; the Soviet and Warsaw Pact officers had been given their next assignments about two months before the final examinations. The concluding events at the General Staff

Academy marked for Soviet officers the beginning of their careers as General Staff officers.

JOHN J. YURECHKO
GHULAM DASTAGIR WARDAK

Notes

1. Shaposhnikov developed this idea with M. V. Frunze and M. N. Tukhachevskii. See M. V. Frunze, *Selected Works* (Moscow: Voenizdat, 1965), p. 155, as cited in Harriet Fast Scott and William F. Scott, *The Armed Forces of the USSR* (Boulder: Westview Press, 1979), p. 12. See also V. G. Kulikov, "*Mozg armii*" (The Brain of the Army), *Pravda*, 13 November 1974, and translated in W. F. Scott, ed., *Selected Soviet Military Writings, 1970-1975* (Washington, D.C.: U.S. Government Printing Office, 1977), pp. 185-91. Both Scott volumes are highly recommended to students of Soviet military affairs.

2. I. E. Shavrov, "Voennaia Akademiia General'nogo Shtaba" (Military Academy of the General Staff), in N. V. Orgarkov, ed., *Sovetskaia voennaia entsiklopediia* (Soviet Military Encyclopedia), Vol. 2 (Moscow: Voenizdat, 1977), p. 173.

3. Ibid., p. 174.

4. For an excellent discussion of the role of General Staff officers in contributing to *Military Strategy*, see Harriet Fast Scott's introduction to V. D. Sokolovskiy, ed., *Soviet Military Strategy* (New York: Crane, Russak and Company, Inc., 1975), pp. xv-xxxv.

5. S. F. Akhromeev, ed., *Voennyi entsiklopedicheskii slovar'* (Military Encyclopedia Dictionary, hereafter cited as VES) (Moscow: Voenizdat, 1986), p. 180.

6. Oleg Penkovskiy, *The Penkovskiy Papers* (New York: Avon Books, 1965), pp. 226, 249.

7. Ibid., p. 249.

8. Ibid., p. 226.

9. Nevertheless, it was some years before the experience of past wars became a prominent component of Soviet military assessments. For example, Major General S. Kozlov noted in 1964 that the character of modern war was, unlike the past, "based not so much on the experience of past wars, as on scientific foresight and a forecast of a possible future war." S. Kozlov, "K voprosu o razvitii sovetskoi voennoi nauki posle vtoroi mirovoi voiny" (On the Question of the Development of Soviet Military Science after the

Second World War), *Voennaia mysl'* (Military Thought), No. 2 (February 1964), p. 64.

10. V. G. Kulikov, ed., *Akademiia General'nogo Shtaba* (Moscow: Voenizdat, 1976).

11. Brief biographies of these officers can be found in Akhromeev, *VES*, under their name entries.

12. V. G. Kulikov, *Akademiia,* p. 207.

13. Ibid., p. 199.

14. I. E. Shavrov, ed., "Lokal'nye voiny i ikh mesto v global'noi strategii imperializma" (Local Wars and Their Place in the Global Strategy of Imperialism), *Voenno-istoricheskii zhurnal* (Military-Historical Journal), March 1975, pp. 57-66, and April 1975, pp. 90-97; and I. E. Shavrov, ed., *Lokal'nye voiny: istoriia i sovremennost'* (Local Wars: History and Contemporary Times) (Moscow: Voenizdat, 1981).

15. Colonel Wardak estimates the breakdown of students by branch/Service as follows: Combined arms (motorized rifle) troops—20 percent; tank troops—15 percent; rocket and artillery troops—10 percent; signal troops—3 percent; Strategic Rocket Forces—3 percent; engineer troops—5 percent; chemical troops—3 percent; radio-electronic warfare troops—2 percent; rear services—12 percent; Air Forces—8 percent; National Air Defense Forces—10 percent; Navy (including Naval Infantry)—7 percent; and Border Troops—2 percent.

PART II

The Strategy Lectures

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CHAPTER ONE

Principles and Content of Military Strategy

I. Definition of Soviet Military Strategy

Soviet military strategy is a system of scientific information about the characteristics of contemporary wars, the forms and types of their execution, the structure of the Armed Forces, and the preparation of the State for war. It also includes the field of practical action of the political leadership and the high military commands with respect to the preparation of the Armed Forces and their deployment to foil enemy aggression and achieve political aims in war.

II. Content of Military Strategy

The content of military strategy emerges from the posture of forces in the international arena. It is determined by the political aims of the Government, the level of the development of weapons and equipment, and the specific missions of the Armed Forces in war. The tasks of military strategy include the following:

- study and analysis of the conditions for the initiation of war and their characteristics;

- determination of the form and types of strategic actions of the Armed Forces;
- organization of theoretical principles for the planning of strategic actions of the Armed Forces;
- determination of the structure of the Armed Forces and their strategic deployment;
- organization of measures associated with supporting the constant combat readiness of the troops and the mobilization of the Armed Forces;
- organization of actions required to prepare the country for defense;
- study and analysis of issues regarding the organization of materiel and technical support of the Armed Forces;
- study and analysis of issues connected with control of the Armed Forces and the systems of control of the Armed Forces;
- study of the strategic theories of the potential enemy and the enemy's capability to wage war.

During the study and analysis of conditions for the initiation of war and the characteristics of war, strategy assesses the specific factors related to these issues, as well as the correlation of political forces, the likely composition of the enemy, the geographic situation of the enemy, the status of military and economic potential, the forms and means for conducting the war, the duration of the war, and the intensity and territorial dimensions of the war.

Depending on the nature and characteristics of future war, the theory of military strategy works out the issues of organization and structure of the Armed Forces, concentrating on the organization of the forms of strategic action, scientific explanation of planning, determination of the composition of forces needed to achieve the principal strategic objectives in war, composition and preparation of strategic reserves, establishment of materiel reserves, preparation of national territories as TSMAs, and organization of strategic reconnaissance.

The theory of strategic deployment of the Armed Forces is organized to be consistent with the conditions of the initiation of a future war and the likely strategic aims and missions of the Armed Forces.

In studying and analyzing the various Services of the Armed Forces and the principles of their structure and organization, military strategy focuses on the requirements of military doctrine affecting the missions of the Armed Forces, in accordance with the changes in the characteristics of the strategic and political aims of war, and the conditions under which the war will be conducted. It also studies the factors determining the missions of the Armed Forces, the interrelations between the various Services of the Armed Forces, and their future development.

Victory in war depends greatly on the morale and psychological strength of Armed Forces personnel. Therefore, military strategy studies and analyzes the importance and the role of morale factors in military activities, as well as issues related to the morale-political preparation of Armed Forces personnel.

Military strategy explains, in theory, the direction of development and future trends in armaments and combat equipment, and prepares necessary recommendations about weapons systems determined by the development of science and technology and the economic capabilities of the nation, the missions of the Armed Forces in war, and the need to establish military and technological superiority over the potential enemy.

The development of the danger of strikes by enemy air and space means requires that military strategic theory study issues related to organization and conduct of an effective national air defense and civil defense in depth.

Using the achievements of the economic sciences during the study of the country's economic potential, military strategy examines the organization of materiel and technical support of the Armed Forces and works out methods to determine the materiel requirements for war in general and for the strategic actions of the Armed Forces for each one of the TSMAs in particular. It also presents recommendations about the deployment of the organs of the rear services and strategic reserves of the Armed Forces, and State materiel reserves in case of the outbreak of war.

During the study and analysis of issues related to control of the Armed Forces, military strategy works out recom-

mendations for establishing the organization, structure, and missions of control organs, and the principles and methods of control of the Armed Forces.

During the study of the potential enemy's strategic theories, military strategy assesses the political aims likely to be followed by the enemy in future war, based on the enemy's military, economic, and morale capabilities, its current military doctrine and strategic theories, likely forms of the initiation of war, and measures for the preparation for war. The content of Soviet military strategy provides for the unity (*edinstvo*) and interrelation (*vzaimootnoshenie*) of strategy and operational art, and recognizes the major role played by strategy in military art.

The practical sphere of military strategy involves the activities of the political leadership of the nation and the high military commands and staffs in preparing for the protection of the nation from enemy aggression, structuring the Armed Forces, and organizing and conducting strategic action by the Armed Forces. On the basis of the instruction of the political leadership and specified military doctrine, the Supreme High Command organizes the strategic concept, plans the employment of the Armed Forces, conducts the preparation of the Armed Forces, and controls them during the conduct of war.

Current Soviet military strategy is in full compliance with the policy of the Communist Party of the Soviet Union, which is directed toward establishing communism and protecting the Soviet Union and Socialist nations from enemy aggression.

III. Strategy and Politics

In determining the nature of war, the teaching of Marxism-Leninism about war and the army emphasizes that war is the continuation of politics by classes and governments through forceful and coercive means.

A proper understanding of the interrelationship of military strategy and politics facilitates not only the determination of the characteristics of a future war, along with the strong and weak points of the enemy, but also scientifically regulates military strategy in accordance with political conditions and

requirements, missions of the Armed Forces, and their capabilities. The State policy of the Soviet Union, followed by the Communist Party and Soviet Government, directs and controls military strategy.

Based on their assessment of the political and military situation and taking into careful consideration strategic calculations, the political leadership selects the optimum time for foiling enemy aggression. A correct resolution of this issue provides the best possibility for the accomplishment of strategic missions, which in itself creates optimum conditions for conducting future military actions to achieve the final political aims.

During the study of the capabilities of the Armed Forces, military strategy presents recommendations about military organization and preparation of the nation against enemy aggression. Therefore, the principal axiom in studying all military strategy and its principles is that strategy is based upon two fundamental factors: the unification of politics and strategy, and the subordination of strategy to politics.

The political-morale factor occupies a very important position in the interrelationship of military strategy and politics. Political and morale factors are the principal source and index of the power of the State. These always exercise great influence on the characteristics and outcome of war. The interrelationship between military strategy and political-morale factors in war is such that an increase in either one leads to an increase in the other. Thus, military success leads to increased morale and stronger morale leads to increased success in war. High morale of the personnel of the Armed Forces contributes to victory over the enemy in situations of military parity, and even when the enemy is superior in the number of forces and means. Therefore, when organizing the structure of strategic concepts and plans, the political-morale status of the nation and the superiority of military morale of one's own forces, as well as the morale status of the enemy's forces and nation, are to be considered carefully.

Soviet military strategy relies on the political-morale power of the Soviet people, which greatly increases the potential for combat action; therefore, Soviet strategy must set decisive aims for itself, such as has been shown in history.

IV. Strategy and the Economy

Strategy and the economy are closely connected with one another. Strategic theory is fully dependent on the forms and level of the development of the means of production. Although economic development is subject to its own special laws, at the same time the direction of economic development is influenced by military strategy, and, in time of war, the direction of the economy is almost totally subject to the requirements of the Armed Forces. The views of the higher military command are given due consideration in designing national economic development plans. The interrelationship of military strategy and the national economy is manifested in several directions.

The development of science and industry [technology] leads to the development of new arms and weapons systems, which has a decisive effect on the forms and methods of conducting a war. Therefore, military strategy must constantly take note of and exploit scientific inventions and the possibility of economic development for the consolidation and promotion of the defense of the nation, the establishment and maintenance of military and technological superiority over the potential enemy, and the destruction of any aggressive power.

Another important direction in the interrelationship of military strategy and the national economy is the creation of the military-technical base of the Armed Forces consistent with their wartime missions. It is obvious that the construction of new armaments and technical equipment creates new forms of military action in a war.

Military doctrine determines the main direction of the development of the technical equipping of the Armed Forces. Military strategy, while studying and analyzing the conditions under which strategic missions are to be accomplished, presents recommendations about the composition and proportion of the various Services of the Armed Forces, weapons systems, and other issues, the resolution of which is required for the successful conduct and outcome of war. These perceptions of military strategy are taken into consideration when missions

are assigned to industry with regard to the establishment and development of the military-technical base of the Armed Forces.

The interrelationship of military strategy and the economy during wartime becomes even more prominent when the need arises to replenish losses of the Armed Forces. Military strategy, while assessing and studying the volume of likely losses of the Armed Forces during wartime and the conditions of the initiation and conduct of war, pronounces specific views in anticipation of establishing armament and materiel reserves in peacetime, and mobilizing military production for wartime.

The most important links between military strategy and the national economy are, on the one hand, the recommendations of strategy concerning the disposition and deployment of the components of the national economy to satisfy military needs, and, on the other hand, the real potential of the economy for defense of its components against enemy air strikes.

V. Strategy and Military Doctrine

Military doctrine is a statement of the official views of the State, hence, those of the Armed Forces, about the characteristics of modern wars and the forms of their conduct. These views include specific concepts regarding the protection and survival of the nation and friendly countries against imperialist aggression, and the preparation and conduct of war under various conditions in modern times.

Military doctrine is developed by the political leadership of the nation pursuant to domestic and foreign policy. It is based on the [Marxist-Leninist] ideology on war and the army, with consideration of the achievements of military science. The nature of the economic, political, and historical characteristics of the State and its international commitments are reflected in State military doctrine. Military doctrine has political and military-technical bases.

Political Basis of Military Doctrine

The political basis of military doctrine includes the nature and characteristics of the war the enemy imposes on us, the posture of forces in the international arena in modern times, the missions of the State and its Armed Forces to protect the homeland against enemy aggression, and other related issues.

Military-Technical Basis of Military Doctrine

Military doctrine emerges from fundamental political principles which determine the following issues:

- the basis of the structure (*struktura*) of the Armed Forces;
- the principles of their use in war;
- the main direction of the development of technical equipment;
- the preparation of the Armed Forces;
- the requirements for the composition (*sostav*) of the Armed Forces;
- the directions of the development of military art.

Military doctrine has a historical and transitional aspect. This aspect changes with the status of the posture of forces in the international arena, new requirements of politics, economic capabilities, scientific achievements, and the level of preparation of the Armed Forces. At the same time military doctrine is constantly adjusted to reflect changes introduced into the Armed Forces of the potential enemy. Military doctrine exploits the achievements of various scientific disciplines, relying, in particular, on Marxism-Leninism and military science in assessing and studying the characteristics of future war and the form of their conduct, and in determining the direction of building and preparing the Armed Forces.

Military strategy is closely connected with, but subordinated to, military doctrine. Military strategy is guided by the principles of military doctrine on the characteristics of future war, the preparation of the country for war, and the preparation and missions of the Armed Forces. In the sphere of military

strategy, the development of specific plans for war and the practical control of the Armed Forces in peace and war depend on the requirements of military doctrine. At the same time, the principles of military strategy have a direct influence in formulating and perfecting the military-technical components of military doctrine.

VI. Likely Characteristics of War in Contemporary Times

Principal Factors Determining the Characteristics of War

Modern war decisively affects the life of society. At the same time, the characteristics of war itself form and develop under the influence of many factors, including:

- socio-political factors;
- economic factors;
- military-technical factors;
- military geographic factors;
- others factors.

Each of these, in one way or another, affects the formulation, development, and understanding of the characteristics of war. Therefore, an explanation and understanding of the nature and characteristics of modern wars are only possible through an in-depth analysis of the conditions under which the war is prepared and conducted.

Socio-Political Factors

Among socio-political factors, the decisive role is played by the policy of the state which prepares for and conducts the war. Politics is not only the producer of the war but the force that continues the war. Politics determines the major characteristics of the war. It must be noted that war is the continuation of politics by forceful means; therefore, each war has a direct relationship with the kind of political order which produced it.

War always has a class nature. It is the continuation of the politics of the governing class by forcefui means, i.e., the armed forces. The explicit nature of the politics of the belligerents is manifested in the political aims their forces seek to achieve. These aims could be just or unjust in character, depending on which state or which governing class establishes the aims. A Socialist government, when dragged into war, will have just aims, i.e., the protection of the Socialist system, which is a progressive socio-economic order. Any war waged by imperialists against the Socialist system or individual Socialist governments and national liberation and revolutionary movements will have unjust aims.

Economic Factors

The influence of economic factors on the characteristics of war is varied and enormous. The teachings of Marx and Lenin reveal convincingly that the sources of war are imbedded in socio-economic relationships. These relationships dominate class politics and governments and, under specific conditions, lead to war. Therefore, war, in this context, is the continuation of the actual politics of governments and governing classes.

The form of the conduct of war, as well as its characteristics, are dependent greatly on the economy. As Engels stated, "Victory by force is based on the production of armaments, which in turn depends on general productivity and, as a consequence, on economic power, the economic situation, and on the materiel means placed at the disposal of that force." The economy provides all means required for the conduct of the war. Therefore, in addition to materiel means, the economy allocates personnel who employ the materiel means in the Armed Forces.

The modern economies of developed nations are complex in composition and have the potential of enormous industrial and agricultural output. This potential enables them to produce various types of weapons and combat equipment and provide the Armed Forces with all required materiel means.

Economic power is dependent decisively on the availability and disposition of the sources of raw materials. Moreover, in meeting the requirements of defense, economic capabilities, in particular, are largely dependent on the level of scientific and technological development.

The basic means for the conduct of modern war are personnel. The quantity and quality of personnel support all areas of the economy in peacetime and wartime, and provide for the massive augmentation of the Armed Forces with educated cadres who are able to use sophisticated combat equipment. Therefore, one of the characteristics of modern war, particularly a war with the use of nuclear weapons, is the fact that economic installations constitute important targets for attack, and the opposing sides will try to launch heavy strikes on enemy military and economic centers at the outset of war to paralyze the enemy's economy. Obviously, strikes will be launched against important industrial centers where industry and population are concentrated in high density in limited areas, such as the economic centers of Germany, the United States, and Britain.

Military-Technical Factors

Military-technical factors have a decisive effect on the characteristics of modern war. Among these factors, the military-technical means of conducting war occupy the most important place.

The technical revolution in armaments has fundamentally changed the theories and experiences of past wars into a more complex view of future war, in which all types of modern and complex weapons will be used. In the beginning of a global nuclear war initiated by imperialists against Socialist countries, nuclear weapons will be used in an unlimited proportion, because both sides have enormous stockpiles of nuclear weapons and the means to deliver them to the target.

Speaking about the means of future war, it should be noted that not only currently available weapons will be used in the

war, but also other new weapons to be developed in the future. At the present time, enormous efforts are made in developed countries in the direction of developing and producing new types of weapons. For example, in the United States there are continuous efforts to develop laser equipment for military purposes, including the production of combat laser weapons.

In addition to efforts to develop new weapons, efforts continue to improve and perfect conventional weapons, such as tanks, aircraft, artillery, and other means. The use of space means is not going to remain limited to reconnaissance, guidance, communications, etc. In the United States, many efforts continue in the direction of the development of military space means.

All these elements are closely considered in determining the likely characteristics of future wars under the conditions of the employment of new weapons, even if these weapons are currently at a very elementary stage of development. On this basis, new strategic theories are developed. For example, when the United States enjoyed a monopoly of nuclear weapons, the military doctrine of "massive retaliation" was used by the U.S. In the 1960s the strategy of "flexible response" was developed, and at the beginning of the 1970s the strategy of "credible deterrence" evolved.

Military-Geographic Factors

Military-geographic factors exert various influences on the characteristics of future war. The scope of the war and the forms of the conduct of strategic action are much dependent on the military-geographic situation of the opposing forces. During an assessment of the situation of the two antagonistic political systems on the globe, we can derive the general conclusion that Socialist countries are situated in a more advantageous position vis-a-vis Western countries.

Socialist countries occupy enormous space in the heart of the European and Asian continents. This provides the following advantages over NATO countries:

- the possibility of establishing a unified defense system for all Socialist countries;
- dispersed deployment of military-economic bases, groupings of armed forces, mobilization resources, strategic reserves, control systems, and other elements vulnerable to enemy attack;
- the conduct of wide maneuver by forces and means in internal regions and the capability to reliably cover different directions.

[In some respects, however,] European members of NATO are situated in more advantageous positions, in that they envelop the Socialist countries with their flanks, and they possess many military bases. This enables them to launch their strikes against Socialist countries from different directions. At the same time, they are separated from one another by oceans, straits, mountain ranges, and the territories of neutral countries. The depth of the territory of NATO in Europe is limited to 400-800 km, while many of their rear bases and important targets are located near the borders of Socialist countries. The most important weakness of NATO is the separation of the European allies from their major ally, the United States, which constitutes the vital military and economic basis for the alliance. European NATO members are separated from the U.S. by the Atlantic Ocean, while naval supply routes to Europe, the Near East, and the Middle East are subject to direct threat.

The fact that the United States is situated on the other side of the ocean does not make it immune to nuclear strikes. Since its population and industry are concentrated in major cities in limited space, they constitute favorable targets for nuclear strikes. It must be noted that 40 percent of the population of the United States is concentrated in cities. This figure is 35 percent in Germany and 25 percent in the Soviet Union. The total area of the Soviet Union is 2.5 times larger than the area of the United States and its NATO allies. Significant importance in the various TSMAs is given to facts contributing to a more advantageous terrain situation for the forces, such as

natural cover, rivers, operational installations, and the disposition of different objectives.

Likely Types of Wars in Contemporary Times

Due to the complex situation in modern times, major disputes among nations, and the correlation of military and political forces in the international arena, the initiation and conduct of war is expected to be of different forms and types. In terms of socio-political content, the scope of war, and types of weapons used, wars can be classified differently. With respect to socio-political content, wars are classified as follows:

- war between different social systems, such as capitalism and socialism;
- imperialistic wars among Capitalist nations or against people conducting a national liberation struggle;
- national liberation wars of colonies;
- civil wars among antagonistic classes.

In terms of scope, wars are classified as follows:

- war between two worldwide social systems, in which a large part of the world or even the entire world may participate;
- local wars between two or several governments.

(The classification of war in terms of scope also is related in terms of the size of areas affected by the war.)

In terms of means of destruction and weapons, wars are classified as follows:

- nuclear war;
- conventional war.

In order to gain a full and comprehensive understanding of the nature of a war, it is better to study it not only with respect to the individual classification indicators, but also in simultaneous consideration of the several indicators when classifying it. Wars can be classified simultaneously in terms

of socio-political content, scope, and the means of destruction. The types of war in modern times are the following:

- —general nuclear war between the two antagonistic (Capitalist and Socialist) world social systems, using all types of weapons;
- —war between several Capitalist and Socialist nations conducted using conventional weapons and subsequent initiation of the limited use of nuclear weapons;
- —local war of a Capitalist government against a Socialist government using conventional weapons;
- —local war between individual Capitalist nations using conventional weapons, where the possibility of the use of nuclear weapons cannot be excluded if one or both sides possesses nuclear weapons;
- —local war of imperialist nations using conventional weapons against people fighting for their national liberation;
- —local war in the form of civil war, the scope of which will be limited to the boundaries of one country and conducted using only conventional weapons.

Each one of these different types of war has its individual characteristics. Therefore, it is necessary to study the likely characteristics of each of these wars separately.

Likely Characteristics of General Nuclear War

General nuclear war is a decisive class conflict between two antagonistic social systems. The decisive nature of the political aims of the belligerents leads to the unlimited use of the entire arsenal and all means of destruction. Thus, all nations involved in the war face the danger of massive destruction.

In a future general war, if the aggressors succeed in initiating it, Socialist nations will stand against the imperialist bloc; therefore, the war will take the form of a coalition war. The groups of nations, due to their political and economic structure, and due to the political aims they follow in the war, will be

irreconcilable and antagonistic. One of the characteristics of this war is the form of its initiation.

One of the Soviet principles regarding the maintenance of peace is that the Soviet Union will not initiate war. If any country attacks us or imposes war upon us, we will conduct war decisively and with the use of all forces and means. In order to achieve favorable conditions in war, the Armed Forces should be prepared to cope with any form of the initiation of the war. An important point is the fact that the forms of initiation of war must be thoroughly understood. This is because war can break out by surprise attack without a preceding period of threat, can be initiated after a period of threat, or can escalate from a military action of limited scope. The most dangerous form for the initiation of war is that without a preceding period of threat, because in this case a very limited time will be available for the preparation of the troops for the accomplishment of their missions. Therefore, the Armed Forces must be kept in a high state of combat readiness, and indications of enemy preparations for the initiation of war must be detected and disclosed on time.

Prior to the initiation of war, there can be a period of threat, the duration of which can range from several hours to several days. In this case, the international situation can become complex, and then it may change for better or worse. During the period of threat, the strategic situation will change as the Armed Forces prepare directly for war. In the threat period, measures must be conducted fully in accordance with the situation. The vital aim in the threat period is to exploit the time and situation secretly so as to forestall and overtake the enemy in preparation for the accomplishment of strategic missions at the outset of the war.

It is also possible that a general nuclear war will develop as a result of local wars. In this case, the massive use of nuclear weapons may come later in the course of a war which began with the use of conventional weapons only, gradually making a transition through a period in which nuclear weapons are used on a limited scale.

In a general nuclear war, important missions are accomplished by nuclear weapons, primarily by strategic nuclear forces that will be used simultaneously throughout the entire territory of the enemy coalition. Consequently, military action will assume a continental form. All nations will become involved in such a war. Even neutral countries cannot escape the effects of radioactive fallout.

The principal form for the conduct of nuclear war is inflicting massive losses by nuclear strikes on the enemy's military and economic base and armed forces throughout his entire territory and, subsequently, exploiting the results of the nuclear strike and completing the enemy's destruction by forces that have maintained their combat capability. The major targets of the strategic nuclear strike are intercontinental rocket positions, nuclear weapons depots, air and naval bases, the state control system, military command posts, military production centers, individual major installations, and other targets of military and economic significance.

Each of the opposing sides will try to inflict heavy losses in a short time on the enemy. In such wars, the capability of the military to conduct planned and organized action will decrease rapidly, and nuclear stockpiles will be exhausted. This does not mean that a nuclear war will be terminated very quickly. Even after the exhaustion of the principal nuclear stockpiles, military actions will carry on for a long time, and the war will assume a special character, unprecedented in history. Following massive nuclear strikes, the war will surely not end, but the opposing sides will continue to launch their strikes at a lower level of force. The forces must be prepared to continue the war, despite the fact that they may have suffered enormous losses. They should continue to advance and prosecute the war.

As a result of nuclear strikes, some countries with smaller territory, whose industries are concentrated in smaller areas, may be eliminated from the war. In some strategic directions, due to the creation of large areas of destruction and contaminated zones, fires, flooded areas, and heavy losses of forces, the continuation of military action may not be possible.

Generally speaking, the war will not have similar characteristics in all TSMAs. Success will be achieved in some directions, and the forces will have maintained their combat capabilities to complete the destruction of the enemy and force him to surrender.

A future general nuclear war will consist of a system of strategic operations and strategic actions by all Services of the Armed Forces, in accordance with a unified strategic concept and plan, under the control of the Supreme High Command. All of these operations and strategic actions are differentiated from one another in terms of the content of missions, areas of execution, scope, duration, and composition of participating forces. At present, there are five accepted principal forms of strategic action of the Armed Forces:

- the action of strategic nuclear forces, which constitute the basis of the conduct of nuclear war;
- strategic operations in a continental TSMA;
- strategic operations in an oceanic TSMA;
- strategic air operations, conducted especially in a war initiated using only conventional weapons, to destroy enemy air force groupings;
- actions to repel enemy air and space attacks.

The above description of the characteristics of nuclear war leads us to conclude that in a nuclear war there will be no winner or loser. However, Soviet strategy holds that the victory will belong to Socialist countries because their aim in the war is just, the morale of their population is higher, their national economic system is better, and at the head of Socialist governments are hard-working people who are members of the Marxist-Leninist Party.

Characteristics of War Between Several Capitalist and Socialist Nations with the Use of Conventional Weapons and Subsequent Initiation of Limited Use of Nuclear Weapons

As mentioned earlier, the imperialists have lost their superiority in nuclear weapons, particularly in strategic nuclear

weapons. Thus, in the event a war begins with nuclear weapons, the imperialists will suffer a devastating blow. Therefore, some of the imperialist countries will try to achieve the aim of a war against Socialist nations with conventional weapons or limited use of nuclear weapons.

In such a war, the initial military action will be conducted in a smaller area and its depth will be limited. But under such conditions, the war will assume a decisive character by virtue of the intensified struggle to seize the strategic initiative, inflict massive losses on the enemy forces, and expand efforts continuously by moving their reserves from the depth. The entry of the enemy's allies into the war would rapidly expand the dimension of the conflict, and the actions of the Armed Forces will occupy the entire area of a TSMA, and even the areas of adjacent TSMAs.

A major role will be played by the initial operation of the Armed Forces, during which the strategic initiative must be seized. The principal contents of these operations will include inflicting losses on the deploying enemy groupings and his reserves by both massive aviation and artillery strikes, and the conduct of uninterrupted attack on the important directions to the entire depth of the TSMA. In some conditions the enemy invasion must be repelled before the initiation of the offensive. The major requirements for success are as follows:

- destruction of strike groupings of enemy air and naval forces;
- establishment of air supremacy;
- rapid reduction of the enemy's nuclear potential;
- foiling enemy attempts to stop the friendly offensive on defense lines.

Action with conventional means will be conducted under constant threat of the use of nuclear weapons by the enemy. Therefore, special attention should be paid to forming advantageous combat formations, protecting troops from nuclear weapons, and taking measures for maintaining high combat readiness of all nuclear weapons for their rapid employment. At the same time, wide use should be made of *maskirovka* means.

Military action with the use of conventional weapons provides favorable conditions for the mobilization and strategic deployment of the Armed Forces, if such actions have not been accomplished before. New operational formations and large units will be moved into the TSMA area. At the same time, elaborate measures will be taken in support of the restoration of expended materiel and losses in materiel reserves, equipment, and weapons, by using materiel reserves established in advance.

The national economy of the involved countries will support the war effort. At the same time, enemy economic targets in the depth will be hit by the strikes of strategic aviation. Therefore, some of the weapons production plants will be destroyed. It should be noted, that despite the limited losses to the economy of the countries involved, by the end of the war the national economy, nevertheless, will be put on a war footing and focused on producing the requirements of the Armed Forces.

The duration of a war without the use of nuclear weapons is dependent on many factors. As mentioned earlier, due to the possible enormous losses caused by nuclear weapons, the enemy will avoid using these weapons. But at a crucial and decisive point, when the enemy is about to lose its territory, its armed forces are threatened with destruction, or the strategic situation on important directions turns in our favor, the enemy will resort to using nuclear weapons. According to the experiences of NATO exercises, NATO can initiate the use of nuclear weapons after five to six days.

There are many disagreements about this NATO theory, but at crucial and dangerous phases, limited use of nuclear weapons will be possible; however, if nuclear weapons are used on a limited scale, the possibility of the use of the entire nuclear arsenal, including strategic nuclear weapons, cannot be excluded, since the belligerents may find it necessary to launch massive nuclear strikes.

In some TSMAs, or in vast areas of one TSMA, different conditions may prevail with regard to the restriction on the

use of nuclear weapons. We can assume that in some cases nuclear strikes will be limited to military and economic targets deployed in smaller areas, while, under other conditions, nuclear strikes may be limited only to military targets, such as first echelon forces. Moreover, other forms can develop, which are beyond our estimation at this point.

The possibility cannot be excluded that the danger of massive strikes by all nuclear weapons in retaliation for any attempt at the use of nuclear weapons, albeit of a limited nature, may force imperialist countries to give up the continuation of combat actions.

Characteristics of Local War

Assessing the current correlation of forces in the international arena and attempting to avoid a major war, the imperialists try to prevent the further development of socialism and the expansion of national liberation movements, and consolidate their own position around the world by local wars. Therefore, the major imperialist nations have created more than 30 local wars/armed crises around the world since the end of WWII.

The political aim of all such local wars is not necessarily an intervention in other areas in connection with the presence of the Socialist system, but they contribute toward the weakening of socialism, isolating socialism from some countries, and sustaining colonialism in those nations that have opted to follow a Socialist path. These wars have also been conducted to secure sources of raw materials and dominate commercial markets. Therefore, local wars have limited aims in comparison to a general war between the world's two socio-political systems.

Local wars are characterized by the following elements:

- the number of countries involved;
- the dimensions and scope of the area where the military action is conducted;
- the intensity of the war;

– the duration of the war;
– other elements.

However, local wars are not always limited in the real sense of the word. For example, in the Korean War the number of troops at the end of the war reached 2.5 million, or nine times the number at the start of the war. The Vietnam War, fought by the Americans against the Democratic Republic of Vietnam, lasted over seven years. In addition to U.S. Armed Forces, the armed forces of five other imperialist nations participated. Moreover, 30 other countries supporting the United States indirectly participated in the war.

While local wars are relatively small, for the nation conducting the war it is considered a major war, and the nation needs to concentrate its maximum efforts to wage it. The nation which becomes the target of the aggression should concentrate its maximum power to resist the aggression sufficiently. The countries that initiate aggression in a local war cannot escape the negative impact of the war. For example, in the war conducted by the U.S. against Vietnam, the war led that powerful imperialist country to a crisis in its domestic policies, a financial crisis, and a situation where it had to spend its gold reserve and suffer major losses in personnel and materiel.

One of the important characteristics of local war is that its scope may expand many fold as the war develops. Therefore, it is necessary to take any local war initiated by imperialists very seriously, even if it is small in scope. This is because local wars tend to have a smaller scope initially but have the potential to lead to a major conflict between the two antagonistic world social systems under certain conditions. Although local wars have several common characteristics, there are particular characteristics related to individual types of local war.

Characteristics of Local War with Conventional Weapons Between a Capitalist Country and a Socialist Nation

Such wars are conducted to eliminate or weaken the influence of the Socialist system in a specific part of the globe. The target

of attack will not be the Warsaw Pact nations. This is because if one member of the Warsaw Pact is attacked, the other partners in the alliance will not let that war remain local but will enter the war in support of the country invaded by imperialism. Hence, the local war escalates to a general confrontation.

Despite the fact that the aim of such wars will be limited, the stakes will be very high for the Socialist system. Thus, the other Socialist countries will enter the war decisively in support of the Socialist nation attacked by the enemy. This explains the decisiveness and the intensification of the action of the armed forces of the nation which defends its freedom and independence.

The scope and characteristics of combat action in such a war are largely dependent on the level and form of participation of the other nations that join the war in support of the opposing side. This kind of support can be extended in different ways, ranging from weapons and equipment assistance to direct participation by part of their armed forces in the war.

It is very likely that a local war would be conducted using only conventional weapons. Given the direct and indirect participation of countries that are economically developed and have high industrial capacity, the type of conventional weapons that would be used would be of high quality and great destructive power. However, if the aggressor possesses nuclear weapons, the possibility of the use of such weapons cannot be excluded.

Characteristics of Local Wars Between Individual Capitalist Nations

These are wars fought by individual Capitalist nations against each other to resolve territorial disputes, seize new trade markets, expand their borders at the expense of weaker neighbors, strengthen political and economic positions in specific areas of the globe, etc.

Such wars are the manifestation of the savagery of imperialism. The wars are unjust on both sides because the wars follow objectives that are damaging to the masses. The

possibility of the outbreak of such a war between major Capitalist nations is not out of the question. Combat action in such a war is accomplished by conventional weapons, but under certain conditions the war can become nuclear.

Local Wars of Imperialist Nations Using Conventional Weapons Against Peoples Fighting for Their National Liberation

This war is a continuation of the despoiling policy of the imperialists. In such wars, the imperialist government tries to maintain or restore its domination over its former colonies or less-developed countries by the use of force. In some cases the nature of the war is characterized by the extreme inferiority of the technical base of one of the nations involved, and the use of conventional weapons only. The military action may begin in individual areas, in a local form, with subsequent spreading to the entire territory of the nation, or a large part of it. The level of intensity of the military action will vary due to several factors. Among these factors the following play a major role:

- the level of effort put forth by imperialist governments to conduct the war;
- the level of assistance by Socialist countries to the nations defending their independence;
- the unity and national cooperation among the peoples defending their freedom and independence;
- geographic conditions.

VII. Fundamentals and Principles of Military Strategy

The content of Soviet military strategy is the reflection of the real laws of military action. The fundamentals and principles of this strategy are based on the experience of past wars, study and analysis of the characteristics of future war, the situation of the Armed Forces, and the political-morale and military potential of the country and that of potential enemies.

The principles of military strategy serve the leadership by providing them with an elaborate theory for the conduct of war, as well as a guide to practical actions in the organization of the Armed Forces. The principles of military strategy are closely related to military doctrine and respond to its requirements.

The fundamentals of strategy are the general concepts which most reflect its inherent characteristics. These fundamentals are of vital importance in understanding the issues related to the preparation and conduct of military action in the realm of strategy.

Strategic Aims and Missions

The definitions of strategic aims and strategic missions of the Armed Forces are of vital importance for understanding the nature of military actions.

STRATEGIC AIMS A strategic aim constitutes the qualitative outcome of a military action, in the course of which the total destruction of the enemy's armed forces and his military economy, neutralization of his state control system, and seizure of his territory are achieved. This means that fundamental changes in the military and political situation in one or several TSMAs will have occurred.

Strategic aims depend primarily on the situation and posture of political forces in the international arena and on economic and military factors. The political aims of the State in conducting war have a decisive effect on the content of the strategic aims. The strategic aims depend also on the composition of the groupings of armed forces of the opposing sides and the military-geographic characteristics of each TSMA. A strategic aim is achieved by accomplishing a number of strategic missions by the Armed Forces.

STRATEGIC MISSIONS Strategic missions can include the following:

- destruction of the main grouping of enemy armed forces in the TSMA, particularly the destruction of enemy nuclear weapons;
- repulsion of enemy air and space attacks by air defense forces and means;
- destruction of enemy military productivity and the economy of individual enemy allied nations;
- disruption of enemy state and military control systems in the TSMA or in territories of individual enemy allied countries;
- seizure and retention of vital areas of enemy territory.

Depending on the specific conditions of the political and military situation in the TSMA, the content and form of the execution of strategic missions can vary. The content of strategic missions and the forms of their accomplishment depend on political requirements, types of weapons to be used in the war, the enemy's capability to resist, and the conditions of the TSMA.

Strategic missions are conducted by the unified efforts of the groupings of all Services of the Armed Forces, the actions of strategic nuclear forces, and also by individual groupings of the Armed Forces. Strategic nuclear forces include Strategic Rocket Forces, nuclear submarines, and Long-Range Aviation.

Forms of Strategic Action

Depending on the political conditions, types of weapons used, composition of one's own forces, and aims, missions, and concept of operation of friendly forces, the strategic actions of the Armed Forces in the TSMA can be conducted in various forms. The forms are influenced also by the composition of the enemy groupings of armed forces, likely characteristics of action, and military geographic conditions in the TSMA.

The posture of forces in the international arena, development of strategic nuclear rockets, and nature of preparation of the imperialistic bloc for war require the development of

new forms of strategic action not existing in the past. The new forms of strategic action are as follows:

- —actions of strategic nuclear forces to destroy the enemy in overseas areas;
- —strategic operations in a continental TSMA;
- —strategic operations in an oceanic TSMA;
- —actions of National Air Defense Forces to repel the attacks of enemy air and space forces;
- —operations to destroy enemy air force groupings.

The aforementioned forms of strategic action will be further discussed later.

Principles of Military Strategy

Strategic actions of the Armed Forces are organized and conducted in different forms on the basis of, and in compliance with, specific principles designed by military strategy on the basis of requirements determined by military doctrine. The fundamental of Soviet military strategy is the fact that it is subservient to policies developed and followed by the Communist Party and the Soviet Government. Military strategy is a means and a weapon of politics. The nature of this relationship sets the following guidelines for military strategy:

- —strategic aims and missions of the Armed Forces must comply with political aims of the war in general, and with the political aims of war against each enemy allied nation individually;
- —an important principle of military strategy is determining the direction of development of modern armed forces' organizations. Their strategic employment requires an understanding and appreciation of nuclear rocket weapons as the decisive means of the conduct of war, and particularly the role of strategic nuclear forces in achieving the main strategic aims of the war;
- —despite the fact that Strategic Rocket Forces play the decisive role in the destruction of the enemy, military

strategy in also guided by the principle that victory in war can only be achieved by the unified and simultaneous efforts of all Services of the Armed Forces;

- the important role of strategic nuclear forces and the increasing importance of surprise attacks have given new and decisive importance to military action in the initial period of war. Therefore, seizure of the strategic initiative under any circumstances at the outbreak of war is one of the most important principles of military strategy. In contrast to past wars, the use of nuclear weapons from the outset of war will predetermine not only the course of war, but also the outcome of war;
- in military strategy, one important requirement in quickly seizing the strategic initiative and achieving the aim of war is the timely commencement of the initial nuclear strike of strategic nuclear forces against the aggressor, while simultaneously repelling enemy air and space attacks;
- following the initial strike of strategic nuclear forces, a decisive offensive of the entire Armed Forces must be initiated on the ground, sea, and in the air to complete the destruction of the enemy and seize vital areas;
- the enemy has intercontinental ballistic rockets and nuclear-rocket submarines, giving him the capability to launch surprise attacks against Socialist nations. Therefore, military strategy attaches special importance to the constant combat readiness of the Armed Forces, which enables the Armed Forces to be prepared in the following ways:
    - to deliver timely initial nuclear strikes by surprise;
    - to be ready to repel by PVOS enemy nuclear attacks by air;
    - to be ready to repel by ground forces enemy invasions in continental TSMAs;
- in a nuclear war, the important targets to be destroyed are strategic nuclear weapons, enemy groupings of forces

in the TSMA (operational and tactical nuclear weapons, units and formations of ground forces, air forces, naval forces, air defense forces and means, headquarters, command posts, signal centers, weapons, and POL [petroleum, oil and lubricant] bases and depots), military and industrial targets, power-energy systems, and state control centers. But, the most important mission is the destruction of enemy nuclear weapons;

- as a result of the delivery of decisive and deep nuclear strikes on the enemy, simultaneous losses are inflicted on enemy groupings of armed forces, military and economic targets, power stations, and control centers in the entire depth of the TSMA and overseas areas;
- based on the requirements of military doctrine, safeguarding the homeland and achieving victory are accomplished by dynamic actions, which means that the offensive constitutes the principal form of strategic actions of the Armed Forces;
- strategy in a nuclear war with unlimited use of nuclear weapons is based on the requirement for the swift destruction of the enemy. This fact is developed on the basis of calculations related to the actual power of weapons and likely changes in the political and military situation caused by the use of nuclear weapons;
- one of the principles of military strategy is the recognition of the importance of establishing superiority of forces over the enemy at the decisive time and place;
- military strategy serves the need for the advance establishment of State and strategic reserves and their retention at a high level throughout the war. This constitutes the conditions required for the successful conduct of a modern general war and entails economic resources, the creation of materiel support bases, reserves of various military and technical materiel, personnel resources, etc.;
- military strategy views the maintenance of military-technological superiority over the enemy in the area of the principal and decisive means of destruction as one condition for the successful conduct of a general nuclear war;

- military strategy considers the all-round support of strategic actions of the Armed Forces during their preparation for war, in peacetime, and also during the war, as an unavoidable and indispensable condition for achieving victory;
- military strategy holds that the basis of modern control of the Armed Forces in war includes a correct understanding of the missions assigned by the political leadership through foresight regarding the control of mobile actions of the troops and organization and support of their continuous interaction (*vzaimodeistvie*);
- military strategy attaches high importance to the role of morale-political factors in the conduct of war and the achievement of victory over the enemy. This factor has played an important role in the past, and its role in modern times will increase.

*Fundamentals of Strategy Discussed in New Textbooks**

Definition of Military Strategy of the Soviet Union

The theory of military strategy in the Soviet Union is a body of information which reflects fundamental characteristics relating to war as an armed conflict, and principles of preparing the Armed Forces and the nation for war. Such information is derived from the process of identifying and adapting experiences related to the preparation and conduct of past wars, and from objective studies on future wars.

War

War is an armed conflict between two nations (two coalitions) or two antagonistic irreconcilable classes, in which the belligerents employ their armed forces and conduct military

* [This material, while not an integral part of the original 1973 "Principles and Content of Military Strategy" lecture itself, was acquired in the form presented during the course of instruction. It is drawn from new materials incorporated in the "Military Strategy" lecture during 1975, and was sum-

actions to achieve their political and economic aims. In strategic terms, war is the sum of all operations and combat actions by armed forces conducted to destroy the enemy, seize his territory, force his unconditional capitulation (*bezuslovnaia kapituliatsiia*), and determine postwar peace conditions. Despite the fact that military actions are typical and important characteristics of war, they do not resolve all matters related to the preparation and conduct of the war. Therefore, in addition to military actions, economic, diplomatic, ideological, and other forms of struggle are employed.

Of these forms of struggle, the direct aim of strategy is the study and analysis of military action (armed struggle). In other words, among all forms applied in war, military strategy directly aims at studying military action as the principal form of struggle in war. Military action, as an important component of war, is conducted by the Armed Forces and sometimes supported by partisan forces. Military action is conducted in all TSMAs and all spheres (ground, air, sea, and outer space). Military action is conducted on the basis of the unified concept and plan of the Supreme High Command to achieve the political and strategic aims of war.

Armed Forces

The Armed Forces are an organ of the State and an element of the State's political infrastructure. The Armed Forces also constitute the principal means of force and the weapon to achieve political aims through conduct of war. The Armed Forces, as a means of conducting war, consist of the aggregate of military organizations formed of the required number of trained personnel, equipped with arms and combat equipment, and assigned to conduct military actions in support of the achievement of specific political aims.

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marized in an effort to highlight – in note form – new additions to the original lecture. Although often repetitive of the material presented in the original lecture, it is included here for what additional insights it may provide into military strategy.]

Content of Strategy

The content of strategy includes the following:

- characteristics of modern wars, particularly their strategic content;
- the mission of the Armed Forces in war, and the means required to conduct the war;
- types, forms, and conditions for the preparation and conduct of war in general, and particularly those of operations (actions) in the strategic context;
- planning for war and strategic action of the Armed Forces;
- principles of the structure, preparation, and employment of the Armed Forces in war;
- setting of requirements and recommendations on the preparation of the country and TSMAs for war;
- fundamentals of civil defense;
- fundamentals of materiel, technical, and other types of support measures;
- control of the Armed Forces in peacetime and during war;
- strategic theories (doctrine) of the potential enemy and his capabilities to wage war.

Relationship Between Strategy, Operational Art, and Tactics

The relationship between strategy, operational art, and tactics is determined by the following:

- strategy, operational art, and tactics are the components of a unified military art. Each of these components occupies and involves a specific area and level of the art. They are distinguished by the level they occupy, and the dimension and detail of the theories included in their sphere of action. In spite of this, all of these components, i.e., strategy, operational art, and tactics, are closely connected with one another;
- strategy, operational art, and tactics are strictly dependent on one another. Strategy occupies the most dominant position in relation to the other areas of military art,

i.e., operational art and tactics. In turn, operational art dominates tactics.

- military strategy is a unified scientific theory generally applied to all of the Armed Forces. The essence of this principle is based on the fact that one Service of the Armed Forces alone cannot appropriately conduct its missions, the accomplishment of which is essential for achievement of the aim of war.
- only the combined and concerted employment of all Services of the Armed Forces and combat weapons and equipment, which supplement each other's form of action, can ensure success in the achievement of the aim of war. Based on their combat capabilities, assigned mission, and the circumstance of their accomplishment, each Service of the Armed Forces has its own operational art and special tactics. Strategy has close interaction with these specialized forms of operational arts and tactics.
- strategic employment of all Services of the Armed Forces in a combined form is studied and conducted within the framework of military strategy. Operations and combat actions of operational formations and large units of the various Services of the Armed Forces are integrated components and elements of the different forms of the strategic action, which are conducted by one, several, or all of the Services of Armed Forces.

The conduct of war as a unified system of strategic action requires the following:

- developing a unified concept;
- specifying the aim and mission of the Armed Forces;
- determining the main effort;
- organizing and conducting unified troop control;
- conducting many other measures related to war and military actions.

Therefore, strategy addresses questions on the conduct of war in general, and the employment of the total military power of the State for the achievement of victory.

On this global level, strategy studies and conducts measures related to the preparation and conduct of military action along different strategic directions and in TSMAs separately, or in a group of TSMAs. The aggregate of such actions constitutes the war as whole, each forming an area of practical action on a specific strategic level.

Therefore, two levels of action must be taken into consideration in the realm of strategy. They are differentiated by the level of military actions, participation of forces and means in these actions, content of the missions, and aims of the Armed Forces in such actions. One of these levels covers the preparation and conduct of the war in general, while the other level deals with military actions in specific regions of the world, in different TSMAs, or on individual strategic directions.

Close, workable interaction exists between both levels of strategy and between their different components. General (*obshchaia*) military strategy is directed toward achieving the overall aim of the war, and partial (*chastnaia*) military strategy is aimed at achieving assigned aims in one or another TSMA, and in groups of TSMAs. Achievement of the general aim of military strategy is ensured through successes achieved in the realm of partial military strategy.

Another important issue in the interaction between strategy, operational art, and tactics is related to combat readiness of the Armed Forces, which constitutes one of the important categories of strategy.

Ensuring a high state of combat readiness is not an exclusive area of strategic action, but is also included in the area of action of operational art and tactics. The resolution of questions of combat readiness at all levels of military art is conducted by scientific and practical actions. Strategy determines the principal general requirements of combat readiness and their basic criteria at the level of the Armed Forces and the various Services of the Armed Forces.

Operational art and tactics, each in its own area, seek and determine specific ways that ensure high combat readiness of the Armed Forces to accomplish missions under any conditions.

Military Doctrine and Strategy

Military doctrine is a system of theories adopted by the State and Armed Forces regarding the characteristics and forms of the conduct of war, and the preparation of the country and the Armed Forces for war. Military doctrine must answer the following:

- what will be the characteristics of a future war which is likely to involve the State and the Armed Forces;
- what aims and missions will face the Armed Forces in such a war;
- what requirements must be met by the Armed Forces in order to accomplish the assigned missions;
- in which direction must the structure of the Armed Forces be developed;
- in which form should the war be conducted;
- how will the country prepare for war.

The more thoroughly and appropriately such questions are resolved, the more rational and consistent the preparation for future war, by the country and Armed Forces, will become. Every nation has its own military doctrine. National military doctrine depends on the following:

- nature and characteristics of the social and political order of the country;
- policy of the State;
- level of economic development and raw material;
- status of the Armed Forces;
- geographic situation of the country;
- other factors.

***Political Basis of the Military Doctrine* [*not expanded upon, but addressed in the basic "Military Strategy" lecture*]**

***Military* [*-Technical*]* *Basis of the Military Doctrine* [*not expanded upon, but addressed in the basic "Military Strategy" lecture*]**

* [While these notes refer to "military" rather than the previously designated "military-technical" aspects of military doctrine, the distinction reflects only the shortened note-taking form used here. Military-technical remained the correct formulation.]

The political and military [-technical] aspects of military doctrine have a close dialectical relationship with one another. These are as follows:

- both aspects of military doctrine are inseparable from one another and they are jointly developed and established;
- the determination of the political aspects of military doctrine must be in total compliance with the combat capabilities of the Armed Forces and the forms of conducting military actions;
- both aspects of military doctrine constantly influence each other; however, political aspects play the major role in the context of this mutual influencing process.

Content of Contemporary Soviet Military Doctrine

POLITICAL ASPECT

- Explanations of the social and political nature of war to be initiated by the enemy;
- Characteristics of the political aim and strategic missions of the State in war;
- Their impact on the establishment of the Armed Forces;
- Forms of preparing for and conducting war.

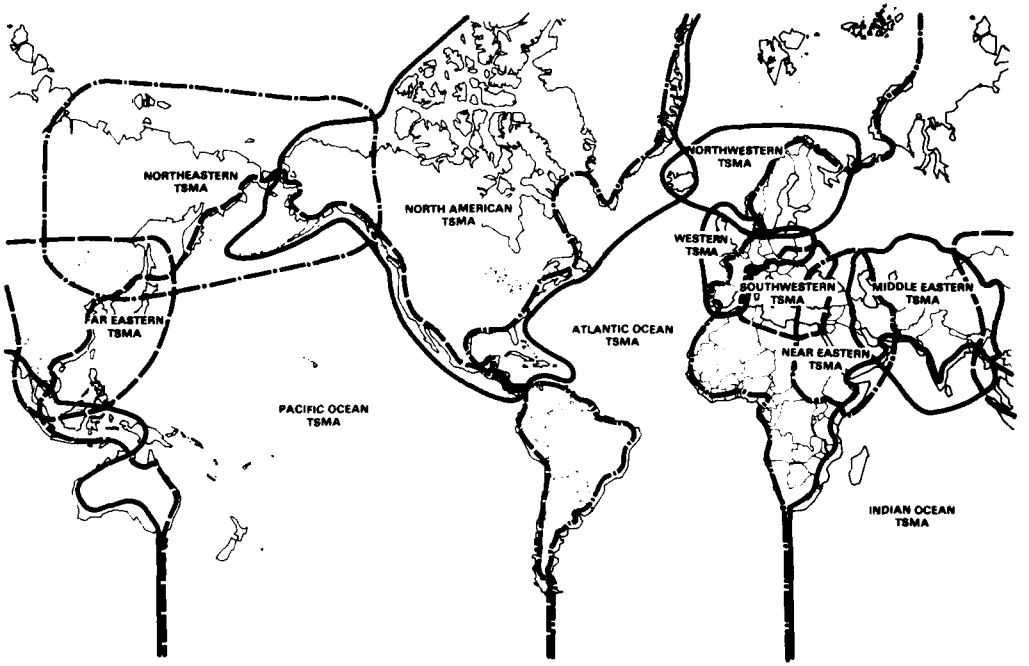
MILITARY [-TECHNICAL] ASPECT The military [-technical] aspect of military doctrine includes numerous issues which affect the general problem from different directions. The general problem is aimed at the protection of the homeland. The fundamentals of the military [-technical] aspect of military doctrine can be listed as follows:

- foreseeing the likely characteristics of war in modern times, particularly its strategic content. This will ensure a purposeful preparation of the Armed Forces for the conduct of future wars;
- making advance preparations of the Armed Forces for war. This includes establishment of the strategic group-

ings of the Armed Forces needed to repel enemy invasions and to inflict decisive losses on him;

- maintaining the Armed Forces in a high state of combat readiness and mobilization, and upgrading it in accordance with the deterioration of military and political situations worldwide or in individual regions;
- structuring the Armed Forces to include: organization, equipment of the Armed Forces, interaction of the different Services of the Armed Forces with one another, recruitment of personnel, training, and preparation of cadres for control organs (staffs);
- establishing principles of military art concerning the forms of preparation and conduct of military action under various conditions in future wars;
- using the total military power of the nation to conduct decisive actions until the enemy is totally destroyed. If the aggressor invades our country, the Armed Forces quickly initiates massive strikes and offensive actions against him;
- accomplishing important strategic missions by the joint and unified efforts of all Services of the Armed Forces conducting actions in individual TSMAs, in groups of TSMAs, or on important directions. An important role is played by, and major attention is given to, the all-round support of actions of the Armed Forces and the establishment of various types of reserves, forces, means, and materiel;
- determining basic principles regarding the organization of control of the Armed Forces, including:
    - the principle of the unification of political and military control;
    - central control of the Armed Forces;
    - a wide range of initiative and necessary freedom of action, within the framework of the general concept of action, given to all organs of control at all levels, in the interest of achieving the aims of battles, operations, and the war in general.

THEATERS OF STRATEGIC MILITARY ACTION (1975)



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CHAPTER TWO

General Concepts on Theaters of Strategic Military Action and Methods of Studying Their Strategic Characteristics

I. Concept of Theaters of Strategic Military Action

Defining possible theaters of strategic military action (TSMAs) and the many-faceted aspects of their strategic assessment is one of the important tasks of Soviet military strategy. The accomplishment of this task is required for the following:

- achieving unified concepts and perceptions about the character of modern war in each region of the world;
- facilitating the planning of operations and combat actions of the Armed Forces;
- ensuring early preparation of theaters from operational, rear service, engineer, and other points of view;
- preparing the Armed Forces in relation to the characteristics of each of the TSMAs.

Military actions take place in defined time and space. This factor was exploited to the maximum for the achievement

of victory, even in the early stages of the evolution of the military art, by great captains of the past. Wars in those days were fought by considerably smaller armies. The basic form for conducting war was the military campaign, often carried out in the summer during good weather. The aim of war was achieved in one or two pitched battles conducted at specifically selected sites on favorable terrain. Battles were fought normally in the daytime. Such battles were prepared in a relatively brief period. The commander usually could watch personally the entire battle from one observation point.

In that context an understanding of the TSMA was limited to the ground favorable for the disposition of troops, materiel supplies, and reserves. The general direction of the campaign and lines of communication were selected, while on the terrain the direction of the main thrust was determined. Accordingly, the concentration of forces and means was effected on the ground. In doing so, the location of the enemy and allies in a given related territory was studied.

The meaning of "TSMA" is not permanent and unchanging, but changes in relation to the status of the means of conducting war, the character of war itself, and the correlation of military and political forces in the world arena. Consequently, evolution in science and technology, increases in the effective strength of armies largely armed with sophisticated military equipment, increased capabilities to inflict casualties on the enemy from long ranges, acuteness of the political situation in the world, changes in the aim of war, and improvements in military art are all factors which change the understanding of the theater of strategic military action. Therefore, the meaning of "TSMA" has become more specific and has expanded. The role of the TSMA has expanded, both generally and specifically, in achieving victory over the enemy, and imperatives and requirements have been created for preparing the TSMA, in all aspects, in peacetime.

Before the Second World War, the TSMA was understood as an area of sufficient expanse in which groupings of Armed Forces were deployed and where military actions were con-

ducted to accomplish strategic missions. Territorial expansion of the TSMA was considered sufficient when it could provide space for the deployment of a few armies, modern for their times. By the outbreak of war, the TSMA was somehow prepared in terms of operational, rear service, and engineering considerations.

The division of the world into two social systems, constituting military alliances, has resulted in the establishment of numerous military bases in various parts of the world aimed against the USSR. At the same time, the development of sophisticated, effective long-range means of conducting war, employed from the above-mentioned military bases, has considerably widened the concept, as well as the dimensions, of the TSMA in contemporary times; reinforced the correlation between the characteristics of war and the TSMA; and, consequently, brought about new TSMAs. Soviet military strategy distinguishes between continental and oceanic TSMAs.

Continental Theaters of Strategic Military Action

Continental TSMAs are geographically defined parts of the globe. They are territories which include continents, or part of them, along with the adjoining water surfaces of the oceans, internal seas on the continents, and the air space over them. Within their bounds, groupings of armed forces of several countries (coalitions) are disposed, deployed, and, in wartime, conduct military actions to resolve strategic missions for the achievement of the military-political aims of a war.

Oceanic Theaters of Strategic Military Action

Oceanic TSMAs are geographically defined as part of the world's ocean water surface, also including the islands and inland seas, air space, and those coastal and land areas where strategic groupings of opposing naval forces and other types of armed forces are based, deployed, and in wartime, conduct

military actions to accomplish strategic missions for the achievement of the military-political aims of a war.

* * *

Within a theater, there will be groupings of enemy forces and objectives of strategic importance, the destruction, seizure, and annihilation of which can fundamentally and radically affect the course of a war.

Properly identifying territories inside the boundaries of a theater should ensure, in terms of space and their natural conditions, the deployment and action of a number of operational formations of all Services of the Armed Forces assigned to conduct joint strategic operations. The preparation of a TSMA, in terms of operational considerations, is carried out in peacetime. The potential enemies create lines of communication systems; bases for their air and naval forces; points of control, supply, and air defenses; and all kinds of reserves in the theater in advance.

II. Factors Determining the Delineation of Theaters of Strategic Military Action, Strategic Regions, Strategic Directions, and Operational Directions

The TSMA is, first of all, an aggregate of countries, with their populations and socio-political, economic, and cultural orders; armed forces; political differences, and so on. Therefore, when determining possible TSMAs and setting their boundaries, the following are required to be studied in first priority:

- the political situation on the globe and in individual countries, which affects the determination of the boundaries, role, and position of TSMAs in war;
- the economic state of countries and groups of countries (alliances), especially their military production and transportation development;
- the degree of progress made in the means of conducting war;

- the location and composition of the probable enemy's groupings of armed forces and methods of their mobilization, deployment, and operational-strategic employment;
- physical-geographic conditions;
- correlation with adjacent TSMAs.

The determination of possible TSMAs and establishing of their composition and boundaries, as well as their description and general study, are the duty of the General Staff. A more detailed discussion and working out of TSMAs and individual regions in one or another aspect are the duty of the Main Staffs of the various Services, the various main and central directorates, and the military districts and fleets located within the boundaries of their respective TSMAs.

III. Methods for Assessing the Strategic Characteristics of Theaters of Strategic Military Action

V. I. Lenin taught that victory over the enemy can be achieved as a result of the objective actions of the laws of war and more organized exercise of command. Victory is achieved through knowledge and the astute application of the objective laws of war, along with consideration of political, economic, morale, geographic, and other factors, and the application of effective methods of conducting war and military actions. In assessing the strategic characteristics of a TSMA, Marxist-Leninist dialectics and materialistic methodology are applied. In this process the aims of analyzing objective factors in a given TSMA are pursued. Conclusions are derived from each factor, and their actions are employed with maximum efficiency to achieve victory over the enemy.

During the assessment of strategic characteristics of TSMAs, primary attention is paid to such matters as the role and position of the TSMA, its relation to other TSMAs, and strategic appraisal of political, economic, military, and geographic factors in the TSMA as a whole, as well as its individual strategic regions and directions. For the purpose of facilitating easier study of all factors and conditions inside a TSMA, some of

them can be combined in groups or designated elements of strategic characteristics of the TSMA. Such elements are addressed below.

Composition, Boundaries, and Strategic Position of a Theater

In studying these elements, strategic characteristics of the TSMA must be followed by examining the areas located inside one's own and foreign territories and water surfaces of the TSMA; the countries inside the TSMA; the boundaries of the TSMA; and by appraising dimensions of a TSMA in terms of the effective range of different means of destruction and the possible span of operations. It is also necessary to assess the position of the given TSMA in the system of TSMAs, determine its significance in war, and analyze interrelationships and mutual effects of the given TSMA with other TSMAs and strategic regions.

Political Situation in a Theater

In characterizing the political situation in a TSMA, the examination of the following are required:

- the presence of Socialist and pro-Socialist countries, neutral countries, and potential enemy countries within the limits of the TSMA;
- existing coalitions of countries and their possible modification;
- foreign policy of the countries located in the TSMA;
- political parties inside the countries and their relations with each other;
- national composition of the population and its political-morale status;
- worker movements, and Communist and Worker Parties inside potential enemy countries;
- factors determining the political situation in the TSMA, their developmental tendencies, and the impact they might have on the course of a war.

Military-Economic Base of the Probable Enemy

The military-economic base of the probable enemy is studied in terms of:

- the general level of development of industries, agriculture, and transportation;
- capabilities for producing rocket, nuclear, and conventional weapons and other military equipment;
- the disposition of industry;
- vulnerable areas of the economy, as well as the possibilities of using material-technological bases of the enemy for supplying friendly armed forces in the course of a war.

Armed Forces of the Probable Enemy and Operational Preparation of Foreign Territories of the TSMA

In a strategic appraisal of this element, strategic characteristics are assessed by examining the following:

- composition and grouping of the Armed Forces, and their qualitative characteristics (in terms of groupings of Services of the Armed Forces on strategic directions);
- determining the main groupings of the enemy, the destruction of which can cause great changes in the strategic situation in the TSMA;
- probable character of enemy action at the commencement of war;
- reinforcement capabilities of enemy armed forces' groupings in the TSMA, the routes of shifting forces from other TSMAs, and the methods of such shifting;
- mobilization reserves of the enemy country;
- the degree of active preparation of foreign territories of the TSMA by the enemy (the presence of rocket and air forces, naval bases, airfields, positions for air defense means, fortifications, command posts, communication lines, and road networks).

These elements are studied in a strategic context to derive conclusions concerning the potential for the deployment and

action in the TSMA of major groupings of all Services of the Armed Forces and various arms of troops using different types of weapons. It is also required that the impact of physical-geographic conditions on the conduct of operations with the use of nuclear and conventional weapons at different times of the year be assessed, that natural obstacles of operational and strategic significance and the possible routes for overcoming them be located, and that the impact of natural conditions on the operational situation be determined.

The significance of each of the characteristic strategic elements in different TSMAs at different stages of military action are not the same. Therefore, in studying one or another TSMA, it is very important to deal, in the first priority, with the strategic significance of the main elements and determine their impact on a specific situation.

IV. Strategic Regions and Directions

Strategic Region (Strategicheskii Raion)

This is a part of the territory of a TSMA in which a country or a portion of the country and vital objectives of strategic significance are located. Such objectives are connected with rocket, air force, and naval bases; groupings of armed forces; major centers of control; depots of nuclear weapons; main communications complexes; areas in which strategic reserves are formed; rear service bases; and industrial, energy, and administrative-political centers. The naval zones in the TSMA can be considered independent strategic regions.

Strategic Direction (Strategicheskoe napravlenie)

This is a vast area of terrain with adjoining coastal and water surfaces and air space. Within the bounds of this area major groupings of enemy armed forces and vital strategic objectives are located. The destruction of such groupings, and the destruction, occupation, and holding of strategic objectives, can be the aim of military actions at the strategic level. The physical-

geographic conditions of a strategic direction affect the deployment and conduct of offensive operations of a number of *fronts*, in cooperation with forces and means of other Services of the Armed Forces.

A strategic direction is determined in accordance with all the characteristic strategic elements of a TSMA. The significance of a strategic direction and its position in the TSMA depend on the importance of the mission to be accomplished by each component of the Armed Forces in the given direction. In each strategic direction of a continental TSMA there can be a number of operational directions.

Operational Direction (Operativnoe napravlenie)

This is an area of terrain and, in coastal regions, the adjoining water surfaces, which lead to objectives of operational significance, i.e., groupings of enemy forces or vital economic centers, and that allow for the conduct of combat actions of operational formations. An operational direction is a part of a strategic direction, which, in turn, is a portion of a TSMA.

The determination of strategic regions and strategic and operational directions is closely connected with the planning actions by the Armed Forces, and particularly with the determination of their strategic aims and missions, and the organization of interaction (*vzaimodeistvie*) and control. [The Russian term *vzaimodeistvie* may also be translated as cooperation and coordination; see the glossary for a more complete discussion of the term.] Occupation of strategic regions or destruction and annihilation of targets within these regions changes the situation widely in a considerable part of the TSMA, and places friendly armed forces in a more favorable position in relation to the enemy. As a result of the occupation of such regions, one or more strategic missions will be accomplished. In the detailed planning of military actions, huge strategic regions may be divided into a number of subregions, if required. Each subdivision will include a group of objectives to be seized, contained, or destroyed. Strategic regions and strategic and opera-

tional directions are determined in close consideration of political, economic, geographic, and military factors in the TSMA. The appreciation of such factors discloses the characteristics of strategic regions. To the extent that strategic regions and their boundaries include different conditions, the greater the variations will be regarding the influence of the above-mentioned factors, and the greater the modifications of plans for conducting war in a TSMA.

In terms of significance, strategic regions are not of the same value. Therefore, in weighing the characteristics of TSMAs, it is important to note vital strategic regions and critical objectives in each of them. Various objectives are normally found in a strategic region. The assessment of the strategic significance of the region is made on the basis of these objectives.

For the purpose of gaining a clear understanding of the character of war in one or another region of the world and planning strategic actions in conformity with the war aim, it is very important to identify the main TSMAs, vital strategic regions, and strategic and operational directions in the TSMAs.

V. Actual Division of Continental and Oceanic Theaters of Strategic Military Action

On the basis of the concept of the General Staff of the Soviet Armed Forces, TSMAs are classified as follows.*

- *Western TSMA*: FRG [Federal Republic of Germany], GDR [German Democratic Republic], Spain, Portugal, France, England [usually designated as Angliia (England) rather than Velikaia Britaniia (Great Britain)], Belgium,

* [Depending on the specific issues addressed earlier in the lecture, the boundaries and composition of TSMAs are subject to change. Therefore, for planning purposes, the Soviet General Staff has included some nations and areas in more that one TSMA. This is reflected in the discussions of each of the TSMAs below. In addition, because of ambiguities in the original text and/or occasional inadvertent omissions or errors in the handwritten material used, clarifications are made where appropriate in consultation with Colonel Wardak.]

Holland, Denmark, CSR [Czechoslovak Socialist Republic], Poland, Switzerland, western USSR, northern Morocco, and western Algeria;

- *Northwestern TSMA*: Norway, Sweden, Finland, Iceland, and the northwestern USSR;
- *Southwestern TSMA*: Italy, Austria, Yugoslavia, Hungary, Romania, Bulgaria, Greece, the western USSR and western Turkey, northern Egypt, Libya, Tunisia, northeastern Algeria, the western Black Sea, and the Mediterranean Sea;
- *Near Eastern TSMA*: the Caucasus, the Black Sea, Turkey, Iran, Saudi Arabia, Syria, Israel, and Egypt;
- *Middle Eastern TSMA*: southern USSR (Uzbek, Tadzhik, Turkman, Kirgiz, and Kazakh SSRs) [Soviet Socialist Republics], Iran, Afghanistan, Pakistan, India, western China, Bangladesh, Burma, and the eastern Black Sea;
- *Far Eastern TSMA*: China (excluding western China), Mongolia, south far eastern USSR, Indochina, Japan, and the Philippines;
- *Northeastern TSMA*: northeastern Siberia (to the Chinese border) and Alaska;
- *Northern TSMA*: northern and central Siberia [included in some older lectures but deleted as a TSMA before the end of the 1973-75 course];
- *Atlantic Ocean TSMA*: all of the Atlantic Ocean;
- *Pacific Ocean TSMA*: all of the Pacific Ocean;
- *Indian Ocean TSMA*: all of the Indian Ocean;
- *North American TSMA*: Alaska, Canada, USA [the contiguous states], Mexico, and Central America down to Panama.

[Supplementary General Staff Academy lecture material associated with this lecture makes the following judgment.] Because of the current posture of forces in the world, which has established America as a major power, and also due to the introduction of intercontinental rockets, overseas TSMAs such as the North American TSMA have been created. By the

same token, South America, Africa, Australia, and Antarctica are also considered individual TSMAs.

VI. Europe and European Theaters of Strategic Military Action

Military-Political Situation in Europe

Europe has always played an important role in world politics. In World War II, the victory over Fascism was achieved on this continent. The world Socialist system was also developed in Europe. The military-political situation in this part of the world can be considered as one of the likely sources of war. The political situation is governed by two important factors: the deepening of a general crisis in Capitalism and the strengthening of the Socialist system. The foreign policy of imperialism is reactionary. All Capitalist countries of Europe are militarizing their economies. NATO constantly threatens Europe with war. The USA has proliferated its doctrines in the NATO bloc countries, and established their economic dependence. West German imperialism is growing. The reactionary forces of West Germany place the German Democratic Republic on the brink of war. The Federal Republic of Germany has access to nuclear weapons. Great Britain is also moving on the path of militarization, and its policy is oriented against the USSR and the camp of Socialist countries. Recently, differences have been arising among NATO member countries. Some smaller countries cannot afford the military expenditures and do not agree with the deployment of nuclear weapons on their territories. The political situation is very critical to all inhabitants of the world. The main political and military power is based in the Federal Republic of Germany, Great Britain, France, and the United States. The United States is attempting to occupy western Europe as a bridgehead (*platsdarm*) against the USSR and Socialist countries. NATO, as a political vehicle in Europe, continues to remain an aggressive organization of imperialism, affecting the military-political situation.

Position and Role of European TSMAs

In these TSMAs, a direct contact line with imperialist countries exists. There, powerful groupings of NATO and the Warsaw Pact are facing each other. Europe confronts the reactionary forces of imperialism, which are capable of waging nuclear world war. Europe was the arena of the First and Second World Wars. Therefore, the Western TSMA occupies an important position among the other TSMAs. The importance of this TSMA lies in the fact that imperialist countries possess developed economies which enable them to produce all types of military equipment and weapons.

Total Military Strength in European TSMAs

- *Ground force strength*: 2.5 million men, 62 army divisions, 250 independent brigades and regiments; 1,100 nuclear delivery devices; 3,100 artillery pieces and mortars; and 16,500 tanks.
- *Air force strength*: 600,000 personnel; 18 medium range ballistic rockets; 72 Pershing missiles; 1,100 NIKE and HAWK guided air defense rocket systems; 4,200 combat aircraft (of which 100 are carrier aircraft) and about 1,000 supporting aircraft.
- *Naval strength*: 200,000 personnel (in the Atlantic Ocean); 20 nuclear-rocket submarines; 3 aircraft carriers; 500 combat ships; 500 naval aircraft. The enemy keeps more than 100 combat ships in the Norwegian and Baltic Seas.

VII. Western Theater of Strategic Military Action

Composition, Limits, and Strategic Position

In the composition of the Western TSMA, the following areas are included: the Kaliningrad district (*oblast*) of the RSFSR [Russian Soviet Federated Socialist Republic], the Lithuanian SSR, the Belorussian SSR and northern districts of the Ukrainian SSR, the People's Republic of Poland, the GDR, and the CSR.

The following areas are included in foreign territory of the Western TSMA:

- *NATO countries*: FRG, Holland, Belgium, Luxembourg, France, England, Denmark, Portugal, and Spain (which is to become part of NATO);
- *neutral Capitalist countries:* Switzerland and Ireland;
- *coastal countries of North Africa:* Morocco and Algeria.

The theater includes the following water surfaces: the southern part of the Baltic Sea, the northern part of the Irish Sea, the straits of Kattegat and Skagerrak, the Pas de Calais and the English Channel, the Bay of Biscay, the western part of the Mediterranean Sea, and the Strait of Gibraltar.

Assumed Limits of the Theater

The boundaries of the theater are assumed to be delineated by Copenhagen, the northern end of the Jutland Peninsula, the Shetland Islands, Ireland, Lisbon, Fez (in Morocco), Djelfa (in Algeria), Nice, the national boundary of Italy with France and Switzerland, and the national boundary of Austria with the FRG, Czechoslovakia, Bratislava, Uzhgorod, Chernigov, and the eastern border of the Belorussian SSR. The total land surface area in this theater is 3,000,000 square kilometers, which includes nearly 1,000,000 square kilometers of territory in Socialist countries. The length of the theater from east to west is 2,500-4,000 km (of which 1,800 km stretch across Capitalist countries) and its width from north to south is 700-3,000 km. The population of the TSMA is nearly 350 million, which includes 90 million of the Socialist countries' population.

The Western TSMA occupies the central position in European theaters. Inside its limits are located the most developed and major European Capitalist countries that are members of the NATO alliance. In this area there are deployed the most powerful groupings of NATO allied armed forces, as well as major administrative-political centers. The main military-economic regions and important land, naval, and air communications pass through its territories, which have vital significance in peacetime. The territories in this TSMA are better prepared in terms of operational considerations. It is

assumed that the most powerful grouping of nuclear weapons is deployed in this TSMA, which may be widely employed against military and vital economic objectives. Successful accomplishment of missions to foil NATO aggression in this TSMA will have a decisive impact on the course and consequences of war.

The Baltic Straits region has important operational significance. Within its limits are located the military-naval bases, ports, and airfields of Norway, Denmark, and Germany. It is likely that nuclear rocket submarines and other ships will be deployed on naval directions of the TSMA. In the Baltic Straits region, the close cooperation of ground and aviation groupings with the "western" fleet is required.

The enemy can launch air and naval strikes from the Southwestern TSMA on targets inside Socialist countries located in the Western TSMA. At the western end of this TSMA lies the Atlantic Ocean TSMA, where the fleets of the USA, England, and France are deployed, providing further western lines of communication with NATO armed forces. Therefore, the composition, dimension, and strategic position of the Western TSMA and the presence of major groupings of NATO armed forces determine, in case of war, the conduct of military actions of strategic significance having decisive aims for the use of all Services of Armed Forces.

Political Situation in the Theater and the Economic Situation of Foreign Countries

Capitalist countries of the TSMA are highly developed in economic terms. These countries produce one-third of the industrial products of the Capitalist world. Their total products, equivalent to three-fourths of the USA's industrial output, assume the second position after the USA. West Germany, Great Britain, and France produce 70 percent of West European products, and these countries possess highly developed transportation systems.

FRG In terms of industrial production, West Germany assumes the first position in Western Europe. In West

Germany, national military industries are growing intensively, producing almost all types of weapons and military equipment, including tanks, self-propelled guns, APCs, antitank guided rockets, [other types of] guided rockets, and aircraft. One hundred firms and companies produce military products. West Germany procures and supplies 45 percent of its forces' needs in peacetime and has the capability of rapidly switching to the mass production of all types of conventional weapons prior to, or at the beginning of, war. Because of the high mobilizational preparation of its economy, West Germany sells weapons to other nations. West German industries are not evenly deployed inside the country, but are concentrated in four industrial regions which are, in the order of importance, the Ruhr (the main industrial region) and the Southern, Northeastern, and Saar industrial regions.

ENGLAND In terms of volume of production, England takes second position in Western Europe. The basis of the English economy is heavy industry. Coal extraction, ferrous metallurgy, and automotive, ship construction, radioelectronic, and chemical industries are particularly developed. Great progress has been made in military industries, and all types of conventional weapons and ammunition, as well as nuclear and rocket weapons, are produced. English industry is highly concentrated; it is deployed in five main regions: the Southern, the Central, and the Northern regions, Scotland, and Wales.

FRANCE In terms of volume of production, France assumes the third position in Europe. The basis of the industrial infrastructure is heavy industry. However, light industry occupies a considerable position in the country's economy. Metallurgical, automotive, ship construction, electric energy, oil refining, and chemical industries are particularly developed. France's military industry produces all types of conventional weapons except heavy bombers. Rocket construction is developing and its own nuclear weapons production is

increasing. There is some development in the atomic industries. The country produces aircraft, rocket and space equipment, and armored vehicles, explosives, ammunition, weapons, radio-electronic equipment, and ships. The main industrial regions of the country are the Northern, Eastern, Paris, Lyon, and Marseilles industrial regions.

The rest of the countries in the Western TSMA have not achieved diversified development in industry and, altogether, have not succeeded in gaining great economic capabilities.

NATO countries supply all types of weapons to their armed forces. The USA produces 90-95 percent of the nuclear weapons and 80-90 percent of the rockets for NATO. Rocket weapons are deployed in England and France. NATO can produce in one year: 30,000 tanks; 25,000-35,000 aircraft; 50,000-60,000 artillery pieces; and 1-1.5 million tons of ships. The vulnerable aspects of industrial output of NATO are the following:

- —concentration in narrow land areas;
- —concentration of electrical energy in 130-135 targets;
- —huge transportation centers;
- —the location of industrial regions close to the borders of Socialist countries;
- —import of foreign raw materials and fuel;
- —transportation of such raw materials and fuel by sea routes through limited ports;
- —import of foodstuffs from foreign countries.

Armed Forces of Capitalist Nations

In NATO countries, armed forces are highly trained and prepared, and properly composed major groupings of armed forces are organized and deployed. Nuclear forces of strategic, operational, and tactical significance are deployed there, and the wide use of USA nuclear forces at the strategic level is expected. The groupings of armed forces in the TSMA include:

- —NATO national armed forces;

—USA and Canadian armed forces in Europe;
—armed forces of non-NATO countries in the TSMA.

NATO countries have great mobilization potential and capabilities. In World War II, Germany had 11 million armed men and the British 8 million. Germany mobilized 90 additional divisions over the course of the war. In contemporary times, the reserves of the FRG are calculated at 1.5 million men; this is planned to reach up to 3.4 million by 1980. As the calculations indicate, the mobilization potential of these countries could amount to more than 25 million men.

NUCLEAR FORCES Nuclear forces in the Western TSMA consist of about 2,000 nuclear delivery means, including 800 tactical and operational-tactical launchers and atomic artillery pieces, 18 ballistic rockets, 870 aircraft, about 200 atomic rocket submarines, and 200 carrier aircraft of the air forces.

GROUND FORCES NATO ground forces in the Western TSMA are deployed and are in high combat readiness. They are grouped in 2 army groups: Northern Army Group—11 divisions (from FRG, Belgium, Holland, Canada, and England); Central Army Group—11 divisions and 1 brigade (from the USA and FRG). In addition France allocates six divisions to NATO.*

TACTICAL AIR FORCES

—2nd Joint Tactical Air Command with 500 aircraft;
—4th Joint Tactical Air Command with 1,100 aircraft;

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* [Soviet planners always take into consideration the coalitional nature of NATO by designating a color for each national contingent. For example, in NATO the USA was "Z" for green (*zelenyi*); the FRG was "K" for brown (*korichnevyi*); England was "S" for blue (*sinii*); Belgium was "F" for violet (*fioletovyi*); and Holland was "L" for purple (*lilovyi*). The color for France was not indicated, probably because the French did not have a corps forward deployed.]

– national air forces of NATO countries with 400 aircraft, and non-NATO countries in the Western TSMA with 800 aircraft, for a total of 2,800 aircraft plus 900 carrier aircraft.

NAVY

– 6th USA Operational Fleet (in the Mediterranean Sea), including two aircraft carriers of 100 aircraft in each;
– 2nd Atomic Submarine Squadron, including 12 submarines and 192 Polaris rockets;
– two English aircraft carriers;
– three English submarines armed with Polaris rockets;
– large units of NATO naval forces.

In addition, in wartime two to three carrier aviation strike task forces of the USA and England (four to six strike aircraft carriers, consisting of 200-300 carrier aircraft) are deployed in the TSMA. Six hundred various combat ships of the NATO national navies and 300 various ships of non-NATO countries are deployed in the Western TSMA.

Grouping of NATO Air Defense Means

In Belgium, Germany, and Holland, 40 battalions of guided air defense rockets are deployed, and 600 fighter-interceptor aircraft are based. Their main efforts are concentrated on covering the Ruhr industrial region. In addition, two national air defense zones are established which are the following:

– English zone: 92 launchers for guided air defense rockets and 120 aircraft;
– French zone: up to 100 fighter aircraft.

Preparation of the Territories of Capitalist Countries in the Theater from the Operational Point of View

Inside the limits of the foreign portion of the Western TSMA, NATO has created wide networks of military aviation and naval bases, air defense and communications systems, command posts, and materiel reserves. It has developed networks

of lines of communication, and has constructed engineer works. Six hundred military and civilian airfields have been constructed, which include 190 airfields with runways of more than 1,800 meters in length. For the purpose of basing tactical aviation units, 140 airfields are constructed which have runways of 2,400 meters in length and more. Appropriate measures for dispersion and sheltering of aircraft are taken at the airfields.

In addition, the Western TSMA is provided with the following: one stationary base for ballistic rockets with 27 launch positions; 12 naval bases; 15 naval base areas; and 44 major seaports, including 11 ports having a cargo-handling capacity of up to 10 million tons a year.

In the air defense system there are 200 radar stations, 20 automatic radio-electronic systems for controlling air defense forces, and 160 guided air defense rocket systems. Stationary, mobile, and rear command posts are prepared. Modern signal bases and many communication centers linked by radio, radio-relay, and cable communications are established. Moreover, in the TSMA the establishment of nuclear mine obstacles and a system of depots are anticipated.

Strategic Directions

- *North-German direction:* [characterized by] large cities, industrial areas, and ports (Berlin, Hamburg, Amsterdam, Brussels, Antwerp, Paris, London, the Ruhr, and northern French industrial regions, and the Birmingham and Cardiff industrial areas in England, and the Vistula, Oder, Elbe, Oker, Rhine, Seine, and Loire Rivers).
- *South-German direction*: [characterized by] large cities and industrial areas (Salzburg, Munich, Stuttgart, Marseilles, Madrid, Geneva, Zurich, and Lisbon); natural obstacles to include the Carpathian, northern Alps, and Pyrenees mountains; and rivers (Danube and Rhine).

The boundary lines between the north-German and south-German strategic directions run approximately through Kiev,

Wroclaw, Frankfurt, the southern border of Luxembourg, and Borge.* The operational capacity of each direction is sufficient for the deployment and military operations of up to two *fronts.*

VIII. Southwestern Theater of Strategic Military Action

This area is located between three continents: Asia, Europe, and Africa. It includes southeastern and southern parts of Europe, Asia Minor, and part of North Africa. Therefore, the TSMA is of vital importance in the world.

Balkan countries constitute the center of the Southwestern TSMA. There, the Slavic people, led by Russia, had been committed for a long time in wars with Turkey. The struggle for domination over the Black Sea, occupation of the Straits, and freedom of the Balkan people from Turkish domination continued until the 20th century.

During World War I and World War II, the contests and races between England, France, Germany, Italy, and the United States for supremacy on the Mediterranean Sea and for influence in the Balkans were further exacerbated. Germany was using the Balkans as a bridgehead against the Soviet Union. During World War II, Britain planned the opening of a second front in Europe through the Balkans, to prevent the victory of the progressive forces of Bulgaria, Hungary, Romania, Albania, and Yugoslavia, and to establish a strong position for itself in the Balkans.

Following the defeat of Germany, the Socialist system was established in the Balkans, which fundamentally changed the political situation. NATO has organized the areas of Italy, Greece, and Turkey into a most effective bridgehead for developing dynamic offensive actions against Socialist nations. NATO can also utilize the Mediterranean Sea as a most

* [A delineation provided by Colonel Wardak based on Academy instruction not integral to this lecture. This mid-1970s assessment was based on three first-echelon fronts, two operating on the north-German strategic direction and one on the south-German strategic direction.]

favorable area for launching attacks by nuclear-armed aircraft, rockets, and submarines against military targets in Socialist countries.

The U.S.-supported policy of Israel for aggression and expansion against Arab countries has created a dangerous political situation in that area. Generally, the Southwestern TSMA in the contemporary international situation, and in case of an outbreak of war using nuclear weapons, is one of the major TSMAs in terms of its geographic position.

Composition, Boundaries, and Strategic Situation of the TSMA

The Southwestern TSMA includes the following areas and countries of the Socialist world: the Ukraine and Moldavia (USSR), southern parts of the People's Republic of Poland, eastern parts of the Czechoslovakian Socialist Republic, Hungary, Romania, Bulgaria, Yugoslavia, and Albania. The foreign territory of the TSMA includes the following countries: Italy, Greece, and western parts of Turkey. The neutral countries in the TSMA are Austria, Cyprus, Malta, San Marino, Monaco, and the maritime areas of Arab countries, i.e., Egypt, Libya, Tunisia, and Algeria.

The TSMA also includes water surfaces, such as the western part of the Sea of Azov, western Black Sea, Sea of Marmara, Adriatic Sea, Aegean Sea, and a large part of the Mediterranean Sea with its islands (of which Sicily, Sardinia, Crete, Cyprus, and Malta are the largest). The expanse of the TSMA is about 3,000 km from east to west and 2,500 km from north to south. Its total area is 5,600,000 square kilometers, half of which is water surface. Its population is about 230 million including 120 million in Socialist countries.

Major lines of communication cross through the TSMA, which connect the European continent with Asia and Africa. The lines of communication of the Mediterranean Sea are of great importance.

The Southwestern TSMA meets the Western TSMA at its northwestern boundary, and thus connects the Western TSMA to the Near Eastern TSMA. The favorable geographic posi-

tion of Capitalist countries in the TSMA and on the Mediterranean Sea enables the enemy to launch his attacks against Socialist countries from land, sea, and air by the shortest routes. Therefore, operations by Socialist countries must be carried out in close coordination with the Western TSMA.

Africa is located to the south and southwest of the TSMA. NATO attempts to convert it into its main supply base of strategic raw material and as a bridgehead for the establishment of nuclear rocket forces, air forces, and naval forces.

The Southwestern TSMA borders the Near Eastern TSMA. The Near Eastern countries produce and supply oil for Europe and even America, and supply 60-70 percent of their requirements. Interruptions in oil and other raw materiel shipments will place the economy and armed forces of West European countries in a very difficult situation. NATO countries try with all possible means to maintain their political influence in the Near East and to strengthen their economic positions in that area, since that region is the center of constant political crisis and unrest.

Therefore, the composition, dimension, and strategic situation of the Southwestern TSMA make it more susceptible to being drawn into a war initiated by imperialists, with the conduct of military action at a strategic level with decisive objectives, using all Services of the Armed Forces.

Other topics concerning the TSMA are studied and discussed in the following fields:

- political situation in the TSMA;
- economic situation in the TSMA;
- armed forces in the TSMA;
- preparation of the TSMA in operational aspects;
- strategic directions and regions in the TSMA.

IX. Northwestern Theater of Strategic Military Action

The Northwestern TSMA occupies large areas of the European continent and its surrounding water surfaces. Military conflicts between individual countries and groups of nations

had not taken place in this TSMA in the past until World War II, when fierce combat was waged in this theater. The Soviet Army accomplished offensive and defensive operations with the employment of large groupings of forces and fleets in that area. In 1944 about 100 divisions were deployed north of the Finnish Gulf.

After World War II, the Americans and NATO countries organized the territories of Norway, Denmark, and Iceland as a bridgehead against the Soviet Union and other Socialist countries, which means that in case of the outbreak of war the territories of this TSMA are likely to constitute an active military battlefield.

This area has a number of special features in terms of its strategic position. The disposition of political and economic forces there and its geographic and physical conditions have a great impact on the specifications and methods of conducting military actions.

Composition, Boundaries, and Strategic Situation of the TSMA

The Northwestern TSMA includes:

- Soviet territory: northwestern districts of the USSR and Baltic Republics of the Soviet Union;
- External part of the TSMA;
  - NATO countries: Norway, Denmark, and Iceland;
  - neutral countries: Finland and Sweden;
  - water surfaces: White Sea, Barents Sea, Norwegian Sea, North Sea, and Baltic Sea.

The total area of the TSMA is 6,400,000 square kilometers (2,700,000 square kilometers land and 3,700,000 square kilometers water surface). Its dimension from north to south is about 3,000 km, and from east to west in the north about 3,600 km and in the south 2,500 km.

Forty-five million people live in the territories of the TSMA, of which 22 million live outside the Soviet Union. To its north lies the North Arctic Ocean, where air and space routes con-

necting the USA and USSR constitute the shortest ranges for intercontinental ballistic rockets and strategic aircraft. Therefore, the air and space distance from the northern coast of the Soviet Union to Washington and the central states of the USA via this TSMA is about 7,000 km; and to Greenland, where the nearest USA naval and air bases are located, it is only about 2,000 km.

The Northwestern TSMA at its western boundary meets the Atlantic Ocean TSMA, where large groupings of NATO naval forces are deployed. Important air and sea routes across the Atlantic Ocean connect America with Western Europe. Operations conducted in the Atlantic Ocean, particularly in its northeastern parts, will have close connection with operations carried out in the Northwestern TSMA, and will have great impact on the general strategic situation on the European continent.

In the south, the Northwestern TSMA borders the Western TSMA, where the most active NATO countries, primarily West Germany and England, are located. Strong NATO armed forces groupings are deployed here, which is at the same time the center of the main economic regions of West European countries. Lines of communication of worldwide significance pass through this area. Operations in the Northwestern TSMA will have to be coordinated with operations in the Western TSMA in terms of unified concepts and strategic political aims.

As discussed above, the Northwestern TSMA occupies an important strategic position between the West European TSMA and the oceanic TSMA of the Atlantic Ocean. In the context of NATO plans, the countries outside the USSR in the TSMA will be used as NATO's bridgeheads for military operations directed to the east. That is the area where NATO has already deployed forces which will be employed to protect its northern flank to the Western and Atlantic Ocean TSMAs.

The main naval forces of Warsaw Pact countries are deployed in the Northwestern TSMA. This area will provide favorable conditions for Warsaw Pact naval forces to get access to the northern and central Atlantic Ocean, which is under

NATO control and influence. This action will isolate Norway and Denmark and provide suitable opportunities for the Northern and Baltic Fleets of the Soviet Navy, as well as for Poland and the German Democratic Republic, to accomplish missions for the purpose of destroying the main groupings of NATO forces operating in the Western TSMA.

X. Near Eastern Theater of Strategic Military Action

The Near Eastern TSMA is located between three continents, i.e., Asia, Europe, and Africa. It connects the most important strategic regions through the naval routes which pass across the TSMA. The Near Eastern TSMA has constantly been the scene of military conflicts and local wars, of which the Israeli-Arab wars are the most recent ones.

In the strategic assessment of the TSMA, the following are to be studied and evaluated:

- seriousness of the military-political situation;
- presence of significant armed forces of CENTO;
- existence of naval communications, air flight sectors, and land routes;
- mountainous-desert nature of the area, which affects the preparation and conduct of operations in the TSMA. In the composition of operational formations and large units operating in the TSMA, specifically organized and lightly equipped units and subunits, as well as transport means with better capabilities for passing through the difficult terrain, are required for the execution of combat actions in mountains, areas of high altitude, and deserts/oases.

Composition, Boundaries, and Strategic Situation of the TSMA

PROVISIONAL BOUNDARIES The Near Eastern TSMA is delimited by Odessa, the Turkish border [Thrace], Cyprus, the western and southern limits of Egypt, western boundary of Iran, Ashkhabad [in the Turkmenistan Soviet Socialist

Republic], north of the Caspian Sea, Saratov, and [back to] Odessa.

Its dimensions are 4,500 km from north to south and 3,500 km from east to west. Its area is 10,000,000 square kilometers of which 2,000,000 square kilometers are water surfaces. Thus, the Near Eastern TSMA occupies an important strategic position. Within its limits run the nearest lines of communication along which oil and other strategic raw materials proceed to Western Europe. Oil and other raw materials are transported to NATO countries via strategic routes of the Near Eastern TSMA. The Soviet Union has about 4,000 km of border with the NATO and CENTO bloc countries across the TSMA, which can be used by NATO and CENTO as a bridgehead against the Soviet Union.

The Near Eastern TSMA includes 20 different countries, some of them members of the NATO and CENTO alliances, some others progressive democratic nations, and others which are under the influence of the United States. As regards strategic significance in this TSMA, the importance of the Black Sea, Bosphorus, Dardanelles, Bab-el-Mandab, Suez Canal, and the western parts of Mediterranean Sea, where the USA fleet is deployed, are worthy of note.

COUNTRIES INCLUDED IN THE TSMA The Near Eastern TSMA includes the southern region of the USSR (Caucasus and Crimea), Iran, Turkey, Egypt, Saudi Arabia, Iraq, Lebanon, Cyprus, Yemen, Kuwait, Bahrain, Qatar, Sudan, Ethiopia, Mali, Israel, Syria, Oman, Muskat, and French Somalia. Water areas include the Caspian Sea, Black Sea, Sea of Azov, part of the Mediterranean Sea, and the Red Sea.

Syria, Iraq, and Yemen are progressive and anti-Capitalist countries. Turkey and Iran are members of the CENTO Pact. Israel is very aggressive and is an arm of the United States. Saudi Arabia and a few other coastal countries of the Persian Gulf are under the strong influence of the imperialist powers. Within the limits of the Near Eastern TSMA there are various seas, such as the Black Sea, and the Dardanelles and

Bosphorus Straits. The Suez Canal and the eastern part of the Mediterranean Sea, where naval bases of NATO and Israel are constructed, are of great significance.

MILITARY-POLITICAL SITUATION IN THE TSMA The main factors determining the military-political situation in the TSMA are the following:

- USA and British policies directed toward aggravating the situation;
- the Near Eastern crisis and the role of Israel in the context of imperialist plans, and the relationship of this to the Capitalist powers;
- the CENTO bloc, its composition and impact on military-political situations in the TSMA;
- the anti-Soviet policy of China and its impact on the situation in the Near East;
- disunity among the individual developing countries;
- policies of developing countries and their influence on situations in Asia;
- Pakistan's break with CENTO;
- the Near Eastern crisis and its impact on relations between Capitalist nations regarding the issue of Near Eastern oil;
- the policy of the USSR and Socialist countries, which is based on friendship with developing countries and attempts to establish a regional security system in Asia.

The military-political situation in the TSMA is complex and full of tension. The factors contributing to this tension are:

- Israeli invasion of Arab territories;
- attempts by the USA to support the reactionaries;
- struggle of developing countries for their independence;
- seizure of important sources of raw materials and markets by Western monopolies and their attempts to keep them in their hands;
- aggravation of differences among major Capitalist countries over the domination of markets and oil sources;

- deepening and further development of national liberation struggles of the people;
- expansion and strengthening of the USSR's and Socialist countries' role in the socio-economic and political development of Near Eastern nations;
- imperialism's support of Israeli policies and rendering of assistance to Israel;
- the extension of the CENTO bloc for safeguarding the interests of imperialism.

The CENTO military bloc is another factor affecting the political situation in the Near East. Turkey, Iran, Pakistan, and England are members of CENTO, while the USA has representation in that bloc; however, in fact, CENTO is led and controlled by the United States. The USA employs the CENTO bloc against the Soviet Union. It is also a means to establish American domination in the Near East. The 1967 Israeli-Arab War was jointly planned by Israel and the USA.

The objective of imperialism in the Near Eastern TSMA is to overthrow the Egyptian and Syrian governments, crush national liberation movements of Arab nations, weaken Soviet influence in the area, strengthen the influence of imperialist countries, control the Suez Canal and economy of Arab countries, and occupy the oil sources of the Near Eastern countries.

Near East Crisis and the Role of Israel in Imperialist Plans: Primary Political Aims of the 1967 War

- liquidating progressive regimes in Egypt and Syria;
- crushing national liberation movements and unity among Arab nations;
- weakening the influence of the USSR in the Arab East;
- strengthening the position of imperialism;
- establishing control over the Suez Canal;
- furthering the expansionist aims of Israel and attempting to inflict losses on Arabs, expand Israeli territories, and provide the circumstances to be recognized by Arabs.

The United Nations Security Council passed a resolution on 22 November 1967 in response to a call by the USSR, which

condemned Israeli aggression against the Arab states and called for the withdrawal of its forces from occupied territories. The resolution also called for a just and peaceful solution of the refugee problem and for the freedom of passage of ships on sea routes of the Near East. Israel, however, did not comply with this resolution.

The USA uses Israeli aggression as a means of establishing its influence in the Near East and Middle East. America is attempting to include Israel in NATO. The Arab countries are endeavoring to liberate their territories and have the national rights of the Palestinian Arabs recognized. The USSR and Warsaw Pact countries are attempting to stabilize the political situation in this region in a just manner, achieve the withdrawal of Israeli forces from Arab territories, and have the legitimate rights of Palestinian Arabs recognized.

Total Military Strength of CENTO Countries

Army Divisions:	37
Tanks:	4,700
Artillery and Mortars:	11,000
Combat Aircraft:	900
Nuclear-Armed Rockets and Aircraft:	264
Atomic Submarines:	18

Economy of Foreign Countries within the TSMA

The economies of foreign countries within the TSMA are generally weakly developed, because this area was dominated for a long time by imperialism. The most developed industries are found in Egypt, Syria, Turkey, Iran, and Israel. However, the level of industrial production, excluding the extraction of oil, is very low [see Table 1 on page 148]. In some Near Eastern countries (Arab Republic of Egypt, Israel, Iran, Turkey, Iraq), atomic energy research has been undertaken in the last few years. Substantial oil reserves have been found in the TSMA, amounting to more than 50.3 billion tons, constituting 70 percent of the oil resources of the Capitalist world. This places

the Near Eastern TSMA in first position in the world with respect to oil reserves. In the Abadan [Iran] oil refinery plants, 26,000,000 tons of oil are processed in a year. In the last few years, oil production has greatly increased. Europe receives 60 percent and Japan 90 percent of their oil from this area. The USA receives 5 percent of its oil from Near Eastern resources; this is expected to reach 40 percent in the next 10 years. The Suez Canal has vital significance in the transportation of oil. Therefore, the Near East oil can considerably affect the military economy of Western countries.

Military industries have been poorly developed in the TSMA. Only Turkey, Iran, Israel, and Egypt possess such industries to some extent. The Turkish, Iranian, and Israeli armies are equipped with aircraft, air defense rocket systems, rocket armaments, radio-technical means, and combat ships. The most important component of their economies is agricultural production, which constitutes 60-90 percent of the national economies. But even such products cannot fully meet the needs of the population. Iran has some surplus in grains and Turkey has a surplus in meat.

Physical-Geographic Conditions of the TSMA, and Their Effects on the Conduct of Combat Actions

Physical-geographic conditions in the TSMA vary. Along the USSR borders with Turkey and Iran run the Lesser Caucasus and Armenian mountain ranges, and the Caspian Sea and Kopet-Dag ranges are located further to the east on the borderland. The first mountain range, along the Black Sea, northern Turkey and Iran, and Afghanistan, stretches for 900 km, with only five passes. This area is defended by the Third Turkish Army and Iranian forces. The second mountain range, in the southern part of Turkey, stretches to the southern regions of Iran, constitutes the second defensive line of NATO, and defends oil sources against threats from the north.

Deserts and semi-deserts occupy almost half of the territories in the TSMA. Vegetation is extremely sparse. Troop *maskirovka* is difficult. The seas and gulfs occupy 20 percent of the area of the theater, and thus provide conditions for the dispersed disposition of naval bases and for the employment of seaborne landing forces in cooperation with land forces. Narrow straits hinder the maneuver of fleets, and wide stretches of sea coast require significant forces to establish a counter-seaborne defense. The rivers are rapid in the spring, with a considerable flow of water. There are some salt marshes in the TSMA. Large water reservoirs are built in the area, which are used for irrigation and water supply. When there are storms, the reservoirs cause large overflows and inundate large areas. Supplying troops with water is difficult in many areas.

CLIMATE The climate in the TSMA is varied, changing from the mountains to the deserts. In the latter areas, the temperature reaches 70 degrees centigrade.

PRECIPITATION Precipitation in the TSMA is from 50 to 150-200 mm a year.

Armed Forces of Capitalist Countries and Preparation of the TSMA in Operational Aspects

ARMED FORCES OF CENTO CENTO headquarters is in Ankara [Turkey]. CENTO's actual control remains in the hands of the USA. The main attention is oriented toward the national forces of Turkey, Iran, and Israel. Much attention is given to tank forces and air forces. Military actions to improve the capabilities of CENTO include:

- achievement of reorganization and rearmament of the armed forces;
- training of personnel, commanders, and staffs;
- preparation of territories of CENTO countries in operational aspects, i.e., the determination of operational regions and directions, construction of road communica-

tions, command posts, engineer works (fortifications), air defense systems, peacetime disposition of units etc.

The Israeli army is organized in three commands (military districts): Northern, Central, and Southern. There is an Air Force Command, Naval Command, and also a Territorial Force Command. Israel maintains 13-14 brigades in peacetime and can mobilize 41 brigades in wartime. Egypt has 10 army divisions. The main attention is concentrated on the development of tanks and air forces.

In Iran three army headquarters were disbanded, but two corps headquarters were newly created. The Iranian armed forces consist of ground forces, air forces, and a navy. At the commencement of war the gendarmerie forces come under command of the armed forces; otherwise, they remain subordinate to the Ministry of the Interior during peacetime.

The headquarters of the I Army Corps in Azerbaidzhan was formed on the basis of the First Field Army; and the headquarters of the III Army Corps in Khuzestan was formed on the basis of the Third Field Army. In addition, Iranian forces are deployed in the northeastern part, in Khorasan. In the five-year development plan of the Iranian armed forces, the following formations have been anticipated: nine existing divisions, six new divisions (including three armored divisions, two infantry divisions, one Shah's Guard Division), and six separate brigades. In addition, the formation of four reserve divisions (three infantry and one armored division) and three field army artillery groups is planned as well. Reserve formations are to constitute the second echelon of the army. Appropriate measures are taken to strengthen the air force and air defense system. Thus, on the basis of air force equipment received from the USA, the rearming of the Iranian armed forces with F-5 and, partly, F-4 "Phantoms," and activation and formation of six air defense rocket battalions for the PVO are almost fully accomplished. Actions to modernize and increase the ships of the navy are realized by the supply of military ships from Britain and the USA. The northern and southern regions are covered with radar scanning and surveillance.

The regions largely consist of mountain-desert terrain. The coordination between Iranian and Turkish armies is hindered by the Kurdistan mountain range. Maneuver of forces and supporting means in joint operations of Iranian and Turkish armies is further impeded by large distances between them and poor development of communications lines and transportation.

American and British forces, as part of CENTO, are deployed in Turkey, Cyprus, the Persian Gulf, islands of the Indian Ocean, Greece, and the Mediterranean Sea, where the 6th USA fleet and 16th USA Submarine Squadron are located. The mobilization capability of Turkey reaches 2.5-3 million, while Iran can mobilize 1.5-2 million men. The morale-political condition of personnel is low. Religion has a large influence on the behavior of the personnel.

Preparation of Foreign Territories of the TSMA

The preparation of the territories in operational aspects depends on the strategic significance of physical-geographical conditions and the terrain. In the past, communication lines have been prepared from the Arabian Sea up to the Soviet border. Along these lines military bases and command posts for forces and means have been created. On the territories of the TSMA, air defense rocket bases and armaments and materiel depots have been constructed, while airfields, air bases, ports, and naval bases are expanding. Defensive lines and areas, command posts, and communications are established.

In Turkey, Iran, and Israel, special attention is paid to the airfield network, which numbers about 220. Of these, 90 are equipped with runways of more than 1,800 meters in length. If each of the [90] airfields is credited with 15-20 aircraft, the entire airfield network of the area will base 1,350-1,800 aircraft. In northern Iran, along the Soviet-Iranian border, three defensive lines are established, having a depth of 150-200 kilometers.

Strategic Directions and Regions in the TSMA:

The Near Eastern TSMA includes important strategic directions and regions.

STRATEGIC DIRECTIONS The TSMA has three strategic directions: the Balkan, Caucasus-Turkish, and Iranian strategic directions.

Balkan strategic direction:

- the Stara Zagora – Istanbul – Ankara operational direction with an operational density of one army;
- the Plovdiv – Chanakkala – Izmir operational direction with an operational density of one army. [The Balkan strategic direction was included in the Near Eastern TSMA portion of the lecture even though it is more closely associated with the Southwestern TSMA. The operational directions were provided by Colonel Wardak based on separate Academy instruction.]

Caucasus-Turkish strategic direction: This includes the western and central Transcaucasus and eastern part of the Black Sea, east central regions of Turkey, Syria, western Iraq, Israel, and western part of the Arabian peninsula. The width of this direction is 1,000-1,500 km and the depth reaches 800-1,000 km. Large groupings of land forces and fleets can deploy and operate on this direction. This strategic direction involves three operational directions, all of which may have an operational density of two to three divisions:

- coastal direction;
- Leninakan – Erzurum direction;
- Yerevan – Diyarbakir direction. [Data on operational directions provided by Colonel Wardak based on separate Academy instruction.]

Iranian strategic direction: This includes the eastern parts of the Transcaucasus and southwestern parts of central Asia. The foreign territories of this direction include Iran, the countries on the eastern part of the Arabian peninsula and Persian Gulf. The width of the direction is about 2,500 km and its depth, down to the coasts of the Arabian Sea, 2,500-3,000 km. On this direction significant groupings of military forces can operate along the operational direction, each having limited

space for the deployment of armed forces. Generally, the strategic direction is characterized by great width and depth. The roads are poorly developed and the terrain is of a rugged nature. The operational-strategic objectives on the direction are usually located at great depth and are isolated by natural obstacles. This strategic direction involves six operational directions, all of which may have an operational density of two to three divisions;

- Nakhichevan – Kermanshah direction;
- Dzhulfa – Tabriz direction;
- coastal direction;
- Kizyl-Atrek – Tehran direction;
- Ashkhabad – Semnan direction;
- Mary – Zahedan direction. [Data on operational directions provided by Colonel Wardak based on separate Academy instruction.]

Strategic Regions

The Near Eastern TSMA does not have major industrial centers. The area is partly developed and consists of impassable natural obstacles. The communications network is not sufficient and the signal means are poorly developed; it mostly depends on other countries and economic regions of the world. Despite these drawbacks, this region has important strategic significance. The Near Eastern TSMA can be divided into the following strategic regions:

- Turkish-Greek region
- Eastern Turkish region
- Iranian region
- Syrian-Israeli region
- Saudi Arabian region
- Suez region
- Persian-Arab oil region
- South Arabian region

Each region has its own characteristics and significance. They are closely connected with one another and with the other TSMAs.

Turkish-Greek strategic region: The area is 1,200 square kilometers, of which 200 square kilometers is water surface. It includes the important administrative-political and economic centers of Turkey, Greece, and Cyprus. The Headquarters of CENTO (Ankara), as well as other headquarters of NATO formations and fleets, are established in the region. The CENTO countries have significant armed forces, in terms of being equipped with modern weapons and sophisticated equipment. They are deployed in vital strategically prepared areas. Therefore, they are expected to show strong resistance. Their established status of air defense, command posts, and signal communications further reinforce their stability. The strategic significance is determined by the Black Sea Straits, Greek islands, and the naval, air, and ground forces in the area.

Iranian strategic region: This includes principally the economically developed areas of the western and central part of Iran and areas contiguous to Soviet territory, where deployed forces comprise tactical aviation bases, the southwestern forces which include troops of the 2nd Army Corps, and small naval forces. In this area there is also the most important oil center of the Middle East. The northern area of the region is prepared in terms of engineer works to a distance of 150-200 km.

The strategic significance of this area is determined by the existence there of major forward military airfields, naval bases, and ports for oil shipment, as well as important administrative-political and economic centers (which include the most significant oil region of the Middle East centered at Abadan) and also a complex network in which the bulk of the Iranian Armed Forces are deployed.

Eastern Turkish strategic region: This includes eastern Anatolia and the Black Sea coastline. The region is prepared in terms of engineer works to a depth of 270-300 km.

Syrian-Israeli strategic region: includes Syria, Lebanon, Iraq, and Israel, which is a member of CENTO. Oil resources and oil pipelines are the important features of the region.

Saudi Arabian strategic region: This region is the center of maritime communications between the east and the Mediter-

ranean Sea. The significance of the Suez Canal is connected with the political situation in this region.

Persian-Arab oil strategic region: This includes the countries of the Persian Gulf. The USA and Britain attempt to keep in their hands the most important oil resources located in the Persian Gulf. Twenty airfields are prepared on Saudi Arabian territory, and USA and British forces are deployed at the naval bases of the region.

South Arabian strategic region: This includes Ethiopia, Yemen, the western part of the People's Democratic Republic of Yemen, Northern Somalia, and the Strait of Bab-el-Mandab. The population of the region is 30 million. The region is located on the maritime lines of communication between two continents—Asia and Africa.

XI. Middle Eastern Theater of Strategic Military Action

This TSMA occupies a vast land and water region in which one-quarter of the world's population lives. The Middle Eastern TSMA connects Eurasia, the Far East, and South Asia together. Major global land, air, and naval routes pass through this TSMA. The USA and imperialism are attempting to prevent further development of national liberation movements in this TSMA.

Composition, Boundaries, and Strategic Position of the TSMA

The TSMA consists of the following 14 states: Central Asian Soviet Socialist Republics (Kazakhistan, Tadzhikistan, Turkmenistan, Uzbekistan, Kirghizistan), Iran, Afghanistan, Pakistan, India, Bangladesh, Nepal, Burma, Sri Lanka, the Maldives, Kuwait, Bahrain, Qatar, United Arab Emirates, and part of China (Sinkiang, Tibet, Hausi, and Tsinkhai).

The dimensions of the TSMA are 5,400 km from north to south and 5,000 km from west to east. The area is 21.2 million square kilometers, of which 5.8 million square kilometers (27 percent) is water surface. The population is 780 million.

Physical-Geographical Conditions

The TSMA has formidable physical-geographical conditions. Up to 40 percent of the total area of the TSMA consists of barely passable mountain systems. Deserts and semi-deserts cover 10 percent of the territory of the TSMA. Two massive mountain ranges are located in the TSMA to the south of the Soviet boundary:

- —the Elbruz-Khorasan-Turkman mountains, Pamir, and Tien Shan, with a height of 1,500-5,000 meters;
- —the Zagros, Suleiman mountains, and Himalayan range 2,000-7,000 meters high.

These mountains have limited passes and saddles without motor transport or railroads. The climate in the mountainous parts of the TSMA is continental and dry. India, Pakistan, and Burma are bounded by the Himalayan range on the north and by the Indian Ocean on the south. Sri Lanka is an island off the southern coast of India. In India railroad communication is more developed. Its climate is severely hot with higher humidity. Large rivers run in this part of the TSMA. In the maritime part of the TSMA, wide use of naval forces is possible. The wide expanses of mountains, deserts, rugged character of the terrain, continental mountainous dry climate, limited roads, and difficulties of water supply in some areas combine to produce great influences on the character, methods, and forms of combat actions. Strict consideration and assessment of these features are required.

For the purpose of conducting combat actions in high mountain and mountainous-desert terrain, specially organized and prepared forces are required, which are lightly equipped and provided with highly maneuverable transportation. Special medical-hygienic preparation is required when operating in areas with hazards of infectious disease.

Political Situation in the TSMA

The disposition of political forces in the TSMA is generally complicated. An important stabilizing influence is provided in this area by the USSR, which extends assistance to the developing countries of the TSMA. National liberation movements are rapidly developing here. Imperialism creates disputes among the developing countries. The agreements between China and American imperialism concerning anti-Soviet moves further complicate the situation. Capitalists and imperialists have been endeavoring for a long time to keep their supremacy over this area. Poverty, illiteracy, religion, and multi-nationalities in the countries are the facts which have been exploited by imperialism.

After the Great October Socialist Revolution and following the end of WWII, many countries of the area, such as India, Bangladesh, Sri Lanka, Burma, and Afghanistan, achieved their independence and decided on a path of non-alignment for their future. So far, territorial disputes have not been completely settled between Pashtunistan and Pakistan, Pakistan and India, India and China, and Iran and Iraq.

Imperialism supports the reactionary forces in these countries and has created the CENTO bloc against the USSR. Imperialism economically and politically exploits a number of countries like India, while China supports Pakistan. The 1971 (3-16 December) war between India and Pakistan ended with the emergence of Bangladesh as a sovereign state. The USSR is extending assistance to the countries in the Middle Eastern TSMA. It supports the reinforcement of independence among the nations and strengthens the idea of peace and socialism.

Economy of Foreign Countries in the TSMA

The economy of the Middle East countries is generally underdeveloped due to the prolonged supremacy of Capitalism, although Iran, India, and Pakistan have a relatively developed industry. Agriculture constitutes the main economy of almost all the developing countries. It is poorly practiced, has a low

technological base, and cannot produce even the minimum requirements sufficient for the population. In a good harvest year Iran imports 300,000-500,000 tons of grain, Pakistan 1,500,000-2,000,000 tons, and India 4,000,000-6,000,000 tons. The productivity of agriculture in these countries is 11 times less than in Capitalist countries.

MAIN ITEMS OF PRODUCTION

	India	*Burma*	*Afghanistan*
Population (millions)	560	28.9	17.5
Energy (million kilowatt-hours)	74.3	0.65	0.46
Coal (million tons)	74.3	0.02	0.135
Cement (million tons)	15	0.2	.073
Cotton (textile million meters)	39-40	16	6.2
Grain (million tons)	105	8.3	3.9

Military industry, excluding Iran, is in a poor state. Only India, Iran, and Pakistan have military industries which can supply the armed forces during peacetime with small arms and artillery pieces. The requirements for other types of weapons and equipment are met by importing them from Capitalist countries.

INDIA India received its independence in August 1947. The economy is 11 percent industrial and 73 percent agricultural. India has 16 artillery, small arms, and explosives manufacturing plants. Since India left the course of following imperialism in 1965, it has constructed 26 military factories including aircraft and tank manufacturing plants. Today, 20-25 percent of India's budget is allocated for military expenditure. The military industrial production is capable of meeting 40 percent of the ground forces' requirements in the wartime. Sixty-six hundred three-ton trucks are produced each year. Another automobile factory is under construction; it will also produce 6,000 motor vehicles a year. India buys its heavy military equipment from foreign countries.

PAKISTAN Pakistan has been an independent country since 1947. It is a Federated Republic. Until December 1971, the republic consisted of two different regions 1,500 km apart. As a result of unpopular policies, East Pakistan cut itself off from West Pakistan and, consequently, weakened the political, economic, and military position of Pakistan. Pakistan is basically an agricultural country, but the grain is not sufficient for the population. Industry is poorly developed and mainly consists of assembling the parts of different machines which are imported from foreign countries. Today, heavy industry, ship building, and military industries are under construction. Significant reserves of useful fossil fuels are found in the country.

In 1966 the USSR extended long-term credit to Pakistan for constructing industrial projects and undertaking geological excavations in search of oil in the country. Today, thanks to aid from the USSR, a metallurgical plant with a capacity of producing one million tons of steel a year, and two electrical appliance factories are under construction in Karachi. In 1970, Pakistan signed trade agreements with Poland, Hungary, Bulgaria, and Czechoslovakia for importing machines and technical equipment from these countries.

Economic development of the country is determined by five development plans (the fourth plan in this series has been undertaken from 1971 to 1975). At the same time, the industrial development of Pakistan depends, to a large extent, on credits received from the USA, the Federal Republic of Germany, Japan, and China. Because of the unstable political situation in the country and conditional aid from Capitalist countries, the tempo of industrial and agricultural development in Pakistan is lower than planned. The military industry is not capable of supplying fully even the artillery weapons and small arms for the armed forces. All modern weapons required for the armed forces are imported, mainly from China, Britain, and the USA.

Armed Forces of the Capitalist Countries in the TSMA

In assessing the grouping of armed forces in the TSMA, the studies and calculations should not be confined only to the countries actually located within the bounds of the TSMA. The existing or potential deployment of the armed forces of the main imperialist countries, the USA and Great Britain, to the Middle East TSMA also must be taken into account. The armed forces of CENTO and neutral countries are deployed in the TSMA.

The regular Armed Forces of Pakistan are 310,000 strong, and its territorial and irregular forces total 68,000. Mobilization potential of the country is three to five million men. The ground forces (280,000 strong) are organized into 12 divisions and 13 separate brigades. There is one separate air defense brigade and 15 separate antiaircraft artillery regiments. All of these large units and units are grouped into three army corps. The divisions and other units are mainly supplied and equipped with American weapons and equipment. The main body of ground forces is deployed at the international boundary with India.

The Pakistani air forces consist of 20 squadrons which include 3 bomber squadrons, 10 fighter squadrons, 4 fighter-interceptor air defense squadrons, and 3 reconnaissance squadrons. The aircraft are American- and Chinese-made. The navy consists of 27 combat ships which include 1 antiaircraft guided rocket cruiser, 2 submarines, 3 squadrons of trawlers and patrol gunboats. The Pakistani Armed Forces, as a whole, are significant for their large personnel strength and their being outfitted with various types of foreign weapons and equipment. The country possesses a relatively large mobilization potential in terms of personnel.

The Iranian Armed Forces consist of ground forces, air forces, and naval forces. The ground forces, numbering 165,000 men, constitute the base. They are formed in two army corps: the 1st Army Corps is in Iranian Azerbaidzhan, and

the 2d in the southwestern part of the country in Khozestan. The mobilization potential is 1.5-2 million men.

The armed forces of CENTO countries are widely isolated by terrain features. The mountain relief of the terrain and almost total absence of maneuver routes hinder the cooperation of the armed forces and limit the capabilities of conducting coordinated combat action at the alliance level. The total mobilization potential of CENTO countries in the TSMA is 8,000,000-10,000,000 men. The USA, as a member of CENTO, seeks to take measures to further improve the organization of the bloc and the outfitting of the CENTO armies with new weapons and equipment.

In the Middle Eastern TSMA, the main military force is the armed forces of the USA and England, which include air forces, naval forces, and special forces contingents being deployed in well-prepared naval and air forces bases. The naval bases of the USA are deployed in the Indian Ocean, on Aldabra, the Seychelle and Cocos Islands, the Diego Garcia Archipelago, and the western coast of Australia. The USA plans to deploy the 5th Naval Fleet in the Indian Ocean. English airfields are located in Oman and on the Maldive Islands. The USA can shift part of its navy and air forces from the Pacific Ocean to this area.

Strategic Regions and Directions in the TSMA

STRATEGIC REGIONS *Xinjiang strategic region (West China)*: This region consists of a mountainous-desert plateau, 3.5 million square kilometers in area, and a population of six million.

Pakistan strategic region: This includes the territory of Pakistan. Its area is 807,000 square kilometers with a population of 50 million. Pakistan also controls one-third of Kashmir which has an area of 88,000 square kilometers and a population of one million. This region [Pakistan] is located between India, Afghanistan and Iran. At the south it reaches the Arabian Sea. The region is separated from the USSR by a 20 to

40-km-wide narrow tract of Afghanistan's territory. The relief of the region is mountainous in the northwest and west, and plains in the Sind Valley. The climate is hot and humid. The transport network is relatively well developed. The length of railroads in the region is 8,800 km, and there are about 70,000 km of motor roads. The industries are poorly developed in this region. Modern industries (such as heavy industry, military and chemical industries, and oil refining) are developed only in the main economic centers of Karachi, Lahore, and Rawalpindi. Pakistan is a member of the aggressive CENTO bloc. Its armed forces, which are quite large in personnel, acquired combat experience during the Indo-Pakistani conflict and can be used for significant, large-scale military actions.

The strategic significance of the Pakistan strategic region is determined by the aggressive politics of Pakistan and its territorial claims against India and Bangladesh, which create a risk of developing into new military conflicts in this TSMA. Moreover, the Pakistan strategic region has access to the Indian Ocean and, through existing ports and naval bases, it can control the communication routes in the Indian Ocean.

Central Indian strategic region: This region is the most developed in terms of economic considerations. Its population is 300 million. The climate is monsoonal and of a tropical nature, with a greater amount of precipitation. The ground relief is mostly plains-type features.

Southern Indian strategic region: This includes the southern states of India and Ceylon [Sri Lanka]. The climate is humid and hot and the ground relief is plains-type.

Bengal-Burma strategic region: This includes Bangladesh, the Indian State of Assam, and Burma. The population is 100 million. The terrain relief of India and Bangladesh is a plain, with marshes along the Ganges and Brahmaputra Rivers. Burma is a mountainous country. Its climate is of a hot monsoon character.

STRATEGIC DIRECTIONS The Iranian strategic direction is examined in the description of the Near Eastern TSMA.

Pakistan strategic direction: Includes the southern area of the Central Asian Soviet Socialist Republics, Afghanistan, Pakistan, and northwestern region of India. The width of the direction is around 3,000 km, the depth to the Arabian Sea is 1,500-2,000 km. The given direction is difficult for troop actions, with difficult mountainous and climatic conditions, absence of railroads, poorly developed motor roads, and disconnected operational directions, all of which create significant complications for troop activities. This strategic direction involves two operational directions:

- Kushka-Quetta operational direction with an operational density of one army;
- Termez-Salang-Peshawar operational direction with an operational density of two to three divisions. [Data on operational directions were provided by Colonel Wardak based on separate Academy instruction.]

Xinjiang strategic direction: Includes the Kazakh and Kirghiz Soviet Socialist Republics, and the western autonomous regions and provinces of China. The width of the direction is over 3,000 kilometers. The existence of mountains and deserts provides favorable conditions for defensive actions and covering Soviet territory. This strategic direction involves two operational directions:

- Sulo operational direction with an operational density of two to three divisions;
- Wu-lu-mu-ch'i operational direction with an operational density of one army. [Data on operational directions were provided by Colonel Wardak based on separate Academy instruction.]

XII. Far Eastern and Northeastern Theaters of Strategic Military Action

The Far Eastern and Northeastern TSMAs have vital military, political, and strategic significance and assume a particularly prominent position among the other TSMAs. They

are the largest of all TSMAs in terms of territory and population. The area of Far Eastern and Northeastern TSMAs is more than 42,000,000 square kilometers and there are more than one billion people living on their territories, which is 1/3 of the total world population. Several major military and political conflicts have occurred in the Far East and Southeast Asia during the last few years:

- during World War II these TSMAs were the scene of a number of the largest campaigns fought on land and sea. The opposing sides employed more than 600 divisions in this area (Japan 267 divisions, USSR against Japan more than 100 divisions). The belligerents employed large naval and air force groupings in the Pacific Ocean (1,500 warships and more than 15,000 combat aircraft);
- from 1945 to 1954 the people of Vietnam led a national liberation war against French occupation;
- in 1950 the United States and South Korea initiated a war in Korea, which continued for three years (1950-53);
- from August 1964 Americans were fighting against the Vietnamese people, and from February 1971 against the people of Laos and Cambodia.

In the past few years the world witnessed the aggression of America against the people of North Vietnam, Burma, and Indonesia. Thus, the Far East and Southeast Asia have been almost constantly the scene of wars and military conflicts initiated by imperialists.

Composition, Boundaries, and Strategic Situation of the TSMAs

The Far Eastern and Northeastern TSMAs occupy the most expansive areas of East and Southeast Asia, Alaska, and their surrounding seas and islands.

The Far Eastern TSMA includes part of the Soviet Union (south of a line from Novosibirsk to Sakhalin Island), the People's Republic of Mongolia, the People's Republic of China, the People's Republic of Korea, South Korea, Japan, Taiwan, the Philippines, the Democratic Republic of Vietnam, South

Vietnam, Burma, Laos, Cambodia, Thailand, Malaysia, and Singapore.

The water surfaces of the area include the Sea of Okhotsk, the Sea of Japan, the Yellow Sea, the East China Sea, the South China Sea, the Andaman Sea, and also a part of the Pacific Ocean.

The dimensions of the TSMA are 5,000 km from west to east and 6,500 km from north to south. The total area of the TSMA is more than 23,000,000 square kilometers including 7,000,000 square kilometers of ocean surface.

The Northeastern TSMA includes part of the Soviet Union (Siberia from Irkutsk to the Chukot Peninsula, including Kamchatka, Sakhalin Island, and the Kuril Islands), Alaska and Aleutian Islands (USA), and Hokkaido (Japan).

The water surfaces of the TSMA include the Laptev, East Siberian, Chukchi, Beaufort, Bering, and Okhotsk Seas, the northern part of the Sea of Japan, and a part of the Pacific Ocean. The dimensions of the TSMA are 8,000 km from west to east and 4,200 km from north to south. The total area of the TSMA is more than 20,000,000 square kilometers, half of which is land surface.

The Far Eastern and Northeastern TSMAs border in the East with the North American TSMA and in the West with the Middle East TSMA.

XIII. North American Theater of Strategic Military Action

The study of North America as an independent TSMA is required and necessary because of the two following factors:

- realignment and correlation of political forces in the international arena;
- development of strategic nuclear weapons and rockets.

The importance of the North American TSMA is determined by the fact that the most powerful imperialist country, the United States of America, is established there. In an analysis of the USA's role and position among the other Capitalist countries, an important fact to bear in mind is that the economic

center and, consequently, the political and military center of capitalism has shifted from Europe to the United States of America.

As a result of bourgeois monopoly supremacy, the United States has been transformed into a reactionary power of the Capitalist world. The ruling authorities of the USA are engaged in preparation for a new world war to destroy the Socialist system and to establish American bourgeois domination over the world. The USA interferes in the internal affairs of other countries.

The principal military and economic bases of contemporary imperialism are established in North America, especially in the United States. Half of the industrial and 3/4 of the total military output of the Capitalist world is produced in United States and Canada. The military and economic potential of the United States has decisive importance in the preparation and execution of war by the imperialist camp. The American share in production of nuclear weapons is 90 percent of the total of Capitalist countries' production. The USA produces 100 percent of the intercontinental missiles in Capitalist countries, as well as 80 percent of the strategic bombers and submarines equipped with nuclear missiles, and 60 percent of the tanks, aircraft, artillery, and combat ships.

The main nuclear strike forces of the imperialist camp, such as intercontinental rockets and strategic bombers, are based in North America, especially in the United States, while the rear bases for nuclear submarines armed with nuclear rockets are also established in that area.

In case of the outbreak of war started by the imperialists, the military production and industry of the United States, as a whole, will be very vulnerable because of their very dense concentration in limited and constricted areas.

Composition, Boundaries, and Strategic Situation of the TSMA

The North American TSMA includes the entire area of North and Central America, the West Indies, Greenland, and Iceland. The total land surface of the TSMA is more than 24,000,000

square kilometers. This area is separated from the USSR by the Bering Strait and from South America by the Isthmus of Panama. The dimensions of its land surface from Cape Barrow in the north to the Panama Canal in the south are about 10,000 km, and from east to west, at its widest portion, more than 6,000 km. The TSMA joins with the Northeastern TSMA at the northwest, with the Atlantic Ocean in the east, and with the Pacific Ocean in the west.

More than 320 million people live in the TSMA, including 210 million in the United States (in 9,400,000 square kilometers), 48 million in Mexico, 22 million in Canada, more than 16 million in the Central American countries, 21 million in the East Indies, about 6 million in British, American, French, and Dutch colonies, 200,000 in Iceland and 50,000 in Greenland.

The population density in various countries and different regions of the TSMA is not uniform. The average density in the United States (excluding Alaska) is 25 persons per square kilometer; however, in some northeastern areas of this country the density reaches as high as 300 per square kilometer, while it is as low as only 2-3 per square kilometer in western mountainous regions. The population is composed of different nationalities with different education levels and different religions. The majority of the population is of European extraction. The original American natives constitute a small minority, particularly in the United States and Canada. They suffer from racial discrimination and are often forced to beg and ask for charity to make their living. Generally speaking, their race is declining toward extinction. The black population lives under hard conditions. They are the descendants of those blacks brought to America from Africa as slaves in the 16th and 17th centuries.

Natural conditions in North America are very different from place to place. The central part of the continent consists of vast plains which end in hills in the east and join the high mountain ranges in the west. The northern parts of the continent consist of unvegetated open areas with cold weather, long polar days and nights, frozen surfaces, and perpetual marshes. These

arctic areas change into vegetated and wooded areas in the south, which further to the south transform into wide plains consisting of steppe-type terrain and farming fields. The southern extremity of North America is an equatorial region covered with dense jungles, marshes, such as the Florida Peninsula, Mississippi River Delta, and deserts such as Mexico, the southern part of California, and Arizona.

The climate of the North American TSMA is not similar in all parts, but varies because the TSMA stretches into three climatic areas: cold, moderate, and tropical. The coastal areas are dominated by an oceanic climate, while a continental climate prevails within the TSMA. Rivers and lakes play an important role in the life of the North American people, and great economic importance is attached to the Great Lakes (Michigan, Erie, Ontario, Huron, and Superior), Mississippi River, Missouri River, and some other rivers such as the Mackenzie, Yukon, and Columbia.

XIV. Atlantic Ocean Theater of Strategic Military Action

For a long time the Atlantic Ocean has been the scene of major wars. During World War I it was the scene of major battles between the German and British navies and their allies. In World War II the important mission of the USA and English navies was to defend the naval routes across the Atlantic Ocean against fascist German submarines.

The advanced means of modern warfare in the oceans include nuclear-powered submarines equipped with ballistic nuclear rockets and winged [cruise] rockets with an extremely long effective range, naval aircraft armed with rockets, and rocket-equipped ships. These means and equipment have increased the role and position of naval actions, to a large extent, in oceanic TSMAs. The Atlantic Ocean TSMA has prominent importance in modern times among the other oceanic TSMAs. This importance is derived from the new disposition of political forces in the international arena. The USA and English command authorities use the Atlantic Ocean as a bridgehead for the deployment of their nuclear strike forces,

such as submarines armed with nuclear rockets and aircraft carriers, all of which are directed against Socialist countries. These countries also consider the Atlantic Ocean the most favorable route to exploit underdeveloped countries.

The geographic position of the Atlantic Ocean is significant in that it separates Europe from the United States. The USA has a strong navy, the mission of which is primarily to conduct naval actions in the Atlantic Ocean. American fleets are capable of attacking targets in European Socialist countries with nuclear strikes. The coasts of the Atlantic Ocean are occupied by Capitalist countries who are members of the NATO Pact. Sea and air routes, which connect the United States with its NATO allies in Europe and provide communication lines to sources of strategic raw material in Latin America, Africa, the Near East, and Middle Eastern countries, pass across the Atlantic Ocean.

The Soviet Union has access to the sea at the very northern part of its territory. At the western end of Atlantic Ocean and in close proximity to the USA is the Socialist Republic of Cuba. The Soviet Union and other European Socialist countries maintain their foreign economic relations and maritime trade with American, African, Southeast Asian, and Far Eastern countries through the Atlantic Ocean. Extensive fishing activities are carried out in the Atlantic Ocean.

In case of a general global war with the use of nuclear weapons, the fleets of Socialist countries can use the Atlantic Ocean for delivering heavy nuclear rocket strikes against military targets inside enemy territory. Thus, the situation in the Atlantic Ocean TSMA would be difficult and of a varying nature. Both nuclear and non-nuclear military actions can be carried out there in case of a general war.

Composition, Boundaries, and Strategic Situation of the TSMA

The Atlantic Ocean TSMA consists of the Atlantic Ocean, the Greenland, Norwegian, Barents, and Caribbean Seas, and the coastal regions of Europe, Africa, and North and South America. The boundaries of the Atlantic Ocean with the Pacific

Ocean are determined by the longitude running through Cape Horn, and with the Indian Ocean by the longitude running through the southern Cape of Africa.

The total area of the Atlantic Ocean (including Greenland, the Barents and Norwegian Seas) is about 98,000,000 square kilometers. The longitudinal length of the TSMA extends from the Arctic to the Antarctic Circle. The distance between important points across the Atlantic Ocean are as follows:

- Gulf of Kola (USSR) to Cape Horn – more than 14,000 km;
- Florida to Gibraltar – 6,850 km;
- New York to London – 6,200 km;
- African coast to the South American coast at the narrowest point – about 3,000 km.

Because of the large dimensions of the TSMA, much time would be required for the deployment of naval forces in the TSMA. Therefore, 6 to 8 days are required for the deployment of nuclear-armed submarines, large naval strike forces, and aircraft carriers from the Atlantic Coast naval bases to the Norwegian Sea, and 10 to 14 days for the movement of transport ships from America to West European ports.

The Atlantic Ocean is relatively one mass unbroken by gulfs or land capes. The major seas and gulfs are located at its very northern edges. There are many islands in the Caribbean Sea. The Greenland Archipelago, Iceland, and the Faeroe and Shetland Islands, as well as the straits between them, are of important strategic significance. The USA and English commands are planning an anti-submarine blocking line in the Atlantic Ocean to prevent the access of Soviet submarines from bases in the Barents Sea.

The Atlantic Ocean TSMA connects the North American TSMA with Europe and joins Africa with South America.

XV. Pacific Ocean Theater of Strategic Military Action

The Pacific Ocean TSMA occupies an important position among the adjacent TSMAs in this part of the world, where

at one extreme Socialist countries are confronting Capitalist nations, and at another lies an area which has long been the scene of opposition and conflicts between large imperialist countries. For example, the USA and Japan have rivalries that have continued for years in the political and economic fields.

The 1941-45 USA-Japanese War was mainly conducted in the Pacific Ocean TSMA. After the destruction of the USA fleet at Pearl Harbor in December 1941, the Japanese landed large seaborne units in the Philippines, Malaysia, Indonesia, and a hundred other islands. The United States, after restoring its naval forces, reoccupied its lost territories and systematically cut the sea routes which were used by Japan to feed its war economy.

The commitment of the Soviet Union into the war, which destroyed Japan's Kwangtung army in Manchuria, forced the unconditional surrender of Japan. Presently, Japan has revived again and is rapidly developing its armed forces. The United States has helped the restoration of Japanese militarism, with the aim of exploiting the military and economic potential of Japan, like other countries of the region which are USA allies against the Soviet Union, and is crushing national liberation movements in the Far East and Southeast Asia.

Composition, Boundaries, and Strategic Situation of the TSMA

The Pacific Ocean TSMA consists of the Pacific Ocean with its surrounding seas, the coastal regions of Asia, America, and Australia, and a large number of islands and archipelagos. The Pacific Ocean is located between the North American, Far Eastern, and Northeastern TSMAs.

The main feature of the Pacific Ocean TSMA is its huge size. Its dimensions are from north to south 15,800 km and from east to west, 19,500 km. The distance between Vladivostok and San Francisco across the Pacific Ocean is 8,600 km, from Petropavlosk in Kamchatka to the Panama Canal, 14,000 km, and from Manila to San Francisco, 11,500 km. The total area of the Pacific Ocean with its surrounding

seas is 180,000,000 square kilometers, which is 1/3 of the global surface. The area of the Pacific Ocean is twice as large as the Atlantic Ocean and three times larger than the Indian Ocean. Considering the great distances and huge dimensions of the Pacific Ocean TSMA, specific capabilities in terms of space and operational ranges of aircraft and ship actions are required, which, in turn, change the nature of armed forces' operations.

The Pacific Ocean's coasts are dotted by different countries. The total population of these countries is more than 1.5 billion. On the Asian coast of the Pacific Ocean, from the Bering Strait down to the South China Sea, the following Socialist countries are located: the Soviet Union, the People's Democratic Republic of Korea, the Democratic Republic of Vietnam, the People's Republic of China. The imperialist countries maintain various types of social structure, political regimes, and governments. Their bridgeheads are in South Korea and South Vietnam. On the American coast of the Pacific Ocean there are the United States, Canada, and the Latin American countries. In the western part of the TSMA, we see Japan, Australia, New Zealand, the Philippines, Indonesian Republic, and some other small countries. The USA, Britain, and France have occupied most of the Pacific islands or established control over them.

Table 1 Military, Economic, Geographic, and Demographic Data for Selected Continental TSMAs

INDICES OF PRODUCTION FOR BASIC TYPES OF INDUSTRIAL PRODUCTS IN 1970 (WESTERN TSMA)

	FRG	*England*	*France*
Electrical energy (billions of kilowatt-hours)	236	246	140
Hard coal (millions of tons)	119	149	37.4
Oil:			
Crude (millions of tons)	8	0.1	2.4
Refined (millions of tons)	105	95	102.5
Natural gas (billions of cubic meters)	5.8	14	100.3
Pig iron (millions of tons)	34	17.7	19.1
Steel (millions of tons)	45	28.3	23.8
Cement (millions of tons)	35	17.1	28.9
Plastics (thousands of tons)	4,590	1,330	1,250
Automobiles:			
Total (thousands)	3,872	2,090	2,750
Light vehicles (thousands)	3,558	1,641	2,458
Tractors (thousands)	103	179	68.6
Ships (thousands of gross registered tons)	1,687	1,237	960

COMPOSITION OF ARMED FORCES IN THE WESTERN TSMA

	NATO Countries (Europe)	*U.S. and Canada*	*NATO Total*	*Under NATO Control*	*Under National Control*	*Countries Not in NATO*
Overall (thousands)	1,300	250	1,550	750	806	1,000
Ground force divisions	26	4	30	23	7	11
Guided rocket launchers	60	118	178	178	-	-
Free flight rocket launchers and atomic artillery	190	440	630	630	-	24
Tanks	4,900	1,300	6,200	5,500	700	2,500
Guns and mortars	8,500	800	9,300	5,100	4,200	14,000
Combat aircraft	1,280	840	2,120	1,630	490	780
On carriers	300	850	880*	760	120	45
Antiaircraft guided rocket launchers	860	530	1,390	1,330	60	160
Combat ships	550	50	600	-	600	300
Naval combat aircraft and helicopters	330	200	530	-	530	190

* [sic.]

Table 1 – Continued

COMPOSITION OF ARMED FORCES IN THE WESTERN TSMA

	FRG	*England*	*France*	*Belgium*	*Netherlands*	*Portugal*
Overall number (thousands)	490	400	570	110	117	200
Ground force divisions	12	5	6	2	2	3
Guided rocket launchers	32					
Free-flight rocket launchers and atomic artillery	150	27	24	26	20	-
Tanks	3,000	700	1,200	430	600	180
Guns and mortars	4,100	1,500	4,100	400	980	1,500
Combat aircraft	470	420	500	140	100	150
On carriers	108	116	45	36	24	-
Medium-range strategic bombers	-	56	45	-	-	-
Antiaircraft guided rocket launchers	430	85	70	120	140	-
Combat ships	180	140	180	30	50	170
Naval combat aircraft	85	150	160	20*	80	24

* [Obscured in original notes.]

GEOGRAPHIC-DEMOGRAPHIC INDICES

	Territory (sq. km)	*Population (millions)*	*Percent of Urban Population*	*Population Density (per sq. km)*	*Mobilization Potential (millions)*
Turkey	781	37.5	36	45	2.5-3
Iran	1,648	29.2	41	18	1.5-2
Israel	20.7	2.9	78	138	0.3
Iraq	448.7	9.5	35	22	0.6-0.7

PRODUCTION OF THE MAIN TYPES OF INDUSTRIAL MATERIAL (1970-72) (NEAR EASTERN TSMA)

	Electric (kw-h)	*Coal*	*Oil*	*Steel (million tons)*	*Iron Ore*	*Cement*	*Textile (million mtrs)*
Turkey	9.7	7.8	3.6	1.5	2.3	7.0	141
Iran	5.5	0.3	254	0.6	1.0	2.5	450
Israel	6.7	–	0.1	0.15	–	1.26	21.4
Egypt	10.0	0.6	20	0.6	0.44	4.0	755
Syria	1.5	–	7.5	–	–	0.7	36
Iraq	3.5	–	67	–	–	1.5	40.4

Table 1 – Continued

ARMED FORCES OF COUNTRIES IN THE NEAR EASTERN TSMA

	Ground Forces (thousands)	*Air Force (thousands)*	*Naval Force (thousands)*	*Total*	*Division / Brigade*	*Tanks*	*Guns & Mortars / Nuclear*	*Combat Aircraft / Support Aircraft*	*Combat Ships*
Turkey	404	45	44	493	20 / 15	2,343	4,464 / 92	306 / 374	168
Iran	165	14	8	187	6 / 5	874	1,380 / 52	283 / 77	55
Israel	125	20	5	150	– / 33	1,500	2,510 / –	412 / 200	50

Note: Israel maintains 13 to 14 brigades in peacetime while in war it can field 44 brigades. Egypt has 10 divisions.

ARMED FORCES OF THE MIDDLE EASTERN TSMA

	Iran	*Pakistan*	*India*
Army corps headquarters	2	3	6
Divisions	7	14	26
Infantry	4	12	24
Armored	3	2	1
Separate brigades	6	13	14
Separate regiments	-	-	4
Nuclear artillery	52	24	-
Tanks	930	1,000	1,270
Guns and mortars	2,270	3,974	5,850
Combat aircraft	238	312	580
Antiaircraft guided rocket launchers	26	-	-
Combat ships	55	37	54
Naval aircraft	-	-	77
Overall number of armed forces (thousands)	189	310	973
Ground forces	165	280	860
Air forces	15	19.5	85
Naval forces	8*	10.5	28

* [Number indistinct. Possibly 9.]

Table 1 – Continued

GEOGRAPHIC-DEMOGRAPHIC INDICES IN THE FAR EASTERN TSMA

	Territory (1,000 sq. km)	*Population (millions)*	*Percent of Urban Population*	*Population Density*	*Mobilization Potential (millions)*
Soviet part	4,070	10.7	-	2.6	-
Mongolia	1,665	1.1	41	0.7	-
China (w/o Sikiang)	6,800	730	17	75	-
PRK	121	11.5	44	95	-
South Korea	94	30	28	300	1.5-2
Taiwan	36	12	-	300	-
Philippines	300	33.5	43	102	1.5
DRV	159	19	10	119	-
South Vietnam	111	16	17	93	1
Burma	678	25	15	36	1.5
Laos	236	2	5	8	0.11
Cambodia	181	63	13	35	0.5
Thailand	514	33	10	64	1.5
Malaysia	132	9.5	30	72	0.5

GEOGRAPHIC-DEMOGRAPHIC INDICES IN THE NORTHEASTERN TSMA

	Territory (1,000 sq. km)	*Population (millions)*	*Percent of Urban Population*	*Population Density*	*Mobilization Potential (millions)*
Soviet part	7,000	7.8	6.2	1.1	-
Alaska and Aleutian Isls.	1,519	.3	-	.2	-
Hokaido Isl. and Japan*	-	-	-	-	-

* [Not recorded.]

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CHAPTER THREE

Preparation of the Territories of Theaters of Strategic Military Action

I. Introduction

The preparation of the territories of a theater of strategic military action is an important part of the preparation of the Armed Forces and the country itself for war, and consists of a large number of organized and practical measures taken by every nation. Such measures are directed to provide the most favorable conditions for the employment of forces at the beginning and in the course of the conduct of war, and to ensure the successful foiling of enemy aggression and his decisive destruction.

Before World War I, the preparation of a TSMA included the establishment and completion of border defense positions and the improvement of lines of communication, primarily the main lines. Before World War II, the volume, content, problems, and depth of preparation of a TSMA widely increased because of the introduction of modern and more sophisticated weapons and means of war. This included the introduction of air forces, mechanization of troops, and changes in the organizations of the opposing sides' armed forces and in the methods and forms of conducting war.

At the present time, the existence of nuclear weapons, their enormous destructive power, their great range, the likelihood of a surprise outbreak of war by the aggressor, and the development and improvement of all types of weapons and combat equipment have widely expanded the dimensions of the TSMA. At the same time, its depth, along with the volume and difficulty of the content of the measures to be taken in preparing the territories of the TSMA, is greatly increased. Moreover, particular tasks to protect troops, targets, and the population are mandatory, and the volume of work in establishing the country's air defense system is widely increased, as are many other new requirements which presently cover the entire depth of each TSMA.

II. Principles of Organizing the Preparation of the Territories of a Theater of Strategic Military Action

The preparation of the territories of a TSMA is conducted in accordance with specific aims and requirements. It is organized in compliance with the unified plan of defensive measures executed by the ministries, civil organizations, and Armed Forces. Preparation of the territories of a theater includes the following:

- preparation of the ground to support the deployment of the Armed Forces and to ensure their high combat readiness;
- establishment of defense lines and shelters for personnel and equipment to protect them against nuclear strikes and other weapons;
- improvement of all lines of communication, the network of depots and bases, and the signal communications system;
- preparation of the area in terms of topogeodesy, meteorology and navigation, and guidance and control.

The principal objectives in preparing the territories of a TSMA are the following:

- ensuring, early in peacetime, the constant combat readiness of the Armed Forces in a TSMA in order to

enable them to successfully accomplish their assigned missions. According to this aim, the main objectives of nuclear weapons readiness are:

- maintaining nuclear delivery means of all Services of the Armed Forces in an active status;
- launching decisive strikes;
- foiling or maximally weakening an enemy nuclear attack and destroying the aggressor in the shortest possible time. For this purpose, nuclear weapons should be secretly deployed and well-concealed, appropriate engineer works should be constructed, positions of rocket troops and airfields must be concealed, and their security and defense should be organized;

- ensuring maximum protection and maintenance of the combat power of troops in all Services of the Armed Forces, the country's population, and rear service installations against enemy nuclear strikes. This aim is achieved *through:*

  - wide dispersal of Armed Forces' groupings;
  - wise utilization of the protective and concealing nature of the terrain;
  - establishment of engineer construction (works) and shelters;
  - application of concealment measures in strategic, operational, and tactical contexts;

- providing favorable conditions for the Armed Forces to repel an enemy invasion, mobilize, and conceal strategic, operational, and tactical advance, maneuver, and deployment;

- ensuring the viability and activeness of the Armed Forces' control system, maximum firmness in the operation of the signal system and the network of lines of communication; providing favorable conditions for an uninter-

rupted supply system of the Armed Forces to replenish them with the materiel and technical means required for the conduct of military operations.

Therefore, the preparation of the territories of a TSMA in modern times should, among other actions, provide the country's Armed Forces with the capabilities of launching a devastating strike against an aggressor by all available means, weaken enemy nuclear strikes to the maximum, repel his aggression, and ensure the preservation of friendly troops and assets for quick deployment into decisive operations in order to destroy completely and rapidly the enemy in the TSMA, with or without the use of nuclear weapons.

In accordance with the aims and likely conditions of conducting military actions, specific requirements are set for the preparation of the TSMA. The main requirements include:

- preparation of the territories of the TSMA conducted in compliance with the nature and specifications of imminent war, the missions of the Armed Forces in the TSMA, and the methods and forms of accomplishing these missions in accordance with the nature of each TSMA;
- constant state of combat readiness of the groupings of the Armed Forces in the TSMA at an early stage (prior to the war) due to the decisive role of nuclear weapons in future war and the threat of their massive and surprise employment by the enemy. These grouping should be capable of:
  - repelling enemy nuclear strikes or attacks by conventional means;
  - inflicting heavy casualties and losses on the enemy;
  - successfully accomplishing their assigned strategic mission.

Accordingly, the preparation of the TSMA is initiated early in peacetime in such a way so as to ensure successful actions of the Armed Forces, under any circumstances, at the begin-

ning, as well as in the course, of a war conducted using either nuclear weapons or only conventional means. Victory in a future war can only be achieved through unified and concerted efforts of all Services of the Armed Forces. Therefore, the preparation of a TSMA should be principally accomplished in the interest of troops of all Services of the Armed Forces. For the purpose of preparing a TSMA, the required forces and means of State ministries, civil administrations and the Armed Forces are employed. The tasks accomplished in this connection by the State ministries and civil administrations include the tasks carried out in the interest of the national economy, as well as the national defense itself. They are as follows:

- establishment of a unified and developed system of lines of communication and transportation;
- preparation of State control and signal communication systems;
- establishment and development of an energy supply system;
- establishment of a developed network of materiel means and bases;
- preparation of a network of factories, bases, and maintenance facilities compatible with restoring technical components of aircraft, armored and wheeled vehicles, etc;
- deployment of a hospital network;
- meteorological, topogeodetic, and navigation support in a TSMA through the establishment of additional meteorological service posts and a network of geodetic benchmarks;
- water supply measures for the troops and population in the theater;
- civil defense measures.

The plan of general State measures is worked out on the basis of the government's decisions depicted in the State plan and implemented by related State ministries. The General Staff of the Armed Forces may prepare and propose specific

suggestions to related State ministries concerning the number and scope of necessary works to be done in a TSMA, the location of objectives and installations, and their concealment and protection. After coordination of all required and proposed measures, they are approved by the government and included in the country's national economic plan. The implementation of the plan is accomplished by related State ministries. Control over the process is exercised by the government. The mission of the Armed Forces in connection with the preparation of a TSMA includes general State actions which ensure combat readiness of all Services of the Armed Forces and provide favorable conditions for operational and combat deployment of the troops, the repelling of an enemy attack, and the successful accomplishment of assigned missions. Planning of the measures concerning the preparation of the territories of a TSMA to be taken by the Armed Forces is conducted by the General Staff of the Armed Forces in the form of routine planning and planning for the future. In routine planning, those measures which help promote the combat readiness of the forces and assets to the maximum, in the framework of their actual organization and configuration, are anticipated and included. Such planning should anticipate their future likely configuration in relation to the changes in the international situation. Planning for the future is determining important measures to be taken as weapons develop and improve, anticipating economic, scientific, and technological progress, and forecasting the development of international relations.

During planning, successive implementation of planned measures, their content, time of execution, and the agencies responsible for carrying them out can be specified. The most important projects required by the Armed Forces which necessitate large government expenditures are to be studied by the government and approved by State authorities. The execution of planned measures are effected by construction agencies of the Ministry of Defense and field forces. The preparation of the TSMA is considered in two categories:

- general State measures;
- Armed Forces' measures.

III. General State Measures for Preparing the Territories of a Theater of Strategic Military Action

Establishment of a Unified and Developed System of Lines of Communication and Transportation

The lines of communication system in a TSMA includes railroads, motor routes, air routes, naval routes, pipelines, and other communication routes capable of ensuring all types of movement in the country in support of the national economy and the Armed Forces, in careful consideration of their increasing requirements and likely casualties and losses in the course of a war. The lines of communication system should ensure the high combat readiness of the Armed Forces, and should ensure troop mobilization and movement. It should also support the movement of allied armies on their own territory, as well as their engagement, along with a continuous supply of troops with required materiel reserves, and should help their evacuation.

The establishment and improvement of the lines of communication system in a TSMA should take into account a number of defensive requirements which the circumstances of nuclear war and the Armed Forces' mission are imposing on us. The main requirements in this connection are the following:

- development and improvement of railroads and motor routes in likely areas and along directions of troop operations meeting the requirements resulting from troops missions. As field experiences indicate, the total requirement for motor routes in the West European TSMA will be 60,000-70,000 km, and if the first echelon *fronts* are to deploy, the total required length of motor communication routes should be 60,000-80,000 km;
- improvement of the capacity of routes to ensure their higher rate of trafficability;
- straightening and leveling of trunk roads, railways, and motor highways;
- bypassing of cites and large lines of communication centers with trunk roads;

- preparation of prefabricated bridging elements to establish alternate crossings over large rivers;
- expansion of the civilian airfield network and establishment of special facilities at the airfields for military purposes;
- establishment of an improved network of trunk pipelines and central pumping stations;
- expansion of repair bases and establishment of reserves of all types of transport means.

One of the important tasks is the preparation of the railroads to ensure the rapid dispatch of trains from Soviet territory to other countries. Since the railroads are of different gauges, it is necessary that a uniform type of railroad in gauge and capacity be established and stretched to the depth of the territories of allied countries, while loading and unloading stations of the same capacity should be established in advance along the railroads. All railroads and motor routes running toward the front in the theater should be stretched up to the borders of allied countries and potential enemy nations, so that by the commencement of war they can be quickly linked with the railroads of the TSMA to ensure the development of success by friendly forces to the depth of enemy territory.

The specific volume and content of the measures concerning preparation of the communication routes will not be the same everywhere, but will be different in each part of the country or in different allied countries. In all cases, the likelihood of the routes being destroyed by enemy nuclear strikes should be taken into consideration. In Europe, many canals and rivers join the Black Sea, Baltic Sea, and North Sea with one another. Therefore, sea and river waterways, integrated in a unified communications system with the land routes, should be prepared in advance. The principal measures in this connection are the establishment of exits, small and large harbors, and the expansion of shipping routes. Particular attention should be paid to totally and effectively utilizing all types of communication routes supporting the rapid movement of the troops, and transloading freight from one transport means to another.

Preparations of State Control and Signal Communications System

This includes the creation and establishment of State and high military authority command posts and the expansion of the signal communications network in the territory of each country. The major requirement of the State signal communications network is its security and reliability in ensuring control of the national economy and the Armed Forces in a nuclear war. The State signal communications network is the main signal communications network for the troops. Therefore, during its development, the following defensive requirements are taken into account and are organized by the General Staff of the Armed Forces:

- the State signal communications network should be more developed in likely deployment areas and along the directions of the operation of the main groupings of Armed Forces;
- the signal network of each country should be linked with the signal communications system of allied countries so that the signal communications network of the Warsaw Pact command is linked with the signal system of the armed forces of its member countries. The integration of all of these signal communications networks is of particular importance;
- the general State signal communications system is organized as a complex, with all signal channels duplicating each other;
- in all allied countries, and in their armed forces in the TSMA, particular attention should be paid to the development and implementation of multi-channel radio relays, underground cables, and ionosphere and troposphere communications which are a more secure, more active, and more reliable means of communications;
- the signal communications system of each country should have reliable energy sources.

Establishment and Development of an Energy Supply System

Providing an extensive energy supply system ensures the combat readiness of the Armed Forces in peacetime and

Marshal of the Soviet Union B. M. Shaposhnikov was Chief of the General Staff in the years preceding the Great Patriotic War and during its initial phases (1937-40 and 1941-42) and served the last three years of the war as Chief of the General Staff Academy. Former Chief of the General Staff N. V. Ogarkov subsequently became Commander-in-Chief of the Western TSMA. Former Chief of the General Staff V. G. Kulikov was later the Warsaw Pact Commander-in-Chief.

B. M. Shaposhnikov

N. V. Ogarkov

V. G. Kulikov

facilitatcs their combat employment in a nuclear war. In establishing the energy supply system in each country, the particular requirements of the Armed Forces in different theaters of strategic military action are generally taken into account. The main requirements in this connection are:

- provision of a stable and constant supply of energy by establishing State and Armed Forces' energy networks;
- viability and activity of the energy supply process in case of a nuclear war.

To meet the aforementioned requirements, the energy network should be all-round (*krugovoi*), and in border areas electricity should be provided through underground cables. In the main electrical power plants of the country, reliable measures should be taken to protect them against nuclear strikes.

Establishment and Early Deployment of the System of Protected Bases of Materiel Means and Depots and Safeguarding of State Materiel Resources

This is undertaken to maintain national reserves of materiel. Such bases and depots are established throughout the country. Within the framework of such a system, stockpiling certain amounts of materiel and equipment allocated to the Armed Forces is taken into account. The number, size, and location of the aforementioned installations on the territory of each country are determined in relation to the combat composition, mission, and likely directions of operations of the groupings of the national Armed Forces and allied combined forces.

In deploying the system of bases and depots, the following are required and should be taken into account:

- establishing materiel reserves; their size in each area should be in accordance with the plans of deployment and the use of the various Services of the Armed Forces and different combat arms;
- constructing bases and depots in an underground protected form;

- dispersing, covering, and concealing installations;
- avoiding the placement of bases and depots in large cities, industrial centers, or in their vicinity;
- providing bases and depots with the necessary road network.

Preparation of a Network of Factories, Industrial Bases, and Maintenance Facilities Compatible with Restoring Technical Components of Aircraft, Armored and Wheeled Vehicles, etc.

This is undertaken in careful consideration of their defense requirements, and is primarily connected with the possible utilization of maintenance facilities to restore various kinds of combat equipment. Therefore, factories, bases, and maintenance facilities are provided with technical equipment required for ensuring access to and from repair facilities.

Deployment of a Hospital Network

The deployment of a hospital network is effected through placement of medical facilities along the directions where the initiation and conduct of military actions in war are anticipated. In such areas, the deployment of special hospitals, detachments of medical personnel, if possible, and their provision with necessary medical equipment are taken into account.

Establishing a Unified Meteorological and Navigational System and Accomplishing the Topogeodetic and Topographic Preparation of the TSMA

These systems are created in the interest of meeting the requirements of the national economy, as well as of the Armed Forces. Such measures include the following:

- establishing a system of meteorological stations and additional posts of meteorological service and geodetic benchmarks in the TSMA;
- organizing a unified cartographic structure of the country in the entire depth of the theater of strategic military

action, producing unified topographic, hydrographic, and economic terrain maps, maps required for submarine operations, and other special maps, catalogues, and instructions.

Water Supply Measures for the Troops and Population

This will be vitally important in preparation for a nuclear war. Preparations related to the water supply system in Socialist countries are conducted beforehand, in peacetime. A detailed survey of the TSMA, including its territories in foreign countries, is conducted to determine underground water reservoirs, and to draw special maps and instructions in this connection. Deep wells are drilled throughout the country, particularly in densely populated, industrial, and military garrison areas, as well as along the likely directions of the operations of the Armed Forces.

Civil Defense

In the territories of each allied country, measures for civil defense are taken, particularly those concerning the protection of the population and the national economy. [A lecture dealing specifically with civil defense will be published in a subsequent volume.]

IV. Measures Conducted by the Armed Forces to Prepare the Territories of a Theater of Strategic Military Action

These measures are specified actions taken in accordance with the characteristics of weapons, missions, composition, and form of combat action of the troops. Such measures are aimed directly at ensuring the combat readiness of operational formations, large units, and units of the various Services of the Armed Forces for successful accomplishment of their assigned missions during the war. These measures can be divided into two groups:

– general measures conducted in the interest of all Services of the Armed Forces;

- special measures conducted in the interest of individual Services of the Armed Forces and their operational formations and large units, consistent with their mission and the actual weapons they use.

The general measures conducted in the interest of the Armed Forces are accomplished principally by special military construction (*boevoe stroitel'stvo*) organizations. Such measures are aimed at developing and expanding the general measures taken by the State and national economy in the interest of the Armed Forces.

These general measures are as follows:

- development and expansion of the road networks, which are prepared principally for the implementation of the national economic plan originated by various ministries and other civilian agencies. Construction of new routes, bridges, bypass roads, upgraded routes, expansion of actual roads, and development of roads in the concentration areas for the troops are accomplished by employing military forces, particularly engineer road construction units. The development of a road network by the troops is conducted to the extent necessary to meet the specified requirements of mobilization and combat missions of operational formations and large units. Additionally, the troops are to maintain the network of roads for military operations;
- reconnoitering for fords and crossing sites, and preparing the construction materials for establishment of crossings needed for reenforcement of existing crossings during the period of threat;
- establishment of command posts of the Supreme High Command, General Staff, operational formations, and large units;
- organization and construction of military field signal links and channels and their connection to the general State signal system;
- redevelopment of the State geodetic network to the required density in the disposition areas and the direction of combat action of the troops;

- establishment of troop materiel-technical reserves, establishment of areas for military depots and bases, and preparation of a water supply system;
- deployment of medical treatment facilities of the Armed Forces;
- conduct of measures in the context of the operational *maskirovka* plan to deceive the enemy on the likely concept of the operation of one's own forces.

In practice, the accomplishment of *maskirovka* aims in modern times is very difficult because of highly developed reconnaissance means and forms. This requires that *maskirovka* activities be conducted very precisely and secretly and that deceptive installations and targets be established continuously and effectively. Moreover, a large quantity of forces and means must be allocated to establish these targets and to conduct missions in support of the *maskirovka* plan. The missions of operational *maskirovka* in the TSMA are conducted in accordance with the General Staff plan by military districts and armies. The important missions are particularly conducted by special large units and units directly under the control of the General Staff. The above are the general measures conducted in the interest of the Armed Forces.

The special measures conducted by the troops in the interest of individual Services of the Armed Forces are addressed below.

Preparation of the Territory of the TSMA in the Interest of the Ground Forces

The principal aim of such preparations is to ensure the constant combat readiness of the troops, create conditions for repelling enemy aggression, quickly initiate decisive attacks, and conduct reserve mobilization and movement.

One principal and two to three reserve troop concentration areas to be occupied on the alert signal are selected and prepared. [This process and associated terminology are discussed in the following "Combat Readiness" lecture.] Movement and maneuver routes are prepared, reserve river crossing means are established, protected signal centers and installa-

tions for rear services organs are created, and materiel reserves are stockpiled.

In the principal troop concentration areas to be occupied on the combat alert signal, only terrain reconnaissance is conducted in advance. While work to prepare maneuver routes and prepare reserves of engineer means to create signal centers and crossing sites can be conducted in advance, all engineer work in the principal concentration areas is conducted only when the troops arrive there after the combat alert signal. The reserve troop concentration areas to be occupied on the combat alert signal are fully prepared in advance.

In order to support the movement and combat action of the troops in the Western TSMA, the experience of exercises shows that the overall length of roads for one first echelon *front* would be 4,000 to 5,000 kilometers. This will include 10 roads going to the *front* line covering the entire depth of the operational formation of the *front* and 4 to 5 lateral routes (*rokada*).

For each first echelon division there are normally two roads, and for each army five to eight roads are established. For rocket units of the Ground Forces, the principal positions are only selected in advance and routes leading to such areas are prepared. The full preparation of the main positions is accomplished when the rocket troops reach the area after the alert signal. The reserve positions for rocket troops and launch positions for the rockets located inside the permanent locations of the rocket forces are fully prepared in advance.

The most important measures are to ensure the repulsion of enemy aggression and the covering of the State boundaries. This mission is conducted by all forces which are combat ready, to include PVOS, Air, Ground, and Naval Forces. For this purpose, defensive lines and positions in the border areas for Ground Forces and systems of obstacles and demolitions are prepared. In some directions, particularly threatened directions, such preparations include trenches, covered firing positions, command posts, and shelters for personnel throughout the entire operational depth of the first echelon forces. The positions are prepared in the form of field fortifications by using prefabricated material made of steel and concrete. The posi-

tions on fortified defensive lines and areas which were already there can be improved or further equipped.

In order to ensure foiling enemy aggression in some directions in the border areas, nuclear mine obstacles can be set up.

Preparation of the Territories of the TSMA in the Interest of the Air Forces

The aim of such preparation is to ensure constant combat readiness of the Air Forces to conduct combat action under all conditions of the combat situation and all weather conditions. For this purpose those airfields providing for the dispersion and secret deployment of all types of aviation and branches of the Air Forces are constantly developed. At the same time reserve airfields and deception airfields are established. On the principal airfields, in addition to the preparation of runway and landing strips, shelters for aircraft, troop control means, and personnel are prepared. The aircraft parking sites can have overhead cover. Near the airfield, depots for ammunition, POL, and other materiel reserves are established. A unified automated system of troop control is deployed and measures for operational *maskirovka* of the air bases are conducted.

The airfield network, troop control system, supply bases, and repair facilities are prepared in advance. The system of airfield bases in the TSMA is prepared in a complex form (with many interrelated parts), so that it can maximize and ensure the simultaneous or successive use of the airfields of all Warsaw Pact nations. The system of airfield bases includes the forward zone (*polosa*) of fighter and fighter-bomber aviation bases of the *front*. The *front* bomber aviation bases are established at a depth of 500-600 km. Further in the depth of the TSMA, areas for Long-Range Aviation and Military Transport Aviation bases are prepared.

The airfield network is prepared by taking into account that each aviation regiment base will include two to three airfields. Out of the total number of prepared airfields the percentage will be as follows:

- permanent airfields – 35 percent;
- dispersal airfields – 35 percent;
- maneuver and reserve airfields – 30 percent.

Based on the plan of operational *maskirovka*, the network of deception airfields, in terms of numbers of airfields, can constitute one third to one half of all permanent airfields.

For the purposes of dispersion of *front* aircraft and for forced landings, wide sections of motor roads can be used. Such sections of roads are specified in advance, during peacetime, and measures to support unimpeded aircraft landing are taken. Such issues are coordinated with civilian ministries. The use of specified areas of motor roads is determined by the directive of the General Staff of the Armed Forces.

Special importance is given to the preparation of the systems of troop control of the Air Forces and ground control and support of aircraft. The command posts are established in the guidance and target designation system. Positions for guidance means, target intersection by radios, and bad-weather aircraft landing systems are selected and prepared in advance. The principal and reserve airfields are equipped with flight control means.

All measures for the development of the airfield network are conducted by special units of the Ministry of Defense.

Preparation of the Territories of the TSMA in the Interest of Air Defense Forces

The preparation is conducted to create the most favorable conditions for secret deployment and aircraft maneuver, and to provide for constant high combat readiness of those large units and units assigned to intercept enemy aircraft violating our space. Also, preparation is conducted to repel surprise enemy space attack and to ensure the viability of all air defense systems.

During the preparation of the TSMA in general, and the territories of each country in the interest of air defense forces, the following main measures are taken:

- advance preparation of rocket deployment areas (principal, reserve, and deception) for air defense rocket troops;
- establishment of an airfield network for fighter aviation of the air defense forces;
- preparation of positions for radio-technical and radio suppression units;
- preparation of protective installations for troop control organs, depots, repair units, and route networks for supply and maneuver of materiel and technical reserves;
- preparation of *maskirovka* measures for combat formations.

To prepare the positions of air defense troops the following requirements must be taken into consideration: positions for all air defense rocket units of the National Air Defense Forces are prepared in advance during peacetime, and in such positions all units of National Air Defense Forces constantly conduct combat (on-call) duty (*boevoe dezhurstvo*).

For the air defense units and large units organic to the ground forces, positions are prepared in advance only for those means conducting combat (on-call) duty. For the rest, the areas for positions are selected, but they are prepared when the troops go out on combat alert and arrive at the designated areas. The positions are prepared by the units themselves.

Preparation of the Territories of the TSMA in the Interest of the Naval Forces [*This portion of the lecture was not transcribed.*]

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CHAPTER FOUR

Combat Readiness of the Armed Forces

I. Definition and Essence of Combat Readiness of the Armed Forces

Combat readiness is a specified state of the Armed Forces, which represents the capability of a force to carry out combat missions at a specified time. In strategic terms, combat readiness of the Armed Forces reflects a state and capability which ensure the desired security of the nation in peacetime and the achievement of specified aims in case of war.

In tactical terms, combat readiness is the capability of large units, units, ships, and subunits for organized commitment into combat with the enemy in the shortest possible time, under all conditions, and for their successful accomplishment of assigned missions. Combat readiness has its quantitative and qualitative aspects and characteristics. The quantitative aspect of combat readiness of the Armed Forces is represented in the number and size of the Armed Forces' components to include:

—the number of units, ships, large units, and operational formations;

- the total number of personnel, weapons, combat vehicles, and equipment;
- the quantity of materiel reserves, etc.

The quantitative aspect should comply with the requirements of future war and the objectives and missions assigned to the Armed Forces by the organs of State policy. The qualitative aspect of combat readiness measures includes:

- the organization of units, ships, large units, operational formations, and the Armed Forces as a whole;
- their state of being equipped with modern weapons, combat vehicles, and equipment;
- the training of personnel,and their psychological, political, and morale status;
- the standard of preparation of commanders and staffs;
- the availability of the required number of units and large units ready for quick deployment and rapid actions.

The basic aim of maintaining high combat readiness of the Armed Forces is to support their readiness under all conditions to launch crushing and decisive blows on the enemy by the employment of all forces. It is to ensure the initiation of decisive attack to foil an enemy invasion, destroy his forces, and achieve the aims of the war. In such a context the meaning and essence of combat readiness is not only the proper and reliable system of warning of the troops at all levels of command, and the constant rehearsal of deployment from permanent military garrisons and movement to specified areas, but also, primarily, the capabilities and competence of units, large units, and operational formations in their organized commitment into combat and successful conduct of military actions under the most difficult conditions of a given situation.

Formerly, high combat readiness was required primarily of first echelon troops, the Border Troops, and air defense troops covering important economic and strategic objectives. But at the present time, high combat readiness is required of the entire Armed Forces, of all subunits, units, ships, and large units, regardless of the areas of their location. Therefore, the

meaning and concept of combat readiness at the present time is far wider than the mere readiness of a limited number of units. Combat readiness has entered the strategic category.

In contemporary times, combat readiness is composed of many factors. It includes a number of measures conducted by the State's political control authorities, commanders and staffs at all levels of command, political organs, Communist Party and Communist youth organizations (*Komsomol*), and all personnel of the Armed Forces. The painstaking efforts of all workers involved in manufacturing weapons and combat equipment are also reflected in this endeavor.

II. Contemporary Requirements for Combat Readiness of the Armed Forces

The requirements associated with combat readiness of the Armed Forces emerge from the assessment of the current military and political situation around the world, and the characteristics of future war, which will be initiated by the imperialists against the USSR and Socialist countries. These requirements widely depend on time and space factors.

The events of recent years indicate that the policy of the imperialists is as reactionary and aggressive as in the past, despite the fact that the forces of imperialism around the world are pressured to decrease tension.

The imperialist arms race against the peace-loving peoples of Socialist countries cannot stop the efforts of Socialist countries to further strengthen and enhance the combat readiness of their Armed Forces.

At the 24th Congress of the Communist Party of the Soviet Union the relationship between building communism and strengthening the Socialist State was clearly described. The successful accomplishment of the task of establishing communism is not possible without the security of the country and the strengthening of the defensive power of the State. Such a strengthening is also dependent on progress in the areas of science, culture, and the economy. L. I. Brezhnev has said:

"The strengthening of the Soviet State means the strengthening of its Armed Forces and promotion of the defensive power of the country. As long as we live in such an unquiet world, this will remain as one of the important tasks." Therefore, combat readiness of the Armed Forces is of special importance for Communist and Workers Parties of Socialist countries and great attention is paid by them to the same.

Also, the nature and character of contemporary wars, i.e., wars with or without the employment of nuclear weapons, have a great impact on combat readiness of the Armed Forces. In nuclear war, the presence of nuclear rocket forces requires that in pursuance of the impact of the initial strategic nuclear strike, decisive military and political objectives are achieved and the future course of the war and its conclusion under specific conditions are determined. In the past, the opposing combatants had the possibility and opportunity to increase and expand their armed forces quantitatively and qualitatively in the course of a war, through military and technological production, for the purpose of supporting their military actions in the war. A decisive victory in war was dependent, to a large extent, on the power of the country, and it was most important to forestall and overtake the enemy in the speed of increasing and expanding the armed forces during a war.

But in circumstances when war may be initiated with the unlimited employment of nuclear weapons, the importance of the above-mentioned rule has changed decisively. Now, the main part of the efforts and actions are concentrated on the initial nuclear strike of strategic forces, and subsequently on coordinated actions by groupings of all components of the Armed Forces.

It must be noted also that such a circumstance does not lose its importance even in a war fought without the employment of nuclear weapons. As the experiences of the Second World War have indicated, the successful accomplishment of initial operations ensured the seizure of the initiative and resulted in the achievement of many political and military objectives at the beginning of the war. In a situation of parity of strength

between the belligerents, decisive superiority in war is achieved by the one which has higher combat readiness and which can employ effectively its forces and means at the beginning of war and forestall and overtake the enemy. Therefore, the ability to concentrate maximum efforts and actions at the beginning of war more vigorously than the enemy is of vital importance in achieving victory in modern times. This determines the necessity for decisive and high combat readiness of the Armed Forces, and the nation as a whole, for a war well in advance.

The specific and concrete requirements of combat readiness of the various Services of the Armed Forces, as well as of the units, large units, and operational formations, will not be the same. Higher and broader capabilities are required from those components of the Armed Forces which are appointed for the following tasks:

- repelling enemy air and space attacks (by PVOS);
- launching of initial nuclear strikes against the enemy (Strategic Rocket Forces, Long-Range Aviation, and submarines equipped with nuclear rockets);
- executing initial operations (Ground and Air Forces deployed in the first operational echelon).

The large units and operational formations organic to the above-mentioned categories of the Armed Forces are supplied, organized, and maintained at full wartime strength and should be able to advance themselves to a level of full combat readiness in the shortest time for the accomplishment of assigned missions.* The notification by alert (*opoveshchenie po trevoge*), given to bring the strategic nuclear forces to the level of full combat readiness, is only some minutes, while, for the units, large units, and operational formations of the various Services of the Armed Forces, such notification will be longer to a great extent. One of the requirements and necessities for maintaining high combat readiness of the Armed Forces under

*[For a discussion of the three levels of combat readiness and measures associated with their attainment, see page 195.]

contemporary circumstances and conditions is the open preparation and readiness of aggressive imperialist states for the surprise initiation of war against the Soviet Union and other Socialist countries. New means and modern methods of action have been introduced to ensure the surprise initiation of war, such as initial strategic strikes and new forms of their delivery, the employment of new types of armed forces, and new combat equipment and vehicles.

It is obvious that the United States and its allies, as part of their preparations to initiate war, established large groupings of armed forces, constructed bases, and prepared staging areas in important TSMAs, and continuously develop strategic nuclear attack means which play an important role in conducting war. At the present time, large groupings of intercontinental ballistic rockets and strategic bomber forces are constituted in the North American TSMA, and strategic aviation bases are prepared in other TSMAs where a part of the forces are continually based and maintained. The Americans have equipped their submarines with more advanced nuclear rockets, and they are conducting combat patrols in the Norwegian Sea, Mediterranean Sea, Atlantic Ocean, and Pacific Ocean.

In assessing the effectiveness of strategic means, special and vital importance is given to their levels of combat readiness. Strategic rockets of the Titan and Minuteman type are always kept at a level of combat readiness requiring one to two minutes to bring them to action. Submarines on combat patrol are maintained at a level of combat readiness requiring 15 minutes to initiate combat actions, while the rest of the submarines are at a level of combat readiness requiring 1-2 days to initiate combat actions. Forty percent of strategic bombers are maintained at a level of combat readiness that enables them to commence combat flights on notice of 15 minutes, while this time is 6 hours for the rest of such aircraft. The pilots are continually conducting practice flights with aircraft loaded with nuclear bombs. In a period of threat (*period ugrozy*) they can form air groupings and launch attacks on specified targets.

According to statistics and calculations, more than 1,000 intercontinental ballistic rockets, up to 500 strategic bomber

aircraft, and 41 nuclear armed submarines with a total of 656 rockets can fire a total of more than 4,000 nuclear rounds against the Soviet Union in a short time, but if we consider the repeated loading of rockets with multiple warheads, the above-mentioned figure increases several times. According to NATO doctrine, for the purpose of launching a strategic offensive in a TSMA, tactical and naval aircraft and operational-tactical rockets are employed in addition to strategic means, and NATO pays particular attention to their combat readiness.

The United States command has established permanent and mobile command posts capable of ensuring the control of forces, particularly strategic forces. It must be mentioned that NATO forces in Europe are in a high state of combat readiness. Twelve divisions at full wartime strength are deployed; these can be reinforced, to a large extent, in a short time. It takes 15-20 hours to deploy such divisions on the border of Socialist countries. Altogether, NATO has at its disposal about 50 divisions. This number can be increased to about 65 divisions. With such groupings of forces, including 10,000 tanks, 12,000 guns and mortars, about 1,000 nuclear capable artillery pieces and tactical rockets, and supported by more than 2,000 aircraft, NATO can initiate combat actions, even without the employment of nuclear weapons, to achieve large political and military aims, and can achieve great successes on the first day of operation.

The potential enemy also maintains its navy with submarines and aircraft carriers in combat readiness in the areas of their possible operations. Therefore, by the presence and availability of such large numbers of nuclear weapons, together with ground, naval, and air forces in a TSMA, the enemy can launch an invasion without announcing mobilization, and without having to concentrate and deploy large groupings of forces beforehand. The aggressors possess unlimited offensive and destructive capabilities by employing nuclear rockets, and will attempt to achieve rapid victory in war. In such circumstances, success will be achieved by the side whose forces are prepared for war in all its aspects, and whose armed forces have higher combat readiness than the enemy.

In the assessment of time and space factors, it must be noted that launching strikes on different targets and objectives does not require days, but hours, and in some cases even minutes. The duration of flight of intercontinental rockets from their bases in America to their targets in the Soviet Union is 25-30 minutes; for Polaris rockets based on nuclear submarines and ships deployed in the North Sea, Mediterranean Sea, and the Norwegian Sea it is 10-12 minutes; and for operational-tactical rockets it is 3-5 minutes. Enemy strategic aircraft can launch attacks from their forward bases, as can aircraft carriers in the Atlantic Ocean and North Sea, within two to three hours. Tactical aircraft can launch their attacks on targets in the USSR within 30-35 minutes. Ground forces can launch an invasion 24 hours after receiving the order. Therefore, as a result of progress and development in the means of war and the methods of conducting war, the possibilities of surprise attack by the enemy have increased significantly. On the other hand, the time for achieving the combat readiness of one's own forces to repel an attack by opposing forces is continually decreasing. All these facts and matters have increased to a great extent the importance of the general question of combat readiness. It reveals the delicacy and sensitivity of the question and the important requirements of combat readiness of the Armed Forces, particularly the means of surveillance and the means of delivering nuclear strikes.

In our time, the expression "delay is the cause of deaths" or "delay is similar to death" has a deep meaning. Only the constant combat readiness of the Armed Forces ensures a successful repulsion of the invasion. Based on the above-mentioned arguments, a number of general deductions can be made. The present posture of political and military forces and the possibilities for surprise initiation of war require very high alertness and high combat readiness of the Armed Forces as the basic means of thwarting the aggressive plans of the imperialists. Therefore, it must be noted that the aggressors can cover and conceal their intentions by publication of false news, diplomacy, and other means. Consequently, the combat

readiness of the Armed Forces should always be very high and should not depend on the military and political situation in the world. High combat readiness of the Armed Forces must not be of "seasonal" nature. Rather, it should be a continual process and must be able, like any other means of modern warfare, to support the initiation and conduct of the war in any season of the year.

III. Principal Measures Ensuring High Combat Readiness of the Armed Forces

The establishment of high combat readiness of the Armed Forces requires that very complex and difficult measures be taken in peacetime. The authorities of political administrative leadership of the State, as well as commanders and political and Party organs of the Armed Forces at all command levels, directly participate in the organization of such measures.

It must be mentioned that achieving combat readiness at all command levels of the Armed Forces requires specific actions. Specific measures in size and content should be taken at different levels of command. The different Services of the Armed Forces and various arms of troops are to carry out various measures and actions. But, at the same time, there are a number of general measures which are of the same importance for all Services of the Armed Forces and various arms of troops that constitute the basis of combat readiness. The most important of such measures are the following:

- ensuring a high political and morale state for personnel of the Armed Forces;
- establishing an adequate and well-developed material and technical base of combat power in the Army and Navy, and providing them with combat equipment and modern weapons;
- ensuring high standards of training for ground, air, and naval forces;
- developing military science in accordance with modern requirements;

- ensuring continuous troop control of the forces and means under the most difficult conditions of the given situation;
- mobilizing the system of political and Party activities, along with the psychological, morale, and physical strength of personnel in support of the execution of the most difficult tasks which can be assigned to them prior to the war, as well as in the course of the conduct of the war.

The aim and content of the measures can be outlined briefly as follows:

- the psychological and political status of personnel is an important factor which ensures combat readiness of the Armed Forces. Therefore, the establishment of high morale in ground, air, and naval personnel should be the routine and daily endeavor of all commanders, as well as political, Party, and *Komsomol* organizations;
- in modern wars, the strain and hardships to be borne by personnel will be very difficult to endure. They will not be the same as in previous wars but unprecedently difficult and severe. Therefore, personnel will overcome such straits only if they possess a strong morale, which will also ensure them victory over the enemy.

Morale and Political Preparation

The aim of morale and political preparation of the personnel of the Armed Forces is to engender the scientific thinking of Marx and Engels in the troops and equip them with Communist idealogy and knowledge about the policies of the Party, State, and Government, as well as the nature, character, and the aim of war for the protection of the homeland.

Psychological Preparation

Psychological preparation, in its essence, is connected with morale-political and combat preparations and should create necessary combat values and qualities in soldiers such as

bravery, courageousness, devotion, sacrifice, psychological resistance, and boldness. It is the duty of commanders and political organs (staffs) to promote the psychological preparation of the soldiers and to reinforce and strengthen it.

Materiel and Technical Base

The materiel and technical base of the Armed Forces and outfitting them with modern and advanced weapons and military equipment is of special importance for Armed Forces' readiness. There is no doubt the economies of Socialist countries have superiority in this aspect. Such superiority, leading to the establishment of a powerful defense capacity, was proven by the Soviet Union in the Second World War. This capability ensures the combat readiness of the Armed Forces to a high degree. The development of weapons and military equipment and means is achieved at an enormous rate of speed under the conditions of economic, scientific, and technological growth of Socialist countries.

Ground, air, and naval forces are being equipped with modern and advanced weapons and equipment and the entire Armed Forces and arms of troops are developing and growing. The weapon systems and equipment, by their organization and qualitative specifications, ensure the accomplishment of all strategic, operational, and tactical missions which may be assigned to the Armed Forces facing imperialism. Victory over the enemy is impossible without modern and advanced weapons and equipment. Therefore, one of the important components of high combat readiness of the Armed Forces is the wise employment of weapons and equipment in combat. To ensure the successful accomplishment of combat missions with fewer casualties, crews and personnel should have rich experience and practical knowledge in the employment of weapons and equipment. Also, the complete and coordinated preparedness of units and formations should be properly and accurately ensured. The maintenance of weapons and military equipment in a combat-ready status and the control of their

preparedness for carrying out combat missions are of decisive importance.

Intensified Training

Modern war requires high standards of military training for the forces and fleets. A combat mission should be accomplished by a minimum of forces and means in a short time, and superiority should be wisely established over the enemy. The enemy must be forestalled and overtaken in deployment, and our strike should be developed. This means that through new tactical methods not known to the enemy, we should wisely undertake various types of combat actions and operations against the enemy and defeat him.

By various types of field exercises, firing training, marches, and by the level of troop training in the Army and Navy, combat readiness should be increased. The improvement of combat readiness does not have a specified limit. It is necessary to constantly advance to higher standards of training. We must also study and assess the posture of enemy forces in the TSMAs.

Military Science

High combat readiness of the Armed Forces is closely connected with military science. Creative application of the deductions of Marxist-Leninist theories, and detailed study and scientific elaboration of the practical experiences of Armed Forces' institutions have particular importance in organizing and properly deciding all matters concerning combat readiness. In recent years, Socialist military science has become richer by new deductions in the areas of strategy, operational art, and tactics. Currently, military science has decisive impact on the military training of personnel. Advanced and progressive theories should not only be systematized, but they must be learned by all officers so that they have unified and common understandings in the areas of building the Armed Forces, the methods and forms of conducting a war, and unified theory

and practice in the training and preparation of the Armed Forces.

Troop Control

Fundamental to the successful accomplishment of combat missions by troops in war and peacetime is the necessity for wise and proper troop control. Firm, active, flexible, and continuous control of the troops by commanders and staffs in combat actions exemplifies the high combat readiness of ground, air, and naval forces. In modern times, troop control is a complicated principle. At present, the firmness of troop control means not only its steadiness and reliability, but also the clear and correct adjustment of a decision in accordance with the rapid changes in the situation. Firmness of control means making timely and accurate decisions, and ensuring the achievement of aims in the best possible way with the fewest losses in troops and combat equipment. Thorough knowledge by commanders in performing their duties constitutes a fundamental of troop control. Troop control must be active, flexible, and continuous.

Mistakes in decisionmaking are very dangerous. Therefore, decisions must be made on the basis of sound arguments and must be timely; planning should be accomplished in a short time; and missions should be assigned to the troops and their execution should be organized. Proper use should be made of computers and technical means of control for such purposes. Commanders and staffs should be trained and prepared, in peacetime, through a routine military training program. One of the important elements of high and constant combat readiness of units and subunits is the firm and continuous work of political staffs, the Communist Party, and *Komsomol* among the masses of the soldiers. The best assistants for the commanders are the Communists and *Komsomol* members, who are at the same time the most specialized and prepared soldiers, distinguishing themselves by their high standards of knowledge and discipline. Their most important duty is to

mobilize the morale and physical capacity of personnel on behalf of accomplishing difficult combat missions. They should set an example in organizing their efforts and activities, thoroughly learn the use of weapons and equipment, and maintain and preserve them very well.

High personnel discipline denotes a high state of troop morale and high status of the troops. This is the main and important direction of the actions by commanders, staffs, political organs, and the Communist Party and Komsomol on the high combat readiness of the Armed Forces. We must not forget such measures and important tasks of combat readiness as the disposition of the troops and fleets; organization of combat and political training; advance establishment of materiel reserves with the troops; proper troop organization; completeness of mobilization preparation of units and formations; advance planning for the combat employment of forces and fleets; preparation of the TSMA; and other measures.

As discussed above, the early provision of Armed Forces' groupings with all types of support and necessities, and preservation of their high combat readiness guarantees, to a great extent, the protection of the country from the consequences of the surprise outbreak of war initiated by the enemy. The Armed Forces are composed of large masses of personnel and equipment, and keeping all of them at a constant level of combat readiness for the purpose of rapid action may not be possible. It is required that they maintain a normal life in peacetime, engaged in conducting their planned military training programs. On the other hand, the actual situation requires that a part of the Armed Forces should be ready for initiating rapid combat action. For example, the Strategic Rocket Forces are ready to begin action on the signal given to them by the Supreme High Command. The various Services of the Armed Forces such as Ground Forces, Air Forces, and National Air Defense Forces are maintained at a level of constant [routine] combat readiness, and, depending on the situation, part of them stand combat (on-call) duty (*boevoe dezhurstvo*) and combat patrol (service) (*boevaia sluzhba*) duties to repel

enemy attacks. Bringing the entire Armed Forces to the level of full combat readiness is conducted gradually, designating specific components of the Armed Forces and their various groupings, according to the degree of enemy threat.

To ensure the timely transition of the Armed Forces under any conditions to a level of full combat readiness, an intermediate combat readiness level is instituted, i.e., increased combat readiness. Transition of units and large units of the Armed Forces from the level of constant combat readiness to the levels of increased or full combat readiness requires a series of measures and actions to be taken. The nature of such measures and actions will be different for the various Services of the Armed Forces. When moving the Armed Forces from a level of constant combat readiness to a level of increased combat readiness, normally the strength of on-call forces and means, duty units (*dezhurnaia chast'*) for combat, and the strength of combat patrol elements are augmented; all systems of communication and combat troop control deploy for action; the responsible duty personnel are specified in command posts; mobilization and combat employment plans for the troops are reviewed and adjusted; materiel reserves are prepared for transport; and other measures aimed at ensuring the rapid and concealed upgrading of the troops to the level of full combat readiness, in order to facilitate the rapid accomplishment of combat missions, are taken. In this phase, secret (concealed) mobilization of some units and large units, the first echelon of central rear services, and the rear services of the Ground Forces, Air Forces, and Navy is conducted; measures are taken for the technical cover of lines of communication, and the dispersal of forces and means is effected. All of the above-mentioned actions, in accordance with available time, are normally taken gradually and secretly under the guise of field exercises and other routine kinds of activities.

In case of limited time, the Armed Forces are brought directly to a level of full combat readiness through notifying units and subunits by combat alert (*boevaia trevoga*) and by open and parallel execution of all measures and actions ensuring the

readiness of troops for the accomplishment of assigned combat missions. At the same time, in accordance with additional instructions, the dispersal of forces and means are achieved, combat support elements deploy, the delivery of nuclear rounds is effected, and other actions are taken as the situation may require.

The main emphasis in moving forces and means to a level of full combat readiness is naturally placed on preparation of maneuver units and large units. As an example, actions concerning the advancement of a cadre division from the level of constant combat readiness to the level of full combat readiness can be as follows:

- warning;
- preparation and intensification of security in permanent military posts;
- movement to concentration (mobilization) areas;
- deployment and dispersal in concentration (mobilization) areas;
- organization of combat support and protection measures and covering of troops against air attacks in concentration areas;
- engineer construction in troop disposition areas and the organization of protection against weapons of mass destruction;
- reception and distribution of military personnel, vehicles, and transport vehicles;
- deconservation of weapons and equipment from covered containers, and their transport to the concentration areas specified for the deployment and dispersal of the division until being brought to full combat strength;
- transportation of materiel reserves;
- preparation of weapons, vehicles, and equipment in concentration areas for combat employment;
- placing of charged and operable batteries in all vehicles;
- preparation and control of individual secret gas masks;
- bringing ammunition to the level of final readiness;

- turning in secret documents to archives;
- turning over the military post and items not accompanying the division.

At the same time, understrength divisions should be supplied and brought to full combat strength during the process of being raised to the level of full combat readiness. Therefore, together with the above-mentioned measures, a number of other actions anticipated in mobilization plans are taken as well.

Topics concerning the transition of the Armed Forces to the level of full combat readiness are studied systematically during all field exercises of the Ground Forces, Air Forces, and Navy. Great efforts are made to shorten the time to achieve readiness. Decreasing the time required for preparation is attempted through an intensification of vigorousness, higher march speed, and higher speed in all actions. If in the past attempts were made not to lose hours, now each minute is to be fully used for the accomplishment of assigned missions. All attempts must be made so that under any conditions, even when the most limited time is available for warning and alerting the troops, troop preparations for combat actions are well organized, on time, and in accordance with the plans. Timely and organized advancement of the Armed Forces to a level of full combat readiness is achieved by the following measures:

- systematic execution of troop and staff exercises;
- establishment of an adequate and timely warning system;
- preparation of units and large units for organized and rapid movement from permanent military posts;
- maintenance of weapons, combat vehicles, and equipment in a combat-ready state;
- early preparation of areas for troop deployment and dispersal;
- establishment of continuous and flexible troop control.

Bringing the Armed Forces to the highest level of combat readiness should be conducted under all conditions in close consideration of the employment of nuclear weapons by the

enemy. All forces and means, all units and subunits, should take necessary actions concerning their protection and the secrecy of the preceding measures. The volume of actions, the time, and the method of their execution during the transition of units, large units, operational formations, troop control elements, and rear services to the levels of increased and full combat readiness are organized in accordance with the instructions of the Minister of Defense and the instructions of the General Staff, as well as in compliance with established troop norms, the given level of readiness, and procedures associated with the various levels of readiness.

All measures and actions pertaining to notifying the troops by combat alert are organized in the form of special plans in each unit, large unit, and operational formation. The best form of such a plan is a graphic illustration of measures and the timing of their accomplishment, which represents each action associated with the alert of units and subunits after the alarm signal; specifies the weak points, the timing, and time reserve; and, therefore, facilitates the transition of the troops to the specified level of combat readiness in the shortest possible time. The accomplishment of measures and actions is systematically reviewed and controlled by conducting test alerts of units and subunits by combat alarm signals.

In the transition of the Armed Forces to the highest level of combat readiness, their firm and continuous control is of particular importance. Control should ensure centralized and simultaneous communication of signals and instructions by the specification of proper measures from the General Staff and their direct communication to the troops. Higher staffs are to strictly control the actions of the troops. In case of surprise attack by the enemy, the commanders and staffs of units and large units should maintain order and control among units and civilians, and prevent panic and disorder.

In troop control, early preparation of command posts, signal centers, and signal lines at all levels by using automated means, particularly to communicate the combat alert warning, has a particular significance. It must be noted that the transition to

a level of full combat readiness for the various Services of the Armed Forces is not the same. Each of them will have specific characteristics and weak points, particularly the elements requiring many measures which will take a long time.

In the Ground Forces, the weak points during the transition to a level of full combat readiness are the deconservation of weapons and equipment, the supply of large units and units in a short time, the lengthy time needed to load ammunition in tanks, movement of troops out of garrison, transport of materiel reserves, difficulties in preparing and moving nuclear rounds, organization of warning, collection (mobilization) of officers, and difficulties in control during the notification of troops by combat alert.

In the National Air Defense Forces, the volume of measures to bring the forces to a level of full combat readiness is relatively small. This means that the air defense system does not change, and that mobilization measures are conducted in a short time. But the difficult thing is maintaining the activeness of air defense weapons and means and organizing radio-technical support and troop control.

In the Navy, the dispersal and rapid movement of ships to the ocean and their support, particularly the support of ships conducting combat patrol [combat service], are the most difficult tasks.

During the period of moving the Armed Forces to the highest level of combat readiness, the measures which must be taken are generally difficult and full of responsibility. This requires the constant action of commanders and staffs at all levels of command, and the troops themselves, to solve all of these questions.

*Levels of Combat Readiness**

There are three levels (*stepen'*) of combat readiness (*boevaia gotovnost'*): constant [or routine] (*postoiannaia*) combat

*[This material is a narrative version of readiness data that appeared in chart form in the Voroshilov General Staff Academy Lecture, "Combat Readiness of the Armed Forces."]

readiness; increased (*vysshaia*) combat readiness; and full (*polnaia*) combat readiness. The actions and measures connected with each level of combat readiness are as follows.

Constant [Routine] Combat Readiness

This is the regular readiness level of a military unit in peacetime. The unit conducts prescribed military training and exercises, military personnel can be assigned to civilian work details, and leaves and passes are granted.

Increased Combat Readiness

The unit is alerted and all leaves and passes cancelled; all military personnel on leave or work details, and units participating in training or exercises, are recalled to the barracks; materiel reserves and organizational equipment are loaded on vehicles in the motor pool and vehicle batteries are re-installed; guard details inside the installation are doubled and organizational air defense units assume firing positions inside the installation to provide air defense of the installation; frequent communications checks between subordinate units and higher headquarters are conducted; all personal and organizational protective equipment, clothing, and masks are inspected; military personnel living outside the military installation are ordered to return and remain in the barracks; the operations group (*operativnaia gruppa*) (consisting of several staff officers and led by the operations officer) leaves the installation and moves to the unit's predesignated concentration area (*raion sosredotocheniia*) where the group establishes itself in a prebuilt command post, establishes communications with headquarters and other operational groups, and conducts nuclear, chemical, and bacteriological reconnaissance of the area; the mobilization group (*mobilizatsionnaia gruppa*), consisting of several rear services officers led by the mobilization officer, moves to the unit's reservist and equipment mobilization center and prepares to operate these centers. Only divisions and higher echelon units have mobilization centers.

Principal Measures for Raising the Status of Troops to the Level of Increased Combat Readiness

- Detachment of operations groups to prepared command posts;
- Recalling troops to garrisons and bases;
- Recalling officers absent on leave and placing them in an on-post accommodation status;
- Establishment of on-call service (*dezhurnaia sluzhba*) regiment;
- Control of warning and communication systems;
- Intensification of reconnaissance activities;
- Intensification of security at military posts, bases, and objectives;
- Taking necessary measures for protection against weapons of mass destruction;
- Achieving a higher level of technical preparation of weapons, combat vehicles, and equipment;
- Loading of materiel reserves on transport means;
- Undertaking special measures concerning rocket troops, air, and naval forces;
- Reconfirming combat alert plans;
- Postponing the release of military personnel from active service;
- Achieving higher readiness of military commissariats for carrying out mobilization.

Full Combat Readiness

The unit is alerted, the soldiers in full field uniforms and with individual weapons report to motor pools, board their assigned vehicles, and each subordinate unit, when ready, leaves the installation individually and moves to the collection point (*punkt sbora*). When the entire unit is ready at the collection point, convoys are formed and the unit moves to the concentration areas, where the individual units secure and camouflage assigned sectors, establish communications, and make pre-combat checks of their equipment. The staff officers,

when authorized by higher headquarters, open sealed envelopes containing the unit's operational plans and make last-minute adjustments or changes as required. The mobilized reservists and reserve equipment begin arriving at unit mobilization centers, where personnel and equipment are processed and then directed to the unit of assignment. When ready, the unit reports its combat readiness status to higher headquarters, and stands by for orders to begin the assigned operation.

Principal Measures for Raising the Status of Troops to the Level of Full Combat Readiness

- Notifying units, large units, and staffs by combat alert (*boevaia trevoga*);
- Deploying and dispersing troops, aircraft, and naval formations in specified areas;
- Bringing weapons systems and combat equipment to combat status (*boevoe sostoianie*);
- Deconserving vehicles and equipment and supplying combat materiel reserves;
- Moving the staffs and military commissariats (*voennyi komissariat*) to the field and deploying command posts;
- Reconfirming the missions of forces and means;
- Bringing control elements, support organizations and services, and maneuver units and large units to full combat strength;
- Other measures (depending on the situation).

*Division Mobilization**

***Collection Point* (Punkt Sbora)**

A unit's collection point is located in a wooded area, generally about two to three km from the installation and along a

*[This material, while presented at the Voroshilov General Staff Academy, did not comprise an integral part of the "Combat Readiness of the Armed Forces" lecture. It is included here because of its pertinence to the combat readiness process.]

highway permitting rapid assembly of the unit outside the barracks and facilitating rapid departure for the concentration area.

Concentration Area (Raion Sosredotocheniia)

Each division has its own concentration area, which is generally located 8-15 km from division installations. The concentration area is prepared in advance, an underground command post is built, communications cables are laid, and positions for heavy equipment dug. The area is divided into sectors and each major subordinate unit is assigned one [see Figure 1 for a sketch of the layout of a division concentration area].

Mobilization Center (Mobilizatsionnyi Tsentr)

Separate division mobilization centers for reservists and for reserve equipment (mainly motor vehicles) are established along a highway, three to eight km from the division concentration area. [See Figures 2 and 3.] The sites of the centers are prepared in advance and consist of several tents of various sizes. When the division is put at a level of increased combat readiness, the mobilization center for reservists is supplied with uniforms, personal weapons, and other military equipment from the division's mobilization reserves. This is done under the supervision and control of division rear service officers. The time limit for reservists and reserve equipment to assemble from the moment they are alerted to their arrival in their unit is 24 hours. Should operations plans call for immediate deployment from the concentration area, the division does not wait for the assigned reservists and equipment, but moves out as ordered, and the mobilized personnel and equipment are transported after the departed units to join them as soon as possible at reservist and reserve equipment mobilization centers.

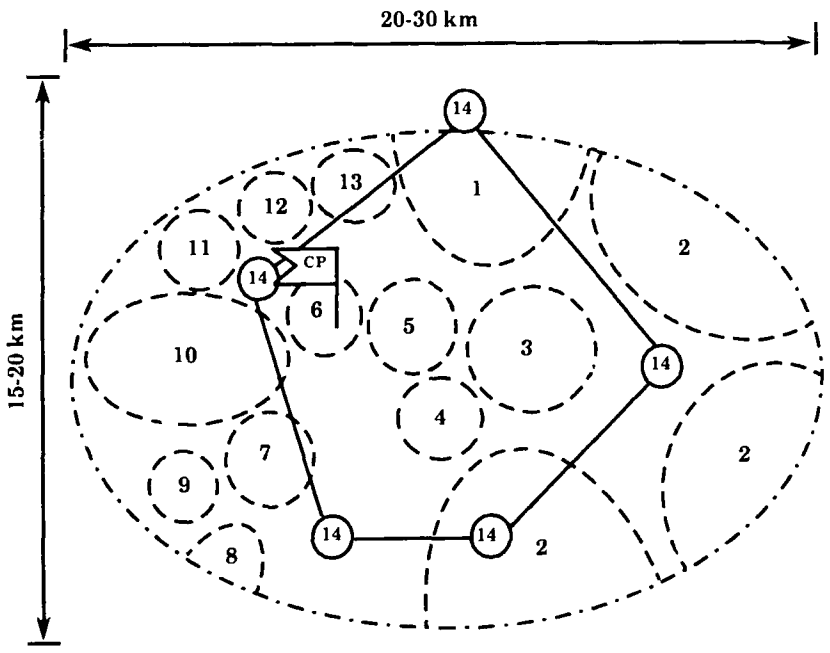
Time Considerations

When a unit is at a level of increased combat readiness and alerted to move out of the installation, the goal is 20 minutes

for a first echelon, full strength unit. These units regularly practice alert procedures to move out as fast as possible. The 20-minute time limit to clear the military installation was established by calculating the flight time for ballistic rockets launched from the USA at targets in the USSR.

Soviet divisions stationed close to Soviet borders follow different procedures when put on high combat readiness alert. They may actually combine the increased and full combat readiness procedures into one operation. However, these divisions do not move to their concentration areas, but drive from collection points directly to assigned positions along the border.

When a mobilized unit moves out from its barracks, the installation is given over to militia authorities [a component of the Ministry of Internal Affairs, MVD] for protection and safekeeping.



1. TANK REGIMENT
2. MOTORIZED RIFLE REGIMENT
3. ARTILLERY REGIMENT
4. ANTITANK BATTALION
5. MULTIPLE ROCKET LAUNCHER BATTALION
6. DIVISION COMMAND POST
7. RECONNAISSANCE BATTALION
8. MOBILIZATION CENTER
9. LONG-RANGE RECONNAISSANCE CENTER
10. REAR SERVICES
11. FROG SURFACE-TO-SURFACE ROCKET BATTALION
12. CHEMICAL BATTALION
13. ENGINEER BATTALION
14. DIVISIONAL AIR DEFENSE ELEMENTS

Figure 1. Concentration area of a motorized rifle division.

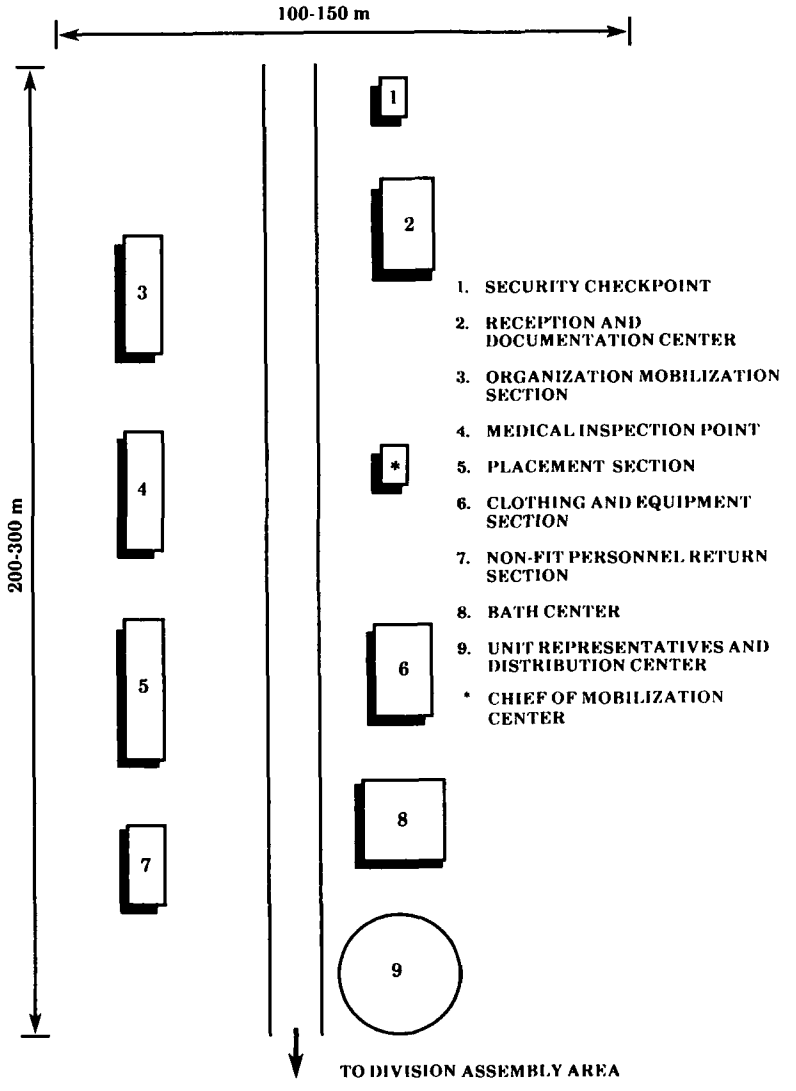


Figure 2. Layout of a division reservist mobilization center.

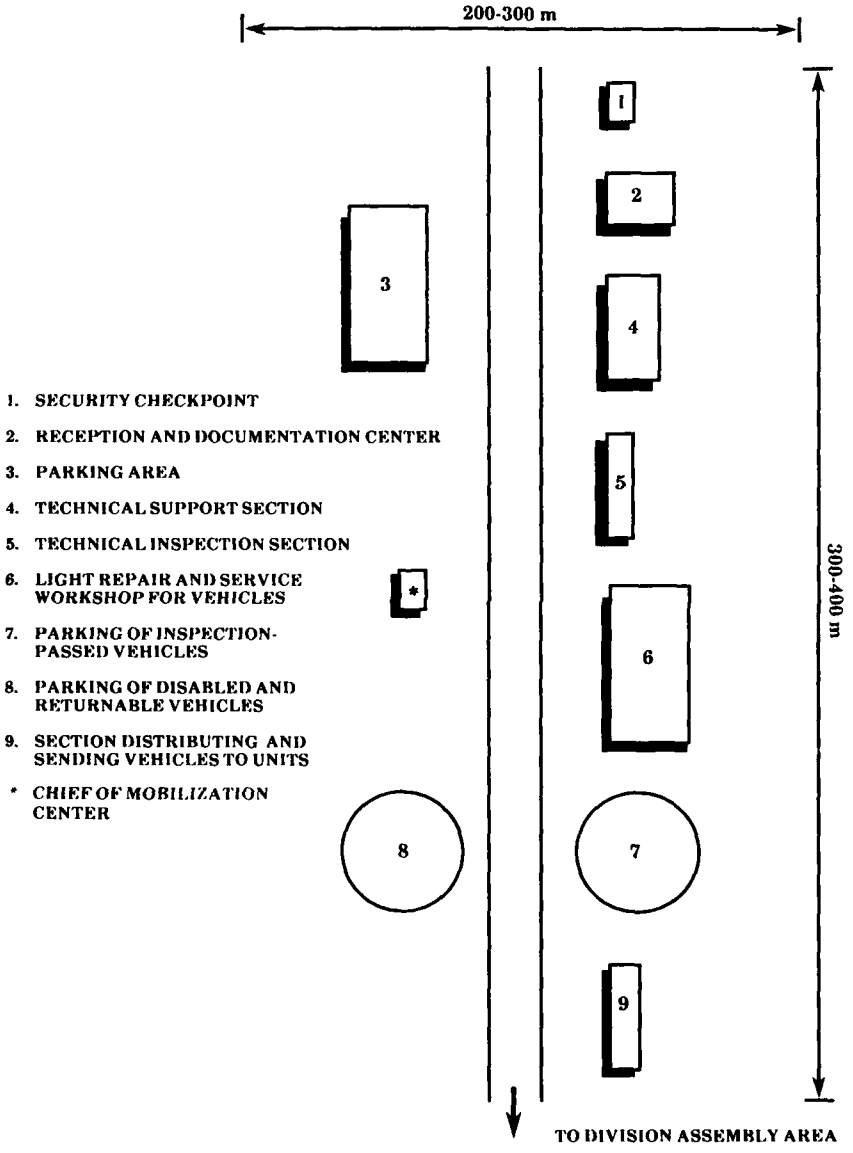


Figure 3. Layout of reserve equipment mobilization center.

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CHAPTER FIVE

Strategic Deployment of the Armed Forces

I. Introduction

Strategic deployment is a series of measures and actions aimed at achieving the transition of the Armed Forces from a peacetime to a wartime status and establishing appropriate groupings in accordance with the war plan. Such measures and actions are closely interconnected.

To understand the volume of these activities, it need only be noted that the total strength of Germany's armed forces of 1.3 million prior to World War II was increased to 4.6 million at the beginning of the war. It was further augmented to 7.3 million at the time Germany began the invasion of the USSR. In a similar manner, the Soviet Union increased the strength of its Armed Forces 2.6 times more than its peacetime strength, and 4 times more than the strength of its Armed Forces in 1937.

Strategic deployment is one of the basic issues of strategy itself. It is important because it includes a number of timely and far-reaching measures that ensure the organized commitment of the Armed Forces into war and affect the future development of military actions and the course of the war.

In modern times, questions related to the strategic deployment of the Armed Forces should be solved in close consideration of the requirements for forestalling and overtaking the enemy in deploying and establishing strategic and operational force groupings, and ensuring constant readiness to repel an invasion under all conditions and circumstances at the outbreak of war.

II. General Considerations

The nature, characteristics, sequence, and methods of conducting actions concerning the strategic deployment of the Armed Forces continually change in accordance with changes and modifications in the nature of military arms and equipment, as well as with changes introduced in the forms of initiating war.

In the past, when war was declared officially, strategic groupings of the Armed Forces were generally established by mobilization after the declaration. The entire procedure of concentration and deployment of Armed Forces in a TSMA was conducted at the outbreak of war without any serious interference by the enemy. But later on, the aggressors obviously intended to deploy their armed forces well in advance and prior to the outbreak of war in order to seize the strategic initiative and gain other types of advantages that have a lasting impact on the course of war. At present, an early declaration of war is part of history; modern wars are far from being officially declared.

The imperialist states that already have strong peacetime armed forces ready for war openly prepare themselves for a surprise initiation of a war against Socialist countries. Therefore, for the sake of guarding socialism, we are also forced to maintain strongly organized armies that should be ready at all times to foil the aggressors' intentions.

Peacetime Composition of the Armed Forces

Forces and means in constant combat readiness, such as strategic nuclear forces (Strategic Rocket Forces, Long-Range

Aviation, nuclear submarines), PVOS Forces, and groupings of Ground Forces that are organized at full wartime strength, or close to that, have the mission of repelling an enemy strike and conducting initial operations. Operational formations and large units are mobilized quickly and are designated for the development of efforts in the course of war and the establishment of strategic reserves.

On the basis of the war plan, the Armed Forces are allocated to different TSMAs and to strategic and operational directions, thus constituting specific strategic and operational groupings. The general strategic grouping of Armed Forces and the main groupings in the TSMAs are established well in advance during peacetime. Their composition and disposition are determined on the basis of the nature of future war and its political aims, the strategic missions of the Armed Forces, and the capabilities of the nation. Meanwhile, the importance of the TSMAs, the roles of different components of the Armed Forces in the war in each TSMA, and the requirements of the relative correlation of forces should be taken into close consideration to determine the composition and disposition of the Armed Forces in each TSMA.

Depending on the significance of changes in the political situation in different areas of the world or in the TSMAs, the composition of groupings of Armed Forces can be changed or modified. Strategic deployment is conducted to commit the Armed Forces directly into war. The general purpose of deployment of the Armed Forces is to establish strategic and operational groupings which will initiate organized combat actions in accordance with the requirements of the war plan.

III. Elements of Strategic Deployment

Strategic deployment includes the following:

- bringing the Armed Forces to a level of full combat readiness by augmentation of units and large units that are in a state of constant combat readiness;

- —deployment, mobilization, and activation of new units, large units, and operational formations, primarily those needed to meet the requirements of operational plans;
- —troop maneuvers and strategic movements of forces from the interior to the TSMAs;
- —operational deployment of Ground Forces, Air Forces, and fleets in the TSMAs to carry out combat missions, i.e., the establishment of the operational groupings of forces and their disposition;
- —deployment of strategic reserves.

The main feature of strategic deployment is the fact that it is based on a strong build-up of peacetime Armed Forces that are positioned well in advance in the TSMAs, as well as in the interior of the country. This facilitates the accomplishment of tasks relating to the deployment of forces for the purpose of war.

A second major feature of strategic deployment of the Armed Forces is the fact that it is carried out under the constant threat of enemy nuclear attack. Therefore, it should be conducted with much greater speed than in the past. The scale and forms of deployment of the Armed Forces will change significantly and rapidly with the world military and political situation, the circumstances of the outbreak of war, and the means of war employed by the opposing forces. Deployment cannot be conducted on the basis of a single unified scale or form.

First, it should be noted that in a nuclear war, total or partial prevention of deployment could be possible through the employment of nuclear weapons by the enemy. This requires that specific measures be taken to support the deployment of the Armed Forces and the forms of its execution. More flexibility than was customary in the past is required in organizing and planning strategic deployment, heightened preparations, and the capability to conduct effective actions associated with the deployment of the forces. It is also likely that the Armed Forces may have to be redeployed in circumstances in which they suffer massive casualties and extreme destruction,

including the disruption of the operation of all types of transport means.

Second, strategic deployment will not always be the same, but will have different characteristics in relation to the various components of the Armed Forces, the various TSMAs, and different strategic directions, the importance and characteristics of which will be derived from the significance of the TSMAs.

It should also be noted that the aim, characteristics, and circumstances of strategic deployment will be different in a war in which nuclear weapons are used, from those in a war in which such weapons are not used. In a war with the employment of nuclear weapons, decisive damage must be inflicted on the enemy by strategic groupings of nuclear forces that have deployed in advance and are ready for action. But in order to continue the war until final victory, it is required that all Services of the Armed Forces be reconstituted rapidly after the initial enemy nuclear attacks, and that they should be deployed and ready to conduct combat actions. Any one of the belligerents that loses its combat capability will eventually lose the initiative and will face a difficult situation.

In circumstances when the war is conducted with the employment of conventional weapons, strategic deployment of the Armed Forces should primarily ensure and provide the following:

- building necessary superiority in forces and means over the enemy in the TSMA, in order to conduct the initial strategic operations successfully;
- seizing the strategic initiative, achieving victory in initial operations, and developing efforts by the commitment of forces arriving from the interior.

Strategic deployment of the Armed Forces should be conducted secretly and quickly. It should provide superiority over the enemy in forces and means on decisive directions and should forestall and overtake the enemy in initiating decisive action and ensuring the seizure of the strategic initiative. Keeping and ensuring the secrecy of the scale, time, and objectives

of the deployment are particularly important. The enemy should be deceived about the purpose and the time of friendly forces' readiness for action. Measures also are to be taken to forestall and overtake enemy deployment of forces by the beginning of the outbreak of war.

Successful and organized strategic deployment can be ensured by the following:

- detailed planning of the deployment of Armed Forces in general, especially for each TSMA and strategic direction, in careful consideration of the likely forms of the initiation of war;
- timely intensification of reconnaissance, and warning of the Armed Forces about enemy preparation to attack;
- early and secret mobilization of units and large units;
- timely transition of the Armed Forces to a level of full combat readiness and rapid expansion of the combat (on-call) duty (*boevoe dezhurstvo*) and combat patrol (service) (*boevaia sluzhba*) troops;
- accomplishment of peacetime preparation measures to protect men and materiel from enemy surprise air strikes;
- establishment of materiel reserves in the vicinity of areas where the activation of new units is scheduled and along communications routes leading toward the TSMA;
- preparation of the TSMA and the entire territory of the country to meet the requirements of war, particularly in terms of developing lines of communications;
- development of signal communications and troop control;
- training and preparation of troops and staffs in peacetime.

IV. Preparation for Strategic Deployment of the Armed Forces

Preparation for strategic deployment of the Armed Forces is conducted on the basis of plans worked out in peacetime under the supervision of the General Staff. Depending on military and political aims and the missions of the Armed Forces in war, the General Staff determines the appropriate

composition of groupings of forces in each TSMA as early as possible. It also specifies:

- operational formations and large units to be kept at a level of constant or full combat readiness and those to be maintained in low strength (cadre) status in order to be brought subsequently up to full strength in a period of threat;
- groupings of forces and means to be established to conduct the initial operations;
- levels of weapons, vehicles, and materiel reserves to be established in the TSMA to support the deployment of the Armed Forces, and, subsequently, to support combat action;
- measures to be taken by operational installations in the TSMA to conceal and support the deployment of Armed Forces.

All such matters are jointly organized and planned by the General Staff and all components of the Armed Forces and the staff of the Rear Services Directorate of the Ministry of Defense. The concepts are illustrated on maps and depicted in directives, written plans, calculations, and other documents.

Subsequently, on the basis of instructions from the General Staff, detailed planning of deployment is worked out in military districts, *fronts*, and operational formations of the various components of the Armed Forces. At this stage, all plans are fully organized and coordinated, and their related parts are conveyed to each unit and large unit.

It should be noted that preparation for deployment of the Armed Forces in a TSMA is not limited only to planning, but also includes practical support for the application of plans. Practical actions of commanders and staffs at all levels of command to support the deployment can be as follows:

- organizing the preparation of the TSMA in terms of operational and field considerations, such as the development of lines of communication, airfields, and a system of naval bases; preparing transport means; preparing staging areas (*iskhodnyi raion*) for troop deployment; constructing

bridges and crossings; establishing depots and supply bases, command posts, and signal communications lines; establishing materiel reserves in the TSMA, etc.;

- preparing the troops themselves, which includes systematic training and rapid upgrading of the units and large units to a level of full combat readiness; conducting training mobilizations, drills, and exercises in embarking and disembarking troops using different types of transport means; upgrading the abilities of cross-country movement and long-distance marches; practicing rapid operational deployment, occupation of initial positions, and initiation of combat action, etc.

If the necessary measures for the preparation of deployment are fully taken in peacetime, the actual deployment will be ensured in a shorter, more timely, and organized way, and more effectively, even under difficult conditions.

V. Conduct of the Deployment

Strategic deployment of the Armed Forces is conducted on the decision of the political administration of the nation and depends on the national economy, population, and materiel resources.

Deployment can be conducted in different situations:

- in a period of threat, before or simultaneously with putting the country on a war footing;
- at the outbreak of war;
- during the course of the war.

The groupings of Armed Forces assigned to conduct the initial operations deploy prior to the outbreak of war. Meanwhile, under all conditions, the forces and fleets should be ready to deploy or complete deployment. In case of enemy surprise attack, including attacks with the employment of nuclear weapons, when the forces and fleets, as well as the civilian population, suffer heavy casualties, deployment over extensive areas will be very difficult, and in some areas mobiliza-

tion will be impossible. Most of the equipment and supplies allocated for forming new units will be destroyed, lines of communications will be interrupted, many airfields on which transport aircraft are based will be destroyed, and the system of control and signal communications may be knocked out.

When strategic deployment is disrupted by enemy action, partial or complete readjustment and modification of deployment plans, primarily the plans concerning the deployment of Ground, Air, and Naval Forces, may be required. In this case, many large units and even operational formations may be assigned new axes. Meanwhile, special attention should be paid to taking prompt mobilization measures, particularly in areas not hit by enemy nuclear strikes, and supporting the organized movement of the troops in the TSMAs or in the areas of military operations.

When a war is conducted without the use of nuclear weapons, friendly forces should always keep the potential threat of enemy use of nuclear weapons in mind, and constantly be prepared to meet such a threat. This requires detailed preparation, as well as rapid, organized, and proper execution of all important tasks concerning the strategic deployment of the Armed Forces, particularly the tasks which may require a longer time to be accomplished. Such actions are partially connected with the mobilization of forces and their movement to the TSMA. It is very important to accomplish the major and essential part of such tasks in the period of threat, and to ensure the accomplishment of the remaining part at the beginning of the war.

Strategic deployment of the Armed Forces begins with their transition from peacetime to wartime status. This can be carried out either directly, in one single phase, or gradually, as the military and political situation develops and the danger of war becomes more and more imminent. This process includes:

- transition of forces and fleets from a level of constant combat readiness to a level of full combat readiness, to include moving out units and large units to concentration areas (*raion sosredotocheniia*) for the purpose of

dispersal, and strengthening the units to their level of wartime organization [strength];
- formation of sufficient new units, large units, and installations to ensure the accomplishment of preplanned initial operations.

Such tasks should be accomplished prior to the outbreak of war, since delays in this process are too dangerous in modern times. In the past, mistakes and delays in the process of moving the Armed Forces to a wartime footing could be compensated for in the course of the war. But at present, such mistakes and delays cause heavy losses.

In former wars, the rear services of opposing nations were out of range of enemy weapons, and they could take all measures in support of the transition of their Armed Forces and national economies to a war footing without any harassment by the enemy. In modern times, particularly in a nuclear war, there will be practically no location out of range of enemy weapons. Therefore, delays in the transition of the Armed Forces and national economy from a peacetime to a wartime status would create a very difficult and complex situation. The enemy not only will attempt to forestall and overtake us in deployment of the Armed Forces but also, by employing all available means, try at the same time to disrupt our attempts to forestall and overtake him.

Consequently, we will face the problem of upgrading the capabilities of the Armed Forces and keeping them constantly active, alert, and responsive. The solution to such problems should be sought in two ways:

- through construction of shelters and protected positions in permanent military posts and bases;
- through dispersal of forces and fleets, combined with concealment and deception measures.

In the case of the Ground Forces, all efforts should be made to get them out of their barracks as fast as possible and to move them to the concentration areas, where they should immediately start digging and preparing protective shelters.

Calculations from the experience of field exercises indicate that protective shelters decrease the consequences of the use of enemy nuclear weapons by a factor of several times. Timely dispersal and advance preparation of protected positions are important also for the deployment of the Air Forces. In the case of the Navy, ships should move out of bases, and maneuver bases (*manevrennaia baza*) should be prepared well in advance.

By taking the above-mentioned measures, we will be able to protect our forces during their transition from a peacetime to a wartime status. Both the achievement of victory in initial operations and the future course of the war are dependent on these measures. For this reason, measures to ensure the protection of the Armed Forces at the outbreak of a war are considered particularly important.

The Process of Bringing the Armed Forces to a Level of Full Combat Readiness

This process is conducted on the basis of the General Staff's special directive (*osobaia direktiva*) that specifies concretely what measures are to be taken, by whom, and when. The transition of the entire Armed Forces to a level of full combat readiness is often conducted gradually from a level of constant combat readiness as the risk of an aggressor strike develops.

In case of a surprise outbreak of war, strategic nuclear forces immediately launch strikes against the aggressor, initially by the forces and means that are in full combat readiness and subsequently by the rest of the strategic nuclear forces as they become ready. In such a difficult situation, the Ground Forces, National Air Defense Forces, Air Forces, and Navy should be brought in an orderly manner to the highest level of combat readiness and deployed to carry out specific initial objectives. In this case, all components of the Armed Forces, in all TSMAs simultaneously, would be brought to a level of full combat readiness. It should be noted that in such circumstances great importance should be given to the establishment and opera-

tion of an effective warning system for the Armed Forces that can ensure signal communications down to units and large units in prescribed minutes and even seconds.

Along with the transition of the Armed Forces to a level of full combat readiness, the augmentation of incomplete units and large units, and the formation of new units, large units, and installations are undertaken. Bringing the rear services of Strategic Rocket Forces, *fronts*, PVOS, and fleets up to full strength; mobilizing special troops and services; and also establishing first-priority reserves should also be anticipated and carried out.

The volume of work and measures related to mobilization during the period of strategic deployment will not be the same for all components of the Armed Forces (i.e., Ground Forces, Navy, Air Forces, National Air Defense Forces, and Strategic Rocket Forces). For example, the Strategic Rocket Forces will require the deployment of relatively fewer support and service units.

In the PVOS Forces, the augmentation of some units and large units, which are at reduced strength in peacetime, becomes necessary. To support the deployment of active air defense artillery units and large units, an additional required number of technical and rear service units are mobilized. However, the mobilization process in this case will generally not be enormous.

In the Air Forces, shortly before the outbreak of war, mobilization and deployment of additional transport units and large units, auxiliary aircraft, and service units are anticipated by using resources of the national economy.

In the Navy, the deployment of additional forces by using ships and equipment kept in conservation, as well as by using civilian fleets, is also anticipated.

Mobilization measures and actions taken by Ground Forces will include strengthening large units which are kept at a reduced strength level in peacetime, mobilizing the necessary number of new units and large units for the purpose of deploying the planned groupings of forces in the TSMAs, and establishing reserves.

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Finally, for the purpose of completely deploying rear services, mobilization, movement and deployment of *front* rear service units, large units, facilities, and the forward line of the central rear services (*peredovoi rubezh tsentral'nogo tyla*) in the TSMAs, as well as redeployment of Strategic Rocket Forces' rear services and the rear services of fleets and PVOS Forces, are required shortly before the outbreak of war. The majority of the rear services of the Armed Forces are provided by the resources of the national economy.

To ensure the accomplishment of their combat mission, operational deployment of groupings of the Armed Forces is conducted in each TSMA to include the following:

- moving and deploying first operational echelon Ground Forces to staging areas or directly on the deployment lines, in accordance with the assigned missions and specified operational organization of combat;
- moving second echelon forces to the areas of future actions;
- redeploying aircraft bases, deploying main fleets, and establishing appropriate groupings to accomplish the assigned missions;
- deploying operational rear services;
- deploying the command post system.

The most important requirement of the operational deployment of the Armed Forces is that it be done rapidly, secretly, and in a timely manner to establish strong groupings of forces against the attacking enemy in order to repel the attack and inflict decisive losses on his forces.

Timely operational deployment is ensured by the following:

- detailed planning;
- early construction of movement routes;
- establishment of staging areas and areas of dispersal;
- detailed organization of traffic control services;
- enhanced preparation of units and large units for the march;

- assured protection of deploying troops against enemy attacks from the ground, air, and sea;
- satisfactory organization of control of forces and fleets.

Operational deployment of Ground, Air, and Naval Forces in the TSMAs can be conducted in the period of threat prior to the war, or it may begin before the outbreak of war and end during the war.

If the situation requires that the deployment of the main forces of first echelon operational formations be accomplished prior to the outbreak of war, then the deployment can be conducted on planned lines specified in peacetime, which may provide favorable positions to repel enemy strikes and support the execution of operations initiated at the outbreak of war. In this case, the deployment lines of first echelon large units will conform with the lines occupied by combat security forces.

Newly activated large units or those approaching from the interior should be deployed in the second echelon, so that they may have time to complete their transition to full readiness and be oriented to the nature and characteristics of the TSMA.

In the case of an aggressor surprise attack, the deployment of groupings of Armed Forces from the outset will be engulfed by the circumstances of active military actions. In such a situation, if the use of nuclear weapons is intended, strategic nuclear forces will rapidly launch nuclear strikes against the invading enemy, while air defense forces and means repel enemy air attacks. Naval forces and means will move to specified areas in a situation of heavy destruction and radioactive contamination created by enemy attacks on their routes of maneuver, and in their concentration areas.

Successful deployment of men and materiel under such conditions requires the following:

- organization of steady and centralized control;
- quick readjustment of deployment plans according to the actual situation;
- measures to restore troop combat capability;

- flexible movement by forces and means;
- effective employment of means left intact;
- rapid and energetic action in restoring movement routes, opening passages through barriers and obstacles on these routes, and carrying out support measures along the routes of maneuver.

Obviously, strategic nuclear forces and PVOS Forces are totally, or nearly totally, deployed in their firing positions and are always ready for combat action.

Operational deployment of *fronts* and armies in the first operational echelon in TSMAs will be conducted secretly, during short periods of time. Their operational deployment will be accomplished by the occupation of favorable covering positions prepared in advance by troops along common borders with the potential enemy, and by the arrival of the first operational echelon main forces in previously specified staging areas, as well as by the deployment of the rear services. In the course of the deployment, *front* and army rocket and artillery troops will occupy firing (launch) positions and prepare for the destruction of designated targets. The troops will have to begin engineer work immediately after the occupation of staging areas.

The troops in staging areas should be in a position to rapidly initiate the attack, repel enemy attacks through the active defense of occupied positions, and preempt the enemy in launching the attack in a meeting engagement. Units and large units of first operational echelon forces should be constantly ready to conduct maneuver in order to change the operational formation or the direction of attack if it becomes necessary.

To ensure the required speed of operational deployment of Ground Forces' units, the lines of deployment of units, large units, and operational formations will be reconnoitered and inspected by all responsible control elements, and sometimes such lines will be fortified by engineer works and constructions. The routes and axes of troop movement will be prepared and maintained in a state that ensures quick deployment of the units and large units from their assembly areas and

their approach to the deployment lines. During the deployment, particular attention will be paid to the concealment and protection of troops against weapons of mass destruction.

Operational deployment of the Air Forces must ensure timely movement of aircraft to *front* airfields and the establishment of Air Forces' groupings configured in accordance with the plans for forthcoming operations.

Operational deployment of the Air Forces may start simultaneously with the deployment of the Ground Forces, or it may coincide with the completion of their deployment. In exceptional cases the deployment of the Air Forces may precede that of the Ground Forces.

Depending on the situation, the movement of aircraft may be conducted successively or simultaneously. In all cases the movement of aircraft should be conducted secretly, in careful consideration of the fact that the activeness and preparation of the Air Forces should ensure its rapid combat action from the new bases. For this purpose, specifying the time of flight of aircraft and regrouping the ground elements of the Air Forces' supply and support elements, as well as preparing beforehand operational airfields and establishing materiel reserves there, are required.

Operational deployment of the Navy includes the following:

- organization of base protection;
- expansion of active combat units on combat patrol (service) (*boevaia sluzhba*);
- deployment of first and second operational echelon forces.

In this case, special naval task force groupings will be established for the destruction of enemy coastal targets, submarines, and aircraft carrier strike task forces.

Deployment of naval forces may be conducted successively over a long period of time, and, if the situation requires, carried out in a shorter period of time under the threat of the imminent and obvious risks of war, or at the outbreak of war. In the latter case, deployment will be attempted by using the method of penetrating anti-ship lines and destroying enemy anti-shipping forces deployed on such lines.

To ensure the organized commitment of naval forces into war and the launching of their timely attacks against the enemy, considerable importance is given to the secret and rapid expansion of the Navy. For this purpose, combat (on-call) duty (*boevoe dezhurstvo*) forces and combat patrol (service) (*boevaia sluzhba*) forces, if required, will be used in the initial phase in accordance with the actual situation. The deployment of the remaining forces, which will be at a level of constant combat readiness, will be conducted gradually or simultaneously in all TSMAs, depending on the likely actions of the enemy. The strength of such forces will be expanded by the commitment of reserve ships as they complete their preparations and become ready for active operations. Deploying elements will be integrated into operational groupings and assume the formation required for rapid action in compliance with assigned missions.

To prevent the enemy from hindering the deployment of groupings of forces in the TSMA, operational formations and large units included in the second operational echelon will move rapidly to their specified areas once they are mobilized.

Massive movements over long distances will generally be required of the Ground Forces. In the case of other elements of the Armed Forces, such movements will be conducted on a smaller scale. This indicates that in peacetime most of the components of the Ground Forces included in the composition of the first strategic echelon will be located hundreds of kilometers away from the line of contact with the potential enemy. In some TSMAs, even some individual divisions and armies included in the first operational echelon will have to move a distance of 300-400 km or more to reach the international boundaries.

In modern times the movement of second operational echelon forces from their permanent military garrisons and mobilization areas into *fronts* located in TSMAs, regardless of distances, can be conducted prior to the outbreak of war by using all means of transportation. With the outbreak of war, troop movement by the marching method, which is

to be conducted by employing organic vehicles and attached transport vehicles, will have decisive importance. For military districts adjoining international borders, the march will be the principal form of movement under all circumstances.

The most important requirement in the organization of movement, in any situation, is to ensure the timely arrival of troops at the new concentration areas or lines of commitment into battle at full combat capability. For this purpose, the following should be anticipated:

- of top priority, moving support units and large units, ground elements of aviation, rocket troops, and large combined arms and tank units that are in constant readiness to execute important tasks;
- taking full advantage of troop march capability;
- providing satisfactory cover for moving troops against enemy air strikes, particularly on major rivers, in mountain passes, and in new concentration areas;
- coordinating the movement of troop march columns with the transport of their heavy equipment by railroad;
- early organization of measures to support the passage of barriers and obstacles along the routes of movement;
- preparing for the organized transition of the troops from rail movement to march;
- ensuring the secrecy of troop movement, as well as the secrecy of their actual debarkation and their assembly areas;
- continually supplying troops with materiel reserves, particularly POL [petroleum, oil, and lubricants];
- continually providing flexible troop control, especially during movement on heavily damaged lines of communication, as well as during the passage of troops through large radioactive contamination areas created in the areas for regrouping forces.

Greater importance is given to the following:

- allocation of march zones and axes;

- —early preparation of the TSMA, particularly preparation of the route network, bridges, routes bypassing major road junctions, administrative centers, and industrial centers;
- —organization of crossing sites on large rivers;
- —establishment of POL reserves and reserves of other materiel.

Troop movement at a rate of 300-400 km every 24 hours, (as the experience of field exercises indicates as an undeniable fact) will ensure, to a large extent, their secret and timely concentration and deployment in the TSMA. The combat capability of units and large units is fully maintained in the process. This will ensure, in turn, the surprise seizure and retention of the strategic initiative from the outset of war.

Organizing and supporting the movement of an air army or large *front* aviation units will be more difficult. For the Air Forces, particular attention should be focused on support of flight elements (pilots and aircraft) in the areas of the new aviation bases by mobilizing local resources or using the facilities of first echelon *fronts*, or by the early movement of Air Forces' ground elements to the areas of new aviation bases. The most important requirement in the movement of the Air Forces is that, following movement, the aviation units should be ready immediately to conduct combat missions at the new airfield.

Under some circumstances of the maneuver of forces, the movement of aviation units may be conducted across the territories of a number of Socialist countries. Therefore, measures should be taken to coordinate with them, in advance, matters concerning the common utilization of lines of communication, routes, airfields, and signal communications means; the organization of air defense; engineer support on the routes; rear service support; and other support actions.

Air transport of troops and materiel can be conducted on the basis of previously organized plans. In all cases, flexibility, the capability of coordinating motor vehicle marching columns and railroad and air transport, and changes in the direction of movement, debarkation, and concentration are very important.

In order to shorten the duration of movement, the following actions are required:

- loading railroad transport means to their maximum capacity;
- taking measures in advance to promote the speed of traffic flow on routes in areas with impeding barriers and obstacles, and utilizing air transport having large capacity;
- strictly coordinating strategic movement with movements conducted in support of mobilization and the reorientation of the national economy.

Overall, control of strategic movement and the movement of forces from the remote interior of the country is exercised by the General Staff of the Armed Forces directly through the military district organs of lines of communication, and through the Main Staffs of the Air Forces and Navy. The countries and military districts on territories in which the movements are undertaken bear the responsibility for support primarily to maintain the continuous and uninterrupted serviceability of the lines of communication.

VI. Support Measures and Control

The general objective of support measures is to prevent enemy actions from foiling our strategic deployment and to provide opportunities for its successful completion, even in circumstances created by the initiation of an enemy strike. In such a context, particular importance is given to repelling enemy air and space attacks by on-call units of PVOS and Air Forces, and initiating military operations by combat-ready Ground and Naval Forces in a timely fashion.

In case of the outbreak of war with the use of nuclear weapons, an important role is played by strategic nuclear forces. Timely delivery of initial nuclear strikes can foil strategic deployment by the enemy, ensure seizure of the initiative, and, therefore, assist in the organized accomplishment of timely deployment by friendly forces.

Direct combat support measures concerning the deployment of groupings of Armed Forces in the TSMA are organized by the headquarters of *fronts* (groups of forces, military districts), armies, and fleets, and include the following:

- reconnaissance;
- cover of international boundaries;
- engineer fortifications and works in border areas;
- protection against mass destruction means.

Combat support and protective measures in areas of future combat actions along vital directions are taken to repel enemy surprise attacks, and to ensure the organized commitment of friendly forces and means into combat under all circumstances of the outbreak of war.

Perhaps one of the most difficult and vital reconnaissance duties prior to the outbreak of war and during the period of deployment of the Armed Forces will be the timely detection of direct enemy preparation for initiating the war. Organization and conduct of reconnaissance in the period of threat, when the risks of war are imminent, is one of the most important tasks. This primarily denotes and describes the need and requirement for constant monitoring of both the situation and the status of large numbers of enemy targets deployed in an extremely broad area.

For example, in the Western TSMA, the situation and status of some 1,000 enemy targets to a depth of up to 2,000 km should be continuously surveyed and carefully watched. Air reconnaissance will not be viable because such action is only possible at the cost of incursion into enemy air space, which will not be allowed at this stage. In modern times, the traditional means of reconnaissance are not sufficient for the accomplishment of such tasks. Hence, it is required that the means of reconnaissance be further augmented by radio, radiotechnical, and space means, which possess greater capabilities for warning commanders about all changes taking place in enemy forces and their dispositions.

If an enemy surprise invasion is likely, special importance is given to the following missions for covering international boundaries:

- foiling enemy infiltration and reconnaissance activities along the borders in direct contact with the enemy, and preventing enemy infiltration from land, air, and sea prior to and at the outbreak of war;
- repelling surprise attacks of enemy first operational echelon forces, and in some cases, foiling the deployment of enemy forces;
- supporting the deployment of friendly first operational echelon main forces and their organized commitment into the war.

On land, international boundaries are covered by individual units and large units that are deployed on the respective directions as part of operational formations on those directions. In some areas, strongly fortified positions may be occupied as part of the process of covering the international boundaries, and such areas are turned into strong defensive positions by the advance assignment of tank units to establish a defense area. Airborne assault units and large units can also be designated to hold such strong defensive positions.

The mission of covering airspace is conducted by on-call fighter aircraft which belong to PVOS and Air Forces, as well as by radio-technical means, and PVOS Forces and *front* air defense rocket troops that are in constant readiness to repel enemy air attacks. The covering of airspace is conducted in accordance with the general plan for the unified air defense system in the TSMAs. The number of on-call forces and means change according to the situation, but under any condition they should be in a position to ensure the readiness of all air defense personnel and materiel for repelling massive enemy strikes.

In oceanic TSMAs, covering operations are organized on the approaches to naval bases, in important coastal areas, in straits, and in other vital areas by patrolling task forces and means, on-call naval formations, and part of the actual

combat elements of the fleets. Such forces and means should foil the efforts of enemy aircraft, submarines, and other ships. They should also provide a protective cordon around friendly naval bases and provide favorable conditions for the deployment of the main naval forces in specified areas.

Combat security on the ocean should prevent the possibility of surprise actions by enemy submarines and other ships in the areas of responsibility of friendly naval forces, and should limit the chances of enemy vessels launching surprise attacks or initiating other actions, such as mine laying.

The above-mentioned forces and means employed for providing cover and security are not specially organized only for such purposes. Rather, they are detached from forces organic to the operational formations of the various Services of the Armed Forces to provide close cover and security and ensure the deployment of operational formations and large units and their commitment into the war. Their combat composition and missions are specified in close consideration of the importance of the TSMAs or directions involved, operational missions of friendly forces, and composition and likely nature of enemy actions.

The forces and means designated as covering forces should not only be capable of repelling attacks of smaller enemy units but also be strong enough to deal with larger enemy forces. They should contain enemy strike groupings by their actions and force the enemy to deploy. They should also delay enemy attacks, inflict heavy casualties, and provide favorable conditions for the organized combat deployment of friendly main forces.

Under the most favorable conditions, by the time military actions begin, covering troops operating on separate directions may advance to occupy the enemy security zone and move forward of the deployment line of the main friendly forces. Covering units and large units normally occupy their positions in the course of the transition of the forces and fleets to a level of increased combat readiness, or at the beginning of the transition to the status of full combat readiness.

In modern times, greater requirements are anticipated in the process of covering international boundaries, in terms of

maintaining the secrecy of the whole system and providing for its quick establishment, effective activation, and dependability. To serve these purposes, the positions of covering forces, approaches to such positions, areas where obstacles are to be constructed, and directions of counterblows and counterattacks should be reconnoitered and prepared well in advance. The operational methods of forces and means should be studied and organized in detail. The enemy must be denied early reconnaissance and detection of the covering system of friendly forces by any means necessary. The establishment of the covering system should be planned accurately and in detail, and kept strictly secret.

One of the combat characteristics of forces and means assigned for covering operations is good maneuver capabilities and the ability to occupy designated areas rapidly. They should also be able to deploy and accomplish their assigned missions from the march.

One of the important conditions for the successful accomplishment of the strategic deployment of the Armed Forces is continuous control of the Armed Forces through the general State signal communications lines and military signal communications links. It should be noted that by deployment of the Armed Forces and transition of the country to the state of war, a series of very major changes will be undertaken in State activities. An enormous range of totally new measures connected with the war are required to be taken in this situation. Therefore, the decision for strategic deployment and transition of the Armed Forces from a peacetime to wartime standing is made by the political authorities of the State.

Direct control, organization, and supervision of deployment is exercised by the General Staff of the Armed Forces, Main Staffs of the various Services of the Armed Forces, commanders and staffs of military districts, groups of forces, fleets, and armies, and commanders at all levels in related matters. A major role is played by Party organizations and government agencies at all levels, and by military commissariats, particularly in the conduct of mobilization. They procure and provide

resources and technical equipment in support of the deployment of units and large units.

The wide range of comprehensive actions and measures to be taken simultaneously in support of strategic deployment requires an early organization of control systems at all levels, from the General Staff down to large units, units, and local military commissariats. The control system should be absolutely reliable and must be able to function constantly under the most difficult conditions and circumstances before and at the outbreak of war, and, in case of the initiation of war by the aggressor, by any form or method.

The complex situation in which strategic deployment of the Armed Forces is conducted requires centralized control. At the same time, considering the limited capabilities of control elements to furnish a wide range of timely information and taking into account the possible interruption of control, particularly in a nuclear war, special importance is given to the initiative of the commanders at all levels on the basis of overall concepts and plans. Therefore, during the organization of deployment, the commanders and staffs of lower echelons should be briefed on the final missions of units, large units, and operational formations.

In the deployment phase, at all levels of command, particular attention should be paid to the detailed organization of the execution of all measures, retention of high discipline, command and staff procedures at all levels, maintenance of order and calmness during an enemy nuclear attack, rapid elimination of the impact of nuclear strikes, discrete maneuvers by the reserves, and rapid negotiation of all obstacles in the course of accomplishing the assigned missions. This depends, to a large extent, on the strong will, firmness, and perseverance of commanders.

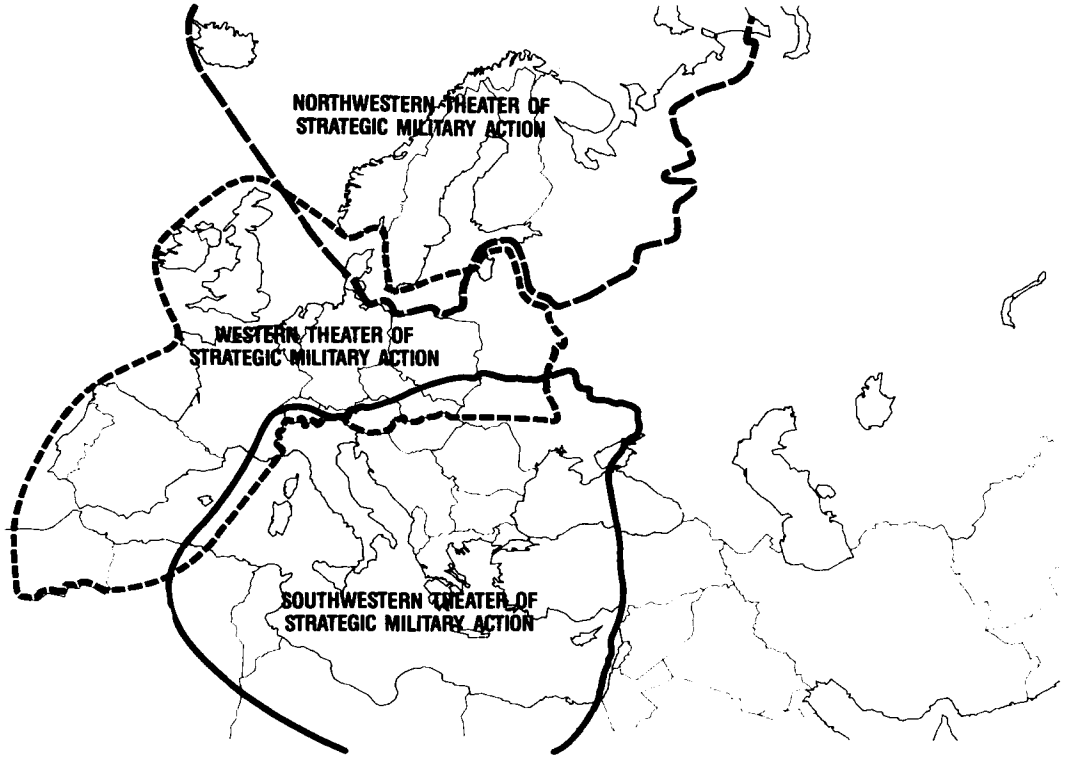
The system of wartime control and signal communications is established in peacetime and is an integral part of the preparation of the TSMA. For this purpose, the main, alternate, rear, and auxiliary command posts at strategic and operational levels, and the governmental and strategic multi-communications

link system are organized and established. Moreover, measures are taken for the combined utilization of different types of signal communications means, which can ensure the continuity of their performance and the operational status of all systems.

The prepared signal communications system should ensure simultaneous control of the process of transition of the Armed Forces to a level of full combat readiness, mobilization, troop movement, operational deployment, and initiation of active operations in war. For this reason, the signal communications system should be equally reliable both in command and staff channels, and in the channels of the railroad system, water transport, and motor routes used as military lines of communication. Along with the preparation of our control system, measures are taken to disrupt the enemy control system through the application of radio jamming and the use of various destructive means.

Ensuring the viability of the friendly troop control system and disrupting the enemy control system produce a decisive impact on the operation of the Armed Forces in a period of threat, and at the outbreak of war.

EUROPEAN THEATERS OF STRATEGIC MILITARY ACTION



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CHAPTER SIX

Principles of Strategic Action of the Armed Forces

I. Introduction

Strategic action of the Armed Forces is unified action for the coordinated employment of the Armed Forces as a whole, in order to accomplish strategic missions and achieve the aim of war, which is gaining victory over the enemy.

The achievement of victory in war is dependent, to a large extent, on the organized commitment of the Armed Forces and the nation into war, seizure of the strategic initiative from the outset, and its retention during the course of war.

The types of organized commitment of Armed Forces into a war and the forms of strategic action are the most complex subjects of strategy, and they are continuously dependent on political requirements, the national economy, the materiel base (reserve) for war, particularly weapons and military equipment, and other factors. They develop constantly and change under the impact of the above-mentioned factors. This necessitates a detailed study of the methods of initiation of war by the aggressor, the circumstances in which our Armed Forces enter the war, and the types of strategic action of the Armed Forces.

II. The Principles of Strategic Action and Factors Affecting Their Characteristics

Strategically, future war will involve a system of operations by Ground, Air, and Naval Forces, and combat actions of PVOS operational formations, while in a nuclear war it would also consist of nuclear strikes of the Strategic Rocket Forces.

All of these operations, combat actions, and strikes, carried out by operational formations and large units of all Services, are conducted within the framework of a unified plan and concept, under the guidance of the Supreme High Command. Consequently, the groupings of Armed Forces accomplish their assigned missions through coordinated strategic action implemented in specific forms and methods.

Strategic action of the Armed Forces continues during the entire course of a war, from the outset to the end. This means that the specific political and strategic aims of war are achieved only after gaining victory over the enemy.

The characteristics of strategic action of the various Services of the Armed Forces are generally determined by a number of factors, the most important of which are the following:

- political and strategic aims and the mission of opposing forces;
- composition and status of friendly and enemy armed forces;
- forms of initiation war;
- employment of destructive means and the relative correlation of combat, economic, and morale-political capabilities of opposing sides in a war;
- conditions of the TSMAs.

Only through a complete assessment and evaluation of the above-mentioned factors is it possible to determine properly the principles of execution of strategic action and its characteristics.

Let us discuss some of these factors. The factor that generates a decisive influence on the characteristics of strategic

action is the political aim of the war, which is determined by the political authorities of the State.

In contemporary times, despite the easing of international tensions, reactionary forces can initiate a new general war. In such a war, the antagonistic socio-political systems—imperialism and socialism—would seek the achievement of decisive aims.

In case of the initiation of war by imperialists, it would follow reactionary and aggressive aims at the beginning, which would involve an attempt to destroy socialism and the international system of socialism.

The Soviet Union and other Socialist countries are not interested in war, but would react if war were imposed upon them. In this case the Socialist countries would follow legitimate aims, which are the support and protection of the achievements of their people.

The decisiveness of political and strategic aims of the opposing sides in a war would result, in turn, in the decisiveness, activeness, and intercontinental dimensions of the strategic action of the Armed Forces.

This further emphasizes that, in modern times, the unlimited capabilities of nuclear missiles, primarily strategic nuclear weapons, expand the limits of the areas of strategic action of the Armed Forces into intercontinental and global dimensions. The disposition of political and military forces in the world, the creation of two different social systems, and also the presence of aggressive imperialistic coalitions cause the participation of many countries in the process of strategic action of the Armed Forces, and, therefore, war assumes the nature of alliance blocs and continental conflict. The achievement of the aim of war, as a result of strategic action of the Armed Forces, would be accomplished through the destruction of the main groupings of enemy armed forces and, in the first priority, the destruction of nuclear delivery means, as well as the destruction of the enemy military-economic base, disruption of the government and military control systems, and the seizure of vitally important areas of imperialist countries. This explains the decisive nature of modern war and strategic action.

This also indicates that the destructive means employed by the belligerents to achieve the aims of war and the content of assigned missions produce great effects on the characteristics of the strategic action, since they determine, to a large extent, the types and forms of the conduct of strategic action.

In a nuclear war, the method of conduct of the war is the infliction of losses on the enemy by simultaneous nuclear strikes against the enemy's economic base and the main groupings of the enemy armed forces in the entire depth of his territory, and, subsequently, the exploitation of the results of such strikes by intact forces in order to accomplish the destruction of the enemy. The basic means at the disposal of opposing sides in such a war are strategic nuclear weapons. Despite this, effective conventional means of destruction would also be utilized. Strategic action assumes continental and intercontinental dimensions in terms of scope, involves a large number of countries, and will be distinguished by decisive political and military aims and its tremendously destructive nature. But, at the same time, this does not mean that all regions of the world would be affected equally by nuclear strikes.

Strategic action would be of a dynamic, mobile character, with prompt changes in the situation at the beginning of war, and would assume extreme intensity. The consequences of the initial nuclear strikes of the opposing sides would have a decisive impact on all future actions of the Armed Forces. In such situations, the roads, industries, electric power stations, and military targets in the territories of the main members of one alliance fighting with the opposing bloc would be destroyed, the government and military control systems would be disrupted, large radioactive contaminated areas would be created, large fires would erupt, and large areas would be flooded. Normal living activities would stop for prolonged periods in major countries participating in the war.

In such circumstances victory will be achieved by the side that manages to inflict heavy losses on the enemy, while retaining its own economy and armed forces to a greater extent, and rapidly restoring the combat capabilities of its armed forces. The strength and durability of the morale of the

people and Armed Forces will be very important in this case.

It cannot be excluded that the strategic action of the Armed Forces in a theater of strategic military action would terminate following initial massive nuclear strikes. Such a situation may prevail in a case where the strategic initiative is seized by our Armed Forces and, as a result of nuclear strikes, the major imperialist countries are ousted from the war, because the restoration of their armed forces and industry requires a long time. In such a situation the continuation of war becomes meaningless for the enemy.

However, a situation that cannot be discounted is one in which the war stops in some areas and directions, while military actions continue with great intensity in others. Following massive nuclear strikes or after a certain period of time required for the restoration and reconsolidation of forces, military operations may be conducted normally by small groups on separate directions employing conventional weapons and individual nuclear strikes. The above discussion leads us to deduce that the characteristics of strategic action in a nuclear war should comprise:

- decisive political and strategic aims to be achieved by the country and Armed Forces;
- massive use of nuclear missile armaments, particularly strategic nuclear weapons, to maximally weaken enemy strategic nuclear forces and destroy enemy war production capabilities, disrupt governmental control functions, and destroy enemy armed forces' groupings;
- intercontinental dimensions and nature of military actions;
- concentration of the main efforts of the Armed Forces to destroy the main grouping of enemy forces;
- enormous destructive action by strategic nuclear forces and its decisive impact on the course of war.

Strategic action will be initiated in the most difficult situations. This will require great physical and morale resistance and durability on the part of the Armed Forces and the population of the country. When strategic action is initiated with the

employment of conventional weapons, the basic method of its execution will be the accomplishment of missions in successive phases. Under such circumstances, the principal strategic tasks of the Armed Forces will be:

- weakening enemy nuclear forces and destroying his main groupings of armed forces that are deployed in the TSMA;
- destroying enemy air force groupings to seize air superiority;
- seizing important areas and ground objectives and foiling enemy mobilization and attempts to raise reserves;
- covering friendly armed forces groupings and rear service objectives against enemy air and space attacks.

In conducting a war using only conventional weapons, the following would become more important for the successful conduct of strategic action in the war:

- rapid destruction of enemy air force groupings at the beginning of the war;
- seizure of the strategic initiative and its retention during the war;
- decisive destruction of enemy groupings of forces deployed in the TSMA;
- seizure and occupation of vital operational and strategic areas in enemy territory.

The seizure of the strategic initiative and the accomplishment of assigned missions in a conventional war can be ensured by launches of heavy air strikes on enemy air fields and control means, air battles, decisive attacks of Ground Forces on the main direction, in coordination with naval and the PVOS Forces, and rapid and bold actions of airborne assault landing forces.

At the same time it should be noted that military actions without the use of nuclear weapons may not last very long, since it is possible that the aggressor, confronting a difficult situation, may seek to employ nuclear weapons to change the situation to his advantage.

Under such circumstances, the conduct of strategic action is characterized by the need to maintain high combat readiness of strategic nuclear forces as well as units and large units of *front* operational-tactical rocket troops for the rapid employment of nuclear weapons, should it become necessary.

The nature and characteristics of the enemy and the relative correlation of opposing forces greatly affect the characteristics of the strategic action of the Armed Forces under different conditions of the outbreak of war. The missions, the method of employment of operational formations of the Armed Forces, and their composition will be determined on the basis of the composition, location, and combat readiness of strategic groupings of the enemy in the TSMA, their likely reinforcement in the future, the number and quality of enemy weapons, the level of materiel means of enemy forces, concepts of operational-tactical employment of enemy armed forces, and the level of readiness of enemy operational and strategic commands for control.

Analysis of the composition and capabilities of potential enemy groupings of forces in different TSMAs requires that the nature of likely enemy strategic action should be thoroughly assessed and evaluated, so that the different forms of actions of friendly armed forces to destroy the enemy can be determined in advance.

The strongest groupings of NATO bloc forces are deployed in the Western TSMA. NATO bloc forces are in a high state of combat readiness, and they are equipped with highly sophisticated, modern weapons and combat equipment. They are also provided with the necessary quantities of materiel reserves for conducting war. The peacetime composition of NATO forces in the theater consists of 50 divisions, up to 1,000 nuclear rocket launchers and artillery pieces capable of firing nuclear rounds, and more than 10,000 tanks and 2,600 combat aircraft, including 750 nuclear-armed aircraft. Nuclear submarines and hundreds of other NATO ships may operate in the coastal waters of the TSMA. At the same time the enemy has the necessary groupings of forces in other theaters.

Obviously, the appropriate composition of friendly forces and the nature and characteristics of their strategic action will be determined and specified depending on the composition and situation of enemy forces and the conditions of each TSMA.

To destroy the enemy grouping of forces in the main TSMA, the allocation and employment of large groupings of Ground, Air, and Naval Forces are required. In strategic operations in the Western TSMA alone, several Strategic Rocket Force operational formations and large units, Long-Range Aviation, three to four *fronts*, one to two fleets, operational forces and large units of Border Troops, and PVOS Forces may be employed.

In other TSMAs, where the enemy concentrates relatively smaller forces in a lower state of operational and tactical readiness, and where they are inadequately equipped with modern weapons and equipment, fewer friendly forces and means than those employed in the Western TSMA would be required for the destruction of the enemy.

At the same time it must be noted that appropriate superiority in forces should be established against each grouping of enemy forces at the beginning and during the course of a war. The establishment of appropriate superiority over the enemy not only ensures the seizure of the strategic initiative but, at the same time, facilitates and supports the accomplishment of assigned strategic and operational missions.

The above discussion leads us to the conclusion that the essence of planning, organization, and conduct of strategic action is based on general principles of strategy that are, in turn, in compliance with the nature and character of a future war, in close consideration of the actual situation that might be created.

The general principles of strategy are:

- conformity of strategic goals and missions with political aims determined by State political authorities;
- continuous maintenance of a high level of combat readiness of the Armed Forces in peacetime as well as in war;

- unified actions of all Services to achieve strategic goals and accomplish strategic missions;
- concentration of the main efforts of the main groupings of Armed Forces in the main direction at the decisive time;
- timely exploitation of the impact of nuclear strikes in support of decisive attacks and completion of the destruction of the enemy;
- retention of close and continuous coordination between forces and means in the course of strategic action;
- centralized control of groupings of Armed Forces participating in strategic operations.

Now we will briefly discuss these principles.

The first important principle is the conformity of strategic goals and missions to the political aims of the State. In a general war with the imperialist bloc, the strategic goals and missions should conform to the political aim of all friendly Socialist countries. This principle emerges from Lenin's definition of the social and political essence of war and the subordination of military strategy to the political leadership of the State.

The conformity of the strategic goals of the Armed Forces to the political aims of the State is the basic framework and foundation for determining the specifications for the preparation of strategic action, the composition of forces and means to take part in a war, and the methods of their operation. Only the conformity of strategic goals to political requirements, which, in turn, emerge from the capabilities of the Armed Forces, can ensure the successful achievement of the aims of a war.

Another principle is that success in strategic action during a future war will be achieved through the establishment of appropriate groupings of armed forces in peacetime and their maintenance of high standards of combat readiness.

The basis for the requirement of constant combat readiness of the Armed Forces is the possibility of a surprise initiation of war by the enemy, and the requirement that Soviet military strategy ensure the achievement of the aim of war, in the shortest period of time, through the actions of first strategic

echelon forces. Moreover, a high level of combat readiness constitutes one of the standard preconditions for seizing the strategic initiative at the outbreak of war and retaining it throughout the war.

The essence of the need to unify the efforts of all Services of the Armed Forces lies in the fact that the achievement of the final aim of strategic action is only possible through coordinated action of operational formations and large units of all Services of the Armed Forces. However, this principle does not mean that all types of military forces and means play equal roles in war. Each element plays a specific role and occupies a certain position by virtue of its combat capabilities and methods of conducting strategic actions.

In a nuclear war, vital missions are accomplished by the use of nuclear weapons, primarily Strategic Rocket Forces. Nevertheless, all Services of the Armed Forces, whether or not equipped with nuclear weapons, actively participate in strategic action, although they play different roles in the process. Consequently, missions such as completing the destruction of the enemy and seizing territory are widely carried out by Ground, Air, Naval, and Air Defense Forces using only conventional weapons.

The nature and essence of the above-mentioned principles gain even more importance in circumstances in which strategic action is conducted only with conventional weapons, and it is necessary to unify and coordinate the efforts of all Services of the Armed Forces to achieve strategic aims.

At the same time, it should be noted that a vital role in destroying the enemy and seizing his territory is played by the Ground and Air Forces.

The application of the principle of concentration of the main effort of the Armed Forces on important directions in a TSMA envisages that the establishment of superiority in forces and means at the decisive place is a requirement to destroy the enemy.

The requirement to precisely and properly select the direction of the main effort is applied equally to different forms

of strategic action conducted individually or as a whole, but the application still has some peculiarities in each individual case, depending on the capabilities and the method of employment of various Services of the Armed Forces.

The principle of concentration is observed strictly in distributing Armed Forces to different TSMAs. The significance of various TSMAs will not be the same in a war. Strategic action, through the use of large or small forces, can be initiated simultaneously in all of them. The main TSMA, in addition to its political significance, is the area where the enemy's strongest grouping of nuclear forces and means, the main grouping of enemy armed forces, and vital economic centers are concentrated, and the destruction of such enemy forces will produce greater strategic consequences decisively affecting the entire course of war.

Thus, the quantitative and qualitative composition of forces required for achievement of the aims of strategic action in the TSMA is determined on the basis of the volume and significance of missions to be accomplished in the theater.

Another principle of strategic action is the timely exploitation of the impact of nuclear strikes for initiating decisive attacks in the TSMA to complete the destruction of enemy groupings and seize vital strategic areas in enemy territory.

Finally, there is the necessity to establish close interaction among all Services of the Armed Forces participating in a strategic action and centralized control by the Supreme High Command. The need for continuous interaction and centralized control of Armed Forces' strategic actions is important and must be met, since military actions in war are conducted by operational formations and large units of all Services of the Armed Forces, and strategic missions in each TSMA and in each operation can only be accomplished if they are coordinated in the interest of the common goal. Moreover, strategic actions are closely connected with each other, despite their execution in different forms, different places, and at different times. The best example of this is the variety of tasks conducted by the various Services of the Armed Forces, primarily that of

strategic nuclear forces and Long-Range Aviation, as part of the strategic action in a TSMA in different forms of operations (in continental or oceanic TSMAs).

The application of the principle of centralized control of strategic actions should ensure constant and flexible control of the Armed Forces. Therefore, in a general nuclear war which will be practically simultaneous in all TSMAs, intermediate strategic control elements will be established in most of the individual TSMAs. An example of such a procedure is the establishment and successful operation of the Soviet Union's High Command (*Glavnokomandovanie*) in the Far East in 1945 for the purpose of controlling the Armed Forces in the war against Japan.

III. Forms of Initiation of War by the Aggressor and the Commitment of the Armed Forces into War

Methods of initiating war may be different and, as history indicates, they will never remain unchanged and eternal. Methods of initiating war are dependent on the military and political situation, the extent of progress and achievements in weapons and military equipment, and the theory of characteristics and forms of waging war.

For example, in World War I, dynamic military actions were initiated two weeks after the official declaration of war, during which the mobilization and deployment of the groupings of armed forces were accomplished.

However, in World War II, military actions against the Soviet Union and other countries were initiated by surprise by the armed forces' groupings of Fascist Germany and Japan, which had been deployed in advance.

In modern times, Soviet military strategy, based on the nature and character of future war, the presence of strategic missile systems in the armed forces of the potential enemy, and the experiences of large operational and strategic field exercises and maneuvers of the NATO bloc, considers the likely forms of initiation of war by the aggressors to be as follows:

- surprise strikes with unlimited use of nuclear weapons;
- a strike with initially limited use of nuclear weapons and subsequently going over to full use of the complete nuclear arsenal;
- strikes by groupings of armed forces deployed in the TSMAs without the use of nuclear weapons;
- initiation of war by gradual expansion of local wars.

The study and analysis of the likely forms of the initiation of war by the aggressor provide the possibilities for us to develop and select effective forms for the organized commitment of friendly Armed Forces into war in order to foil enemy aggression and inflict decisive losses on him.

Initiation of war by the imperialist bloc, led by the United States, through a general nuclear attack is considered and studied as the basic form of initiating war, with respect to American doctrine. This form of initiating war is the most dangerous method and can turn into an enemy surprise attack with unlimited use of strategic nuclear forces.

Surprise massive nuclear strikes can be initiated by war-ready (*gotovyi*) nuclear forces after brief direct and secret preparation (from constant combat readiness or combat patrol), or by the entire strategic nuclear forces after long preparation.

In the first or second variant the aggressor would launch the initial nuclear strike using the bulk of his war-ready nuclear delivery means. The initial nuclear strike may consist of several salvos of intercontinental and naval-based rockets (up to three salvos), with an interval of 2 hours between the first and second salvos, and 7 to 10 hours between second and third salvos. It will also include an attack of strategic aircraft with a total duration of up to 12 hours. After preparation and assessment of the consequences of the initial nuclear strike (up to 12 hours according to American norms) the subsequent strike can be launched.

In a nuclear offensive in the TSMA, in addition to strategic nuclear delivery means, the tactical means of Ground Forces, Air Forces, and fleets will also employ up to 60 percent of allocated weapons in the initial nuclear strikes.

According to the experiences of NATO forces, the total duration of the nuclear offensive in the TSMA can be three to four days.

Generally, as part of preparations for the initial nuclear strikes, which may take one to seven days according to American norms, the enemy will apparently take specific actions concerning the combat readiness of the control system and groupings of all services of armed forces, and he will also make preparations pertaining to the national economy and national defense. All activities carried out in this direction by the enemy provide possibilities to detect his preparation for the initiation of war. However, it should be noted that enemy direct preparation for the initiation of war will be conducted in the form of field exercises and maneuvers, along with the spreading of deceptive news and misleading information. In some cases, the enemy may even initiate the nuclear attack without deploying its armed forces prior to the outbreak of war.

On the basis of such options of American strategy, the forms of commitment of the Soviet State into war can be determined. First, the enemy should be denied the chance of launching surprise nuclear attacks. Therefore, the most important task is the timely detection of enemy direct preparations for launching a nuclear attack. For this purpose, efforts of all types of reconnaissance must be directed toward acquisition of information required by the political leadership of the State to enable it to make a timely decision on committing friendly nuclear forces into action.

In case the enemy initiates a nuclear attack, the preestablished warning system must disclose the launching of enemy missiles and should inform the Supreme High Command, within three to four minutes, so that it can make a decision on committing friendly Armed Forces into action.

By the commencement of an enemy nuclear attack, friendly nuclear forces launch, on signal (*signal*), the initial massive nuclear strike, which can be followed by subsequent nuclear strikes. Meanwhile, dynamic military action by PVOS Forces

to repel enemy air and space attacks, according to the actual situation, and *front* and fleet operations are initiated in the continental and oceanic TSMAs.

Limited use of nuclear weapons, followed by the unlimited use of his complete arsenal of nuclear weapons, is the most likely form in which the war will be initiated by the enemy. The reasons for this are:

- an attempt by American forces to save their territory, for a time, from the devastating impact of nuclear strikes by the opposing side;
- an attempt to mobilize and conduct operational deployment of armed forces under favorable conditions on the territories of America and allied countries;
- the necessity to ensure the accomplishment of actions in the area of civil defense and transition of the national economy from a peacetime to wartime status on a large scale;
- the intention to avoid the concerns of society about the risks of using strategic nuclear weapons.

Such a war would be initiated not only by the U.S. or the NATO aggressive bloc against the Soviet Union and other Warsaw Pact countries, but also by China against the Soviet Union and other Socialist countries of the Far East.

The limited use of nuclear weapons by imperialist countries against individual Socialist countries and against friendly developing nations is considered likely, since attempts to jeopardize the vital interests of the Soviet Union are inevitable.

Initiating war by limited use of nuclear weapons in one of the continental or oceanic TSMAs may be expected in areas where the enemy would be in an unfavorable situation, with respect to the disposition of his armed forces' groupings, and would seek to compensate for weakness by the use of nuclear weapons. However, under modern conditions, such nuclear attacks would be primarily the consequences of the expansion and development of a conventional war in a crucial situation, when the dangers of complete destruction of the grouping of

enemy armed forces and the loss of important and vital strategic enemy territories may become apparent.

Under such circumstances, committing Soviet Armed Forces into the war will have particular features. In case of limited surprise enemy nuclear strikes, Soviet forces should rapidly launch strikes to destroy the opposing enemy groupings of forces, primarily against his operational and tactical nuclear delivery means, and subsequently move into the attack. The Ground Forces of the *fronts*, supported by Air Forces, fleets, and PVOS Forces, and interacting with airborne assault landing forces, must attack following the nuclear strikes and should complete destruction of enemy groupings and seize vital terrain areas in enemy territory.

Conducting military actions with limited employment of nuclear weapons in Europe and in other vital areas would not last long, and the use of all nuclear weapons, similar to initial nuclear strikes, would be soon initiated.

Depending on the situation, enemy use of nuclear weapons should be foiled through launching of strikes by operational and tactical nuclear delivery means, aviation and conventional weapons strikes, and rapid development of the attack to complete the destruction of the enemy and seize vital strategic areas.

In modern times, the possibility of the aggressors' initiating war using only conventional weapons, followed by the use of nuclear weapons, is likely. America and its imperialist allies currently emphasize small wars, which help achieve part of their military and political aims. By doing so, they avoid the possibility that their countries will be hit and suffer damages through the use of enemy nuclear weapons.

A war without the use of nuclear weapons may be initiated as follows:

- after initial mobilization and strategic deployment of armed forces;
- by war-ready forces deployed during peacetime;
- through simultaneous or subsequent commitment of the entire force into action.

Such a war might be initiated in two forms: by a surprise strike or gradual expansion of military actions (from the interior).

War employing conventional weapons can be initiated simultaneously in all TSMAs. Such a war will not last very long, and is expected to develop into a nuclear war at a crucial stage. The duration of the conventional phase of the war in Europe will be much shorter, lasting several days. In other TSMAs it may last longer.

The nature of enemy action under such circumstances will consist of massive use of aviation with the simultaneous invasion of mobile groupings of ground forces cooperating with large airborne and seaborne assault landing forces.

According to NATO field exercises, military action without the use of nuclear weapons commences by massive air strikes to weaken enemy aviation groupings, inflict damage on nuclear delivery means, disrupt the control of enemy forces, and isolate the areas of military action to prevent the arrival of enemy reserves from the interior to such areas. As the exercises indicate, all technically operative tactical, naval, and strategic aircraft (up to 70 percent of all aircraft) have participated in such actions.

In such cases, committing friendly armed forces into the war is primarily directed at destroying enemy aviation groupings. The principal means of accomplishing this task is the action of the Air Forces, which is in the form of an air operation. Meanwhile, the decisive actions of *fronts* and fleets begin.

The initial offensive operation of the *fronts* is conducted to destroy enemy groupings of forces, expand military action into enemy territory, develop the attack along the main strategic directions, and eliminate individual enemy allied countries from the war in the initial days.

The basic conditions of successful action are seizure of the strategic initiative, rapid development of the attack, and timely expansion of efforts by committing operational and strategic reserves into combat.

The Navy, interacting with Long-Range Aviation, launches attacks from the beginning of the outbreak of war against large

enemy aircraft carrier task forces, submarines, airfields, anti-naval forces, and control and guidance systems.

In order to commit the Armed Forces of the nation into war in an organized fashion, with the use of conventional weapons, the accomplishment of timely mobilization and strategic deployment, according to the plan, and the transition of industries from a peacetime to wartime status while taking civil defense measures would be of prime importance.

In case the enemy initiates war from the "interior," the method of friendly Armed Forces' action would be specified according to the situation by the political authorities of the nation.

In some cases, friendly Armed Forces may prevent military provocations and local conflicts through decisive action, precluding their development into a general war. In other cases, depending on military and political situations, heavy strikes may be launched to destroy, in the shortest possible time, groupings of enemy armed forces deployed in the area of military conflict.

With the start of any local military conflicts, the Armed Forces of the Soviet Union will be brought to a level of full combat readiness.

IV. Basic Forms of Strategic Action and Their Interrelations

The principal forms of Armed Forces' strategic action in war are the following:

- action of strategic nuclear forces;
- strategic operations in continental TSMAs;
- strategic operations in oceanic TSMAs;
- air operations to destroy enemy aviation groupings and nuclear missiles;
- action of PVOS Forces to repel enemy air and space attacks.

In a general nuclear war the most important form of action which constitutes the very basis of conducting such a war

is the action of strategic nuclear forces conducted by operational formations of Strategic Rocket Forces, nuclear submarines, and Long-Range Aviation. Their actions, which consist of massive nuclear strikes by land- and sea-based ballistic rockets, are directed to destroy enemy targets in overseas areas and in TSMAs. Long-Range Aviation strikes are conducted in coordination with ballistic nuclear rocket strikes, with respect to missions, targets, and time. The initial nuclear strike is the strongest; it will be followed by subsequent strikes until the missions assigned to strategic nuclear forces in the war are accomplished.

Strategic operations in continental TSMAs are the sum of strategic rocket strikes and operations and combat actions of Ground, Air, Naval, and PVOS Forces directed to destroy groupings of enemy land forces in the total depth of the theater and important targets in the territories of enemy allied countries, seize the main areas in enemy territory, and eliminate individual countries from the war.

Strategic operations in oceanic TSMAs will be conducted to destroy enemy naval force groupings, nuclear submarines, large aircraft carrier task forces, and anti-ship forces, and to foil enemy sea movements and blockade islands and naval bases. Such operations include the operations of one or more fleets and Long-Range Aviation and, in some cases, the strikes of strategic nuclear forces and the actions of PVOS Forces. Military actions cover large areas of the ocean and assume a maneuvering, dynamic character.

Actions of PVOS Forces to repel enemy air and space attacks are conducted to prevent enemy air and space strikes against political and industrial centers and groupings of friendly forces, and consist of the actions of air defense means to destroy attacking aircraft and aircraft-launched rockets, an anti-ballistic missile defense to destroy the warheads of enemy missiles, and anti-space defense to destroy space systems.

Therefore, each type of strategic action is the combination of strikes, operations, and combat actions of operational formations and large units of the various Services of the

Armed Forces that are conducted on the basis of general concepts and directed toward a unified aim.

All forms of strategic action are interrelated and are conducted on the basis of a unified plan, under the control of the Supreme High Command, to achieve the general aim of the war.

Strikes of strategic nuclear forces play a decisive role in achieving the aim of the war, and fundamentally affect the development of the conduct of other forms of strategic action.

The most important element of strategic action is the delivery of the initial nuclear strike through the utilization of the maximum number of combat-ready strategic nuclear forces.

Strategic operations in continental and oceanic TSMAs will be of major importance in achieving the aim of the war. In such operations the main tasks will be accomplished by operational formations and large units of Ground Forces, *front* and Long-Range Aviation, and fleet forces and means.

Operational and tactical nuclear delivery means are used to launch the initial nuclear strikes in coordination with strategic nuclear forces. These will also launch nuclear strikes according to the plans of *front* and fleet commanders to destroy enemy tactical nuclear delivery means, large enemy ground and air force units, air defense means, large strike and anti-ship units of enemy fleets, control systems, and enemy rear service bases.

The actions of the PVOS Forces have a large impact on the actions of strategic nuclear forces and on the entire execution of strategic operations in continental and oceanic TSMAs. Successful accomplishment of missions by the PVOS Forces largely affects the status of combat capabilities of groupings of the Armed Forces and the safeguarding of important and vital rear economic, political, and administrative centers.

In a war conducted using conventional weapons, the quantitative role of the principal forms of strategic actions of the Armed Forces will be different from that in a general nuclear war.

First, the actions of strategic nuclear forces will not be conducted, although they will have to remain in constant combat

readiness for rapid use as the situation requires. In conventional war, decisive importance is given to strategic operations in continental TSMAs. The role of strategic operations in oceanic TSMAs and the actions of PVOS Forces to repel enemy air and space attacks retains its importance.

At the same time, a new and significant form of strategic action, an air operation to destroy enemy aviation and nuclear forces groupings, is implemented in one or more adjoining TSMAs.

An air operation will be conducted to ensure air supremacy and seizure of the initiative from the beginning of a war, destroy enemy nuclear rocket systems, and provide favorable conditions for successful actions of *fronts*, fleets, and large units of other Services of the Armed Forces.

Strategic action of all Services of the Armed Forces in a conventional war will be conducted through coordinated actions of all elements, in close cooperation and interaction with each other. In such a war, an air operation to destroy enemy aviation groupings and nuclear missiles, and to facilitate decisive offensive operations of the *fronts*, which are conducted as part of strategic operations in TSMAs at high speed and in great depth, will be of decisive significance in successfully conducting the war.

Significant importance in successfully conducting a strategic action is given to the seizure of the strategic initiative from the beginning of the war.

In a strategic action conducted in a conventional war, the seizure of the strategic initiative should be ensured by the following actions:

- forestalling and overtaking the enemy in deployment of Armed Forces in the TSMA;
- launching devastating strikes against the enemy on the main directions;
- initiating rapid, surprise actions to destroy enemy aviation groupings in order to gain air supremacy;
- initiating decisive action, from the outset of war, by *fronts*, fleets, and airborne assault forces directed at deeply penetrating into enemy territory;

- depriving the enemy of the opportunity to deploy his groupings of forces on lines earlier prepared, destroying his forces in border areas, and ensuring the penetration of attacks launched by the *fronts* to great depths.

While repelling enemy-initiated aggression, the seizure of the strategic initiative can be ensured by successfully repelling the enemy's attack from land, air, and sea, followed by dynamic actions of friendly forces in destroying the main aviation, ground, and naval groupings of the enemy. For this purpose, rapid accomplishment of the deployment of the main forces of *fronts* and fleets and their going over to dynamic offensive action are required.

In a nuclear war the seizure of the strategic initiative in the first minutes produces a decisive impact on the development of military action, the extent of casualties incurred and damage sustained, and generally, the duration of the war.

In such cases the seizure of the strategic initiative is ensured by the following actions:

- launching timely nuclear strikes on enemy nuclear missile systems in their launch positions, airfields, aircraft carrier strike task forces, and nuclear submarines deployed in the ocean;
- disrupting the enemy control system by inflicting damage on its control centers and using radio-electronic warfare means;
- successfully repelling enemy air and space attacks;
- causing great losses to enemy ground and naval forces deployed in the TSMA, as well to strategic reserves.

In seizing the strategic initiative, decisive importance is given to the timely delivery of the initial strategic nuclear strike by strategic nuclear forces and nuclear delivery means of the *fronts* and fleets, and also to the successful action of PVOS Forces in repelling enemy air and space attacks.

Protecting the maximum number of friendly forces from enemy nuclear strikes is of vital importance, since such measures ensure the establishment of the superiority of friendly

Armed Forces and help to forestall and overtake the enemy in restoring combat power of groupings of friendly forces and initiating attacks by them.

Moreover, inflicting great damage on military production, disrupting governmental control, and suppressing the morale of the population of enemy nations produces great impact in favor of seizing the strategic initiative.

The retention of the strategic initiative during a military action is largely dependent on the commitment of *fronts*, airborne assault large units and aviation reserves, and the development of an air defense system in occupied territories.

V. Conclusions

In this lecture we studied a number of important issues and facts which constitute the basis for strategic action of the Armed Forces. We can derive the following conclusions from them:

- first, the characteristics of strategic action depend on many factors, among which, the most important role is played by the following:
    - the policy of the Soviet State and Socialist countries for ensuring peace and all-round protection of the nation from the aggression of imperialist coalitions;
    - content of the strategic aims specified for the Armed Forces in war by the political control authorities;
    - the capabilities of the potential enemy's armed forces and characteristics of his likely action;
    - the weapons to be used in the war and the correlation of forces and means;
    - the situation and conditions of the TSMA;
- second, despite the wide variety in the content and condition of the conduct of the strategic action, basically they are governed by unified principles;

—third, a strategic action is conducted in a specific form and it is required that such a form facilitate the accomplishment of missions faced by the Armed Forces effectively and in accordance with the aim.

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CHAPTER SEVEN

Strategic Operations in a Continental Theater of Strategic Military Action

I. Introduction

In Soviet military theory, future war is studied as a system of strategic operations and strategic actions with the employment of all Services of the Armed Forces such as:

- action of strategic nuclear forces;
- strategic operations in continental TSMAs;
- strategic operations in oceanic TSMAs;
- actions of PVOS Forces to repel enemy air and space attacks;
- air operations to destroy enemy aviation groupings and enemy nuclear missile systems in the TSMA, when the war is initiated using conventional weapons.

Depending on the number of participating forces and means, territorial dimensions, and objectives, strategic operations conducted in continental TSMAs occupy the main position in the aforementioned system of strategic operations and strategic actions.

Strategic operations by groups of *fronts* emerged as the method of strategic action by Soviet Armed Forces in World

War II. Soviet military theorists studied *fronts* as strategic formations of the Armed Forces, designated to operate on strategic directions. The *front* was capable of accomplishing large strategic missions independently. But the experience of Soviet forces during the winter of 1941-42 in the offensive around Moscow indicated that not just one, but a number of *fronts* should be employed to achieve strategic objectives.

II. Content of Strategic Operations in a Continental Theater of Strategic Military Action

Strategic operations in a continental TSMA are the total of strikes by strategic nuclear forces, and operations and combat actions by operational formations and large units of Ground Forces, Air Forces, the Navy, and PVOS Forces, conducted in accordance with a unified general concept and plan, under the guidance of the Supreme High Command, to achieve the aim of the war.

Modern strategic operations have a number of characteristics, as follows:

- the capabilities of strategic nuclear forces, with their enormous effective range, and the increased striking power and maneuver capabilities of troops equipped with various types of combat equipment, ensure the destruction of groupings of enemy armed forces within the boundaries of the entire TSMA and in its entire depth;
- the presence of nuclear weapons with different yields, used for different purposes and tasks, requires that the main missions of the operation should be accomplished in a short period of time. In case of initiation of nuclear war by the aggressors, the above-mentioned weapons will constitute the main weapons for conducting strategic operations and achieving objectives;
- in strategic operations, friendly Armed Forces will have to deal with large enemy groupings of all services of the armed forces operating in land air, and maritime regions

of the TSMA. In order to destroy such enemy groupings, operational formations of all Services of the Armed Forces will have to be used. Therefore, modern strategic operations will assume the character of a combined operation of all Services of the Armed Forces to a far greater extent than those conducted in the last world war.

These considerations differentiate between contemporary strategic operations and strategic operations of World War II, which were often conducted by *fronts* on one or two strategic directions. For the purpose of conducting strategic operations in continental TSMAs, large units of all Services of the Armed Forces will be used. Therefore, in strategic operations conducted in the Western TSMA, a number of operational formations and large units of Strategic Rocket Forces, a number of *fronts*, joint naval forces of the Warsaw Pact, large units of Long-Range Aviation, and operational formations and large units of PVOS Forces deployed in the TSMA may be employed.

Several thousand nuclear rounds of different yields, delivered by various nuclear-delivery means, can be allocated to the Western TSMA for the execution of strategic operations. In other TSMAs, the size of the Armed Forces used to conduct strategic operations will depend on the significance of the theater and the content of the aims to be achieved through the accomplishment of such operations. Strategic operations in a continental TSMA may include the following:

- strikes by Strategic Rocket Forces on the most vital enemy targets in the entire depth of the TSMA, using nuclear weapons;
- initial and subsequent operations by *fronts*;
- Long-Range Aviation operations;
- Naval operations to destroy enemy ships and submarines operating in the maritime theater and enemy coastal targets, to land seaborne assault forces, to destroy enemy maritime communications routes, to prevent the landing of enemy seaborne assault elements in coastal areas of the theater, and to protect friendly maritime communications routes;

- air operations to destroy enemy air forces and nuclear rocket forces in case war is initiated using conventional weapons;
- airborne assault operations;
- combat action of operational formations and large units of PVOS Forces deployed in the theater to repel enemy air and space attacks.

The duration of a strategic operation should include the operational phase of the actions of land forces to occupy vital areas in enemy territory. In the case of the West European TSMA, its greatest depth is 1,200-1,800 km from the border of Socialist countries. Therefore, if the rate of advance in *front* offensive operations is 40-60 km per day, the duration of a strategic operation in that area will be 25-30 days. In other TSMAs the duration of strategic operations may be shorter or longer than the aforementioned figure.

Strategic operations in a continental TSMA will have different characteristics in different types of wars , i.e., nuclear or conventional. In nuclear war, the basis of strategic operations is nuclear strikes against the enemy. In such a war, simultaneous damage will be inflicted on the main groupings of the enemy armed forces in the entire depth of their combat formations, as well as on military-industrial targets, and governmental and military command posts of enemy nations in the TSMA and in overseas territories.

The decisive action in a strategic operation is the launching of initial nuclear strikes in the TSMA by Strategic Rocket Forces, Long-Range Aviation, nuclear submarines, and the nuclear delivery means of the *fronts* and fleets.

As a result of nuclear strikes, both sides will suffer heavy losses and damage, and a difficult and complex situation will prevail in the TSMA. Under such circumstances, the most important role will be played by decisiveness and persistence in seeking victory, quick elimination of the impact of enemy

nuclear attacks, restoration of troop combat capabilities, and intelligent organization of their future actions.

Despite heavy losses and the difficulties of the situation, the *fronts*, armies, fleets, operational formations, and large units of the other Services of the Armed Forces will continue to conduct the operation. Combat actions are conducted by troops left intact following nuclear attacks, as well as by troops whose combat capabilities have been restored in order to accomplish the destruction of the enemy in the TSMA and occupy enemy territories.

In a conventional war without the employment of nuclear weapons, the most important enemy targets to be engaged at the beginning of strategic operations are enemy ground and aviation groupings, including nuclear delivery means. It may not be possible to engage enemy rear service targets located in the depth of enemy territory with conventional weapons prior to the use of nuclear weapons.

Successive destruction of the enemy in different depths and at different times will be achieved by destroying his force groupings. A vital role will be played by *fronts*, Air Forces, and the Navy.

Forces will be required to operate in the face of the constant risk of the use of nuclear weapons. Since the time of initiation of enemy nuclear attacks will not be known exactly, commanders of all echelons and at all levels will have to maintain their nuclear forces in constant readiness for employment, and keep the troops in constant readiness to protect themselves against the possible impact of enemy attacks using weapons of mass destruction.

In strategic operations initiated by using conventional weapons, the vital role in initial operations and combat actions will be played by the *fronts*, fleets, and operational formations and large units of other Services of the Armed Forces. In the course of such operations, missions will be carried out to foil enemy attacks, inflict decisive losses on his groupings of armed forces deployed in the TSMA, including nuclear delivery means, and seize and retain the strategic initiative.

For successful initiation and conduct of strategic operations using conventional weapons, gaining air superiority is of particular significance. Therefore, in this case, the most important element of the strategic operation is the air operation to destroy or weaken enemy aviation groupings and destroy enemy nuclear rocket forces deployed in the TSMA.

It is not likely that strategic operations in European TSMAs will be conducted for the duration of the war without using nuclear weapons. There is every indication that a war initiated in European TSMAs with conventional weapons will transform into a nuclear war at a certain stage. Consequently, the principal components of strategic operations, according to Soviet military theory, are anticipated in continental TSMAs. In a general war, such operations, including actions of strategic nuclear forces, are the most significant forms of strategic action by the Armed Forces.

Strategic operations in continental TSMAs will not be conducted separately and individually, but will be carried out in coordination and close relationship with each other, as well as in coordination with other forms of strategic action by the Armed Forces, primarily with the actions of strategic nuclear forces and strategic operations conducted in oceanic TSMAs.

Strategic operations in continental TSMAs are the most difficult and complex form of strategic action by the Armed Forces and require detailed preparation in all aspects.

III. Preparation for Strategic Operations

Preparations for strategic operations in a continental TSMA are carried out in peacetime and include the following:

- making a decision about strategic operations;
- planning the operations;
- establishing groupings of Armed Forces to conduct the operation, assigning missions to operational formations, and organizing coordination;
- preparing for all types of support measures in the interest of strategic operations;

- organizing and taking measures to ensure secret deployment of groupings of the Armed Forces and their constant combat readiness;
- organizing troop control of groupings of Armed Forces during the operation;
- organizing systematic strategic control of all measures and actions on time and in full detail.

We will now discuss some of the above-mentioned measures, such as the content of the decision method of planning operations issues related to the establishment of Armed Forces' groupings, organization of coordination, and organizing and ensuring troop control.

Decision for Conducting Strategic Operations

The decision for conducting strategic operations in continental TSMAs is made by the Supreme High Command. In making the decision for conducting strategic operations and working out the operational plan, the process and concepts are based on the following doctrinal principles:

- first, the Soviet Union, as a Socialist State, rejects waging predatory wars. The Soviet Union has not prepared or desired to wage war to achieve world political supremacy or to cause changes in the social systems of other countries. The Soviet Union has no need to expand its territorial boundaries. However, what has been achieved and constructed by the Soviet people will be protected by the Armed Forces, which will support the achievements of other Socialist countries as well;
- second, if aggressors attempt to invade our Socialist homeland and attack the national interests of the Soviet Union, decisive military action will be conducted for the complete destruction of the enemy by using the full military power of the country and all forces and means at the disposal of our State. The Soviet Army and Navy will rapidly initiate dynamic offensive actions when the enemy invades our borders;

- third, along with offensive actions, Soviet military doctrine recognizes defensive laws and actions at strategic, operational, and tactical levels; however, defense is considered a forced form of military action. Defense is assumed only when forces and means are not sufficient to attack or when gaining time may be necessary in order to concentrate forces and provide favorable conditions for the initiation of a decisive offensive operation.

The following are usually included in the decision for conducting a strategic operation:

- deductions from an assessment of the military and political situation in the TSMA;
- assessment of enemy armed forces' groupings, strategic objectives, and likely plans for military actions in the war;
- composition and capabilities of friendly forces appointed to conduct strategic operations;
- relative correlation of opposing forces (in forces and means) at the beginning of, and during, the war;
- aim and concept of the strategic operation;
- combat formation of Armed Forces' groupings in the operation;
- method of using nuclear weapons;
- missions of operational formations of all Services of the Armed Forces;
- instructions on organizing coordination of all types of supporting actions and troop control.

The decision is depicted graphically on a 1:1,000,000 or 1:500,000 scale map with a written annex, or worked out in written form with a map annex. The most important element of the decision for strategic operations is the aim and concept of the operation.

Content of the Aim of Strategic Operations

The content of the aim of the strategic operation in each TSMA is dependent primarily on the political aim of the war,

capabilities of friendly and enemy forces, relative correlation of opposing forces, nature and significance of military geography in the TSMA, and other factors. In World War II, typical objectives of strategic offensive operations were destroying large formations of enemy armed forces composed of 20-30 divisions (which, in some larger operations, consisted of 50-60 or more divisions), and seizing the most important economic, political, and military objectives, areas, and lines.

The aim of contemporary strategic operations in continental TSMAs ensures complete destruction of enemy armed forces' groupings in the theater, devastation of the military economic base of enemy allies, and elimination of all enemy nations or, at least, major enemy nations, from the war. The aim of the operation can be modified according to changes in the world political and military situation and in the TSMA, particularly at the beginning of the war.

Concept of Strategic Operations

The concept of a strategic operation in a continental TSMA reflects the major content of the decision of the Supreme High Command regarding the conduct of the operation. According to the experience of field exercises, the basis of the concept of strategic operations usually consists of the idea of simultaneous or successive destruction of enemy armed forces' groupings and the sequence of destruction of important military and economic targets in the entire depth of the TSMA. The achievement of the aim of strategic operations requires accomplishing a number of large strategic tasks. The most common tasks in this series are the following:

- destroying important groupings, primarily nuclear, of enemy armed forces in the TSMA;
- repelling enemy air and space attacks by PVOS Forces;
- destroying or seizing enemy economic and military targets that directly boost morale-technological incentives of the enemy armed forces;
- foiling the mobilization of enemy armed forces;

—disrupting enemy governmental and military control;
—seizing and holding important areas in enemy territory.

The aforementioned tasks will be carried out in the course of the operation and combat actions by operational formations of various Services of the Armed Forces. The content and concrete significance of these tasks may differ according to the nature of each TSMA and various enemy allied countries. The political concept is of particular importance in determining the above-mentioned issues. Political reasons may affect the selection of areas of the TSMAs for action, the selection of countries to be hit by nuclear strikes, or nations not to be attacked or temporarily not to be attacked by nuclear weapons. They also affect the selection of the methods and sequence of inflicting losses on groupings of forces and military targets in the depth of enemy territory.

The capability to accomplish various strategic tasks is dependent on the type of destructive weapons. In this context, the destruction of enemy military-economic targets can be most effectively ensured by nuclear weapons. When war is conducted without using nuclear weapons, it is difficult to strike and damage all enemy military-industrial targets. In this case, it is necessary to determine the most crucial areas of the enemy's war economy and strike such targets and industrial areas whose destruction may impede and paralyze the enemy's military economy to the maximum extent, even for a short period of time.

The tasks of seizing and occupying enemy territory can be accomplished in different ways. In a war initiated using conventional weapons only, the seizure of terrain areas is of particular significance. When the war is initiated using nuclear weapons, many territorial areas will lose their significance after nuclear weapons are employed against them. In some areas, radioactive contamination with a high lethal dose of radiation, fatal to the lives of personnel trying to occupy them and stay there, will be created. In such cases it is better to seize and occupy only those areas left relatively intact and which, by occupation, may place the enemy in a hopeless situation.

Planning for Strategic Operations

Planning for a strategic operation in a continental TSMA is conducted well in advance in peacetime by the General Staff of the Armed Forces on the basis of the decision made by the Supreme High Command. Only a limited number of people are involved in the planning, and the process is considered a State secret. Commanders and Main Staffs of the various Services of Armed Forces, chiefs of arms and services of the Ministry of Defense, the Deputy Minister of Defense for Rear Services, the Main Rear Staff of the Armed Forces, and commanders and staffs of military districts and fleets are called on to participate in the planning of matters only directly relating to them. The armed forces' General Staffs of Warsaw Pact countries participate only in the planning process related to the use of their armed forces and the preparation of their areas included in the TSMA.

Planning for strategic operations consists of working out the plan for using nuclear weapons in the operation, *front* operations, air operations, airborne assault operations, naval operations, combat actions of operational formations and large units of the country's Air Forces and other forces and means taking part in strategic operations, and other plans to support the operation, including the rear service support plans and other necessary documents. The planning is conducted on the basis of calculations and assessments made of the actual opposing forces and anticipation of likely and possible changes in the world political and military situation, as well as on the basis of calculations concerning the different forms of the initiation of war, with or without the use of nuclear weapons. Regardless of the form of the initiation of war, a unified plan is worked out for strategic operations. In such a plan, a unified aim for the operation is specified, and zones of offensive operations are marked for *fronts* and armies, with or without the use of nuclear weapons. By the same token, the directions of the main attacks and supporting attacks and the immediate and subsequent missions of thc forces are specified for both variants. Moreover, measures in support of strategic opera-

tions are specified. Meanwhile, details are illustrated in the plan for both types of war. The unified plan of the operation should be flexible, but, at the same time, must be sufficiently clear and specific. Under all circumstances it should include definite designation of initial missions.

The decision for the strategic operation, the plan for the use of nuclear weapons, the operation order and combat actions of operational formations and large units of various Services of the Armed Forces, and plans of support—all of these documents as a whole, worked out on the basis of the general concept, constitute the plan for a strategic operation in a continental TSMA. The plan for a strategic operation is constantly reviewed, readjusted as necessary, and kept up-to-date.

In planning a strategic operation, the art of planning the use of nuclear weapons, particularly planning the initial nuclear strikes in the TSMA, is of particular importance. This is a very complex task and a great responsibility.

Planning for use of strategic nuclear forces—Strategic Rocket Forces, Long-Range Aviation, and submarine-based nuclear rockets—in the initial and subsequent nuclear strikes is conducted by the General Staff of the Armed Forces. Planning for the use of operational-tactical nuclear weapons is conducted by the staffs of *fronts* and the Navy on the basis of the instruction of the General Staff.

Planning for initial nuclear strikes in a TSMA is the process of designating troops, methods, and the time of launching the strikes by strategic and operational-tactical nuclear delivery means. The following are included in planning initial nuclear strikes:

- —detailed analysis and assessment of enemy land, air, naval, and air defense targets, military and economic targets, and other targets in the depth of enemy territory;
- —selection of targets, the destruction of which may be decisive in the achievement of the aim of the operation;
- —assessment of the capability of friendly nuclear forces' groupings;

- designation of the mission and methods of accomplishment by Strategic Rocket Forces, submarine-based nuclear rockets, Long-Range Aviation, and nuclear means of the *fronts* and fleets, and the method of coordination among them;
- determination of the expected effectiveness of the strikes;
- organization of measures for supporting the use of nuclear weapons;
- determination of methods and forms of controlling nuclear forces and monitoring their readiness.

Nuclear delivery means may be required to carry out the following missions:

- destruction of enemy nuclear delivery means and reserves of nuclear weapons in the TSMA by launching strikes against rocket launching pads and nuclear-armed aircraft based on airfields and aircraft carriers at sea, and against bases and large depots of nuclear weapons;
- destruction of enemy armed forces' groupings by launching strikes against enemy forces in concentration and deployment areas, mobilization areas, areas of concentration of strategic reserves, staging areas of airborne large units, and bases of airborne/air assault means;
- disruption of the enemy governmental and higher-level military control systems by destroying command posts of the political leadership of allied enemy nations, command posts and the control systems of strategic and operational echelons, major signal communications centers, control centers of air and air defense forces, radar posts, radio guidance systems, and radio receiving and transmitting centers;
- destruction of the military-economic base of all, or the major, enemy countries. The accomplishment of this mission is ensured through the destruction of military-industrial centers and targets, nuclear installations, rocket manufacturing and other fields of militry industry, power and energy targets, and large depots of troop materiel;

—destruction of enemy communications routes, by damaging major railroad centers, seaports and river ports, civilian airfields, large bridges, and hydrological installations on rivers and canals.

When planning initial nuclear strikes, it is necessary to anticipate the methods of foiling or severely weakening the attacks of enemy nuclear delivery means. For this purpose, it is necessary that initial nuclear strikes be launched by surprise, primarily by using nuclear rocket troops, since they are at the highest level of combat readiness and possess the most powerful nuclear weapons.

The aim of reducing the impact of enemy nuclear attacks is achieved, to a large extent, by concealment, dispersion, placement of troops and combat vehicles in covered positions and shelters, utilization of radio-electronic warfare means, and other measures. Taking early measures to protect the troops and restore their combat capabilities after enemy use of nuclear weapons is important in achieving the aim of weakening the impact of enemy nuclear strikes.

In strategic operations initiated using conventional weapons, a separate operation may be conducted to foil enemy nuclear attack by destroying his nuclear rocket systems. This can also be attempted during the conduct of air operations to destroy enemy aviation groupings.

One of the important requirements of planning initial nuclear strikes is to ensure the flexible use of forces and means during the launching of the strikes. It is necessary that the plan anticipate simultaneous destruction of enemy main force groupings and important targets constituting the core of enemy military and economic power through the entire depth of the TSMA, and under any conditions that may prevail or may be created at the time of the launch. At the same time, action must be taken to provide for the feasibility of concentrating all or part of the nuclear strikes on one or a group of enemy nations in a short time, and the possibility of engaging all, or

certain categories of, enemy targets simultaneously or successively in a specific order.

Nuclear delivery means should be used in mass during initial nuclear strikes. To launch the nuclear strikes, the bulk of nuclear forces and means having maximum destructive power should be mobilized and employed. The most desirable method for initial nuclear strikes, in terms of timing, is to narrow the time gap (to the maximum) between the initial salvo of strategic nuclear rockets and nuclear strikes by *front* and fleet nuclear delivery means. In planning initial nuclear strikes, safety and security requirements to protect friendly forces and fleets from the impact of friendly nuclear strikes should be taken into consideration.

When the strategic operation is initiated using conventional weapons, it is necessary to anticipate measures and protect all fully ready nuclear delivery means to ensure their constant readiness for the timely initiation of the first nuclear strike, whenever it may become necessary.

All matters concerning the participation of various means in the initial nuclear strike in a TSMA are coordinated by the General Staff of the Armed Forces. In this process the Main Staffs of the various Services of the Armed Forces and the staffs of military district commands, groups of forces, and fleets are called upon by the General Staff of the Armed Forces.

It must be noted that planning for the initial nuclear strike, like planning the strategic operation as a whole, is not a single-phase action. Actually, the plans are constantly reviewed, readjusted, and modified as needed, according to changes in the military and political situation, as a result of receiving new intelligence on the enemy, according to changes in the composition of friendly nuclear forces, and as a result of changes in the situation of friendly forces in regard to the extent of their advance and movements, in the case of the initiation of war without using nuclear weapons.

Planning for Actions of Fronts

Planning for actions of the *fronts* in a strategic operation in a TSMA is conducted in accordance with the aims and

concept of the operation, as well as with respect to the role to be played by the *fronts* in the accomplishment of strategic missions. According to the calculations and experiences of field exercises on strategic operations in a TSMA using nuclear weapons, it is possible, despite the enormous power of nuclear devices, that part of the enemy's nuclear delivery means and large units and units of ground, air, and naval forces may not be destroyed. Therefore, to achieve certain victory over the enemy, it is required to destroy completely surviving enemy groupings or those that maintain their combat capability, and seize important enemy administrative and political centers and economic areas. Such missions will be accomplished by the *fronts*.

In strategic operations initiated with conventional weapons, the *fronts* are considered the main and decisive force in destroying the enemy in continental TSMAs and in seizing the strategic initiative. The most important and responsible role in strategic operations is played by first-echelon *fronts*. Their actions will be distinguished by high rates of speed, advance, and dynamism. All possibilities should be utilized for the successful accomplishment of the assigned missions under all circumstances. A first-echelon *front* should be ready to initiate the offensive in situations requiring repelling the enemy in a meeting engagement or enemy attack, destroying opposing enemy groupings, and ensuring the development of the operation in great depth with a high rate of advance. The following may be included in planning the use of *fronts* in strategic operations in TSMAs:

- designating the organization of force groupings, the aims and missions of initial and subsequent operations of the *fronts*, and the method of their execution;
- planning the initial operations of the *fronts*;
- specifying the method of coordinating actions by *front* elements among themselves, and with operational formations of other Services of the Armed Forces;
- planning the movement and commitment of second-echelon *fronts*, armies, and strategic reserves into combat.

The formation for operations (*operativnoe postroenie*) [sometimes translated as "organization for combat"] of operational formations of the *front* is determined according to the concept of the strategic operation, and should primarily ensure constant readiness of the troops for rapid offensive actions and repelling enemy surprise attacks, and also must ensure the concentration of superior forces and means on the axis of the main attack. It should provide the possibility of timely expansion of efforts of operational formations acting on the main directions and must ensure maneuver along the front and in depth. Under all conditions, required preparations and readiness to launch nuclear strikes on the enemy by operational-tactical means should be ensured, either separately, or in coordination with strategic nuclear means. On the basis of the aforementioned requirements, the formation for operations of the groups of *fronts* in strategic operations may be composed of the following echelons:

- first-echelon *fronts* composed of groups of forces and peacetime military districts at border areas in close contact with the potential enemy;
- second-echelon *fronts* or armies composed of elements organic to the military districts that are deployed in the interior of the country and designated to develop and accomplish strategic operations;
- reserves (combined arms and special reserves) composed of combined-arms reserves (armies, army corps, and divisions), antitank artillery divisions and regiments (brigades), air defense reserve units and large units, engineer and signal troops, etc. The reserves are mobilized from the forces in a constant state of combat readiness, and also from forces newly activated and mobilized at different times.

In the Western TSMA, initial *front* offensive operations are planned to be conducted to a depth of 600-800 km or more, with a rate of advance of 40-60 km per day. The duration of *front* operations is 15-20 days. In the Far Eastern TSMA, a *front* offensive operation will be conducted to a depth of

800-1,000 km. In such a TSMA, forces operating along the main directions (largely utilizing tanks and infantry combat vehicles), and airborne assault units and large units can advance at a rate of 70-80 km and in some areas up to 100 km per day. The initial operations of the *fronts* are planned in detail in peacetime by the staffs of the border groups of forces and border military districts.

Because of the complex nature of future wars and the nonfeasibility of anticipating the character of future developments in the entire range of strategic operations, the missions to be accomplished by *fronts* in subsequent operations are roughly specified. The concrete planning of subsequent operations by the *fronts* is accomplished at the concluding stage of the initial operations. Second operational echelon *fronts* are assigned missions that include their advance to specified combat areas and the general directions and time and areas for their commitment into combat. In planning the actions of these *fronts*, the most important thing is to properly determine the method of destroying enemy armed forces' groupings in accordance with the situation that will be created in the TSMA.

In a strategic operation conducted using nuclear weapons, one of the most effective methods of action by *front* elements is launching massive nuclear strikes against the enemy, rapidly attacking with forces that have maintained their combat capability or have restored their combat effectiveness on a number of the shortest directions to the specific objectives of the operation, and splitting the enemy groupings into pieces and destroying them individually. Such a method can be utilized on a favorable stretch of front line.

This method will include inflicting heavy losses on the enemy by the use of nuclear weapons and the coordinated attack of *fronts* converging on avenues to encircle and destroy the main formation of the enemy forces in the TSMA, along with a simultaneous development of the attack in depth. One of the *fronts* can launch an enveloping maneuver to press the enemy against natural obstacles, such as oceans and seas, to facilitate his destruction. The combination of these different forms of actions can be attempted across the entire theater.

In strategic operations initiated using conventional weapons, the basis of the methods of *front* actions consists of successive destruction of the enemy along the front and in depth. *Fronts* can launch multiple attacks on a number of different avenues to split enemy groupings into pieces and destroy them individually. In conventional warfare, the envelopment of enemy groupings is sought to a greater extent than in nuclear war. Enveloping maneuvers are launched to outflank the enemy and destroy his large units. Such actions are combined with one another.

An important matter in planning initial *front* operations is to work out measures to do the following:

- ensure effective use of *front* nuclear weapons;
- keep the strike units active in the face of enemy nuclear attacks;
- repel the likely enemy invasion;
- determine the sequence of initiating an offensive by the troops, and their method of action following nuclear strikes;

The plan for a *front* operation provides the required framework for a unified concept. Within this concept, the forces are so postured that they can initiate combat action from concentration areas in which they have been raised to a level of full combat readiness, or from attack staging areas.

Such areas must be the same for both options: initiation of combat actions using nuclear weapons and initiation of operations initially using only conventional means. Therefore, what is most important is that the formation for operations for the forces should be flexible and must allow for the possibility of rapid maneuver by the troops to establish appropriate groupings of forces on the desired directions.

In case of actions without using nuclear weapons, the plans consider and anticipate the establishment of a relative superiority in forces and means against the enemy on decisive directions by concentrating the required density of forces and means in the breakthrough areas and reinforcing efforts in the course

of conducting the operation. Measures are specified to maintain constant readiness of nuclear delivery means in order to ensure their rapid deployment and protection of the troops against enemy nuclear strikes. Materiel reserves also are established to support additional combat actions by conventional means.

Particular attention is concentrated on planning movement and marches by second-echelon *fronts* and armies and strategic reserves. The greater part of such forces will be located great distances from lines of contact with the potential enemy, and might be hundreds of kilometers from such lines. The organization of their movement, particularly in a nuclear war environment, will be difficult.

The movement of second operational echelon forces and strategic reserves can be conducted in different forms. The forces may move by marching in columns utilizing their organic vehicles. In this method, large units and units will march in full strength in their organic combat and transport vehicles at a rate of 300-400 km in a 24-hour period. Railroad transportation means maintain their significance as the most important means of troop and cargo transport prior to the outbreak of war, and with the use of conventional weapons at the beginning of a war. In a war using nuclear weapons, it is more likely that rail operations will be seriously damaged by the enemy, and the utilization of rail transport will have secondary significance.

Movement of troops in their organic vehicles should be planned in detail and properly prepared in advance. It is necessary that the preparation of transport routes, construction of routes bypassing major transportation centers and cities, and construction of additional bridges across large rivers are planned in advance. Along the routes of movement, POL reserves and maintenance means for wheeled and tracked vehicles should be established.

Planning for Airborne Operations

Airborne operations are planned by the General Staff of the Armed Forces along with the Main Staff of Air Forces and

the staff of Airborne Troops. The staffs of combat arms and services and the staffs of operational formations participating in the operations can be called upon to participate in planning of individually related matters.

The participation of a large number of forces and means (Airborne Troops; Long-Range Aviation, *front* aviation, and Military Transport Aviation; the Navy; and, in some cases, large motorized units) in airborne operations requires detailed cooperation and all-around support of their actions. This can be achieved only through centralized control by the General Staff of the Armed Forces over the planning process of the airborne operation. Airborne operations are planned and conducted to accomplish the following tasks:

- destroying enemy government and military control and the operation of his rear services;
- foiling enemy mobilization;
- seizing and destroying enemy nuclear delivery means;
- seizing important targets and areas such as straits, islands, canals, etc.;
- assisting the forces attacking from the *front* in the accomplishment of their missions;
- preventing the movement of enemy reserves;
- taking over individual governments of enemy allied nations or occupying enemy territory;
- creating an internal military front in the rear of the enemy;
- opening a new front on a new direction.

Depending on the aim and the missions of airborne operations, one or more airborne (motorized) divisions, Military Transport Aviation large units, Long-Range and *front* Aviation, naval formations, and other Services of the Armed Forces can participate in the conduct of airborne operations.

Assault landing airborne and motorized divisions in the enemy rear are planned to be effected in one or more areas, usually successively.

Planning for the Employment of Air Forces

Planning for the employment of the Air Forces in strategic operations in continental TSMAs consists of planning air activity by Long-Range Aviation, air operations to destroy enemy aviation groupings and nuclear missile systems in case of the initiation of war without using nuclear weapons, and the use of air transport formations.

Planning for the use of Long-Range Aviation is worked out in the context of planning for the *front* operation and the conduct of an air operation to destroy enemy aviation groupings and his nuclear missile systems.

Planning for an air operation to destroy enemy aviation groupings and nuclear rocket systems in the TSMA is conducted by the Air Forces' Main Staff under the guidance of the General Staff of the Armed Forces, while the Main Staff of PVOS Forces and *front* staffs are taking part in planning matters that concern the use of their organic forces and means in the conduct of the air operation.

Working out plans for Long-Range Aviation action is conducted by the Main Staff of the Air Forces on the basis of directives of the Armed Forces' General Staff.

Long-Range Aviation may conduct several air actions during the strategic operation in continental TSMAs. In this case, the initial air action is planned in detail.

In case of the initiation of war using nuclear weapons, the basic aim of Long-Range Aviation actions can be destroying enemy nuclear rocket systems, destroying his nuclear arsenal, knocking out significant enemy command posts, neutralizing enemy operational and strategic reserves, and destroying relatively small and mobile targets. To ensure the achievement of this objective, air actions by Long-Range Aviation are conducted in one or, simultaneously, in two adjoining TSMAs, to include an oceanic TSMA as well. A number of successive massive nuclear strikes are planned.

Planning for the use of Long-Range Aviation in case of the initiation of war without using nuclear weapons will be of a different nature. In such a situation, initial Long-Range

Aviation air actions may be a part of the air operation to destroy enemy aviation groupings and nuclear rocket systems. In their subsequent operations, Long-Range Aviation continues to destroy enemy nuclear weapons and air forces, neutralize enemy operational and strategic reserves, destroy the most important military and industrial targets, support friendly *front* forces, and conduct reconnaissance. During the period of threat and immediate threat of war, part of Long-Range Aviation is kept in constant readiness to launch nuclear strikes.

Planning for the use of Military Transport Aviation in a strategic operation in a TSMA is based on its assigned missions to transport and land airborne assault forces, support troop maneuver, supply weapons and different categories of materiel to troops, and evacuate the wounded and sick from the battlefield. The method of executing these tasks is specified in the plan of airborne assault troops in a *front* operation and in the air transport plan.

Planning for the Employment of the Navy

Planning for the use of the Navy in a strategic operation in a continental TSMA includes the designation of the composition of naval forces and means and the methods of their activity to accomplish missions to destroy enemy ship and submarine formations operating in the maritime limits of the theater, destroy important targets on the territorial areas of the theater, land seaborne assault forces on enemy beaches, foil enemy sea movements, protect friendly sea routes, take part in coastal defense, and implement other tasks.

General issues on the use of the Navy in strategic operations and matters concerning its participation in the initial strike of strategic nuclear forces in continental TSMAs are organized and determined by the General Staff of the Armed Forces and the Main Staff of the Navy. The initial naval operation and combat actions are planned in detail by the Navy Main Staff and fleet staffs.

Planning for the Combat Action of Air Defense Forces and Means

Planning for the combat action of air defense forces and means in a strategic operation in a continental TSMA includes designating missions and coordinating the combat actions of PVOS operational formations and large units deployed in the border areas, *front* and fleet air defense forces and means, and, in the European TSMAs, also the PVO forces and means of Warsaw Pact nations. Air defense in a strategic operation in a continental TSMA is organized on the basis of the following principles:

- all air defense forces and means deployed in the TSMA, regardless of their subordination to the various Services of the Armed Forces, should be integrated into a unified air defense system and used according to a unified plan;
- a unified air defense system in the TSMA is established in advance, in peacetime, in careful consideration of accomplishing air defense missions for each friendly country, and also in regard to the requirement for ensuring the covering of forces and means participating in the strategic operation;
- the grouping of air defense forces in strategic operations should ensure the participation of a large number of air defense forces and means in repelling initial enemy air strikes;
- the control system of air defense forces and means in the theater should be sufficiently simple, flexible, and steady, and must comply with the overall system of Armed Forces' control in strategic operations;
- the air defense system in a strategic operation should ensure effectiveness throughout the entire depth of the operation, and must be active and able rapidly to restore combat power to the groupings of air defense forces and means;
- the air defense system in strategic operations should respond to the requirements of waging war under the most complicated conditions, i.e., under the circumstances of

enemy surprise attack in a continental TSMA, a designated mission which is most likely.

All matters concerning the organization of the air defense system in strategic operations in a TSMA are organized jointly by the General Staff of the Armed Forces, the Main Staff of PVOS Forces, and staffs of *fronts* and fleets. In the European TSMAs, the staffs of PVO forces of Warsaw Pact nations are also conferred with on issues related to the use of their national air defense forces and means. In this process the following are particularly specified:

- missions of air defense forces and means prior to the beginning of strategic operations and in the course of the operations;
- units of air defense forces and means designated to repel enemy air and space attack on the main directions;
- method of expanding the air defense system following the advance of the attacking forces of the *fronts*;
- method of coordination for various air defense troops at the beginning and in the course of the conduct of strategic operations.

When establishing a unified air defense system in a TSMA, it is necessary to anticipate and secure an echelonment in depth of forces and means, according to their combat capabilities. In areas directly adjoining international boundaries, the first echelon of the air defense system in the TSMA consists of *front* and fleet air defense forces and means and of air defense forces of Warsaw Pact member nations. The subsequent echelons of the air defense system are established by PVOS Forces deployed in the depth of the TSMA.

IV. Establishment of Groupings of the Armed Forces

The groupings of the Armed Forces in a continental TSMA are established in advance, early in peacetime, on the basis of the decision for strategic operations. An Armed Forces' grouping can consist of forces and means at a level of constant

[routine] combat readiness, forces and means maintained at reduced combat strength in peacetime, and forces activated and deployed through mobilization for war.

In determining the desired specific capabilities of the forces at different levels of combat readiness, it is normal to consider:

- the role of military actions in the theater to achieve the aim of the war;
- the military and political situation;
- the composition, strategic position, and readiness of enemy armed forces' groupings;
- the degree of threat of enemy invasion.

The nature of the military geography of the theater, state of operational preparations in the TSMA, mobilization potential of the theater, strategic position of friendly force groupings, and the environment for moving and deploying the forces are also assessed and taken into account. Finally, in relation to the economic capabilities of the country, a specific number of Armed Forces' components of a specific nature are maintained in peacetime.

Depending on the imminence or unlikelihood of the outbreak of war, and according to the tension or its easing in the international situation, the composition of constantly combat-ready forces and means in each TSMA expands or decreases.

V. Organization of Coordination of Armed Forces' Groupings

Organizing the coordination (*vzaimodeistvie**) of the Armed Forces is one of the most important measures in the preparation of strategic operations. This includes the coordination of the actions of operational formations and large units of various Services of the Armed Forces and of arms and services in terms of objectives, time, space, and the methods of accomplishing

* [The Russian term *vzaimodeistvie* may also be translated as "cooperation" or "interaction." See the glossary in this volume for a definition of *vzaimodeistvie* and what is encompassed in the term.]

assigned missions, as well as directing efforts toward achieving specified aims.

The organization of coordination of actions by operational formations in strategic operations must be sufficiently flexible to ensure the possibilities of coordinated action by the forces and means under various circumstances of the initiation of strategic operations and rapid changes in the situation as the operation proceeds. To serve this purpose, an exact and thorough analysis of the likely circumstances of the outbreak of war and anticipation of the possible development of strategic operations are required. Actions for organizing coordination are begun during the process of making the decision for strategic operations. The most important issue in this phase is properly specifying the missions of operational formations and the methods of their accomplishment. In the course of working out the strategic operations plan, the coordinating issues of interaction are more clearly shown and specified in detail. At the same time measures to ensure the continuity of coordination in the course of conducting the operation are specified.

Coordination is organized in more detail for the phases of an initial nuclear strike, repelling of enemy air and space attacks, and initial operations by operational formations of various Services of the Armed Forces.

Organization of Coordination in the Phase of an Initial Nuclear Strike

Organization of coordination in the phase of an initial nuclear strike includes the allocation of tasks and targets to be destroyed, coordination of the timing and the methods of delivering the strikes among the units of nuclear delivery means organic to the various Services of the Armed Forces, and measures which ensure the coordination of the use of forces and means.

Coordinating the timing and method for delivering nuclear strikes by means organic to the various Services of the Armed Forces is intended to enhance the chances of the surprise use

of nuclear weapons, shorten the duration of the initial nuclear strike to a minimum, and prevent interference among the various means of the various Services of Armed Forces.

In strategic operations initiated with unlimited use of nuclear weapons, the strikes of Strategic Rocket Forces can be launched initially, since they play a vital role in inflicting casualties and losses on the enemy, and also because they are normally in a high state of combat readiness. It is also possible to launch the initial nuclear strike simultaneously with Strategic Rocket Forces and nuclear delivery means organic to *fronts* and fleets.

In the course of strategic operations initiated without the use of nuclear weapons, when the use of nuclear weapons is decided, the timing of delivery of nuclear strikes by various means can be synchronized, to some extent, during the initial nuclear strikes. The reasons for this are:

- in such a situation all nuclear delivery means earmarked for launching the strikes will be in full combat readiness. This will cut down the time required for their direct preparations to strike and provide the possibility of simultaneous use of all planned means;
- the potential of elements of the Air Forces delivering strikes will be ensured, and their nuclear attacks can be close, in terms of timing, to those of the Strategic Rocket Forces, and, therefore, the duration of the initial nuclear strike will be shortened in the TSMA.

Organization of Coordination Among Air Defense Means

Organization of coordination among air defense means in the TSMA is the coordination of the actions of PVOS operational formations and large units among themselves, with the actions of *front* air defense means, adjacent *front* air defense means and fighter aircraft, and also with the actions of fleet air defense elements to repel enemy air and space attacks. Coordination is achieved through the designation of zones or areas of responsibility for air defense forces and means organic to operational formations of the various Services of the Armed

Forces, designation of the methods of their action during simultaneous execution of their tasks, and maneuver of air defense units in the course of the operation.

Coordination of the actions of operational formations and large units of PVOS Forces among themselves is organized by the Main Staff of PVOS, while in the European TSMAs the cooperation of the actions of the National Air Defense Forces with those of Warsaw Pact member countries is organized by the Air Defense Command of the Warsaw Pact. Coordination of the actions of air defense operational formations and large units of Warsaw Pact member nations with the action of air defense forces and means of military district commands, groups of forces, *fronts,* and fleets, and also among the air defense forces and means of *fronts* and fleets, is organized by the General Staff of the Armed Forces. In the process of organizing such coordination the following are synchronized:

- use of radar reconnaissance means to disclose enemy aircraft and the system of warning;
- deployment areas and the method of action of air defense rocket forces.

The maneuver of fighter aircraft from one axis to another, and movement of fighter aviation and PVO operational formations and large units and *front* air armies in depth are planned.

Organization of Coordination of Front *Actions*

The organization of coordination of *front* actions in strategic operations is aimed at coordinating and synchronizing their actions precisely with the initial nuclear strike of strategic nuclear forces, as well as with the actions of PVOS Forces and the Navy. When organizing actions among *fronts*, the following are normally coordinated:

- aims of the operation and missions of the *fronts*;
- method of launching nuclear strikes by *front* means;

- direction of *front* attacks and missions in the joint destruction of enemy groupings on adjoining flanks of adjacent *fronts*;
- measures for the destruction of enemy nuclear delivery means;
- method of repelling enemy air and ground attacks;
- method of joint action against vital theater targets and areas;
- measures to inflict coordinated damage on enemy reserves and repel their likely counterattacks in the boundary areas between adjacent *fronts*;
- method of joint river crossings over large rivers and water obstacles by *front* forces;
- method of joint maneuver by forces and means in the zones of adjacent *fronts* taken to shift strategic efforts to the direction where success has been achieved, reinforce the attack on the main direction, or bypass radioactive contaminated areas.

Successful destruction of the enemy in the theater is largely dependent on early and detailed coordination of *front* offensives in terms of time and space, and the synchronization of *front* actions with the nuclear strikes of strategic nuclear forces. It is dependent also on rapid initiation of the attack by elements of the first-echelon *fronts*, following the initial nuclear strikes, along with assault landing airborne troops in the rear of the enemy. To serve these purposes, measures are taken in advance to restore quickly the combat capabilities of the various Services of the Armed Forces being hit by enemy nuclear strikes. Moreover, friendly nuclear strikes on enemy targets should be planned on the basis of using ground burst methods, which may not cause radioactive contamination of the terrain in the areas on the direction of advance of friendly forces.

In case of the initiation of strategic operations using conventional weapons, it is necessary to select the penetration (breakthrough) zones in the adjoining boundaries of adjacent *fronts* to cover part of the attack sectors of each adjacent *front*, take measures to block the enemy in some areas in order to

A. I. Radzievskii

Marshal M. N. Tukhachevskii (1893-1937), an innovative military theorist, was killed during the Purge. Army General A. I. Radzievskii (1911-1979) is a former First Deputy Chief of the General Staff Academy and was also Chief of the Frunze Military Academy.

M. N. Tukhachevskii

Former Chief of the Main Political Directorate of the Soviet Army and Navy, General of the Army A. A. Epishev is shown delivering a lecture to the Academy faculty.

ensure the concentration of main forces on the directions of the *front* main attacks, and establish superiority over the enemy in forces and means on such directions. It is also necessary that the successive destruction of opposing enemy groupings and reserves, as well as the zones and timing of the commitment of second-echelon forces, be organized and specified. Maneuver of *front* aviation and other actions are organized and coordinated in detail. Coordination of the actions of *fronts* in the joint encirclement and destruction of large enemy groupings should be organized in particular detail.

Special attention and efforts are required for organizing the coordination of the action of second-echelon *fronts* or armies and strategic reserves in the phase of their movement to the TSMA and their commitment to combat. The basic issues in coordinating their actions are the following:

- allocation of movement zones and support means along the routes of movement, such as traffic control and commandant's service (*komendantskaia sluzhba*) troops, and repair and maintenance facilities;
- supply of advancing (moving) troops with POL;
- cover of troops against enemy air attacks during their movement;
- organization and coordination of the method of movement and selection of airfields for the *fronts'* air army;
- method for destroying the opposing enemy by first-echelon *fronts* in the area of commitment of second-echelons forces;
- method for covering reserve *front* troops in their deployment areas by first-echelon *front* air defense forces and means;
- supply of advancing forces with materiel from first-echelon *front* rear service means and installations.

The forms and methods of coordination between first-echelon *fronts* and approaching reserves are generally specified and organized by the General Staff of the Armed Forces

during the planning phase of a strategic operation and are readjusted according to the actual situation, prior to the commitment of second-echelon *fronts* into combat.

Organization of Coordination Among the Forces and Means Participating in Airborne Operations

The organization of coordination among the forces and means participating in airborne operations includes the coordination of the zones, timing, and method of dropping airborne units with nuclear strikes in the TSMA, and method of coordination of actions of airborne forces with the actions of *fronts*, fleets, Long-Range Aviation, and PVOS Forces.

When organizing the coordination between airborne assault forces and the *front* in the area where the airborne assault forces are to be airdropped/airlanded, the following are arranged:

- missions of airborne assault forces and those of *front* forces;
- targets to be engaged by the *front*'s nuclear delivery means and the method the airborne assault forces will use to exploit the impact of nuclear strikes;
- method for neutralizing enemy air defense means in the flight sectors of friendly Military Transport Aviation, which airlifts the airborne assault forces, and at their flanks;
- direction and time of linking up *front* troops with airborne assault forces;
- method for maintaining signal communications, signals of mutual identification and location, and method for exchanging information about the situation;
- method for the actions of airborne assault forces after linking up with *front* troops.

Coordination of Long-Range Aviation Forces with Front *Troops*

The coordination of Long-Range Aviation forces with *front* troops includes the following:

- allocation of targets to be destroyed by nuclear weapons, with careful consideration of the timely exploitation by *front* troops of the consequences of Long-Range Aviation nuclear strikes;
- support of the flight and actions of Long-Range Aviation by the *front* troops.

The composition of the troops assigned to support the flight of Long-Range Aviation and the forms and methods of their operation are usually specified by the *front* commander on the basis of instructions of the General Staff of the Armed Forces. The staff of Long-Range Aviation coordinates the following matters with the *front* commander:

- sectors and timing of flights of Long-Range Aviation large units on the targets and their return flights;
- preparation of maneuver airfields and their POL supply;
- enemy air defense targets to be destroyed and neutralized;
- measures for reception of flights of Long-Range Aviation that might be forced to land on *front* airfields on their return flights.

In situations where Long-Range Aviation units are called upon to carry out missions in support of a *front*, the establishment of coordination between Long-Range Aviation, the *front* air army, and operational-tactical rocket troops includes the detailed allocation of targets to them and coordination of the launching of their strikes on the enemy in terms of time and the method of delivery.

Coordination of the Navy with Other Services of the Armed Forces

The cooperation of the Navy with other Services of the Armed Forces is organized to coordinate joint actions in destroying enemy groupings of armed forces along the coastline and seize straits and islands.

Coordination with the Armed Forces of Allied Nations

When the armed forces of a number of allied nations take part in the conduct of strategic operations, the general staffs

of the armed forces of participating countries jointly coordinate the main issues concerning the use of their forces and means in tne operation. They determine particularly the composition of each country's contingent participating in the strategic operation, while specific operational missions and the time of their preparation for action are specified for the armed forces of each nation. Moreover, measures concerning rear service support are coordinated, and the amount of materiel and equipment to be contributed by each nation in the interest of the combined allied forces is specified. The method of control of the combined armed forces is determined, and matters concerning the preparation of the territorial area of allied nations which are part of the TSMA are settled.

All measures and actions related to the coordination of plans and the allocation of forces and means to the operation by the armed forces of the allied nations are taken care of strictly in accordance with the treaties and commitments envisaged in the charter of the alliance.

VI. Organization of All-Round Support Measures for Strategic Operations

Measures concerning all-round support of strategic operations are taken continuously to provide favorable conditions for the timely and complete destruction of the enemy. The basic support measures for strategic operations in a continental TSMA are the following:

- reconnaissance;
- protection of troops and rear service targets against enemy weapons of mass destruction;
- operational *maskirovka*;
- radio-electronic warfare;
- engineer support;
- rear service support.

Measures related to the basic types of support are planned by the General Staff of the Armed Forces and carried out by

forces and means of the Supreme High Command and by troops organic to operational formations assigned to conduct the strategic operation. Meanwhile, the commanders and staffs of the various Services of the Armed Forces organize actions concerning specialized types of support measures. All support measures are prepared and conducted in peacetime and are developed and expanded during the conduct of a strategic operation.

Reconnaissance

Reconnaissance in support of strategic operations in a continental TSMA is conducted to disclose in a timely fashion the beginning of enemy direct preparations for attack. It determines the likely time of the enemy attack and discloses what enemy forces are preparing for the commencement of military actions. Reconnaissance should constantly follow changes in the political and military situation and ensure the disclosure of enemy intentions and concepts of operations. It should also pinpoint the units of enemy armed forces in the theater, primarily the location of all enemy nuclear delivery means, and should locate important targets for the use of friendly nuclear weapons in the initial nuclear strike phase. Reconnaissance should also ensure the most effective use of nuclear weapons in the course of strategic operations.

Prior to the commencement of combat actions, as well as during the course of the operation, the most important tasks of reconnaissance are:

- constant observation and surveillance of enemy nuclear delivery means;
- disclosure of the consequences of friendly nuclear strikes against the enemy;
- determination of changes in the composition of the groupings of enemy armed forces in the TSMA.

All types of reconnaissance should provide the Supreme High Command and Armed Forces' General Staff with information on:

- planning combat operations;
- organizing measures to foil and repel enemy counter-attacks in the theater;
- destroying enemy armed forces and achieving the objective of the operation in the shortest possible time.

Prior to the initiation of war, reconnaissance should establish steady and strict observation and surveillance of the status and actions of the groupings of the enemy's armed forces, particularly nuclear delivery means and their preparation for action.

In modern times, the main attack means of the enemy in the TSMA are: the air forces, tactical and operational missile troops kept in a high state of combat readiness, organized ground and aviation groupings deployed in the theater, American submarine-based nuclear rocket squadrons, and U.S. operational naval forces deployed in important areas of the ocean (seas) and on islands.

Therefore, most of the actions formerly taken during the phase of direct preparation for war, which required a considerable amount of time, today are taken in peacetime in contemporary times under the cover of different forms of combat training, maneuvers, and field exercises and are constantly and gradually expanded into full preparation for war. Moreover, in modern times the direct preparation for war will be conducted in a short period of time, showing very little indication of the enemy's real intentions. However, the enemy will have to take a series of preparatory measures, each indicating specific evidence of actual intentions. The main indicators in this connection will be the following:

- deploying and organizing control systems and control centers to guide tactical aircraft to land-based targets;
- removing nuclear rounds from depots, moving them to air bases, and, finally, arming the aircraft with nuclear ammunition;
- launching airborne command posts and testing their performance;

- changing routine radio-electronic reconnaissance posts of air defense systems, supporting their transition to a state of continuous manning, and deploying additional posts in depth;
- deploying combat and transport vehicles of the ground forces, supplying the ground forces with POL, distributing nuclear rounds, moving out rocket troops for deployment, and deploying command posts;
- placing air defense means in a combat-ready status and testing the control system;
- resupplying naval ships with all types of materiel, moving them out of bases to deploy and disperse them, and moving out aviation strike forces (aircraft carrier task forces) from their bases and deployment on airfields;
- deploying submarines to positions from which they can launch missiles within six to eight hours;
- evacuating commercial ships from seaports and internal seas of Socialist countries.

Most of these indicators may not be disclosed. However, sometimes the disclosure of a few specific indicators may play a decisive role in determining enemy direct preparation to launch his attack.

In the course of an operation initiated without using nuclear weapons, in determining the preparation of the enemy to initiate the use of nuclear weapons and to launch nuclear strikes against friendly forces, an important indicator may be a complex [difficult] operational and strategic situation for the enemy. That is, the risks of destroying opposing armed forces groupings may be such that it places the enemy on the verge of losing important strategic areas, political and administrative centers, economic regions, etc.

At the beginning, as well as during the conduct, of strategic operations, the important tasks of all types of reconnaissance are constant observation and surveillance of previously located enemy nuclear rockets, and timely disclosure of new enemy weapons systems of mass destruction and other enemy targets, the destruction of which requires the use of friendly nuclear

weapons. Reconnaissance should disclose the consequences of initial nuclear strikes by friendly forces and determine changes in the system of enemy nuclear rocket units and the status and actions of units of enemy ground, air, air defense, and naval forces. In this phase, due to the commitment of all reconnaissance forces and means of the various Services of the Armed Forces, particularly the air reconnaissance forces and means of the various Services of the Armed Forces, the capabilities for conducting reconnaissance are widely expanded. Large and expanded possibilities for conducting radio and radio-electronic reconnaissance will be on hand in this phase by the beginning of combat operations, and the actions of enemy electronic means will become fully active.

In a strategic operation conducted in a continental TSMA, various reconnaissance means are very important in terms of objectives, time, and space. The organization of coordination among reconnaissance forces and means is the duty of the General Staff of the Armed Forces.

Protection from Weapons of Mass Destruction

Protection of the troops and rear service targets from enemy weapons of mass destruction in a strategic operation conducted in a continental TSMA is organized to prevent losses likely to be inflicted on friendly forces primarily by enemy nuclear, as well as chemical and biological weapons, or to reduce the impact of enemy actions to a minimum, and to ensure the actions and rapid restoration of the combat capabilities of troops and rear service installations, which, by itself, supports the achievement of the objective of the operation.

The protection of troops and rear service targets against enemy weapons of mass destruction is organized in accordance with the concept of the operation, the missions of Armed Forces' groupings, and specific conditions of the situation in the TSMA. Measures for protection are generally taken by the forces and means of operational formations, large units, and units. However, some measures of wider interest directed to

ensure the firmness and strength of the various Services of the Armed Forces against enemy strikes by weapons of mass destruction in the theater are taken centrally, as a whole, in the interest of the strategic operation.

In peacetime, on the basis of plans, a series of measures are taken under the direct control of the Armed Forces' General Staff within the system of preparation of the TSMAs. In this respect, protected command posts, positions for Strategic Rocket Forces and PVOS Forces, and aircraft shelters on airfields particularly are constructed and established well in advance. Moreover, a network of alternate airfields to facilitate the dispersal of rear service bases and rockets, ammunition, POL, and other materiel is effected. The networks of lines of communications in the TSMA are prepared and developed, the system of local hospitals is expanded, and measures are taken to ensure the operational *maskirovka* of Armed Forces' units deployed in the theater in peacetime.

One of the important tasks facing the Armed Forces' General Staff during preparation, as well as in the course of conducting strategic operations, is the coordination of actions and efforts of all Services of the Armed Forces and Civil Defense organizations regarding measures taken in support of protecting troops and rear service targets in the theater against the consequences of the use of weapons of mass destruction. These include:

- a detailed description of the method for warning troops and the civil population of radioactive, chemical, and biological contamination;
- an exchange of information about enemy nuclear strikes and contaminated and destroyed areas;
- the coordination of measures taken to eliminate the consequences of the enemy's use of weapons of mass destruction;
- the restoration of lines of communications passing through contaminated areas;
- different preventive measures among personnel of the Army and civilian population.

Actions to eliminate the consequences of the enemy's use of weapons of mass destruction are carried out by the troops themselves. However, in case of massive casualties and damage inflicted on friendly forces by enemy strikes using weapons of mass destruction, appropriate support is extended to operational formations and large units operating in the TSMA by reinforcing them with forces and means from Reserves of the Supreme High Command or with elements shifted from other directions to affected areas. For this purpose, engineer, chemical, railroad units and large units, air reconnaissance units, road construction, traffic control and commandant's service units, and bridging, medical, and other units can be allocated to the affected area from the Reserves of the Supreme High Command.

Operational Maskirovka

Operational *maskirovka* is the combination of a series of measures coordinated in terms of objective, time, and space, and directed to deceive the enemy about:

- plans and intentions of the friendly forces' command;
- composition of forces and means, primarily nuclear rocket systems;
- disposition, status, and combat capability of friendly forces and means, and the nature of their actions.

Operational *maskirovka* is carried out in peacetime, as well as in war, and is considered an important factor that helps to ensure surprise, promote the effectiveness of combat actions, and maintain the combat power of troops and fleets.

Measures for operational *maskirovka* in support of a strategic operation in a theater are organized by the Armed Forces' General Staff, and are carried out by the forces and means of operational formations and large units taking part in the operation, and also by the means under direct control of the Supreme High Command.

Different methods and forms can be employed to achieve operational *maskirovka*. The principal methods are the following:

- secrecy: eliminating or limiting the disclosure of indicators of friendly forces and their actions;
- deception: setting up dummy targets and deceptive situations concerning the actions of friendly Armed Forces;
- imitation and pretense: demonstrating deliberate actions by real forces to lure the enemy;
- dissemination of deceptive information: giving false and deceptive information to the enemy.

The success of operational *maskirovka* is achieved through:

- taking detailed and timely measures integrated in a prearranged plan;
- exercising systematic and centralized control of *maskirovka* arrangements;
- ensuring the secrecy of the plan of operational *maskirovka*;
- ensuring the dynamism, credibility, and continuity of *maskirovka*;
- making timely decisions and taking timely measures in support of *maskirovka* before and during military action.

Radio-Electronic Warfare

Radio-electronic warfare includes electronic jamming (*podavlenie*), electronic protection, and direct electronic reconnaissance. The most active part of radio-electronic warfare is electronic jamming.

The general objective of radio-electronic warfare in strategic operations conducted in a continental TSMA is to contribute to the successful accomplishment of important missions of strategic operations by disrupting enemy governmental and armed forces' control, disrupting the communication system of enemy force groupings, and ensuring the reliability and continuity of the control systems of friendly forces in the face of enemy radio-electronic jamming attempts.

The disruption of enemy control is achieved through electronic jamming, which means that enemy electronic control systems are neutralized, and rockets are automatically guided against the enemy's active radio-electronic means by friendly radio-electronic warfare means.

Ensuring the reliability and continuity of friendly forces' control systems is achieved by a series of organized technical and tactical measures for electronic protection that secure friendly electronic systems and means against enemy electronic reconnaissance and its electronic jamming attempts. Such measures are as follows:

- destruction of enemy electronic reconnaissance and electronic jamming means;
- utilization of electronic means that operate on different bands and in various modes;
- prevention of the use of enemy guided rockets against friendly electronic means;
- other measures.

The protection of radio-electronic systems and means against enemy electronic reconnaissance means is generally carried out by taking radio and radio-electronic *maskirovka* measures.

The aim of electromagnetic compatibility measures of the systems and means of friendly forces is to avoid mutual interference in the operations of systems. This can be ensured by observation of regional transmission norms and standards of electronic means, proper selection and allocation of bands among different electronic systems and means, and specification of certain methods of operation for such systems and means.

Direct electronic reconnaissance is conducted in support of all radio-electronic warfare measures. Radio-electronic warfare in a strategic operation conducted in a continental TSMA is organized by the General Staff of the Armed Forces and carried out by the forces and means of the Supreme High Command and the elements of operational formations organic to the various Services of the Armed Forces. The basic require-

ments for the organization of radio-electronic warfare are the following:

- complete compliance of all measures with the concept of strategic operations;
- mass use of electronic jamming forces and means on the main directions and directed toward the accomplishment of the main missions of friendly forces;
- surprise action through various types and forms of operations by electronic jamming troops and devices at different times.

Engineer Support

Engineer support of a strategic operation in a TSMA is the aggregate of a large number of actions taken by military engineer forces and means in peace and wartime to provide favorable conditions for the support of high combat readiness of the Armed Forces and the accomplishment of missions assigned to the Armed Forces in order to achieve the aim of the operation in a short time.

Basic engineer support activities taken in peacetime constitute engineer construction in the TSMA, which includes:

- constructing roads, bridges, and airfields;
- establishing and concealing positions for Strategic Rocket Forces and PVOS Forces, as well as naval bases and harbors;
- constructing protective installations and command posts;
- constructing defensive positions and establishing obstacle systems.

In the course of conducting a strategic operation in a TSMA, the main areas of engineer support are the following:

- engineer support of the attack of *fronts* operating in the first operational echelon;
- support of the movement and commitment of second operational echelon forces and strategic reserves into combat;
- engineer support on airfields and support of the movement and maneuver of *front* air armies, fleets, Air Forces, Long-Range Aviation, and Military Transport Aviation;

- support of the relocation of positions of PVO forces and means, general radio-technical means and fighter aircraft;
- restoration and consolidation of captured seaports and preparation of manuever bases for naval forces in new areas;
- engineer support to establish operational *maskirovka*;
- engineer support of airborne and seaborne assault operations and also anti-seaborne defense of the seacoasts;
- preparation of new control posts for troops;
- construction of depot installations and areas for stockpiling ammunition and other materiel;
- restoration of bridges across large rivers, power systems, and water supply systems used by the Armed Forces, and other restoration and rescue operations in destroyed areas.

Major significance is given to engineer support in helping the troops to pass through enemy nuclear mine areas by providing the services of specialized forces, means, and equipment. Engineer troops will also carry out missions to eliminate the consequences of enemy nuclear strikes. Engineer support during preparation for strategic operations and in their course is provided in accordance with the concept and plan of the operation by the troops themselves, as well as by engineer units and large units organic to the various Services of the Armed Forces, Reserves of the Supreme High Command, various military construction installations, and civilian road construction, bridging, and other elements.

Overall control of engineer support in strategic operations is exercised by the General Staff of the Armed Forces, while control over the accomplishment of the basic tasks of engineer support is conducted by the Chief of the Engineer Troops of the Ministry of Defense and by chiefs of engineer services on the staffs of the various Services of the Armed Forces and operational formations.

Rear Service Support

Rear service support of a strategic operation conducted in a continental TSMA is a series of measures for the organiza-

tion of the rear service echelon, preparation and utilization of all types of lines of communication and transport means, and materiel, medical, and technical support.

Rear service support action is taken by rear service large units, units and installations of operational formations, the main and central directorates of the Ministry of Defense, and those large units, units, and installations organic to the headquarters of the various Services of the Armed Forces.

The composition of forces and means of the rear services allocated for rear service support of a strategic operation depends on the scale of the operation, the number of forces conducting the operation, and the conditions of the TSMA.

The planning of rear service support of a strategic operation is conducted by the Armed Forces, with the participation of the Main Staff of the Rear Services of the Armed Forces, and also the central supply directorates of the Ministry of Defense on issues concerning them. They jointly work out the rear service support plan of the strategic operation.

VII. Control of the Armed Forces in Strategic Operations

The control of a strategic operation in a continental TSMA is conducted by the Supreme High Command. For the purpose of the control of the Armed Forces in the distant or individual TSMAs, separate or individual commands under the Supreme High Command can be established.

The important task of control of the Armed Forces in peacetime is the maintenance of high combat readiness of the Armed Forces for rapid action. Therefore, in anticipation of the future conduct of strategic operations, the control process is carried out and directed along the following lines:

- strategic reconnaissance of the potential enemy is organized and executed;
- future strategic operations are planned and constantly, or as needed, updated and adjusted according to the actual situation;

- field training exercises are conducted to increase the practical experience of the Armed Forces and test the soundness of the organized and worked-out plans;
- the area of the TSMA is fortified;
- strategic reserves are prepared;
- materiel and technical support of the operation is organized;
- a control system for units of the Armed Forces is established;
- systematic control is established over the preparation of Armed Forces' groupings and their timely transition to a level of full combat readiness in accordance with the conditions of the situation.

In peacetime, the supreme military control authority constantly monitors changes in the military and political situation and the likely threat of the outbreak of war. It ensures, on the basis of the political leadership's instructions, the timely transition of Armed Forces' groupings from peacetime to wartime status, their deployment in the TSMA, and their organized commitment into combat.

In the execution phase of the strategic operation, the Supreme High Command, according to the actual situation, takes the following actions:

- reconfirms the missions of operational formations of the Armed Forces or assigns them new missions and controls combat operations;
- takes measures to restore an interrupted coordination process;
- controls the process of mobilization and preparation of strategic reserves, their movement to the TSMA, and their commitment into combat;
- organizes the supply of materiel and technical support to troops and fleets from central rear service bases;
- plans and prepares a subsequent strategic operation in the theater, if such an operation is required following the initial one.

For the purpose of control of Armed Forces' groupings in strategic operations, a control system that will be an integral part of the overall system of control of the Armed Forces is established in advance as early as in peacetime. The basis of such a system consists of control elements, command posts, and signal communications forces and means.

At the strategic level, the system of command posts includes central command posts, alternate command posts, forward command posts, and auxiliary command posts, all protected against the impact of enemy weapons of mass destruction. Alternate command posts can be static or mobile (on vehicles, helicopters, aircraft, and ships).

In the course of conducting operations, the Supreme High Command may use, as auxiliary and alternate command posts, the command posts of military district forces, groups of forces, and fleets prepared in peacetime especially for the purpose of control of the Armed Forces.

Considering the possibility of a surprise outbreak of war initiated by the enemy using nuclear weapons, the principal command posts and the important elements of signal communications in the TSMA should be kept in constant combat readiness. In peacetime an on-call system is established in the central command posts on a 24-hour basis.

The signal communication system is established so as to ensure the control of the Armed Forces under the most complex circumstances that may be created in case of war with the use of nuclear weapons. The signal communications system should be kept in a high state of combat readiness. It should also be highly active in terms of providing protection for signal forces and means against enemy weapons of mass destruction and electronic jamming. Moreover, the signal communications system should be organized to provide specific allocations of bands and frequency ranges to different means so that they do not interfere with each other's operations. The signal communications system should ensure the passing of information to appropriate echelons and the firmness of communications under circumstances of high troop mobility on the battlefield.

Finally, the signal communications system should ensure the continuous control of the Armed Forces and their groupings down three echelons and ensure control in case of mutual switching of command posts of the Supreme High Command, General Staff of the Armed Forces, and the Main Staffs of the various Services of the Armed Forces.

In studying the content of the preparation and, subsequently, the conduct of a strategic operation in a continental TSMA, it is necessary and important that the political and psychological preparation of personnel be kept under close consideration. The complex and difficult conditions of nuclear war require ultimate psychological and physical resistance and endurance on the part of military personnel. Training and indoctrination of troops about sacrifices for the homeland and its defense against foreign aggression are important tasks in the preparation of strategic operations. This is accomplished through motivating all personnel and troops to believe deeply in their cause, explaining in detail the purpose and intention of the aggressors, and making them understand their duty in defense of their homeland and the Socialist system.

VIII. Conduct of the Strategic Operation

Strategic operations in continental TSMAs are initiated and developed in different forms, depending on the condition of the political and military situation and the form of initiation of war by the enemy. The initiation of war can be expected following a period of threat in the political and military situation, or as a result of surprise. War can be initiated either following an intermediate phase when the threat of war is imminent, or it can be initiated by a surprise military action. It can also be initiated using either nuclear weapons or only conventional weapons.

During the development of the threat of war, the Armed Forces pass over to war status and operational deployment of Armed Forces' groupings is effected in the TSMA. At the same time, measures are taken to provide all types of support on

behalf of operational deployment. For this purpose, along the international boundaries passing over land, units and large units designated to cover the borders occupy defensive positions, while in those areas where the international boundaries pass over sea surfaces, additional combat patrol forces and means are deployed. Air defense means go to full combat readiness.

By the beginning of the enemy invasion, the forces assigned to cover the borders repel enemy attacks and ensure the deployment of the main forces and their organized commitment into combat.

When a war is initiated with the unlimited use of nuclear weapons by the enemy, the strategic operation in a continental TSMA starts with the initial nuclear strike. It is recommended that the initial nuclear strikes be launched simultaneously by all strategic, operational, and tactical nuclear forces and means. However, the Supreme High Command can take into consideration the decisive role of strategic nuclear forces in the initial nuclear strike, their high combat readiness, and the rapidity of their actions, and, for the sake of ensuring surprise or other purposes, launch the strikes of nuclear forces without waiting for preparations of *front* and fleet nuclear delivery means to strike at the same time.

Under such circumstances, on the signal of the Supreme High Command, the Strategic Rocket Forces and submarine-based rockets conducting combat missions on the sea launch their strikes first. They are followed by the nuclear strikes of Long-Range Aviation. To ensure surprise, Long-Range Aviation may start taking off from airfields simultaneously with the commencement of the launch of strategic missiles. The strikes of operational-tactical rockets of *fronts*, armies, divisions, and fleets should be launched, if possible, simultaneously with the first salvos of strategic rockets. If at that time all operational-tactical rockets are not yet in full combat readiness, combat duty (on-call) rocket systems are first launched. Then the remaining rockets deliver their strikes as they get ready to do so. If at the beginning of the initial nuclear strikes the location of some important targets are not pinpointed, further reconnaissance is required.

In case of the threat of enemy nuclear attack, it is better that *front* aviation should be moved out of range of likely enemy nuclear strikes. This means that the bases of *front* aviation units should be relocated or the aircraft flown from the airfields to keep them away from enemy strikes. By the commencement of combat actions, *front* aviation should launch air strikes against enemy targets with their nuclear weapons.

The nuclear strikes of the Navy are launched on the signal for nuclear attack, and should be coordinated with the strikes of strategic nuclear forces. The forces and means assigned to destroy enemy ships and submarines in naval areas of the TSMA should conduct an active search for enemy targets prior to the commencement of combat actions. They should follow enemy targets by reconnaissance, so that by receiving the appropriate signal they can quickly launch nuclear strikes against such targets. Naval Aviation armed with nuclear rockets may launch strikes independently, or in coordination with Long-Range Aviation. Along with launching initial nuclear strikes, intense combat action to repel enemy nuclear attacks is initiated by *front* and fleet air defense troops, and PVOS Forces.

The initial nuclear strikes of the opposing forces will be very heavy and decisive. It can be expected that, as a result of such strikes, the combat power of opposing groupings of forces may be destroyed. Heavy losses and damage will be suffered by nuclear delivery means. However, the opposing forces, following the initial nuclear strikes, will still have a number of nuclear weapons capable of launching nuclear strikes.

Following the initial nuclear strikes, Strategic Rocket Forces, Long-Range Aviation, and submarines armed with nuclear rockets will continue to launch nuclear strikes against vital enemy targets left intact in the TSMA. The Supreme High Command, depending on changes in the situation, cancels nuclear strikes against some targets and reallocates nuclear weapons to hit targets not destroyed in the initial nuclear strike and engage newly located enemy targets. Nuclear strikes by *fronts* and fleets are continued.

Theoretical calculations indicate that the heaviest and most intensive nuclear strikes would be delivered by both sides in

the first three to five days. During this period the bulk of nuclear rounds stored at silos and launch pads will be expended, and both sides will suffer heavy losses among nuclear weapons due to enemy strikes.

The maneuver forces will suffer heavy casualties also, and individual units generally will lose their combat capability. Rear support areas and border areas will suffer much, and most of the installations and areas located there will incur heavy damage. Lines of communications will be destroyed. The situation in the TSMA will change rapidly. In large and extended areas, radioactive contaminated zones, floods, fires, and devastated areas will be created.

Under such circumstances, the conduct of subsequent strategic operations will generally depend on the consequences of nuclear strikes delivered against the enemy and the possibility of rapidly restoring the combat power of friendly groupings of forces hit by enemy nuclear strikes.

Commanders and staffs should assess the situation as soon as possible, organize the elimination of the consequences of enemy nuclear strikes, take measures to restore the combat capability of subordinate troops, and direct the forces and means retaining their combat capability to carry out their preassigned missions or to accomplish newly confirmed missions. At this stage all efforts must be concentrated to forestall and overtake the enemy in restoring troop combat capability in order to initiate the attack.

It should be noted that an assessment of the combat capability of large units and units in a nuclear war cannot be valid simply by counting the percentage of their casualties and losses in personnel and military equipment. An assessment based upon the latter will be illusory. If a motorized rifle division loses 60 percent of its personnel and equipment during combat operations conducted in a conventional war, the division should not be considered a large unit that has lost its combat power. Actually such a division will possess limited combat power, since there still will be more than 4,000 officers and enlisted men, 100-120 tanks, more than 80 pieces of artillery and mortars, and 150 antitank weapons in the division.

This will be totally different in a nuclear war. In this case, if a division loses 60 percent of its strength as a result of enemy nuclear strikes, such a division will be considered without combat power. What is the argument behind such calculations? Since in a nuclear war the division suffers such casualties and losses on one occasion within a few minutes, there will be a large number of killed, wounded, and panic-stricken personnel. Many units and subunits will be isolated and left without commanders. The morale of personnel will be shaken, and control will be disrupted.

In such cases broad efforts are required to eliminate the impact of enemy nuclear strikes and restore the division's combat power. This means that control is to be restored, medical aid extended to personnel, and the units are to be reorganized. It is required that a wide range of political efforts be made to restore the morale of personnel. The accomplishment of all these tasks requires a certain amount of time, which might be several hours or even a number of days.

In order to preempt the enemy in attack, one should not wait for the restoration of the combat power of all forces, but should initiate the attack even by individual large units and units which have maintained their combat power. In this case, the attack will be conducted on individual directions favorable for advance and maneuver.

Troop units left intact following enemy nuclear strikes should move ahead promptly and advance to as great a depth as possible. Their most important mission will be to destroy enemy reserves and seize rapidly key objectives in the depth of enemy territory. Such units should not become involved in combat with enemy groupings of forces remaining directly in the forward area, particularly in rugged and difficult areas of terrain, including large barriers and heavily radioactive, contaminated areas.

Airborne Troops and motorized units are landed by helicopter to operate in the rear of successively destroyed and radioactive contaminated areas. The actions of airborne large units will be very effective in this case.

The aim of such deep penetrations on land, from the air, and from the sea into enemy territory is the rapid neutralization and foiling of enemy countermeasures, and prevention of the enemy's restoration of combat power of units in the TSMA and his shifting of forces from other theaters and overseas areas.

In this phase, bold action, even by individual units that have maintained their combat power, decisively neutralizes the enemy's will to resist any further. It is better to destroy enemy troops left in the forward area, and eliminate the consequences of nuclear weapons on friendly forces, by such units and large units that have restored their combat power. They can be reinforced and supported by operational and strategic reserves.

In the course of terminating initial operations by the *fronts*, the Supreme High Command will assign missions to the *fronts* to conduct subsequent operations. The actions of troops in such operations will be centered on destroying individual surviving units of enemy forces, seizing vital objectives and areas in the depth of the TSMA, and organizing and restoring normal life in friendly and enemy territories.

At the closing stage of strategic operations, military actions will be undertaken by forces and means relatively limited in composition, preferably using conventional weapons. At this stage fewer nuclear weapons will remain, and these will be used against more important targets. Combat actions of Ground Forces will primarily be decentralized and will be conducted on separate or widely separate directions. The capability to support them by strategic reserves will be limited. Therefore, timely maneuvers, even by small forces including a number of divisions in their composition, will have decisive significance, in some cases, in the successful accomplishment of strategic operations.

In a war initiated using conventional weapons only, a strategic operation in a continental TSMA will also be conducted under difficult conditions, while the threat of nuclear attack will continue to develop. Nuclear delivery means will be maintained in constant readiness for use. Under such

circumstances, strategic operations can be initiated by an air operation to destroy enemy aviation groupings and nuclear weapons in the TSMA. The experience of World War II and the recent Near East wars confirms the dependence of large victories of land forces and fleet actions on the seizure of air supremacy.

In the course of an air operation, enemy aviation should be destroyed on the airfields, heavy damage should be inflicted on enemy aviation in air battle, and also [inflicted on] enemy airfields, and POL depots. Nuclear weapons are to be destroyed and the control system disrupted and destroyed. By the accomplishment of the aforementioned tasks, favorable conditions will be provided for successful actions by *front* forces and fleets.

An important condition to ensure success in such an air operation is the launching of the initial strike in full surprise. Enemy air forces should be attacked on their bases, and aircraft should be destroyed before they can take off.

By the commencement of strategic operations, the *fronts* and armies, depending on the actual situation, will conduct meeting engagements on one direction, while they launch deep penetrating strikes on another, and, subsequently, envelop and destroy individual enemy groupings of forces that have been cut to pieces.

Under all circumstances the action of friendly forces, once initiated, should be as dynamic and decisive as possible to foil enemy attempts and efforts in seeking to engage friendly forces in heavy and intense combat. Attempts should be made to destroy enemy forces before they can fully deploy. Rapidly cutting enemy forces into pieces, isolating individual enemy groupings and individual strategic areas and countries, and foiling enemy actions to move reserves from the rear or overseas areas are of significant importance.

In maritime portions of the continental TSMA, fleets initiate operations and combat actions to destroy enemy naval force groupings. They will conduct seaborne assault operations and combat actions, along with *front* operations, to seize straits and their surrounding dominant areas. Naval forces will

also interdict enemy naval movements, support the naval movements of friendly forces, and accomplish other missions with forces operating on coastal directions.

Operational formations and large units of PVOS Forces, *fronts,* and naval air defense forces and means will concentrate their actions on repelling enemy mass air strikes, which, in operations without using nuclear weapons, will most likely be launched against friendly groupings of forces which are attacking, as well as on key targets in their rear support areas.

All rocket forces and nuclear weapons should be placed in a state of readiness to launch decisive nuclear strikes on the aggressor upon receiving the appropriate signal. The state of readiness of nuclear forces, particularly of nuclear-armed aircraft, is determined according to the development of direct risk and threat of enemy use of nuclear weapons.

As the attacking elements of the *fronts* advance more and more in depth, most enemy targets initially selected to be engaged by friendly nuclear weapons will be seized or destroyed. At the same time, part of the friendly nuclear troops, particularly operational and tactical nuclear weapons, will also be destroyed. All such considerations require that continuous changes be made in the plans for the use of nuclear weapons, so that such plans are kept updated and compatible with the actual situation at the time of the actual delivery of nuclear strikes.

In the course of strategic operations conducted with conventional weapons, such crises and crucial situations may arise in which the enemy may make the decision to initiate the use of nuclear weapons to save himself from a critical position. Such a critical position for the enemy might be created when he loses vital defense lines, when heavy casualties and losses are inflicted on a large number of his forces, when risks of losing vital economic areas or dismemberment of his territories or that of allies may arise, and so forth. In such crucial stages, the most important task is to deny the enemy the opportunity to forestall and overtake friendly forces in initiating nuclear strikes.

At the same time, it is required that measures be taken to foil the enemy's preplanned nuclear attack. Such measures may include:

- calling large numbers of aircraft to inflict damage on enemy nuclear delivery means by conventional weapons;
- increasing the speed of the attack of *front* troops to seize rapidly the area where enemy tactical nuclear delivery means are deployed;
- dropping airborne assault troops and diversionary-reconnaissance groups assigned to destroy enemy rocket-launching pads, nuclear-armed aircraft on airfields, nuclear weapons' depots, and aircraft control and guidance centers.

Transition to combat action using nuclear weapons is a profound, fundamental, and qualitative change in the conduct of strategic operations, and requires tremendous initiative on the part of the Supreme High Command and all commanders and staffs in the proper assessment of the situation, so that time is not lost and the enemy is not allowed to act before friendly forces. All nuclear delivery means must be prepared to strike on time, and their missions in launching the initial nuclear strike must be reconfirmed. The missions of coordinating operational formations and large units must be adjusted and measures taken to protect troops against enemy nuclear strikes. All of these tasks should be accomplished in the shortest possible time.

These are the main issues concerning the preparation and conduct of modern strategic operations in a continental TSMA.

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Shown here, six of the instructors who taught at the Academy in 1973-75 and an Academy student defending his dissertation.

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CHAPTER EIGHT

Air Operations to Destroy Enemy Aviation Groupings

I. Introduction

Air operations are a type of strategic action of the Armed Forces and are the highest form of operational and strategic employment of Air Forces. Air operations are the aggregate of mass strikes, air engagements, and successive actions that are coordinated amongst each other and conducted simultaneously or successively by operational formations of the Air Forces, *front* aviation large units, and Long-Range Aviation large units in coordination with other Services of Armed Forces, and in accordance with a unified plan and concept under the control of the Supreme High Command. Depending on the aims, volume, and tasks, the missions of air operations can be directed toward achievement of the following aims:

- destruction of enemy aviation groupings in the theater of strategic military action (TSMA);
- destruction of enemy operational and strategic reserves in the TSMA;
- prevention of enemy operational and strategic movement of forces in the TSMA;

—destruction of the enemy's military and economic potential by Long-Range Aviation.

II. Aim, Content, and Main Characteristics of Air Operations

Successful actions to prevent an enemy invasion from the outset of war, particularly enemy air strikes, bring about profound changes in the situation in the TSMA and ultimately lead to great strategic success and achievements. Thus, the creation of a favorable air situation and environment, under which the Ground Forces can initiate and develop the attack rapidly and aviation can support them continuously, is the most important mission of the *front* and Air Forces' formations and operational formations of other Services of Armed Forces which have the capability to destroy enemy aircraft in the air and on the ground, inflict heavy damage on aviation command posts and POL and ammunition supply depots, and destroy enemy airfields.

The destruction of enemy aviation means in a TSMA inflicts losses on the enemy that deprive his tactical aircraft of their ability to produce organized resistance and provides favorable conditions for the execution of strategic operations. This will provide air cover and the protection of friendly force groupings to a degree that will enable them to accomplish their assigned missions in strategic operations.

Destruction does not mean the total annihilation of enemy aviation. Its quantitative nature is determined in terms of time and enemy ability to restore the combat capabilities of his air forces and reorganize his strength to counter the actions of friendly forces. In order to destroy the capabilities of enemy aviation for organized resistance against friendly forces, his aircraft in the TSMA should be annihilated. Factors affecting the destruction of aviation groupings are the direct destruction of enemy aircraft in the air and on the ground, the destruction of flight personnel, aircraft runways, command posts, depots, and so on.

Depending on the situation, the enemy may restore and reorganize his destroyed aviation means by shifting air

forces from bases in other TSMAs, employing reserves, and receiving technical means and equipment from industrial resources. To prevent the restoration of enemy aviation groupings, it is necessary to observe and reconnoiter his actions constantly and deliver timely strikes on airfields where indications of newly arrived aircraft have been noted. At the same time, tasks required to destroy enemy aircraft in adjacent TSMAs must also be solved, and the movement of his air forces from the country's interior to the TSMA in which enemy aviation groupings are being destroyed must be prevented.

Generally speaking, the destruction of enemy aviation means is one of the most important tasks conducted in the course of the struggle to establish air supremacy in one or more TSMAs.

The aim of air operations is the destruction of enemy main aviation groupings in one or more adjacent TSMAs and the creation of a favorable air situation. This will ensure the seizure of the initiative by friendly forces, retention of the striking power and freedom of maneuver of *front* forces, airborne large units, and seaborne landing units, and the success of aviation actions while accomplishing missions in the strategic operation.

The main groupings of enemy air forces consist of those tactical and naval aviation units and large units having aircraft with nuclear capabilities, the destruction of which provides a favorable air situation for friendly armed forces in one or more TSMAs. The aim of an air operation is achieved by the accomplishment of the following vital tasks:

- destruction of enemy aircraft and flight personnel at airfields;
- destruction of enemy aircraft and flight personnel in air combat;
- destruction of enemy naval strike aircraft in their combat maneuver areas or at their bases;
- destruction of enemy control and air navigation systems;
- destruction of enemy nuclear ammunition depots, POL, ammunition and materiel-technical supply depots;

– destruction and mining of enemy runways and airfields.

The most important tasks are the destruction of enemy aircraft on airfields and aircraft carriers, and the destruction of enemy aircraft, particularly nuclear-armed aircraft, in the air. Aviation forces and means are grouped and prepared, and their combat actions are organized to achieve these tasks.

Air operations to destroy enemy aviation groupings consist of the coordinated action of *front* air armies, Long-Range Aviation large units, Naval Aviation, units and large units of the *fronts*, and operational large units of National Air Defense Forces deployed in *front* areas of operations. Air operations are conducted in accordance with a general plan and concept under a unified command. They play a vital role in achieving the aim of the strategic actions of the groupings of the Armed Forces. Therefore, such operations are conducted by the decision of the Supreme High Command, under control of the General Staff. Control and coordination of the actions of the forces participating in air operations are normally delegated to the overall command of the Air Forces. A large number of tasks concerning the preparation and execution of air operations are accomplished by the commanders and staffs of the *fronts*, fleets, and all Services of the Armed Forces, the units and large units of which are participating in the air operation.

An air operation conducted for the destruction of enemy aviation groupings has the following characteristics:

– decisive aim;
– broad spatial scope and great vigor of combat actions;
– mass use of all types of aircraft and combat arms;
– short duration of the operation;
– complexity in the organization and support of control and coordination of the various types of combat arms and forces.

The decisiveness of an operation's aim means that the forces taking part in the operation should achieve the destruction of large enemy aviation groupings in such a way that they con-

centrate their efforts, as a first priority, to destroy enemy nuclear-armed aircraft and neutralize control posts and centers of aircraft navigation. Only by the destruction of enemy aircraft can the aim of the operation be achieved. The reason for this is that, within the limits of the Western Theater of Strategic Military Action, the number of enemy aircraft integrated into its main aviation grouping is 1,400. This can be increased up to 2,000-2,500 aircraft. Only when the destruction of 50-60 percent of such enemy aviation is achieved can it be assumed that air supremacy has been gained and favorable conditions are ensured for the *front* forces to accomplish their assigned missions.

The scale of an air operation is determined generally by the scale of the strategic operation, the status of enemy air force dispositions, and the capabilities, forces, and means employed for their destruction. Therefore, in the Western Theater of Strategic Military Action, the area in which missions are accomplished for the destruction of enemy air forces can reach 800-1,000 km in width and 1,000-1,200 km in depth. In the Far Eastern Theater of Strategic Military Action, an air operation can be conducted on one strategic direction 2,000-3,000 km in width and 1,800-2,000 km in depth, or across the entire TSMA.

The great vigor of aviation actions in conducting air operations arises from the need to destroy enemy air forces on their airfields in a short period of time, deny the enemy the ability to restore the combat power of destroyed air forces, and deny the enemy the chance to reestablish air bases on its rear airfields, particularly on airfields out of range of *front* aviation. These factors necessitate mass employment of the Air Forces in order to inflict heavy damage on the enemy's main aviation groupings in a short time.

The duration of an air operation is determined by the number of missions, the units assigned to accomplish them, and the circumstances of the given situation. The high maneuverability of enemy aircraft and their ability to escape from strikes of friendly forces in a short time require the delivery of powerful

air strikes against them in the shortest possible time. Thus, the basic aims of air operations must be achieved in a short time. In addition, *front* aviation resources that participate in air operations will have to support the Ground Forces once they begin to attack. Therefore, the duration of strategic air operations in the Western Theater of Strategic Military Action will be 24-36 hours while it will be 36-48 hours in the Far Eastern Theater of Strategic Military Action. During this time, the main aim of the operation will be achieved, and its main tasks will be accomplished.

The complexity of control and interaction in conducting air operations emerges from the fact that a wide range of different forces and means subordinate to the various Services of the Armed Forces is employed for its execution. The conditions of execution and the characteristics of air operations require that these different forces operate over vast areas in short periods of time in such a way that their actions are coordinated in terms of mission, objectives, time, form of action, and directions of approach to the operational objective. Accordingly, control elements are required to conduct detailed planning and coordination of the actions of the employed forces and means, maintain constant communication among them, and ensure highly centralized control.

The preparation and execution of air operations involve great difficulties, especially in solving complex actions related to airfield support facilities and materiel combat support measures.

III. Preparation of an Air Operation

The preparation of an air operation to destroy enemy aviation groupings is accomplished well in advance. This includes a large number of actions and measures taken by the Supreme High Command, the General Staff, and the Main Staff of the Air Forces. The main and fundamental measures are the following:

- making the decision for the operation;
- determining the composition of forces and means to be employed for the execution of the air operation;

- planning the operation;
- establishing the groupings and deploying forces and means;
- organizing control and coordination;
- preparing an airfield network and establishing materiel stockpiles;
- organizing combat and rear service support elements.

The great volume of the above-mentioned measures and their decisive impact on the outcome of operations require concentrated efforts by commanders and staffs in order to implement them within a short time. While carrying out these measures, special attention must be paid to maintaining the secrecy of their execution, primarily in regard to the decision, plan, and concept of the air operation and the forces and means to be used, and the content of missions to be accomplished by operational formations and large units.

Making the decision on the conduct of an air operation precedes planning the operation. In the decision, the following are considered: the aim of the operation, concept of the operation, forces and means to be employed, role of the operation in achieving air supremacy, and impact of its consequences on the actions of the *fronts* during the accomplishment of their missions.

When determining the concept of an air operation, the following must be considered:

- enemy aviation groupings that must be destroyed as a first priority, and the level of their destruction;
- where, when, and how the main attack on the principal enemy aviation grouping is to be launched;
- composition of forces and means to be used for the execution of the air operation and their missions;
- forms of conducting the air operation;
- composition and operational formation of aviation groupings;
- general concept of destroying enemy air forces in air combat;

- method of exploiting the results of actions conducted by forces and means of the Ground Forces, Airborne Troops, National Air Defense Forces, and the Navy;
- composition and mission of forces and means, and forms of delivering strikes on other enemy aviation groupings;
- start time, end time, and duration of the air operation;
- forms and types of control and coordination in the course of conducting the air operation and method of supplying the participating units and large units.

The concept of the operation must be worked out in such a way as to ensure surprise and highly powerful initial strikes against the enemy's strongest aviation groupings. The Air Forces must accomplish their mission of destroying the main enemy aviation groupings in the TSMA by two or three massive strikes at the maximum, delivered against airfields and other vital objectives.

The success of the air operation is ensured by delivering surprise, massed initial strikes against enemy airfields where the main body of enemy aircraft is concentrated, with first priority given to enemy nuclear-armed aircraft. Surprise action is achieved as a result of a detailed assessment of the conditions for executing the air operation and the proper selection of the time of its initiation. The air situation is estimated thoroughly prior to the commencement of combat actions, as are conditions for their preparation and initiation, the likely characteristics of the strategic operation in the TSMA, and the forms and times of Ground Forces' deployment and occupation of attack staging areas (*iskhodnyi raion*).

The forms of initiating and conducting an air operation may differ, depending on factors determined by the situation. An air operation conducted simultaneously with the attack of *front* forces is more advantageous, because, in this case, great surprise is ensured at the beginning of the combat action. This, by itself, has great importance in achieving the strategic initiative in the TSMA.

Surprise, massed blows on enemy aviation groupings create favorable conditions for effective actions by friendly air

forces, ensure better results of actions against enemy airfields, contain and limit the maneuvers of enemy air forces, neutralize enemy activity, and deprive it of the initiative and the capability to support its ground forces. All these factors lead to severely weakened enemy resistance against friendly forces.

The composition of aviation groupings assigned for the accomplishment of air operations is determined in accordance with the aim, concept, and conditions of the situation in which the air operations are undertaken. Such groupings must be capable of accomplishing assigned missions effectively at specific times. The composition and formation for operations (*operativnoe postroenie*) of aviation groupings is affected by the following:

- composition of enemy aviation groupings and enemy capabilities to reinforce such groupings by shifting aircraft from other TSMAs, as well as from its reserves;
- number and disposition of enemy nuclear delivery means;
- nature and characteristics of enemy air defenses and the capabilities of his means to repel the air strikes of friendly forces;
- operational and combat capabilities of units and large units participating in the air operations;
- likely forms of conducting the air operation.

The composition of forces allocated for the execution of air operations depends on the general situation and the air situation. Vital importance is given to the operational capabilities of friendly and enemy air forces, particularly to the capabilities of enemy air forces to avoid the strikes of friendly forces and present resistance in the air against friendly air forces. When assessing these capabilities, the following must be considered:

- quantitative and qualitative specifications of the aircraft to include the speed of flight, altitude, and range of action;
- the capacity for carrying bombs and rocket and artillery armaments;
- avionics and equipment on aircraft that enable them to operate under different conditions;
- operational capabilities and training of flight personnel;

- the ability to operate day and night and deliver mass strikes;
- the composition of the groupings of aviation means;
- the power of strikes delivered in a specified period of time by an air unit of specific size;
- the capability to conduct air battles (*vozdushnyi boi*) and air engagements (*vozdushnoe srazhenie*);
- condition of airfields and their facilities;
- morale and psychological status of flight personnel.

Based on the above-mentioned factors, aviation groupings organized for conducting air operations can be as follows:

- in the Western Theater of Strategic Military Action: three to four *front* air armies, one to two Long-Range Aviation corps and separate divisions, and Naval Aviation, as well as the Air Forces of Warsaw Pact countries, forces and means organic to the *front*, and operational formations and large PVOS units.
- in the Far Eastern Theater of Strategic Military Action: two to three *front* air armies, Long-Range Aviation corps and separate divisions, Naval Aviation, forces and means organic to the *front*, and PVOS Forces.

The creation of appropriate aviation groupings at the proper time is one of the important tasks in the operational deployment of the Armed Forces. Its accomplishment provides the necessary conditions for successfully executing air operations to destroy enemy air forces in the struggle to gain air superiority. A special task to be accomplished at this stage is the relocation of aviation bases. The relocation of aircraft bases must be conducted at specific times, secretly, normally at night, and by small groups flying at low altitudes, while measures are taken to avoid enemy air observation.

The relative correlation of air forces is of vital importance, both in the execution of air operations and in subsequent actions by *front* forces. The reason behind this is that satisfactorily retaining the initiative gained and creating favorable conditions for the execution of a *front's* assigned missions are

achieved only by having superiority in air forces over the enemy.

The actions of large aviation groupings to change fundamentally the relative correlation of forces in the air in its own favor will achieve success only when the forces and means participating in the execution of air operations coordinate the accomplishment of their missions on the basis of time, place, operational directions, and operational echelons.

The formation for operations (*operativnoe postroenie*) of aviation groupings assigned to conduct air operations is determined on the basis of aim, missions, forms of action, possible resistance of enemy air defense means and enemy air force bases, meteorological conditions, and other related factors. Generally, a formation for operations is organized in a few echelons.

Analysis and the experience of field exercises indicate that the basis for establishing a formation for operations consists of the main forces (strike echelon—*udarnyi eshelon*), support echelon (*obespechivaiushchii eshelon*), and development forces (*razvivaiushchie voiska*). The distribution of forces and means is effected accordingly.

The main force (strike echelon) constitutes the most important echelon in the formation for operations, and is assigned missions therein to destroy enemy aircraft and flight personnel on airfields and in air battle, destroy aircraft runways, neutralize command posts, etc. Accordingly, the composition of the strike echelon includes bomber, fighter-bomber, and a portion of fighter aircraft, as well as Long-Range Aviation large units. The number of aircraft in the strike echelon includes 60 percent of *front* aviation aircraft and 75 percent of Long-Range Aviation aircraft taking part in the air operation. The percentages of *front* aviation aircraft allocated to the strike echelon are as follows: 85-90 percent of bombers, 65-70 percent of fighter-bombers, 15-20 percent of fighters, and 10-15 percent of reconnaissance aircraft.

The support echelon includes 25-30 percent of *front* aviation aircraft and up to 5 percent of Long-Range Aviation air-

craft. This echelon is assigned the missions of conducting reconnaissance; isolating and mining airfields; jamming surveillance, control, and aircraft and rocket navigation devices and systems; neutralizing enemy air defense means; producing deceptive and imitative actions; and supporting Long-Range Aviation aircraft flights. The following percentages of *front* Aviation aircraft are included in the support echelon:

- fighters – 25-30 percent;
- fighter-bomber aircraft – 30 percent;
- bombers – 10 percent;
- reconnaissance aircraft – 55-60 percent.

Strike development forces and reserves are assigned to strike newly located enemy airfields in the course of the operation and to strike targets not sufficiently damaged by the strike echelon. Their composition includes 10 percent of *front* aviation aircraft and 15-20 percent of Long-Range Aviation. Reserves must be established by each air army and the Supreme High Command. A reserve is also needed to meet unexpected enemy actions and accomplish new missions that may arise during the conduct of an air operation.

Determining the positioning of the strike echelon in the formation for operations of aviation groupings is very important. The actions of the strike echelon are coordinated with the composition and actions of the first (support) echelon forces and the method of destroying enemy aircraft on the airfields and in air battle. Most important is that first echelon forces must be able to neutralize enemy surveillance, reconnaissance and navigation systems, shoot down enemy fighters which manage to become airborne, and destroy enemy air defense capabilities for creating obstacles to the actions of friendly main aviation groupings.

The planning of an air operation is conducted in accordance with the nature and content of assigned missions, composition and combat capabilities of air forces taking part in the operation, possible enemy resistance, meteorological conditions, and other related factors. The basic contents of planning the operation are:

- proper selection of targets, and the degree and sequence of neutralizing them;
- timing of the strikes;
- allocation of forces and means to missions, targets, and operation times;
- determination of sequences and forms of execution of the assigned missions;
- coordination and organization of control;
- all types of support measures.

Seeking measures to ensure the successful passage of the forces through enemy air defenses constitutes a vital element in planning the air operation.

The planning of the air operation must be conducted in such a way so as to ensure constantly the timely preparation of units and large units, maintain them in a status that enables them to get into the air from any level of combat readiness at the shortest notice, accomplish assigned missions, and deliver effective strikes on specified targets.

The planning, depending on the missions and form of execution of the air operation, is conducted so as to ensure the achievement of the aim of the operation at the specified time. Depending on the situation, the aim of the air operation is achieved through the simultaneous or successive accomplishment of assigned missions. To serve this purpose, one or more massed strikes, echeloned actions, and air battle and air engagements can be conducted. Thus, if, for example, the concept of the operation anticipates the destruction of enemy main aviation groupings by two massed strikes on airfields and the execution of air engagements, then the content of the mission will be the destruction of those enemy aircraft on the airfields which constitute his main groupings of aviation assets. The second mission will be the completion of their destruction on the airfields, and in air engagements.

If, for example, the enemy has strong groupings of fighter aviation at his disposal, then the first mission of the air operation will be the destruction of enemy fighter aviation on air-

fields and in the air, and the second mission will be the destruction of enemy fighter-bomber and bomber aviation.

Depending on the situation, weakening enemy air forces and providing favorable conditions for delivering decisive strikes can constitute the content of the air operation's first mission. In this case, the second mission will be the destruction of the enemy main aviation groupings, and the third mission will be the completion of the destruction of enemy aviation means in specific areas or in the entire TSMA.

The planning of an air operation is conducted on the basis of the Supreme High Command's decision. The General Staff determines the objective of the operation, the general concept, the times of its execution, and the composition of forces and means to be used in the operation. Moreover, it organizes cooperation among various Services of the Armed Forces. The General Staff issues the directives to the overall commands of the various Services of the Armed Forces, and to *front* and Long-Range Aviation commands.

Based on the instructions of the General Staff, the overall command of the Air Forces specifies the method of conducting the air operation, allocates the efforts of the Air Forces to the missions, specifies the methods of action of aviation formations and large units, and organizes cooperation among the forces and all support measures.

An air operation is planned to ensure the destruction of enemy aviation groupings in the shortest possible time. Generally, it is recommended that the air operation for purposes of destroying enemy aviation groupings does not last more than 36-48 hours. The reason is that by the time for commencement of the attack by Ground Forces, *front* air armies will have to cover and support the *front* forces during their attack and accomplish other missions. Therefore, one of the other important matters in planning air operations is the specification of the time and method of assigning large aviation groupings to support and cover *front* forces. To ensure this, the *front* air armies are assigned such missions in advance, and the number of sorties for their execution are specified.

When planning air operations, all massed strikes generally, and the initial massed strike in particular, delivered by *front* aviation, Long-Range Aviation large units, Naval Aviation, and fighter aviation organic to the PVOS Forces, are planned in detail.

IV. Conduct of an Air Operation

The conduct of an air operation is the commitment of forces and means to execute the missions specified in the plan of operation. The conduct of an air operation is closely connected with actions of the rest of the forces and means operating in the TSMA, and is an integrated component of the general plan and concept. The basic content of conducting air operations is:

- committing friendly main forces into action;
- initiating massed vigorous actions to seize the initiative in the air;
- destroying enemy main aviation groupings and units in the TSMA;
- providing favorable conditions for the accomplishment of *front* and naval missions.

The underlying pre-condition for a successful air operation, the achievement of specific objectives, and the accomplishment of assigned missions is safe passage through enemy air defenses. It will be very difficult to accomplish such a task during the execution of air operations in a TSMA in which the enemy has established strong and multi-layered air defenses based on the disposition and use of air defense rocket systems, fighter aviation, and air defense groupings of maneuver forces, because in such areas major threats against friendly aircraft will be constituted by the high density of fires of "Hawk" and "Nike Hercules" air defense rocket systems deployed to a depth of 150-200 km. Therefore, special attention is paid during the execution of air operations to accomplish the above-mentioned task. What is important in this case is to seek and locate weak points in the enemy air defense system and exploit them. For the passage through the enemy air defense system, it is

necessary that large numbers of forces and means are allocated, well-calculated and objective-oriented tactical methods and forms of actions are selected, breakthrough is organized in specified areas, and sufficient damage is inflicted on enemy air defense rocket systems by fires. The astute calculation and proper selection of the time and place for the surprise arrival of aircraft over targets to be attacked provide added effectiveness in the actions of friendly aircraft and reduce their casualties.

Important measures to ensure successful passage through enemy air defenses in conducting air operations include the employment of new equipment and means of inflicting damage on the enemy from the air and the use of rockets organic to the Ground Forces. Moreover, to inflict damage on enemy air reconnaissance, radar stations, and guidance systems of air defense guided rockets, and to destroy enemy air defense rocket systems at their launch positions, air-to-surface and Ground Forces' tactical and operational-tactical rockets with conventional warheads can be used. One of the important means to ensure successful passage through enemy air defenses is the use of radio-electronic warfare equipment and means. Wise employment of radio jamming decreases, to a large extent, the effectiveness of enemy air defense means.

While preparing and executing air operations, special attention is paid to measures that ensure the activeness of friendly Air Forces. All actions concerning the preparation of the Air Forces must be organized so as to limit and contain the possibility of the enemy's successful execution of surprise, overtaking and forestalling (*pereshchegoliaiushchie*) strikes, or counterstrikes, on the airfields of *front* aviation and Long-Range Aviation groupings. To serve this purpose, constant reconnaissance and observation of enemy aviation activities are organized, aviation groupings are secretly moved from permanent airfields and dispersed on reserve airfields prior to the commencement of the operation, vigorous actions of aviation groupings are simulated at the evacuated airfields, aviation groupings are brought to a higher state of combat readiness

at the newly occupied airfields, and combat (on-call) (*boevoe dezhurstvo*) aircraft are designated on the airfields.

An air operation to destroy enemy aviation groupings may be initiated and conducted under various and very difficult conditions. It can be initiated simultaneously with the commencement of an attack by *front* forces or can precede it. In some cases, an air operation can even be initiated during an attack by *front* forces. In terms of time, an air operation may be initiated in the daytime, at night, at dawn, and at dusk before complete darkness. Optimum results are obtained from an air operation when it is initiated by surprise massive strikes on enemy airfields.

With the commencement of hostilities, the opposing sides will attempt to weaken maximally the aviation means of the other side and seize the initiative in the air. Therefore, the action of aviation in a TSMA will be very vigorous and will develop continuously. Consequently, gaining time by striking the enemy is vitally important.

The experiences of the Great Patriotic War indicate that at that time the main Soviet Air Forces were usually concentrated on those strategic and operational directions where *fronts* and armies were accomplishing the most important missions to destroy the enemy and occupy his territory. Consequently, the Germans had 1,500 aircraft on their main strategic direction in 1942, which was 53 percent of all German aircraft on the Soviet-German front. In the Kursk major campaign, they had 1,400 aircraft, or 50 percent of all German aircraft on the Soviet-German front. At the beginning of the Stalingrad offensive, the Soviet Army had more than 1,800, in the Kursk campaign 5,700, and in the Belorussian operation 6,900 aircraft.

The principles of conducting an air operation must conform with the concept of the operation and should ensure the successful accomplishment of the mission, achievement of the assigned objective, and the effective use of friendly aircraft. In connection with these requirements, the basic principles are as follows:

—surprise action against enemy airfields and control means;

- —massed efforts against enemy main aviation groupings on the ground and in the air;
- —continuous action over enemy airfields and against his aircraft in the air, day and night;
- —cooperation of aviation with other forces and means allocated to participate in the accomplishment of air operations.

The forms of conducting air operations depend on many factors and can vary. They are specified and described in the concept of the operation. The basis of this form is massed strikes on enemy air forces at his airfields and in the air. The most usual forms for conducting the air operation are the following:

- —massed strikes against enemy main aviation groupings on the ground. This is the most effective and decisive form of conducting air operations, and requires the destruction of enemy aircraft in the shortest time and the destruction of runways, depots, and command posts on the airfields. However, this form requires the use of large numbers of *front* aviation and Long-Range Aviation groupings and requires detailed organization and great superiority over the enemy in aircraft at the outset of operation;
- —air engagement activity, in the course of which enemy aircraft, flight personnel, and those enemy fighter aircraft which, in general, are resisting friendly main aviation groupings operating over enemy airfields are destroyed.
- —successive air strikes on individual enemy aviation groupings to destroy them or delay their accomplishing anticipated massed strikes, and to detain them during the intervals between massed strikes, in order to prevent the enemy from restoring his airfields and the maneuverability of his air forces.

Usually air operations are conducted in different ways, closely connected with each other; however, the best results are

achieved by delivering surprise massed strikes on the airfields where the main groupings of enemy aircraft are concentrated. Air engagements and successive air strikes complement massed strikes, and create the most favorable conditions for the execution of the latter.

In the course of conducting an air operation, an important element is the seizure and retention of the initiative and vigorous action in the air. This will deprive the enemy of organized resistance against friendly forces and will prevent him from conducting his own air operation.

As indicated by experience, an air operation must be initiated by a surprise massed strike on enemy main aviation groupings. This strike is the sum of a series of air strikes delivered by *front* and Long-Range Aviation groupings. In this case, launching a surprise air strike is especially important in the actions of *front* air armies and Long-Range Aviation large units.

The main forces during the attack on enemy main aviation groupings must be protected continuously from the actions of enemy fighter aircraft. To achieve this purpose, enemy fighters can be destroyed on the airfields and in air engagements, and can be neutralized or isolated on the airfields.

Retention and development of initiative gained as a consequence of the initial massed strike can be achieved by the execution of air engagements and attacks by small groupings of aircraft on airfields, in locations where sufficient damage was not inflicted on enemy aircraft during the initial massed air strikes. In the meantime, at intervals between massed air strikes, enemy command posts, observation centers for aircraft, and control centers for air defense guided rockets are neutralized, and aircraft runways and other targets are destroyed. To accomplish these tasks, aviation reserves and aircraft especially allocated for such missions are employed.

Subsequent massed strikes on enemy airfields are organized and carried out on the basis of reconnaissance information about the results of the initial massed strikes. The subsequent massed strikes must be brought to bear on the enemy after the shortest of intervals following the initial massed strikes,

so that the enemy is denied the chance to restore his airfields and regroup his air forces. The subsequent massed strikes need sufficient materiel and support, as well as proper selection of their delivery. Since the surprise factor will lose its importance at this stage and the opportunities for surprise will not be available, new measures concerning operational *maskirovka* and regrouping of aviation units, as well as the reconfirmation of their missions and matters of coordination, are required. At this stage, reconnoitering and observing enemy airfields and acquiring information about the nature of enemy aviation actions will be of great importance. This is because the methods of action and the means of friendly forces participating in air operations will be reconfirmed accordingly.

It should be noted that targets located on enemy airfields will have great maneuverability. Therefore, in the course of carrying out strikes against them, retargeting and reorientation of some individual aviation groupings may become necessary to meet the requirement of destroying the targets in their new locations. Consequently, during the preparation and planning of the air operation, each aircraft grouping is assigned not only main targets, but also alternate targets, and the method of retargeting and reorienting against alternate targets is specified. To solve these problems, an important role is planned for crews conducting constant reconnaissance over enemy airfields.

Air engagements in the course of an air operation to destroy enemy aviation groupings may occur from the beginning of the initiation of a friendly massed strike on enemy airfields, as well as when enemy counteractions over friendly airfields are being repelled. In the former case, air engagement is generally conducted against enemy fighter aircraft to ensure the free action of friendly strike forces, while, in the latter case, such an engagement is to be carried out to meet enemy strike forces and prevent them from gaining access to friendly airfields and other active targets.

Thus, during the conduct of air operations, massing fighter aviation groupings and establishing decisive superiority

over the enemy aviation groupings to be destroyed in an air engagement are required. The fighter aviation groupings must be prepared before the initiation of massed strikes on enemy airfields. Successful execution of an air engagement is ensured by the following:

- proper selection of the time and areas to conduct an air battle, providing the most favorable conditions to destroy important enemy fighter aviation groupings piecemeal, and not allowing them to interfere in the actions of friendly main aviation groupings operating against enemy airfields;
- wise and progressive commitment of fighter aviation groupings engaging enemy fighter aviation groupings in air battle piecemeal, retaining constant superiority over the enemy in the air, ensuring the presence of second-echelon and reserve fighter aviation on airfields and in the air, and providing for their timely commitment into combat and restoration of the capabilities of aviation groupings;
- detailed preparation and delivery of strikes at the decisive stages of an air operation, leading to the destruction of enemy main fighter aviation groupings and the morale of their flight personnel;
- continuous action over enemy airfields and command posts, as well as activeness in air battle to neutralize and weaken the morale of enemy flight personnel, thus limiting initiative and disrupting control.

Air engagements conducted to foil enemy aviation sorties have the following characteristics:

- the targets of their action are tactical fighter and fighter-bomber aircraft;
- achieving superiority and seizing the initiative in the air by friendly fighter aircraft becomes difficult.

Such air engagements are often conducted after the flight axis and composition of enemy aviation groupings are deter-

mined. Accordingly, depending on the time available, such an air engagement is conducted by fighter aircraft operating as air patrols, and, subsequently, their development is effected by the sorties of fighter aircraft based on the airfields having full flight readiness. In this situation, what is most important is the commitment of fighter aircraft main forces into combat, which by itself ensures the successful accomplishment of the assigned missions.

When the enemy is operating with large numbers of aviation groupings on a wide front, the rapid commitment of large numbers of fighter aircraft on different axes and the conduct of numerous air battles and air engagements are required. For the successful accomplishment of the above-mentioned missions, the following are required:

- presence of on-call fighter aircraft on the airfields, fully ready to fly on command;
- constant reconnaissance of the air enemy;
- explicit warning about the air enemy;
- quickness in making decisions;
- astute control of friendly fighter forces in guiding them to the air targets.

During massed air battles and engagements conducted in the course of an air operation, the successive actions of friendly aircraft against enemy airfields have great importance. Successive actions of friendly aircraft are widely used to prevent the restoration of enemy activities on his airfields and to mine them; to harass flight personnel; to neutralize control and guidance means; and for other purposes.

Air operations terminate with the destruction of enemy aviation groupings. However, retention of the initiative and air supremacy remains very important. Depending on the situation in the TSMA, the enemy may move a part of his air forces from the depth and from other TSMAs. Therefore, further actions against enemy airfields and the destruction of aircraft in the air are required. Such tasks can be accomplished by *front* air armies and Long-Range Aviation groupings.

The experience of field exercises and wars in the Middle East indicate that, despite the difficulties, the destruction of enemy aviation groupings in a TSMA can be achieved in a short time by astute and clever actions. For example, the Israelis destroyed the aviation groupings of Arab countries in 1967 by such actions. During one training exercise, as a result of strikes delivered on dummy airfields on ten test ranges where 313 aircraft models were emplaced, 45 percent of the aircraft, all runways, and 51 percent of the command posts were destroyed. In addition, 43 percent of the radar posts, 45 percent of the air defense rocket control posts, and 42 percent of the antiaircraft artillery batteries were knocked out.

During air operations, it may become necessary to shift aviation efforts to the successive destruction of the enemy. This would involve, initially, destroying his strongest, and, subsequently, his other aviation groupings, or shifting efforts of the Air Forces from one direction to another. Such actions are anticipated in the plan for air operations, and support measures facilitating their execution are taken in advance. Such measures may include the following:

- reconfirmation of the missions of *front* air armies and the directions of their main strikes;
- reconfirmation of the time of delivering initial and subsequent massed strikes against enemy airfields;
- regrouping of aviation groupings in accordance with the modification of missions and methods of their execution.

In addition to the above-mentioned measures, when the main efforts of aviation are shifted to operations on another direction or to another TSMA, the following are anticipated as well:

- reconfirmation of matters concerning cooperation and control;
- reconfirmation of time and method of regrouping aviation units to establish appropriate aviation groupings in order to provide for the successful accomplishment of assigned missions.

Control of the forces and means participating in air operations is executed in a decentralized fashion. The reason is that such operations are not conducted by forces and means exclusively allocated to accomplish them, but are conducted by forces and means that are allocated to accomplish *front* and naval operations as well. The control of forces and means participating in an air operation is executed by the General Staff through the overall commands of the Services of the Armed Forces and *front* commanders.

Aviation formations and large units are controlled and commanded by the Main Staff of the Air Forces. It organizes cooperation among them as well. For the purpose of control of the aviation forces and means, a system of command posts is established which is used in the course of an air operation and during the execution of other missions by *front* air armies and Long-Range Aviation groupings. During the conduct of an air operation, the overall command of the Air Forces may function from either a central command post or a forward command post especially established for this purpose in a TSMA. There are considerable difficulties in the control of air armies organic to the *fronts*. Such difficulties emerge from the fact that they are subordinate to the *front* commander and are assigned to accomplish missions in support of *front* forces, but in the course of the air operation, *front* air armies must concentrate their main efforts on accomplishing missions to destroy enemy aviation groupings. Therefore, the execution of tasks concerning air cover and support of *front* forces slackens for some time. Thus, the overall command of the Air Forces, when organizing control of the *front* aviation groupings, must anticipate the possibility of rapidly switching the commitment of *front* air armies from the missions conducted on behalf of the air operation to missions executed on behalf of land force support and air cover, and vice versa. Close liaison between the overall command of the Air Forces and the *front* commanders, the presence of liaison officers from the Air Forces in the *front* command posts, and the detailed organization of cooperation matters have great importance in solving the above-mentioned problems.

One of the complicated matters of troop control is the task of ensuring the constant surveillance of enemy aviation actions and means, rapidly bringing aviation units to a higher state of readiness, retaining a higher combat readiness of aviation units and large units, and, finally, delivering timely, effective strikes against enemy aviation groupings on airfields and in the air.

V. Conclusions

An analysis of the status and prospects of enemy aviation means indicates that such forces shall remain a vigorous means of war with the power to have decisive impact on our forces in the various TSMAs. Therefore, attempts should be made from the outset of war to neutralize and destroy enemy air forces.

The destruction of enemy aviation groupings is a difficult task that can be solved only by the united efforts of all Services of the Armed Forces, although the decisive role is played by the Air Forces. The basic method of strategic action of the Armed Forces to accomplish this task is the air operation, consisting of one or more massed strikes by *front* aviation and Long-Range Aviation, air battle and air engagement, and successive actions. Air operations are prepared and conducted on the basis of the Supreme High Command's instructions. Troop control, as well as the coordination of aviation formations and large units participating in the conduct of an air operation, is executed by the overall command of the Air Forces.

Appendix: Academy Curriculum, Staff, and Facilities

Voroshilov General Staff Academy Curriculum, 1973-75

FIRST YEAR

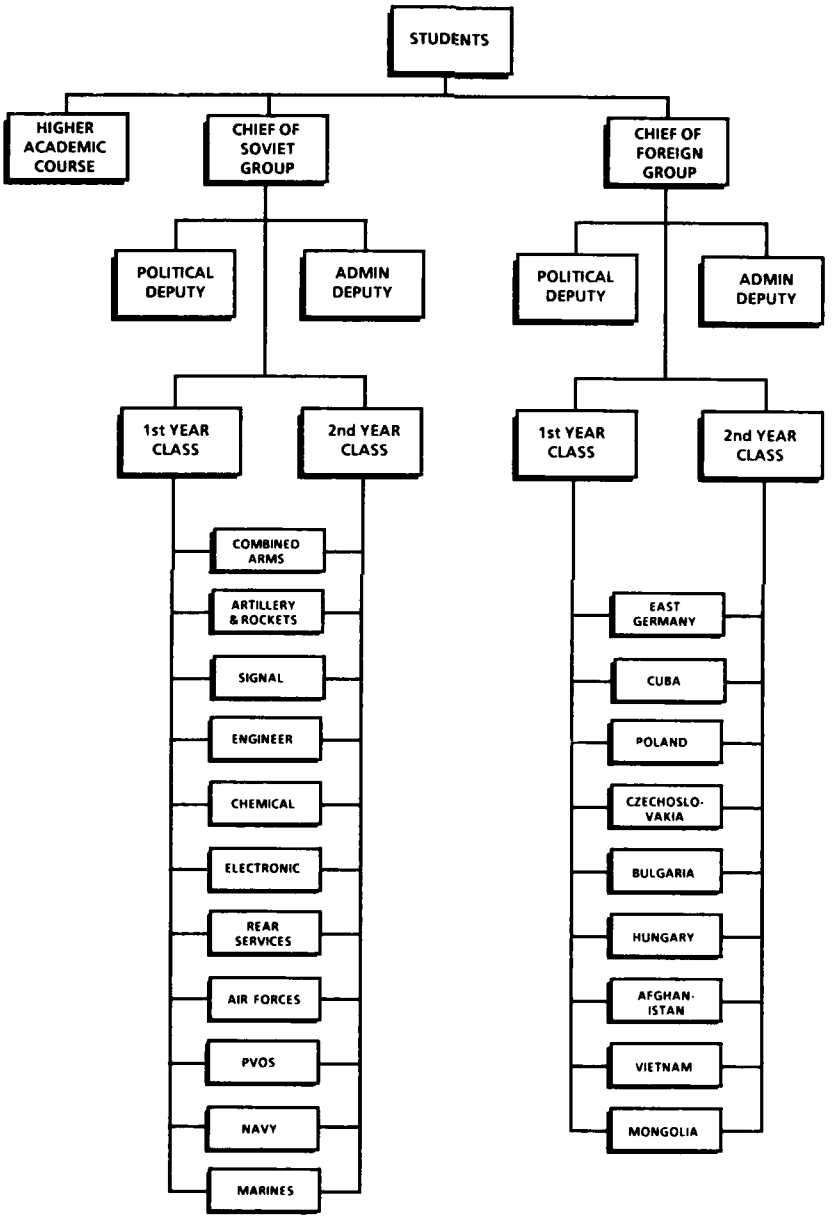
1st Semester	*2nd Semester*
Introductory Course on Soviet Military (2 weeks)	
Strategy	Strategy
Military History	Military History
Language	Language
Motorized Rifle Division and Division Tactics (2 months)	Soviet Air Army Strategic March Course (6 weeks)
Operational Art – Army Offensive (5 months)	Operational Art – Army Defensive (3 months)
Marxism-Leninism	Marxism-Leninism

ONE MONTH VACATION – AUGUST 1974

SECOND YEAR

1st Semester	*2nd Semester*
Strategy	Strategy
Military History	Military History
Language	Language

STUDENT BODY ORGANIZATION, VOROSHILOV ACADEMY



SECOND YEAR – Continued

1st Semester	*2nd Semester*
Combat Readiness	Dissertation Work
Foreign Armies	Navy Operations (20 days)
Front Offensive Operation (5 months)	Front Defensive Operation
Marxism-Leninism	Marxism-Leninism
Air Defense Army (2-3 days)	Final Exams
Staff Training	

Academy Daily Schedule

Monday–Saturday

0715	Students arrive at Academy
0800-1200	Four 50-minute classes, 10-minute breaks
1200-1300	Lunch break
1300-1700	Four 50-minute classes, 10-minute breaks
1700-1900	Mandatory study hall (except none on Saturday)
1920	Students depart Academy

Sunday Free time

*Abbreviated List of Academy Personnel, 1973-75**

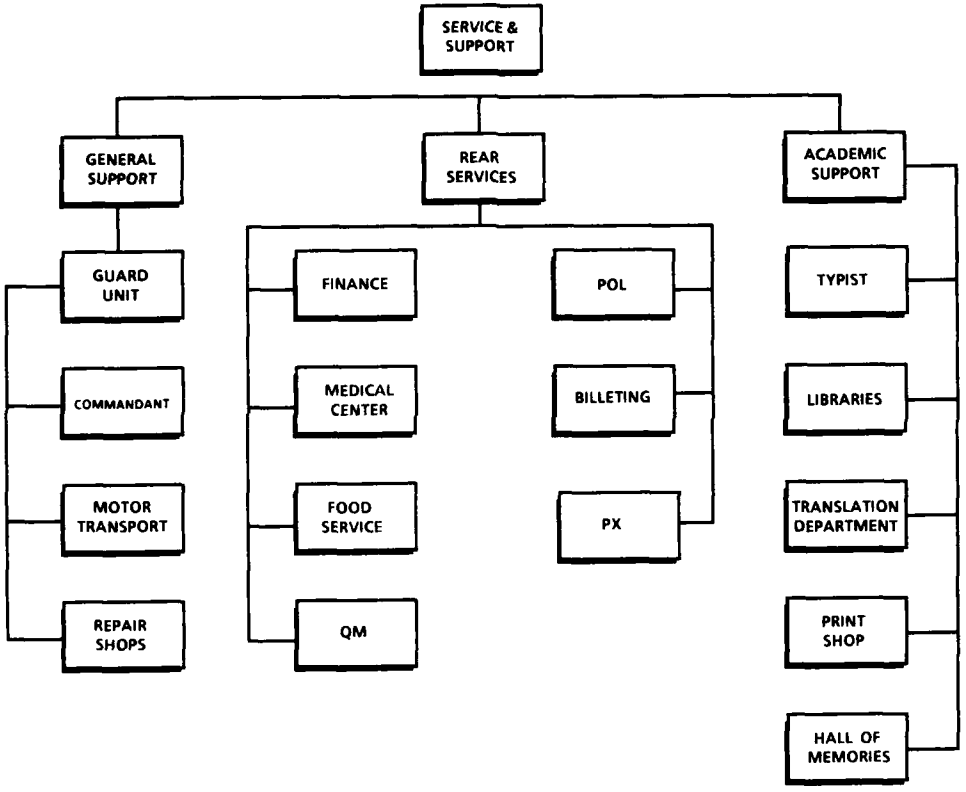
P. F. Antipov	Chief of Foreign Students Section.
Vice-Admiral N. A. Fokin	Taught naval affairs.
Lieutenant General F. F. Gaivoronskii	*Deputy Chief for Operational Art, Professor.*
Major General Kapustin	Member of the *Air Forces Department.*
Colonel Karneev	Deputy Group Chief of the Foreign Students.

*See V. G. Kulikov, ed., *Akademiia General'nogo shtaba* (Academy of the General Staff) (Moscow: Voenizdat, 1976) for material on other staff and faculty members during this time period. Those listed above were specifically noted by Colonel Wardak.

Academy Personnel, 1973-75—Continued

Colonel Kobinov	Taught in the *Operational Art Department.*
Colonel General F. A. Mazhaev	*Deputy Chief for Political Section.*
N. P. Petrov	Taught staff work.
Lieutenant General Pozanov	Group Chief of the Foreign Students.
Major General I. B. Shaposhnikov	Lectured on space systems in the Armed Forces. He is the son of Marshal of the Soviet Union B. M. Shaposhnikov, head of the General Staff prior to and during the Great Patriotic War.
Colonel General A. G. Shurupov	*Deputy Chief of the Academy for Staff Operations.*
A. K. Slobodenko	Taught intelligence and foreign forces.
K. V. Spirov	Taught communications and radio-electronic warfare.
Major General V. A. Tsarev	Member of the *Intelligence and Foreign Armies Department* who taught a course in reconnaissance. In the 1950s and 1970s, Tsarev was the Soviet military attache, first in Afghanistan and later in Pakistan. It was believed that in the past he worked for Soviet military intelligence.

ORGANIZATION CHART OF SERVICES AND SUPPORT, VOROSHILOV ACADEMY



*Glossary of Soviet Military Terms**

ARMEISKAIA ARTILLERIISKAIA GRUPPA (AAG) Army artillery group: The army artillery group is organized for the accomplishment of missions in support of the main forces of the army in the operation. These missions include combat with the enemy's tactical nuclear means and artillery; inflicting losses on enemy reserves and command posts; and supporting the first echelon divisions in the direction of the main attack. Depending on the number of first echelon divisions operating in the direction of the main attack, the army artillery group can be divided into several subgroups.

The number of artillery battalions in the army artillery group can be 8-10 or more. In addition, a rocket artillery group can be established at the army level.

ARMEISKAIA GRUPPA REAKTIVNOI ARTILLERII (AGRA) Army rocket artillery group: In order to use the enormous capability of rocket artillery organic to the artillery division reserve of the Supreme High Command, a separate rocket artillery group is established in the army for central use in the direction of the army's main attack. It provides for rapid maneuver of artillery in the directions required to conduct missions for inflicting maximum losses on the main grouping of the enemy.

*These definitions, prepared by Colonels Wardak and Jalali, are based principally upon material presented at the Voroshilov General Staff Academy in the mid-1970s and the Frunze Military Academy in the early 1980s. The reader is also referred to S.F. Akhromeev, ed., *Voennyi entsiklopedicheskii slovar'* (Military Encyclopedia Dictionary) (Moscow: Voenizdat, 1986), for additional discussion of a number of these, and other, key Soviet military terms. It should be noted that throughout the glossary and the text, frequent reference is made to military organizations of various sizes that in some cases have no precise English translation. In this regard, *podrazdelenie* has been translated as "small unit" or "subunit" (typically denoting a force of battalion, company, or platoon size); *chast'* has been translated as "unit" (usually a regiment or separate battalion); *soedinenie* appears as "large unit" (typically a division or brigade); and *operativnoe ob'edinenie* and *ob'edinenie* are rendered as "operational formation" and "formation," respectively (both terms usually referring to an army or *front*).

ARMIIA PROTIVOVOZDUSHNOI OBORONY (PVO) Air defense army: An operational formation of the National Air Defense Forces assigned for the air defense and cover of political, administrative, industrial, and military centers; groupings of ground, airborne, and naval forces; and groupings of aircraft mobilization areas, naval bases, airfields, communication routes, and supply bases against enemy air strikes.

The composition of an air defense army is not constant, but depends on the mission, significance of the direction to be covered, characteristics of the TSMA, scope of the covered area, and the nature of enemy action. An air defense army having one to two corps, two to four air defense divisions, and other separate units of troop and service arms can have the following composition:

- 5 to 7 air defense rocket brigades;
- 15 to 20 air defense rocket regiments;
- 6 to 12 fighter aviation regiments;
- 3 to 6 radio-technical brigades (regiments);
- 1 separate radio regiment of special designation [jamming] (*otdel'nyi radiopolk spetsial'nogo naznacheniia-spetsnaz*);
- 2 to 3 radio-technical battalions [jamming] (radio-technical battalions of special designation *spetsnaz*);
- signal center;
- engineer units;
- chemical protection units;
- rear service units and installations.

The area of action of the army is assigned by the General Staff.

ARTILLERIIA RESERVA VERKHOVNOGO GLAVNOGO KOMANDOVANIIA Artillery reserve of the Supreme High Command: Artillery units and large units whose employment and allocation is reserved by the Supreme High Command. Their armament is similar to that of the combined arms troops' artillery, and also includes high power (heavy) and special guns (175-mm to 240-mm). While artillery reserves of the Supreme High Command are not organic to combined arms units and large units, they are temporarily assigned by the Supreme High Command (i.e., temporarily placed in operational subordination) to reinforce combined arms groupings operating in the main direction(s).

ARTILLERIISKAIA GRUPPA Artillery group: The artillery group includes artillery subunits, units and large unit grouped during battle (operations) to conduct missions in support of combined arms units (large units and operational formations) and is controlled by unified command. The artillery group is under command of the commander of the combined arms unit, large unit, and operational formation. The composition of the group depends on the size of the penetration area (breakthrough area), nationality of the defending troops, support re-

quirements, the number of targets, available artillery resources, and the missions to be accomplished to destroy the targets by artillery. The composition of an artillery group can be changed during battle (operation).

ARTILLERIISKAIA PODDERZHKA Artillery assault support fire: Artillery assault support fire is an artillery action at the beginning and during the conduct of the assault by friendly troops, which inflicts direct and continuous losses on the enemy by fire in front of, and on the flanks of, the attacking troops to create conditions for their uninterrupted advance. At the same time, it continues to inflict losses on targets in the depth of the enemy defenses. The artillery assault support fire begins after the end of the artillery preparatory fire. The principal methods of assault support fire are:

- *ognevoi val* (OV) rolling fire simultaneously on one or two lines combined with concentration of fire;
- *posledovatel'nyi sosredotochennyi ogon'* (PSO) successive concentration of fire simultaneously on one or two lines;
- *sosredotochennyi ogon'* (SO) concentration of fire on call by the commanders of attacking subunits.

The artillery assault support fire during the attack is coordinated with the advance of the motorized rifle and tank battalions (regiments).

ARTILLERIISKAIA PODGOTOVKA Artillery preparation: A direct combat action of the artillery prior to the assault of infantry and tanks. It is conducted to destroy (suppress) and to annihilate enemy targets. Artillery preparatory fire is pre-organized fire to deprive the enemy of his capability to resist attacking troops. Artillery preparatory fire is part of the assault preparation fire. It begins at a specific time and ends on the arrival of the attacking subunits at the assault line. The duration and composition of artillery preparatory fire is determined by the concept of the operation (battle) grouping of the troops, characteristics of the enemy defense, required degree of inflicting losses on the enemy, and also the nature of missions conducted by the air force, rocket troops, and other elements. The duration of preparatory fire during an attack from the march includes the time from the deployment of the units into battalion columns until they reach the assault line. In an attack from direct contact with the enemy, the duration of preparatory fire is determined by the number of targets to be destroyed or by the width of the penetration area and the nationality of the enemy. Preparatory fire consists of one or several fire strikes for a duration of 20 to 40 minutes or more. During penetration of the enemy defense in the depth of his defenses, during the commitment of the second echelon troops into battle (engagement),

and during the conduct of counterattacks (counterblows), its duration can be 10 to 30 minutes.

ARTILLERIISKOE OGNEVOE SOPROVOZHDENIE Artillery accompanying fire: An artillery combat action during the development of the attack in the depth of the enemy defenses. It is conducted by artillery and rocket strikes with non-nuclear warheads to inflict losses on newly detected targets and surviving enemy troops, which hamper the advance of the attacking troops. Artillery accompanying fire is part of accompanying fire. It begins at the end of the artillery assault support fire and continues until the accomplishment of the combat mission by the troops.

During artillery accompanying fire, artillery preparatory fire and artillery assault support fire can be conducted at specific junctures such as at the prepared defensive lines in the depth of the enemy defenses which are to be penetrated on the march; in repelling enemy counterattacks; in supporting the action of airborne troops; during the commitment of second echelon troops into battle, etc. Accompanying fire is conducted by methods of concentration fire (SO) and massive fire (MO) or by fire with artillery platoons, batteries, and battalions on call by the combined arms commander.

AVANGARD Advance guard: A motorized rifle or tank subunit detached by a combined arms unit for tasks in advance of the main body of troops. In the march, the advance guard serves as a march security element which is detached by the main body along the direction of march to ensure uninterrupted movement of the main body, to prevent enemy surprise attack on the main body, to prevent the infiltration of enemy ground reconnaissance in the area of the march of the protected troops, and to create favorable conditions for the deployment and commitment of the main body into battle.

In the attack, advance guards are detached from first echelon regiments to destroy enemy units defending in the security zone, or during pursuit to destroy the enemy's covering troops and to delay the withdrawal of the enemy's main troops.

AVIATSIIA PROTIVOVOZDUSHNOI OBORONY (APVO) Air defense aviation: An arm of the National Air Defense Forces, which is assigned to cover important directions, areas, and targets against enemy air strikes. Air defense aviation destroys enemy aircraft in the air at long distances from the covered targets. Air defense aviation includes fighter aircraft and also transport helicopters and other aircraft.

AVIATSIONNAIA GRUPPIROVKA Aviation grouping: Aviation groupings consist of aviation formations, large units, and units. They are

deployed or concentrated to conduct combat missions during an operation (battle) in accord with the concept of the operation. Aviation groupings are established in TSMAs along strategic and operational directions, and in areas of combat actions. In terms of scale, the groupings may be strategic, operational, or tactical and organized into main force (strike) groupings, support echelons, and development forces.

AVIATSIONNAIA PODDERZHKA Air support: A type of aviation support conducted to support the assault of the troops. It supports combat formations and large units of the ground forces in operations or battle. It is part of the supporting fire of the attack. Air support begins when the troops initiate the assault. It is conducted by *front* aviation. Air support suppresses or destroys the enemy's nuclear delivery means, immediate reserves, command posts, strong points, weapons, and other targets. Small and mobile targets and targets out of range of artillery are among those suppressed by aviation means.

AVIATSIONNAIA PODGOTOVKA Air preparation or air preparatory fire: Air preparation (preparatory fire) to support the assault of the troops is a type of aviation combat action which is carried out before the commencement of the assault by ground forces in order to inflict casualties on the enemy. It is an integrated part of preparatory fire of the attack, and is simultaneously conducted with artillery preparatory fire. During air preparatory fire, *front*, army, and sometimes Long-Range Aviation participate. Air preparatory fire primarily attacks enemy nuclear delivery means; command posts; tanks, artillery, and their assembly areas; defensive strong points and defensive areas; enemy aircraft on airfields and the airfields themselves; and crossing sites. During air preparatory fire, small and mobile targets and the targets which are out of the range of the artillery are suppressed by aviation.

AVIATSIONNOE OGNEVOE SOPROVOZHDENIE Aviation accompanying fire: A type of aviation support conducted on behalf of the attacking troops, and in constant cooperation with the troops in the depth of enemy defenses, by launching air attacks on enemy nuclear delivery means; reserves; tanks, rockets, and artillery systems; and defensive strong points. It is part of the accompanying fire during the offensive operation.

AVIATSIONNOE PEREKRYTIE Air cover: One of the main tasks of fighter aviation. It is conducted to prevent enemy air strikes on the main body of troops, rocket troops, airfields, fleet components, and rear service installations, as well as to prevent air reconnaissance by the enemy. In addition, air cover is conducted to protect the units and subunits of other aviation arms and services.

Air cover is achieved through the active and decisive actions of fighter aircraft to destroy the enemy's aircraft in the air. Air cover is conducted in coordination with the grouping of air defense troops.

AVIATSIONNO-TEKHNICHESKAIA CHAST' Aviation-technical unit: The principal organizational unit of aviation rear services organic to the Air Forces, Naval Aviation, and National Air Defense Forces aviation assigned to provide direct supply of materiel and equipment, technical support of the airfields, and medical support of the aviation units deployed on one or several airfields. The aviation-technical unit can be a separate organization, or it can be part of aviation-technical large units. Aviation-technical units include aviation bases and technical support battalions (companies).

AVIATSIONNO-TEKHNICHESKOE SNABZHENIE Aviation-technical supply: A system of measures conducted to supply aviation units, large units, and operational formations with all types of aviation materiel and equipment. Aviation-technical supply is conducted by the associated services of the aviation rear services, and aviation-technical units and large units, through depots and aviation-technical bases.

AVIATSIONNYI PREDSTAVITEL' Aviation representative: An air staff officer, or a member of the command element of an aviation operational formation (large unit), attached to an operational formation (large unit) of the Ground Forces, fleets, and Airborne Troops in order to maintain constant coordination of aviation with these troops. The aviation representative is authorized to control the aviation troops in the air, to confirm the previously assigned missions and to direct them to other targets. The aviation representative is attached to the designated headquarters along with a number of required personnel and communication means to ensure his ability to communicate with his parent unit, with aircraft, and with supported troops.

BAZIROVANIE AVIATSII Basing of aviation: The use of airfields, airfield complexes, bases, depots with materiel reserves, lines of communication, local food sources, and designated civilian installations by aviation units and subunits in order to deploy in support of daily aircraft operations in peacetime, and in support of combat action in time of war.

BESPILOTNYE RAZVEDYVATEL'NYE LETATEL'NYE APPARATY Pilotless reconnaissance aircraft drones: Pilotless aircraft which provide strategic, operational, and tactical air reconnaissance in continental and oceanic TSMAs. These pilotless reconnaissance means are capable of conducting reconnaissance during day and night (through photography, radar, and other collection means).

BIOLOGICHESKOE ORUZHIE Biological weapons: A weapon of mass destruction. The basis of their action is the use of military biological means to create epidemic disease. The high combat effectiveness of biological weapons is based on the limited possibilities of their detection and the capability for secret employment in large areas where masses of people, animals, and plants are contaminated. They produce strong psychological effects and create difficulties in protecting people and troops, and in eliminating their effects.

BIOLOGICHESKOE ZARAZHENIE Biological contamination: Contamination of the terrain and air in contact with the ground by microorganisms of epidemic disease, the use of which contaminates masses of people, animals, and plants.

BLIZHAISHAIA ZADACHA Immediate mission: The immediate missions of subunits, units, large units, and operational formations of the ground forces in the attack is normally the destruction of enemy nuclear delivery means, destruction of his main forces in the specified area, and seizure of lines (areas, objectives) which facilitate the development of the attack and accomplishment of the long-range (subsequent) mission.

The immediate mission of a first echelon division is penetration of the enemy's defense in the depth of his first echelon brigades and seizure of the positions of his brigade reserves.

BOEVAIA GOTOVNOST' Combat readiness: Combat readiness (operational readiness) is the capability of troops to initiate combat action in the shortest time under all conditions of a given situation, and to accomplish successfully combat missions at the specified time.

Combat readiness is determined by the combat capabilities of the troops; an accurate understanding of the missions by the commanders, staffs, and political organs; completeness of organizational cadres; completeness of supplies; operability of combat equipment; timely preparation for the upcoming operation; and anticipation of likely changes in the situation. The level of combat readiness in peacetime should be such as to ensure the rapid passage of the troops from peacetime to wartime status, organized commitment of the troops into military action, and their capability to accomplish assigned combat missions.

There are three levels of combat readiness.

– *Postoiannaia boevaia gotovnost'* Constant (routine) combat readiness or Level (*stepen'*) 3. This level ensures the completeness of the troops in personnel and materiel to the extent possible, and maintaining the operability of combat equipment in the conduct of routine activities.

– *Vysshaia boevaia gotovnost'* Increased combat readiness or Level 2. This level is associated with bringing all personnel to permanent residence in the barracks (garrisons), loading supplies on vehicles, assigning operational and combat duty details, and preparing for passage to full combat readiness in the shortest time.

– *Polnaia boevaia gotovnost'* Full combat readiness or Level 1. This level includes leaving the garrison, occupying assigned areas, and fully preparing troops to conduct assigned combat missions.

BOEVAIA ZADACHA Combat mission: A mission assigned by higher commander to subunits, units, large units, and operational formations to achieve specified aims in battle (operation) at the specified time. The content of combat missions depends on the importance, number, combat capability, combat power of friendly and enemy troops, and also the conditions of the situation. The combat mission of an operational formation (large unit, unit, subunit) in the offensive is normally the destruction of the main troops of the enemy in a specific area and seizure of assigned lines (areas and objectives). The time of accomplishment of the action and the method of action can also be included in the content of a combat mission. A combat mission is divided into immediate and long-range (subsequent) missions. In the defense, a combat mission includes repelling enemy blows, inflicting maximum losses on him, and retaining (holding) specified areas or lines (positions). The most important part of a combat mission in the attack and the defense is the destruction of the enemy's nuclear means.

BOEVOE DEZHURSTVO Combat (on-call) duty: Combat duty constitutes a status in which specific forces and means are brought to full combat readiness to accomplish missions or conduct combat actions which unexpectedly arise. Combat duty may be conducted in peacetime or wartime.

The forces and means assigned to combat duty initiate action in accord with the command (signal) of the higher commander. When such an order or signal fails to reach the duty forces for any reason, these forces initiate action in accord with the decision of their immediate commander.

BOEVOI PORIADOK Organization for combat or combat formation: The grouping of large units, units, and subunits with support means to conduct the battle in accord with the commander's decision. The combat formation is established in accordance with the form, character, and the concept of combat to be fought. It should establish superiority

in forces and means over the enemy in the direction of the main attack and should ensure that the maneuver reinforces efforts for exploitation. It also should ensure troop coordination and control in the course of combat. The organization for combat should ensure the decisive destruction of the enemy by skillful use of all weapons and means, terrain, and the consequences of the fire of higher echelons against enemy targets. The basis of the combat formation consists of motorized and tank subunits. Other arms and services are included in accordance with the concept of the operation of these motorized and tank units. The organization for combat should be established to maximize the capabilities of the weapons in accordance with the concept of the operation.

DAL'NEISHAIA (POSLEDUIUSHCHAIA) ZADACHA Long-range (subsequent) mission: The long-range mission assigned to combined arms operational formations in the attack is conducted after the accomplishment of the immediate mission. The long-range mission of an operational formation is normally the destruction of newly detected nuclear delivery means, completion of the destruction of opposing enemy groupings and its operational reserves, and seizure of areas which provide for the achievement of the aim of the operation.

For large units, a subsequent mission is assigned which is conducted after the accomplishment of the immediate mission. It includes the penetration of the enemy defenses in the entire depth of the enemy's divisions' defensive area, destruction of enemy divisional reserves, and seizure of lines which ensure the development of the attack in the depth and to the flank.

DAL'NIAIA AVIATSIIA Long-Range Aviation: Part of the *Voenno-vozdushnye sily* (VVS – Air Forces) directly under the control of the Supreme High Command. It is assigned to inflict losses on the enemy's vital targets in a theater of strategic military action and conduct air reconnaissance. Long-Range Aviation accomplishes its missions independently or in cooperation with the Strategic Rocket Forces, Navy, Ground Forces' operational formations, and National Air Defense Forces.

Long-Range Aviation is organized into aviation corps and aviation divisions, which are equipped with rocket-armed aircraft and bombers. These aircraft carry nuclear and various conventional rockets and are the type of aircraft capable of carrying a heavy load of bombs and rockets a long distance.

DEZHURNAIA SLUZHBA Patrol (on-call) service: This comprises a series of complex measures taken by commanders and staffs of units, large units, and formations during peacetime or wartime to conduct

patrol (on-call) activities to monitor enemy actions. These measures include specifying lines and positions for patrol activity, specifying the composition of participating and supporting forces, and indicating the actions to be taken when the enemy is detected as well as other measures.

DIVERSIONNAIA GRUPPA Diversionary group or sabotage group: Groups consisting of units, subunits, partisan detachments, or individual persons located in the rear of the enemy to destroy military industrial targets, disrupt enemy control, and destroy communications groups, personnel, and equipment and destroy other targets. It must be noted that inflicting losses on the enemy by subversive actions greatly affects enemy morale.

DIVIZIONNAIA ARTILLERIISKAIA GRUPPA (DAG) Division artillery group: The division artillery group is organized and assigned to combat the enemy's tactical nuclear means, artillery, and mortars; to inflict losses on the immediate enemy reserves, radioelectronic means, and command posts; and to reenforce the fire of regimental artillery groups operating on the direction of the main attack of the division.

The division artillery group includes several artillery battalions of the same or different calibers. There can be four to six artillery battalions or more found in a DAG.

ESHELONIROVANIE MATERIAL'NYKH SREDSTV Echelonment of materiel means: Echelonment of materiel reserves in an operation (combat) is carried out to meet the requirements of troops for ammunition, POL, food, and other supplies; effectively protect materiel reserves from enemy actions; and provide more freedom of action to troops for longer periods of time. Such echelonment is determined by the directives and orders of higher commanders.

FORSIROVANIE VODNYKH PREGRAD Forcing water obstacles: A crossing by attacking troops across a water obstacle to the far bank which is defended by enemy troops. The troops in a combat river crossing use tanks, BMPs, self-propelled rafts, and other vehicles. The river crossing is normally conducted on the march (without stopping) to ensure that the high speed of the attack is maintained, and to create favorable conditions to shift the main efforts rapidly to the far bank. A combat river crossing on the march is conducted on a wide front and includes the following elements:

- destruction of the enemy on the river bank;
- crossing of the forward detachments and advance guards, which, along with airborne assault elements, seize bridges and crossing sites or cross the river by means of their own organic equipment;
- crossing of the main troops of the first echelon.

The second echelon troops and reserves are crossed to the far bank in accordance with the development of the attack by their own means or through prepared crossing sites, and are committed for exploitation of the success achieved by the first echelon.

If the river crossing does not succeed on the march, the main forces deploy at the water obstacle and, after a brief preparation, the crossing is conducted by the troops in direct contact with the enemy or by troops advancing from the depth. In this case, prior to the assault crossing, artillery preparatory fire is conducted, which is followed by assault support fire after the initiation of the assault crossing.

GRAZHDANSKAIA OBORONA Civil defense: A system of general national and military measures taken in peacetime and war to protect the population and national economy from weapons of mass destruction and other means of enemy air attack, and also to conduct rescue operations and urgent repair work and restoration in casualty centers and in areas of natural disaster.

The missions of civil defense are as follows:

- —directly protecting the population from weapons of mass destruction and other enemy means;
- —maintaining the operation of State organs and the national economy during war;
- —eliminating the consequences of enemy attack during war and the impact of natural disasters in peacetime;
- —preparing civil defense forces and the population for war;
- —conducting rescue and restoration operations;
- —providing security for social order.

GRUPPA BOEVOGO UPRAVLENIIA (GBU) Combat control group: The combat control group is detached from an air army and posted at the command posts of the first echelon divisions of the *front*. Their mission is to conduct coordination of aviation troops with the motorized rifle and tank divisions and airborne troops, provide mutual identification between the aircraft and ground forces, and guide the aircraft to the ground targets.

GRUPPIROVKA VOISK Grouping of forces: The concentration of the troops, i.e., operational formations, large units, units, or subunits of various arms and services of the Armed Forces and rear service units in a specified system, in accord with the plan and the assigned mission in the operation or battle. Groupings of forces are established in the TSMA and on strategic directions, on operational directions, or in specific areas in zones. Depending on the Service or branch of the Armed Forces, the grouping of forces is classified as follows: Grouping of Air Forces, Air Defense Forces, Artillery, etc. In terms of the scale, a grouping is designated a strategic grouping, operational grouping, or tactical grouping. In terms of the mission, groupings are classified as main groupings, strike groupings, etc.

ISKHODNYI RAION Staging area: An area fortified by engineer troops for large units, units, and subunits before the initiation of an attack, river crossing, or airborne assault operation. It is selected at such a distance from the enemy that the deployed forces are safe from enemy artillery fire. It may also be occupied when in direct contact with the enemy.

Within the staging area are the lines and positions for the covering troops, positions for the first echelon units, assembly areas for the second echelon troops and reserves, positions and areas for rocket and artillery troops and air defense troops, and the movement and maneuver routes for the second echelons and reserves, command posts, and rear service control points. It is prepared beforehand or by the troops when they reach the area.

ISKHODNYI RAION DLIA DESANTIROVANIIA Staging area for airborne or seaborne assault landing operations: An area on the ground reinforced by engineer work for the deployment of subunits, units, and large units before they are embarked to conduct assault landing operations. In the case of airborne operations, for example, it provides for force concentration in preparation of the airborne assault operations and operations of military transport aircraft. The staging area, in this case, includes the following elements: areas of deployment of airborne units, waiting areas, and the main airfields and reserve airfields for military transport aircraft or areas for landing of helicopters. It is covered by air defense units.

ISKHODNYI RUBEZH Start line or line of departure: A designated line from which troops begin to conduct assigned missions. The departure line is assigned in order to ensure simultaneous action of troops in a march or during river crossings. The departure line in the march is located a specific distance from the location of troops or from their assembly area. It is selected at a place which ensures the formation of march column by the units and subunits which are to move at the head of the column at specific times. During river crossing operations, the line of departure is selected at a distance from the river to ensure or facilitate the deployment of troops into combat formation and protect them from the direct fire of enemy artillery, i.e., guns, tanks, and guided antitank rockets. In the attack, the line of departure is actually the line of initiation of the assault.

KOMANDNYI PUNKT (KP) Command post: The main point from which the commander controls his troops. At the command post, along with the commander, are the main components of the staff, the political affairs department, and other departments, and control organs of the various arms and services. There are 45 to 50 percent of control personnel at the command post. The operation is supported by a signal center and supporting elements.

KOSMICHESKAIA SISTEMA Space system: A grouping of space and ground-based forces and means assigned to accomplish special military missions with the help of various types of space means.

The composition of space systems includes the following elements:

- —unified space means deployed in space in a specific way and specific orbit, including one or several space vehicles;
- —space vehicles prepared for launch with their payload at the launch complex (for the deployment of new space systems or to reinforce active space systems and to compensate for them if the active systems cease to function). There are normally two to three launch complexes in each system;
- —two to three command and measurement centers, centers for electronic calculations, and other elements of command and measuring complexes needed for the control of space vehicle flights and their operations in space;
- —several receiving centers of information (data) from space means (three to four), which are connected by communication links with the center of collection, processing, and analysis of information;
- —search and rescue complexes;
- —command posts of the system from which the control of the operation of the system is conducted.

Military space means are under the direct control of the Supreme High Command, and they are centrally employed.

LETNYI RESURS Flight resource (sometimes translated as "sortie rate"): The number of aircraft (helicopter) flights, and the number of aviation subunit, unit, and large unit flights allocated to conduct specific combat missions. The flight resource is determined by the content of the missions, combat composition of subunits, units, large units, and operational formations, their combat capabilities to inflict losses on targets, probable combat efficiency, training of flight crews, and also availability of fuel, ammunition, and other materiel.

MARSH March: An organized advance of operational formations and troops in marching columns on infantry combat vehicles or by foot on roads in order to reach a specific area or assigned lines by a specific time, prepared to accomplish combat actions. In time of war, the march is conducted parallel to the front or from the front to the rear. In each case it can be conducted with or without the probability of a meeting engagement with the enemy. It can also be conducted under conditions using nuclear weapons or without the likelihood of their use. The march is normally conducted at night or under conditions of limited visibility. It should be conducted at high speed, to the extent that this is possible. Marches are conducted to exploit the

operations of the first operational echelon troops, to create new groupings in new directions, to cover the gaps, to participate in a counterblow in order to repel an enemy attack, to accomplish and complete the destruction of individual enemy groups, and to create combined arms reserves in the TSMA, etc.

MARSHRUT March route or direction: The actual march route in a designated direction of march assigned to the troops and transport means. The direction of march is shown on the map by marking the important points through which the direction of march will pass, or it is shown by azimuth. Normally the march will not be conducted through large built-up areas, lines of communication centers, defiles and passes, chokepoints, or in the vicinity of major railroads.

MASKIROVKA Camouflage, concealment, and deception: A collection of measures conducted in terms of aim, time, and space to deceive the enemy about the location, ability, and composition of the troops and targets (especially nuclear rockets), the status of preparation and combat action of the troops, and the plans and intentions of the troops. *Maskirovka* is a type of combat support measure which ensures surprise action and protection of the combat capability of the troops. It can be conducted on different scales, i.e., strategic, operational, and tactical. In terms of the type of enemy reconnaissance encountered, *maskirovka* may be classified as hydroacoustic, sonar, optic, electronic, radar, radiation, radio, radio-technical, heat, and other types. The high effectiveness of *maskirovka* is ensured when it is conducted simultaneously against all types of enemy reconnaissance. It is conducted continuously in all types of troop combat. The forms of *maskirovka* measures are maintaining secrecy, conducting deceptive actions and demonstrative actions, destroying any indications which would disclose or assist the enemy in determining the location or intention of friendly troops, and conducting broad disinformation operations.

MASSIROVANNYI OGON' Massive fire: A type of artillery fire, with all or most of the artillery organic to a large unit, conducted simultaneously to inflict losses on enemy targets in the shortest possible time. Targets can be fired at singly or simultaneously and distributed among the artillery groups or units and battalions.

MOBILIZATSIIA Mobilization: The collection of a series of measures to bring the Armed Forces, the nation's economy, and State administration to a war footing. This can be a general mobilization or partial mobilization, depending on how much of the Armed Forces of the country is mobilized. The mobilization can be conducted

covertly or openly. The announcement of mobilization is conducted through the declaration of the highest authorities of the State. In the Soviet Union, this is the Presidium of the Supreme Soviet. To conduct a successful mobilization of the Armed Forces the following actions should be taken: preparing personnel and resources for quickly providing the necessary means; facilitating the deployment of military organizations; collecting required reserves of weapons, combat equipment, and other materiel means in time of war; appropriately and accurately calculating and alerting related authorities for the collection of required reserves for war in a timely manner; and mobilizing transport means. Economic mobilization includes the following: deploying military production elements; making required adjustments in the nation's economy to support upgrading the production of military materiel; ensuring the operation of transport organs and lines of communication means in the interest of meeting wartime requirements; ensuring the viability of the agricultural system of the country; adjusting the operation of scientific and experimental institutions of the production elements of the country to meet the requirements of the Armed Forces for new products, equipment, and technologies to be used in war.

OGNEVOE SOPROVOZHDENIE Accompanying fire: Accompanying fire inflicts losses on the enemy by fire during the course of the attack. It includes artillery fire and rocket and air strikes in the course of the attack by the subunits, units, and large units of combined arms forces in the depth of enemy defenses. Accompanying fire inflicts continuous losses on the enemy by fire to destroy its personnel and equipment opposing the attacking forces. It also inflicts losses on the immediate reserves of the enemy. Accompanying fire is conducted following assault supporting fire, i.e., it begins after the termination of assault supporting fire and continues through the entire depth of the assigned mission.

OGNEVOI VAL Fire barrage: A fire barrage is a continuous fire screen on one or two lines conducted simultaneously in front of the attacking forces which are advancing into the enemy defenses. The fire is conducted and moved into the depth of enemy defenses successively, in accordance with the advance of the attacking forces. The artillery barrage is a type of fire and also a method of artillery support of the attack. This fire is prepared during the penetration of the enemy defenses. It is conducted on principal lines and intermediate lines. The shifting of fire from one line to another is conducted in accordance with the signal of the battalion and regiment commanders of the attacking forces.

OPERATIVNAIA ZADACHA Operational mission: A mission assigned by a higher commander to operational formations, i.e., army or *front*, to achieve a designated objective in the operation at a specific time.

OPERATIVNO-STRATEGICHESKII VOZDUSHNYI DESANT Operational-strategic airborne assault landing: An operational-strategic (until the early 1980s termed simply "strategic" in open literature) airborne assault landing is conducted by one or several airborne divisions supplemented by motorized rifle troops which are landed. Such an operation is planned by the General Staff with the participation of the overall command of the Air Forces, and the Airborne Troops command. Several divisions of Military Transport Aviation, Airborne Troops, Long-Range Aviation, a motorized rifle division, troops from PVOS, fleet elements, *front* air armies, and *front* rocket, artillery, and air defense troops may participate in the operation.

The missions of an operational-strategic airborne landing are as follows:

- seizing enemy political and administrative centers and disrupting national control means;
- completing the destruction of bases and troop groupings and the groupings of enemy nuclear weapons which are hit by friendly nuclear strikes;
- seizing important economic areas, large islands, and peninsulas;
- supporting forces resisting within enemy territory and opening a domestic (internal) front;
- assisting the troops operating from the front in accomplishing their missions;
- preventing the movement and advance of enemy reserves;
- opening new fronts on new directions.

The depth of the operational-strategic airborne landing can be 500 to 600 km or more.

OPERATIVNO-TAKTICHESKII VOZDUSHNYI DESANT Operational-tactical airborne assault landing: An operational-tactical (a term introduced by the early 1980s into open literature) airborne landing may be conducted by up to one airborne regiment or by a landing assault brigade (*desantno-shturmovaia brigada*). It is assault landed at a depth of 100 to 150 km in a conventional war and at a depth of 250 to 300 km in a nuclear war. The operational-tactical landing force conducts the following missions:

- destroying nuclear weapons and chemical and nuclear weapons bases and depots;
- destroying airfields and air bases, control points, and air defense means;
- seizing bridges and bridgeheads, mountain passes, critical terrain areas, and other important targets;

– seizing and retaining in some conditions, important lines and areas in the enemy rear, covering the open flanks of army troop groupings, fighting enemy reserves and air-mobile forces, and enemy airborne and seaborne troops.

The high versatility of landing assault brigades allows them to conduct combat action from the air and on the ground in coordination with attacking troops and other elements of the *fronts* and armies, and to launch surprise blows on the enemy. When nuclear weapons are employed, they are employed mostly in the wake of nuclear strikes. Planning their employment is conducted by *front* and army commanders with the participation of the chiefs and commanders of various arms and services.

OPERATIVNO-VOZDUSHNYI DESANT Operational airborne assault landing: An operational airborne landing may be conducted by an airborne division which is dropped in a conventional war at the depth of 150 to 300 km, and in a nuclear war at a depth of 300 to 400 km. The planning and conduct of an operational airborne assault landing is done by the *front* commander with the participation of Military Transportation Aviation, other Services of the Armed Forces, and the chiefs and commanders of the various arms and services of the *front*. The missions of an operational landing are as follows:

– destroying enemy weapons of mass destruction, and seizing and destroying his nuclear rocket bases and nuclear ammunition depots;.
– facilitating a high speed of attack by *front* forces;
– cooperating in the envelopment and destruction of enemy groupings hit by nuclear strikes;
– preventing the withdrawal of the enemy and the advance of enemy reserves;
– destroying troop control means and disrupting the operation of enemy rear services;
– seizing crossing sites and assisting *front* troops in crossing major water obstacles on the march.

The assault force is landed in a defined area. The area for a division airdrop can be 30 by 40 km.

For dropping an airborne division, three to four Military Transport Aviation divisions are required, with each transport division having up to 130 aircraft. The airborne division can conduct independent operations for a duration of six to seven days.

OPERATIVNOE NAPRAVLENIE Operational direction: A part of the strategic direction which includes land areas, water surfaces of adjacent seas, and air space where important operational objectives, i.e., where the enemy's grouping of ground forces, important economic

centers, etc. are located. Within the limits of the operational direction, operational formations of large units and units of various Services of the Armed Forces are deployed and conduct operations or combat actions in time of war.

OPERATIVNOE OBESPECHENIE Operational support: A series of measures taken to create favorable conditions for successfully accomplishing the operation. It includes skillful use of the means of armed struggle, retention and maintenance of the high combat capabilities of the troops, timely warning of the troops (preventing a successful enemy surprise attack), and reducing the effectiveness of enemy strikes on friendly troops. The basic types of operational support are the following: reconnaissance, protection against weapons of mass destruction, radioelectronic combat (*radioelektricheskaia bor'ba*), *maskirovka,* chemical support, engineer support, hydrometeorological support, rear service support, and at the tactical level, security. In the Air Forces, Navy, and National Air Defense Forces, operational support includes specific support measures related to these forces.

OPERATIVNOE POSTROENIE Formation for operations: The grouping of troops in an organization to conduct operations. This must be in compliance with the concept of the operation and should ensure successful implementation of the concept of the operation. The *operativnoe postroenie* of combined arms will consist of one, two, or sometimes more echelons and combined arms reserves. These will include operational formations or large units of combined arms, groupings of rocket forces, artillery groups, *front* aviation, air defense troops, combat support troops, airborne and seaborne assault landing troops, mobile obstacle detachments (*podvizhnyi otriad zagrazhdenii,* POZ), rear services groupings, and various kinds of reserves.

OPERATIVNOE RAZVERTYVANIE VOISK Operational deployment of forces: The creation or establishment of operational groupings of forces in the TSMA and in the operational and strategic directions. The principal measures and elements of operational deployment are the following: movement and deployment of the first operational echelon forces in the departure or forming-up areas or directly to the deployment lines, in accordance with the assigned operational missions and operational formation; movement of second echelon troops to the areas of their upcoming action; restoration of Air Force and Navy bases; deployment of control systems; deployment of operational rear services; and organization of all types of supporting measures. Depending on the situation, the operational deployment of forces can be conducted simultaneously or successively.

OPERATIVNOE VZAIMODEISTVIE Operational coordination, interaction, or cooperation: The coordination of the combat action of an operational formation in large units of various arms and services to achieve the aim of the operation in one or several adjoining operational directions. Based on the instructions of the General Staff of the Armed Forces, it is organized by the commanders of the operational formations.

OPERATIVNYE POKAZATELI Operational indices: Operational indices are used to show the scope of operations and operational action. These depend on the size and expanse of an operation. Each one of the operations has its own indices. For instance, in an offensive operation, the indices will include the depth of the operation in kilometers, the duration of the operation in days, the average rate of advance of the attacking troops in kilometers per day, and the width of the attack zones in kilometers. In a defensive operation, they will include the width and depth of the defensive area. In a march, the length of the distance to be covered in kilometers (from the starting point or starting line to the line or the point of the marching objective or new assembly area), the duration of march in hours or days, the number of assigned directions of march, the width of the movement area, the length of the daily march in kilometers and the average rate of march in kilometers per hour are included.

OPERATIVNYI PERVYI IADERNYI UDAR Operational initial nuclear strike: The operational initial nuclear strike is conducted to inflict maximum losses on the enemy by delivering simultaneously a large number of rockets, bombs, and nuclear rounds against one or several groupings and the most important objectives of the enemy in the TSMA. It is conducted by using all *front* troops, such as *front* rocket troops and aviation, army rocket troops, and division rocket troops. The operational initial nuclear strike is planned by the *front* staff in accordance with the instructions of the General Staff and in cooperation with the staffs of the armies.

ORGANIZATSIIA OPERATSII Organization of the operation: Part of the preparation of the operation (*podgotovka operatsii*). It includes making the decision, transmitting the mission to subordinates, and organizing coordination, organizational control, and combat support missions.

ORGANIZATSIIA VZAIMODEISTVIIA Organization of coordination, interaction, or cooperation: The coordination of the form of the conduct of action of operational formations, large units, units, and subunits of various Services of the Armed Forces and the various arms and services in terms of objective, place, and time; and the direction of

this coordination of action to accomplish the assigned missions in achievement of the aim of the operation (battle). Depending on the aim of the action and the size of the coordinating groupings, the interaction of the troops can be strategic, operational, or tactical.

PEREDOVOI KOMANDNYI PUNKT (PKP) Forward command post: The forward command post is established in order to move control organs closer to the troops. This post always should be ready to take over full control of the troops when needed. There are 18-20 percent of the control personnel in the forward command post.

PEREDVIZHENIE VOISK Troop movement: Troop movement from one place to another or one area to another is conducted by a march, by railroad, air transport means, maritime transport means, river transport means, or by combined forms. The form of troop movement depends on the number of troops, distance, availability of transport means, communications groups, and other conditions.

PEREGRUPPIROVKA VOISK Regrouping of forces: The organized shifting of groupings of ground, air, or naval forces from one area to another. Regrouping is conducted to reinforce the existing grouping or to create new groupings of forces to repel an enemy's attack, develop success in the attack, or shift the combat efforts from one area to a new direction. It also includes the establishment of second echelon troops or reserves. In terms of the objective in scale, the grouping of troops may be termed as strategic, operational, and tactical. The regrouping of forces is conducted by movement of available forces and means by various modes of transport and combined transport from other areas.

PEREPRAVA Crossing or crossing site: A passage of the troops over water obstacles, such as rivers, canals, gulfs, straits, and also dams. In another sense, *pereprava* is a crossing site, i.e., the area along water obstacles which are prepared for the crossing of the units. Engineer troops, technical support elements, medical elements, traffic regulation elements, and recovery elements are organized on crossing sites. The crossing sites are classified into assault crossing sites, deceptive crossing sites, bridge crossing sites, ferry crossing sites, ice crossing sites, underwater crossing sites for tanks, and raft crossing sites.

PEREVAL Halt: The temporary stop of the marching column for the purpose of resting of personnel, feeding, control of materiel reserves, and technical maintenance of the vehicles. A short halt is normally given after 2 to 3 hours of march for a duration of 30 minutes to an hour. A long halt is given at the beginning of the second half of the daily march for a duration of two to four hours. In a short

halt the vehicles are stopped on the right side of the road, the distance between vehicles is decreased to 10 meters, and the designated structure of the columns is not broken. In a long halt, the units disperse and take cover.

PLANIROVANIE OPERATSII Planning the operation: Preparing or working out the details of the decision of the commander by marking it on the map with written instructions, calculations, and necessary arguments. Planning may also be conducted in written form with a map addendum depicting the decision of the commander. In addition to this, the operational plan will have other addenda, including the plan of combat employment of various combat arms, combat support arms, and services. Planning elaborates the details and the sequence of the accomplishment of assigned missions by the troops, distribution of the efforts of the troops in terms of the directions of action, coordination between the troops, combat measures of the troops in different phases, and control actions. Planning is a component of the preparation of the operation and it is conducted under the direct supervision of the chief of staff using the instructions of the commander on the basis of his decision for the operation. Planning is also conducted in accordance with the directions of the commander and staff of the higher echelon. The chief of political affairs, and chiefs and commanders of arms and services take part in the planning process. Only a limited number of people are called to participate in planning to ensure secrecy. Planning of the operation is conducted by different methods: successive, parallel, or a combination of both methods. In the successive method, the subordinate staffs begin planning when planning is completed at the higher echelon. In the parallel method, planning at the lower echelon begins when the decision is made at the higher echelon and the missions are assigned to the lower echelon, i.e., before the completion of planning at the higher echelon. In the third method, a combination of both methods is normally used when time is limited. Planning in the lower echelons begins after the higher commander's concept of the operation is known, and the initial instructions are given to the lower echelon. The actions taken in planning an operation are supported by the high level of professional training of the officers, the cooperation of the staff, and the wide use of technical equipment, calculators, and computers. The overall planning results are reflected in the operational plan.

PLANIROVANIE STRATEGICHESKOI OPERATSII Planning a strategic operation: Planning of a strategic operation is conducted by the General Staff in peacetime and is a State secret. The overall command and staffs of the various Services of the Armed Forces, the chiefs of arms

and services, Deputy Minister of Defense for Rear Services and his staff, the commanders of military districts and fleets and their staffs, and the general staffs of the Warsaw Pact countries participate in the planning only for issues directly related to the use of their forces.

The planning of strategic operations includes the plan of the employment of nuclear weapons; plans for *front*, air, air defense, airborne, and naval operations; plans for combat actions of operational formations and large units of the National Air Defense Forces, and other forces and means participating in the operation; plans for support measures; and others. The planning for military action, with or without the use of nuclear weapons, is based on realistic calculations of both sides with in-depth anticipation and forecasts of the military and political situation around the world. The unified aim of the operation, the attack sectors for *fronts* and armies, the directions of the main attacks and other attacks, and the immediate and long-range missions are specified in the plan. These are the same for both nuclear and non-nuclear war. The plan must be flexible and clear.

In strategic planning, special importance is given to planning the use of nuclear weapons, particularly the plan for the initial nuclear strike.

PODAVLENIE OB'EKTOV ILI (TSELEI) Suppression of objectives (targets): Inflicting such losses, so as to create conditions where an objective or target has lost its combat capability for some time, and its maneuver capability has been restricted or lost. Experience proves that if 25-30 percent losses are inflicted on a group of targets or their area is covered by fire of the same proportion, the targets are considered suppressed.

PODGOTOVKA STRATEGICHESKOI OPERATSII Preparation of a strategic operation: Preparation of a strategic operation in a TSMA is conducted in advance in peacetime. It includes the following elements:

- making the decision for the strategic operation;
- planning the operation;
- establishing groupings of Armed Forces for the conduct of the operation;
- assigning missions to operational formations;
- organizing the interaction of participating forces;
- preparing measures for all-round support in the interest of the strategic operation;
- organizing actions for secret deployment and the constant combat readiness of Armed Forces' groupings;
- organizing control of Armed Forces' groupings in the operation;
- ensuring systematic strategic control of the full and timely implementation of all measures.

POKHODNAIA KOLONNA March column: A formation of large units, units, and subunits for movement in the march along one direction. The march column of large units and units is divided in terms of its depth into columns of units and subunits. It is covered by security elements during the march. In the event a meeting engagement is likely, the march column is structured in accordance with the concept of upcoming battle. This should ensure rapid deployment of troops into combat formation. When a meeting engagement is unlikely, a march column is structured by putting different types of vehicles into separate columns according to their capabilities, so that high rates of advance are maintained and pressure on personnel and combat equipment is decreased. In this case, a separate direction of march is designated for tracked vehicles.

POKHODNYI PORIADOK March formation or order: The order of the march of units, subunits, and large units or vessels conducting a march or passage by sea, to complete an assigned mission. The march formation or the march order should ensure the following: high speed of march, rapid deployment of troops into pre-combat formation, or combat formation and speedy and continuous troop control. The march formation of large units, units, and subunits of combined arms forces normally consists of security elements, the main body, technical support units and subunits, and rear services.

POLKOVAIA ARTILLERIISKAIA GRUPPA (PAG) Regimental artillery group (RAG): A regimental artillery group is assigned to inflict losses on enemy personnel, mortars, and other weapons deployed in the first enemy defensive position (i.e., positions of first echelon battalions) or in their immediate rear. A regimental artillery group is established from several artillery battalions. Their number can be three to four or more.

POLOSA DVIZHENIIA Movement sector or area: The aggregate of all routes or directions of march which the units and large units of an operational formation use to move from their location to the objective of the march or to a new assembly area. One direction of march or one route is given for units and subunits. For a large unit, one or two march directions or a movement area is assigned. For an operational formation, a movement area is assigned, which includes four to seven march directions.

PORAZHENIE OB'EKTOV ILI (TSELEI) Destruction of objectives (targets): Inflicting such losses by various means of destruction that the target completely or partially (temporarily) loses its combat capability and will no longer will be able to conduct combat missions. When losses of 40-60 percent are inflicted on a group of targets or their

area is covered by fire of the same proportion, the target is considered destroyed.

In a nuclear war, if a division suffers 60 percent casualties (losses), the division is considered to be a unit which has totally lost its combat power (capability). However, in a war without the use of nuclear weapons, a division with a 60 percent loss is considered a force with limited combat capability.

POSLEDOVATEL'NYI SOSREDOTOCHENNYI OGON' Successive concentrated fire: A type of artillery fire conducted during the support of the assault, e.g., assault support fire for motorized rifle and tank units. This fire is conducted to destroy any personnel equipment, tanks, and other equipment of the enemy in front of the attacking forces and on their flanks. These targets are engaged successively. The successive concentration of fire is conducted on predesignated areas which are to be suppressed. One or several specific disclosed enemy targets are included in each of these areas.

POSTY TSELEUKAZANIIA (PTs) Target identification posts: Target identification posts are under the command of tactical or operational combat control groups, and they are assigned for the identification of targets to aviation. These posts are established by helicopters, small aircraft, infantry combat vehicles, or armored personnel carriers.

POSTY VOZDUSHNOGO NABLIUDENIIA (PVN) Air observation posts: An air observation post is assigned for the observation and detection of air targets at low altitudes where radar cannot operate effectively.

PRINIATIE RESHENIIA NA STRATEGICHESKUIU OPERATSIIU Making the decision for a strategic operation: The decision for a strategic operation constitutes the basis for developing all measures related to the preparation and conduct of the operation. The decision should be based on an objective assessment of the situation and always should be realistic in every aspect.

The decision for a strategic operation in a continental TSMA is made by the Supreme High Command, and it includes the following elements:

- deductions from an assessment of the military and political situation in a TSMA;
- assessment of the groupings of enemy armed forces and strategic aims of the enemy and his likely plans of action during war;
- composition and capabilities of the forces and means assigned for the conduct of the strategic operation;
- correlation of forces and means on both sides at the beginning of and during the operation;

- aim and concept of the strategic operation;
- structure and layout of the groupings of the Armed Forces for the operation;
- method of employment of nuclear weapons;
- missions of the operational formations of various Services of the Armed Forces;
- instructions on the organization of interaction;
- instructions on all-round support measures;
- instructions on control during the preparation for, and in the course of, the operation.

PROTIVOTANKOVYI REZERV (PTR) Antitank reserve: An antitank reserve consists of antitank artillery units (subunits) assigned to repel the strikes of enemy tanks, to reinforce antitank defenses on the most important directions, and to conduct combat against enemy tanks during the battle. Its composition includes, in addition to artillery troops, other means such as mobile obstacle detachments, flamethrowers, etc. The antitank reserve is established in combined arms units, large units, and operational formations during all types of combat action. The antitank reserve is directly under the control of the commander.

In a *front* the antitank reserve is organized from one or two antitank brigades of the *front*, or from the reserves of the Supreme High Command. In an army the antitank reserve is organized from the army antitank regiment or *front* antitank brigade. In a division the antitank reserve is organized from the division antitank battalion or the army antitank regiment. In a regiment the antitank reserve is organized from the division antitank battalion or antitank guided rocket battery.

PROTIVOVOZDUSHNAIA OBORONA (PEREKRYTIE) VOISK Air defense (cover) of troops: This constitutes complex measures and combat actions related to repulsing enemy air attacks and covering groupings of troops and rear service targets against such attacks. Air defense is organized in all types of operations (combat actions), marches, and deployment. It includes aerial reconnaissance and warning of enemy air activity; combat actions of air defense rockets and artillery units; combat actions of fighter aviation; organized fire of antiaircraft means; and infantry weapons of troop subunits.

PUNKT NAVIGATSII I TSELEUKAZANIIA (PNTs) Navigation and target identification point: Navigation and target identification points are established in each center of an air army's combat control center. Two to three navigation and target identification points are established. These points are assigned to ensure and support the arrival of avia-

tion at ground targets, guide fighter aircraft to air targets, provide aviation coordination with air defense rocket units, provide mutual identification between aircraft and ground forces, and ensure the flight security of the aircraft.

PUNKT SBORA Collection point: Collection points are designated for the organization of further activities by military personnel and combat equipment of small units after an alert signal. That is, they serve as gathering points for subunits after an alert signal, and must be designated so that all associated forces and means can quickly and easily reach them prepared to move to collection or concentration areas, or to conduct combat actions.

PUNKTY UPRAVLENIIA Control or command posts: Points specially established and equipped with technical means from which the commander and staff officers control the troops during the preparation for and conduct of the operation (battle), and also during combat (on-call) duties.

The following points are established for troop control: main command post, forward command post, auxiliary command post, alternate command posts, rear command post, and airborne command post.

Moreover, mobile command posts are established in armored vehicles, aircraft, helicopters, ships, trains, etc, which are provided with special equipment. Permanent command posts are established underground in the form of fortified and reliably protected facilities.

The relocation of control posts is conducted in a way not to disrupt the activities of control.

RADIONAVIGATSIONNYE PUNKTY (RNP) Radio navigation points: Radio navigation points are established by the *front* to support the operations of *front* aviation. Two to three such points are established at the *front*. They are assigned to support the flight of aircraft in the area of combined arms and tank armies and to designate the flight corridors for friendly aircraft at the *front* line.

RAION DESANTIROVANIIA Assault landing/drop zones or areas: The terrain areas in the rear of the enemy where airborne assault units are dropped or landed. It includes one or several drop zones for the parachute troops, or one or several airfields for air landing operations.

RAION OTDYKHA Rest area: An area where the troops, during long distance marches, spend the night or the day, depending on when the march is conducted. In the rest area, troops move off the roads and disperse close to the roads or direction of the march. In long distance marches, the troops will be given or designated a 24-hour rest area after each three to five days of the march.

RAION OZHIDANIIA Waiting area: An area on the ground or close to airfields or embarkation areas for the concealed deployment of airborne and seaborne assault units to conduct preparation for embarkation and other necessary preparation of the units.

RAION POGRUZKI I VYGRUZKI Loading and unloading area: An area which is designated for loading and unloading of troops and materiel supplies. It may include several railroad stations, ports, harbors, airfields, helicopter landing areas, waiting areas for embarkation and marshalling areas after debarkation, movement routes for motor vehicles, and stopping areas for loading and unloading of ships in the case of naval movements.

RAION POSADKI MORSKOGO DESANTA Embarkation area of seaborne assault units: A part of the coastline with its adjacent waters where seaborne assault units are embarked on the vessels and transport ships. It includes main and reserve ports for the embarkation of troops on the ships and transport means.

RAION SBORA Collection area: Those areas designated for units to gather after an alert signal and their move out of the garrison. When the combat alert signal is given, subunits may first move to their designated collection points, and from there move quickly to the larger collection areas. These collection areas are to be located in concealed areas which can accommodate the entire unit. Conditions in these areas must be favorable for the formation of march columns and the rapid movement of troops to concentration areas, to avoid detection by the enemy and losses from his air and rocket strikes.

RAION SOSREDOTOCHENIIA Concentration area: Concentration areas are delineated sections of terrain where forces are assembled and concentrated. They are designated in peacetime and are located in places that are judged safest from enemy nuclear strikes. Sites are prepared by various kinds of engineer works. Troops are dispersed in concentration areas by units. These areas must be suitable for supporting the rapid preparation of troops for the conduct of combat actions, or their rapid movement from the area. Alternate concentration areas are also prepared.

RAION VYSADKI DESANTA [Seaborne] assault landing area: A part of the coastline with its adjacent waters where seaborne assault units land and the supporting ships operate. It includes the main and reserve landing areas, areas for the maneuver of ships providing naval gunfire, areas of tactical deployment of landed forces, areas of reembarkation of the troops, areas for the disposition of technical equipment and supplies used for the landing of the seaborne assault units,

and areas for the preparation of different waves of assault landing vessels to land the troops and materiel in the designated area.

RAKETNYE VOISKA STRATEGICHESKOGO NAZNACHENIIA Strategic Rocket Forces: One of the important Services of the Armed Forces. The State and the Communist Party pay significant attention to this Service. The Strategic Rocket Forces have enormous combat capability which includes the destructive power of nuclear weapons, the virtually unlimited range of rockets, great accuracy of fire, a higher combat readiness than other Services in launching massive strikes, the ability to maneuver strikes, and a relatively reduced vulnerability against enemy air strikes.

The main missions of Strategic Rocket Forces are:

- inflicting losses on enemy strategic nuclear delivery means;
- destroying enemy armed forces' groupings;
- destroying enemy nuclear, rocket, air, and naval bases and his military installations;
- destroying targets in the enemy systems of political and military administrative control, transport, power, energy, etc.

The composition of the Strategic Rocket Forces includes the following: operational formations and large units of intercontinental rockets, and operational formations and large units of medium and intermediate-range rockets.

In modern times, rockets may have multiple nuclear warheads, each of which can be directed to a specified target by an automated control system.

RASSREDOTOCHENIE SIL I SREDSTV Dispersal of forces and means: Dispersal of forces and means is conducted to decrease the casualties and losses in personnel and equipment due to enemy action. This is achieved by deploying large units, units, ships, and subunits in the departure areas or forming-up areas, assembly areas and defensive positions, in those places which can accommodate a dispersed disposition of forces. When the troops are moving, the directions of march should be separated by a sufficient distance to decrease the casualties and losses effected by the enemy through the use of different weapons. Sufficient and reasonable distances should be allowed between the vehicles, subunits, and units when they march. The degree of dispersal is dependent upon the nature of the assigned missions, control capabilities, the nature of the terrain, the time of the year and seasonal considerations, meteorological conditions, weather, etc. With the introduction of nuclear weapons in the armed forces, the dispersal of the forces is determined by the fact that two subunits or units located side by side should not be able to be destroyed simultaneously by one nuclear strike.

RAZVEDKA SPETSIAL'NOGO NAZNACHENIIA (RAZVEDKA SPETSNAZ) Special purpose reconnaissance: A type of reconnaissance conducted against targets in political and economic centers and potential military targets. Its principal missions are the following: acquiring information about political, economic, and military targets; destroying or neutralizing these targets; organizing sabotage and subversive action; and preparing and training saboteurs. Units intended to accomplish such missions are organic to the reconnaissance components of *fronts*, armies, and divisions and constitute special organizations.

RAZVIVAIUSHCHIE VOISKA Development forces: Development forces are part of the formation for operations of an air operation. They are assigned to launch strikes on airfields which are newly detected during the operation and on targets not sufficiently damaged by strike forces and to carry out other missions which unexpectedly emerge during an operation. The composition of the development forces will include up to 10 percent of *front* aviation and 15-20 percent of assigned Long-Range Aviation.

RUBEZH RAZVERTYVANIIA Line of deployment: A designated line on the terrain where units and subunits deploy from march columns to the pre-combat formations or from pre-combat formations to combat formations. The deployment line is designated and assigned to the troops conducting the offensive operation or conducting an attack from the line of march while advancing from the rear. It is also for advancing troops being committed into the meeting engagement or conducting counterattacks or counterblows. A line of deployment is also designated for the antitank reserve. This is the line where the antitank reserve deploys into combat formation to repel an attack or counterattack of enemy tanks.

RUBEZH REGULIROVANIIA Traffic regulation line: A designated line on the terrain being crossed by the head of the column of troops moving on a direction of march when conducting offensive operations or approaching from the depth. Traffic regulation lines are also designated to serve as lines for the deployment of troops into battalion columns, company columns, and platoon columns.

RUBEZH VKHODA V BOI (SRAZHENIE) Line of commitment into battle (engagement): A designated line where the second echelon troops or reserves are committed into battle (engagement) and begin their combat action. This line is designated by the commander in his decision. In the course of battle (engagement), the locations can be readjusted according to the situation.

SILY I SREDSTVA Forces and means: Forces and means include personnel and combat equipment of the subunits/large units in formations assigned to conduct combat actions and combat support actions. In this sense, *sily* (forces) means units, such as rifle, tank, or rear service units. During the calculations for determining the correlation of forces and means, *sily* applies to the number of units/subunits and large units. *Sredstva*, or means, applies to the calculation of the weapons systems such as guns, tanks, aircraft, launching pads, etc., as well as materiel and facilities supporting the forces.

SOSREDOTOCHENIE VOISK Troop concentration: The deployment of operational formations, units, large units, and ships in designated areas. Depending on their scale, it may be a strategic concentration, operational concentration, or tactical concentration. Success in troop concentration is achieved through proper selection of the method of troop movement, the directions of march and concentration areas, and the rapid and covert operations of the troops.

SOSREDOTOCHENNYI OGON' Concentrated fire: Artillery fire conducted simultaneously by several artillery batteries or several artillery battalions or ships on one or a group of targets. The field artillery is assigned areas of concentrated fire in the context of prepared plans. The battery and battalion conduct the concentrated fire on one target or one area.

SOZDANIE GRUPPIROVOK VOORUZHENNYKH SIL Establishment of a grouping of the Armed Forces: A grouping of Armed Forces in a continental TSMA is determined in advance in peacetime on the basis of the decision for the strategic operation and its components. It is created from the forces and means having constant combat readiness, the forces and means kept in incomplete (cadre) strength, and the troops which are going to be deployed after mobilization.

In determining an Armed Forces grouping and its combat capabilities when composed of troops at different levels of combat readiness, the following elements are taken into consideration:

- role of military action in the TSMA for achieving the aim of the war;
- political and military situation;
- composition and strategic situation associated with the preparation of enemy groupings;
- the degree of the threat of war;
- geographic characteristics of the TSMA, preparation of the TSMA, and mobilization capabilities;

- —strategic situation of the groupings of friendly forces and the status of troop movement and deployment;
- —economic capabilities.

Depending on the intensity of the threat of war and level of tension in the international situation, the composition of the forces and means kept in constant combat readiness in each TSMA can be decreased or increased.

SPETSIAL'NYI OTRIAD Special detachment: A permanent organization or a temporary establishment in the Armed Forces to conduct special missions, such as destruction of weapon systems, depots, nuclear bases, command posts, military/industrial targets, bridges, communications facilities, and other important targets.

STRATEGICHESKAIA OPERATSIIA Strategic operation: A strategic operation in a continental TSMA comprises the aggregate of strikes by Strategic Rocket Forces, and operations and combat actions by operational formations and large units of Ground Forces, Air Forces, National Air Defense Forces, and the Navy conducted in accordance with a unified general concept and plan, under the control of the Supreme High Command, to achieve the aim of the war in the TSMA.

The composition of forces and means participating in a strategic operation in a continental TSMA can be as follows:

- —three to four *fronts*;
- —operational formations and units of Supreme High Command reserves;
- —operational formations and large units of Strategic Rocket Forces;
- —operational formations and large units of National Air Defense Forces;
- —operational formations and large units of Long-Range Aviation;
- —operational formations and large units of Military Transport Aviation;
- —forces and means of the Navy.

The principal elements of a strategic operation can include the following:

- —nuclear strikes by Strategic Rocket Forces on important targets in the entire depth of the TSMA;
- —air operations of the Air Forces to destroy enemy air forces, nuclear rockets, and other targets;
- —initial and subsequent operations of *fronts*;
- —naval operations to destroy groupings of enemy ships and submarines in the oceanic TSMA, operations to destroy coastal targets, operations to launch seaborne assault landings, opera-

tions to destroy naval communication routes, and operations to defend against seaborne assault landings;
- operations by Airborne Troops;
- combat actions of National Air Defense Forces;
- other elements.

Several thousand nuclear rounds of various yields are allocated for a strategic operation. The following planning factors are associated with a strategic operation:

- width of operations of 1,000-2,000 km;
- depth of operations of 1,200-1800 km;
- average rate of advance of 40-60 km per day;
- duration of operations of 25-30 days.

STRATEGICHESKII PERVYI IADERNYI UDAR Strategic initial nuclear strike: The strategic initial nuclear strike is conducted by surprise to inflict maximum losses simultaneously by rockets, torpedoes, air bombs, and other nuclear rounds on the entire enemy main groupings and his main military, political, economic, and industrial targets in the TSMA. In the strategic initial nuclear strike, all forces of Strategic Rocket Forces, Long-Range Aviation, naval forces and submarines, operational-tactical and tactical rockets and *front* air armies take part. If the operational-tactical and tactical rockets and the *front* air armies are not ready to launch the nuclear strike simultaneously with the strategic nuclear strike, then the combat (on call) elements of *front* operational-tactical and tactical rockets and *front* aviation forces participate. It is ideal to launch the operational initial nuclear strike simultaneously with the strategic initial nuclear strike, but if it is not possible, then the gap between these two strikes should be narrowed as much as possible. Since the strategic nuclear forces are normally at a higher degree of combat readiness, they may be prepared for the nuclear strikes far ahead of operational nuclear forces. The strategic initial nuclear strike is planned by the General Staff.

STRATEGICHESKII RAION Strategic region: An important part of the TSMA, where a country or part of a country and the most important targets having strategic significance are located. Such targets would include rocket bases, air bases, naval bases and groupings of ground forces, main centers of control, nuclear weapons depots, large communication centers, areas designated to form strategic reserves, rear services, industrial bases, and economic, administrative, and political bases or centers.

STRATEGICHESKOE NAPRAVLENIE Strategic direction: A large area within the TSMA, including the ground areas, coastal areas, and air/space areas. Within the limits of the strategic direction, large groupings of the armed forces of the enemy and the most important strategic targets are located. The destruction of these groupings and the seizure and retention of strategic targets and objectives in that area are a main objective of military actions of the strategic operation. Within the limits of the strategic direction, large groupings of the various Services of the Armed Forces assigned to accomplish strategic and operational missions are deployed and used. In time of war, operations or combat actions of such groupings are conducted along a strategic direction. Each continental TSMA may have several strategic directions.

STRATEGICHESKOE OBESPECHENIE VOENNYKH DEISTVII Strategic support of military actions: Strategic support of military actions includes a number of measures taken to maintain troops in a high state of combat readiness, maintain their combat capability, create favorable conditions for the organized and timely commitment of the forces in war, successfully accomplish the assigned missions, warn and prevent an enemy surprise attack, and weaken the effectiveness of enemy strikes.

The principal types of support of a strategic operation in a continental TSMA are as follows:

- reconnaissance;
- protection of the troops and rear service targets against weapons of mass destruction;
- operational *maskirovka*;
- radio-electronic warfare;
- engineer support;
- rear service support;
- others.

Measures for the principal types of strategic support are planned by the General Staff and implemented by the forces and means of the Supreme High Command and also by operational formations participating in the operation.

Different types of support in the interest of the Armed Forces are prepared and implemented in peacetime, and they are further developed and expanded during the operation.

STRATEGICHESKOE RAZVERTYVANIE Strategic deployment: The aggregate of a series of interconnected measures for bringing the Armed Forces from a peacetime to a wartime status. It also establishes the groupings of the Armed Forces for the conduct of war in accordance with the war plan and completes the direct preparation

for war. The strategic deployment of forces includes the following elements: transition of the Armed Forces from a peacetime to a wartime status, i.e., bringing the troops to a level of full combat readiness and the mobilization of forces; operational deployment of the groupings of forces in the TSMA; formation of new units, large units, and operational formations required by the operational plans; strategic regrouping of troops by bringing forces from the depth of the country, shifting troops amongst the TSMAs, and the deployment of strategic reserves. Strategic deployment of forces is conducted in accordance with the situation either simultaneously or successively, but it is conducted in extreme secrecy, without giving any indication of the process. The timely strategic deployment of forces is ensured by accurate and precise planning in accordance with the forms of the initiation of war, by maintaining a constant and high combat readiness and mobilization fitness of the force, by preparing the TSMAs in terms of operational and all-round support measures in advance, conducting all-round support of the Armed Forces, ensuring precise and accurate troop control, and adequately covering control centers by air defense and other means.

STRATEGICHESKOE VZAIMODEISTVIE Strategic coordination, interaction, or cooperation: The organization of coordination in groupings of the Armed Forces is one of the most important elements of preparing for a strategic operation. It is the coordination of the actions of the operational formations and large units of the various Services of Armed Forces and branch arms and services in terms of the objective, time, and place in the form of the accomplishment of assigned missions and the direction of their efforts toward the achievement of the assigned strategic aims. Strategic interaction is organized by the Supreme High Command on the basis of the unified concept and plan of the strategic operation.

SUKHOPUTNYE VOISKA Ground Forces: A Service of the Armed Forces which includes motorized rifle, tank, airborne, rocket, artillery, and air defense operational formations, large units, and units. To support the combat action of the Ground Forces the following special troops are included in their composition: engineer, chemical, radiotechnical, signal, transportation, road construction, rear service units and installations, reconnaissance units, etc.

The Ground Forces, along with the Strategic Rocket Forces, are tasked to inflict decisive losses on enemy troops in a theater of strategic military action. The Ground Forces play a decisive role in the destruction of the enemy in a conventional war and in the completion of their destruction in a nuclear war. The Ground Forces are equipped with nuclear weapons, tactical and operational rockets, air

defense and antitank rockets, modern tanks, and other contemporary combat equipment.

The principal mission of the Ground Forces, in coordination with the other Services of the Armed Forces in nuclear war, is to undertake decisive attacks at high speed to complete in a short time the destruction of enemy groupings which have been hit by strategic and operational nuclear strikes, and in a conventional war to inflict decisive losses on enemy forces and seize important and vital areas and targets in enemy territory.

SUTOCHNYI PEREKHOD Daily march distance: The distance to be covered by the troops during the march in a 24-hour period. The daily march distance depends on the speed of march of the columns, the length of the marching distance, and the physical capabilities of the drivers and combat and transport vehicles. The length of the daily march of the troops for motor transport columns is 400 kilometers per day. For combined vehicle columns it is up to 300 kilometers. In mountains, jungles, swamps, deserts, and other difficult areas, the average rate of movement and the length of daily march can be decreased.

TAKTICHESKII VOZDUSHNYI DESANT Tactical airborne landing: A tactical airborne landing is conducted by units ranging from a reinforced company to a regiment. They are mostly employed on the first day of an attack. The depth of the landing can be 50-100 km from the original enemy forward edge of defense (*perednii krai oborony*).

The missions of a tactical landing force can include the following:

- destroying enemy nuclear delivery means, command posts, and surviving small enemy units;
- preventing maneuver by enemy forces and means which have retained their combat capabilities;
- assisting the first echelon divisions in the seizure of road junctions, crossing sites on rivers, and also crossing radioactive contaminated areas and obstacles, especially those caused by nuclear minefields.

The planing of tactical airborne landings is conducted by army and division commanders with the participation of the chiefs and commanders of arms and services, especially those of the air army.

TAKTICHESKOE VZAIMODEISTVIE Tactical coordination, interaction, or cooperation: Tactical coordination is organized by the commander of operational formations, large units, and units amongst the formations and units of various combat and combat support arms carrying out combat actions. Interaction is organized for coordinated

action of the troops in battle (engagement) in terms of objective, time, and lines, as well as the types of combat action to be conducted.

Among the important issues in operational and tactical interaction is coordinating the employment of nuclear weapons and other means of destruction with the action of the troops in order to achieve the most effective use of all forces and means in the combat action.

TEATR VOENNYKH DEISTVII (TVD) Theater of Strategic Military Action (TSMA): [The term is sometimes translated as Theater of Military Action(s) or Theater of Military Operations.] In modern times, a component of a continent with its coastal waters, internal seas, and its air space. A TSMA may also consist of an ocean, including the islands, seas, and coasts around the ocean, and its air space. This is called an oceanic TSMA. Generally a TSMA is a space where the various strategic groupings of the Armed Forces, to include ground, air, and naval forces, deploy and conduct military action to achieve the objective of a war. The limits and composition of force and means of a TSMA are determined by the political and military leaders of a nation or allied countries.

TEKHNICHESKAIA GOTOVNOST' Technical readiness: This constitutes the technical status of equipment and weapons that determines their readiness for employment. Adequate technical readiness is particularly critical for nuclear delivery means. Thus, for nuclear rocket weapons, high technical readiness is a state in which rocket forces can facilitate timely delivery of strikes on enemy targets in order to successfully accomplish their assigned missions. In a state of full operational combat readiness, rocket troops achieve specified levels of technical readiness in order to launch timely nuclear strikes on short notice. This includes in the case of rocket troops, for example, measures associated with warhead preparation and the preparation of launchers and aiming mechanisms.

TEKHNICHESKII RESURS Technical resource or technical "life": The capacity for action or operation of a vehicle from the time a unit begins to use that vehicle (or from the time that vehicle is used after a principal repair job) to the time at which it is no longer operational. Technical resource is measured in terms of years, hours, kilometers, tons, and other units of measurement.

TREVOGA (BOEVAIA) Combat alert, combat alarm: 1. A number of measures taken in the Armed Forces to bring units (ships) to a level of full combat readiness at a specified time, and to prepare them for the conduct of combat missions, surprise attacks, and other operations of critical urgency. In the Soviet Armed Forces, the declaration of combat, air, fire, chemical, and other alarms have been established. 2. A signal to bring troops to a readiness level for action.

TSEL' OPERATSII Aim of the operation: The final outcome of the combat action to be achieved by the troops in the operation. It is determined by the higher echelon or higher commander, and is usually achieved through successive accomplishment of a number of operational missions.

TSEL' STRATEGICHESKOI OPERATSII Aim of the strategic operation: The aim of the strategic operation in a continental TSMA should provide for the complete destruction of enemy groupings in the TSMA; destruction of the enemy's economic and military bases and those of his allies; and eliminating important enemy countries from the war.

TSENTR BOEVOGO UPRAVLENIIA ISTREBITEL'NOI AVIATSII VOZDUSHNOI ARMII (TsBUIAVA) Combat control center of the air army's fighter aviation: The combat control center of the air army's fighter aviation is composed of a number of air army officers with communications means located in the air defense command post of the *front*. Its mission is to control fighter aviation covering the troops and targets of the *front* rear against enemy air attacks, particularly during the repulsion of the mass flights of enemy air forces, and to provide the coordination of fighter aviation troops with air defense elements.

TSENTR BOEVOGO UPRAVLENIIA VOZDUSHNOI ARMII (TsBUVA) Combat control center of the air army: The combat control center is composed of a number of officers of the air army with communications means attached to the command post of combined arms and tank armies. Its mission is to provide for the coordination of aviation with the army troops, to control the *front* aviation troops, and control the air movement of all arms and types of aircraft in the area of the combat action of the combined arms or tank army.

TYL VOORUZHENNYKH SIL Rear (services) of the Armed Forces: An indispensable element of the Armed Forces which includes diverse large units, units, and installations with materiel reserves deployed in the composition of combined arms units, large units, and operational formations, and also with the rear service large units, units and installations directly attached to the central organs of the rear services. Rear services provide for the materiel, technical, and medical support of the Armed Forces.

The rear services are divided into troop, operational, and central components.

The troop rear includes mobile rear service units and subunits organic to large units, units, and subunits. They are assigned for direct materiel, technical, and medical support of the troops under all conditions.

Operational rear services include materiel, technical, and medical large units, units, and installations organic to operational formations and assigned for the all-round support of the troops. The operational rear consists of rear services of *fronts*, fleets and naval bases, military districts, PVO districts, combined arms and tank armies, air armies, and other operational groupings.

The central rear services include rear service large units, units, and installations directly controlled by the main and central directorates of the Ministry of Defense and Main Staffs of the various Services of the Armed Forces. The central rear services comprise rear service reserves of the Supreme High Command.

TYLOVOI PUNKT UPRAVLENIIA (TPU) Rear control post: The rear control post is established for the control of the rear services. It should always be ready to take over the full control of the troops when needed. The following elements are in the rear control post: the staff and directorates of rear and technical services as well as those departments and sections of the staff, the political affairs department, and additional elements not included in the composition of other command post.

VIDY VOORUZHENNYKH SIL Services (types) of Armed Forces: Services are an integral part of the Armed Forces assigned for the accomplishment of strategic, operational, and tactical missions during war in one or several spheres of military action (on the ground, at sea, in the air, and in space). The various Services of the Armed Forces include Strategic Rocket Forces, Ground Forces, National Air Defense Forces, Air Forces, and the Navy. All five of these Services of the Armed Forces are specially organized and equipped with weapons and combat equipment consistent with the type of missions they are assigned to accomplish.

VOENNAIA BAZA Military base: An area specially equipped in military terms and prepared for the deployment of military-technical means, required ammunition reserves, fuel and lubricants, foodstuffs, and other materiel. Military bases are divided into aviation bases, naval bases, and rocket bases.

VOENNAIA BLOKADA Military blockade: A form of combat action to isolate (disrupt communication with other areas) an enemy country, large groupings of enemy troops, cities, ports, and other targets. The objectives of military blockades are as follows: disrupting military-economic state power, inflicting heavy losses on enemy groupings, and achieving their subsequent destruction or surrender. A blockade can include total or partial isolation of ground, naval, and air force troops or a combination of total and partial. A blockade is conducted at the strategic and operational level. At the tactical level it becomes an encirclement of the troops.

VOENNAIA DOKTRINA Military doctrine: A system of theories accepted by the State and the Armed Forces about the characteristics, form, and conduct of war, and the preparation of the nation and the Armed Forces for war.

Military doctrine is developed by a country's political leadership according to domestic and foreign policy, on the basis of ideologies about war and the Armed Forces, in close consideration of military-scientific achievements. Military doctrine reflects the economic, political, and historical characteristics of the population and its international commitments.

Military strategy is closely connected with military doctrine and is subordinated to it. At the same time the political basis of military strategy has a direct influence on the development and perfection of the military-technical fundamentals of military doctrine.

VOENNAIA TRANSPORTNAIA AVIATSIIA (VTA) Military Transport Aviation: Military Transport Aviation, a part of the Air Forces, is considered an asset of the Supreme High Command, and is assigned to accomplish missions in landing airborne forces, air transport of other troops, supply of weapons, fuel and lubricants, foodstuffs and other materiel, and evacuation of sick and wounded.

Units and subunits of Military Transport Aviation can be attached to *fronts* for the maneuver of the troops and supply of rockets, nuclear rounds, weapons and other materiel. Military Transport Aviation is organized into divisions and separate regiments equipped with transport aircraft having long-range capability and various transport capacities.

In order to increase the range, speed, and altitude of flight, special measures are taken on the design of wings, and special engines are anticipated which will operate by nuclear power. These aircraft will be able to conduct vertical takeoffs and landings. Transport aircraft are capable of transporting large numbers of airborne troops with their heavy equipment and armor over long distances, even from dirt airfields with limited runway lengths. Great progress is being made in development of the speed, payload capacity, sustainability, and control of helicopters.

VOENNO-MORSKOI FLOT (VMF) Navy: A Service of the Armed Forces, which is also equipped with nuclear weapons. Nuclear rocket submarines are considered an asset of the Supreme High Command and constitute the basic strike means of the Navy.

The mission of the Navy is the destruction of the enemy posing a threat from the sea, and on the sea; destruction of enemy military and naval bases; protection and defense of communication lines, etc.

The following elements are included in the composition of the Navy:

- submarines equipped with ballistic rockets of long and intermediate ranges;
- submarines equipped with cruise missiles and torpedoes with nuclear warheads;
- Naval Aviation armed with rockets and anti-ship weapons, and reconnaissance aircraft;
- surface vessels;
- coastal artillery and rocket troops;
- Naval Infantry.

Moreover, the Navy has special troops such as reconnaissance, chemical, signal, hydrography, and rear service units and installations.

VOENNO-VOZDUSHNYE SILY (VVS) Air Forces: One of the Services of the Armed Forces assigned to launch strikes on enemy air, ground, naval, rocket, and air defense groupings; and enemy political, administrative, industrial, and economic centers in order to destroy or disrupt the enemy's state and military control systems, his rear services and transport means, and his air reconnaissance. The Air Forces accomplish these missions independently, or in cooperation with other Services of the Armed Forces.

The Air Forces are equipped with operational aircraft, seaplanes, and various types of modern helicopters. The main combat forces consist of supersonic aircraft. The aircraft are equipped with nuclear rockets; air-to-air, air-to-surface, and air-to-ship conventional rockets, and other types of modern weapons; automated control systems; and radio jamming means. The speed of flight, the range of flight, and the altitude of their flight have developed enormously, and some aircraft can conduct vertical landings and takeoff. Special aircraft and helicopters are developed with the capability of carrying heavy artillery and tanks. There are aircraft which can lift a full subunit with all its equipment. Military aviation forces include *front* aviation, Long-Range Aviation, and Military Transport Aviation. The Air Forces, in terms of the characteristics of missions, are classified into the following forms; fighter aviation, fighter-bomber aviation, bomber aviation (and bombers armed with rockets), reconnaissance aircraft, transport aircraft, and auxiliary aircraft.

The Air Forces also have special troops, such as signal, chemical, radio-technical support, rear service units and large units, etc.

VOISKA PROTIVO-VOZDUSHNOI OBORONY STRANY (PVOS) National Air Defense Forces: A Service of the Armed Forces assigned to provide defense against aircraft, rockets, and space means on behalf of

important targets, to include political, administrative, and economic centers; Strategic Rocket Forces groupings; and operational formations of the Ground Forces, Air Forces, and the Navy. Special emphasis is placed on protection against enemy nuclear strikes.

The National Air Defense Forces are composed of anti-rocket defense forces, air defense rocket troops, radio-technical troops, fighter aviation, and also special troops such as radio-reconnaissance and radio jamming, engineer troops, chemical and signal troops, and rear service units and installations. The National Air Defense Forces are organized into operational formations, i.e., air defense military districts, air defense armies, and large units. The armament of National Air Defense Forces includes anti-rocket complexes; anti-space complexes; long-range and intermediate range air defense rockets, and low-altitude rockets, all armed with nuclear and conventional warheads; long-range and short-range fighter aviation armed with rockets; various radio-technical means; and automated control systems.

Further progress is being made in the perfection of long-range radars, laser means, and infrared equipment to detect targets and independently guided warheads. In the future, a universal system of automated guidance leading to the destruction of various targets such as aircraft, rockets, and even space means will develop. Also anti-rocket complexes will be further developed.

VOORUZHENNYE SILY SSSR Armed Forces of the USSR: The Soviet Armed Forces as a State organ constitutes an element of the State's political infrastructure, a principal means of applying force, and the most important weapon of the political leadership for achieving political aims through the conduct of war. The Armed Forces as a means for conducting war includes a collection of organizations and structures which are organized from the required number of trained personnel armed with weapons and combat equipment, and assigned for conducting war to achieve specific political aims and to ensure the fulfillment of the ideals and supremacy of Marxism-Leninism on the entire globe.

The Soviet Armed Forces include the following elements: Strategic Rocket Forces, Ground Forces, National Air Defense Forces, Air Forces, the Navy, the Armed Forces rear services, Civil Defense, special troops, Border Troops, forces of the Ministry of Internal Affairs (Internal Troops), and other elements of the nation's military structure.

VOZDUSHNAIA ARMIIA (VA) Air army: An operational formation of the Air Forces, which is organic to a *front*. Its missions are as follows:

– Covering troops and *front* rear services against enemy air strikes;

- —destroying enemy air forces on their airfields, in the air, and in base areas;
- —searching out and destroying enemy nuclear rocket means;
- —providing air support to combined arms and tank armies;
- —destroying and suppressing enemy reserves;
- —conducting air reconnaissance;
- —supporting the landing and combat action of seaborne assaults and cooperating with the *front* troops in coastal defense on naval directions;
- —landing and supporting Airborne Troops;
- —destroying enemy airborne and seaborne assault forces in the air, and in landing areas.

The organization of an air army is not fixed. It depends on the missions of the *front*, condition of the TSMA, and the characteristics of the air enemy. In the Western TSMA the organization of an air army can be as follows:

- —up to three fighter aviation divisions;
- —one to two fighter-bomber aviation divisions;
- —one bomber aviation division;
- —up to two air reconnaissance regiments;
- —one radio jamming regiment;
- —two to three combat and transport helicopter regiments.

VOZDUSHNYI DESANT Airborne (assault) landing or airborne (assault) landing force: Troops especially trained to conduct combat actions in the rear of the enemy. They are dropped or landed by aircraft, helicopters, and gliders.

Depending on the number of troops to be employed, the characteristics of the missions to be accomplished, and the depth of the landing or drop, an assault landing is classified as operational-strategic, operational, operational-tactical, tactical, and also special purpose.

Assault landing forces can be parachuted, landed, or a combination of both. Parachute landing forces are dropped from military transport aircraft to accomplish combat action in the enemy rear, and also to seize airfields which will support the landing of reinforcing elements of various types. A landing force is delivered by aircraft, helicopters, and gliders, against airfields and helicopter landing pads in the enemy rear. [It should be noted that the forms of the Russian word *desant* (including the verbal form *desantirovat'*) refer generally to an assault landing conducted by various air, sea, and ground means. *Desant* also may refer to an assault landing force itself. In the volume, the forms of *desant* are translated as "landing," "assault

landing," "assault landing force," and variations thereof depending upon context and issues of style. Unless otherwise specified in the text, these terms should be understood to be pertinent to the airdrop of an airborne assault landing force (*vybroska vozdushnogo desanta*), airlanding of an airborne assault landing force (*vysadka posadochnogo desanta*), and an assault force landed by the combined airdrop/airlanding method (*kombinirovannyi desant*). In some cases, as dictated by common usage, forms of *desant* are not translated literally. For example, in addition to "Airborne Troops," this was done in the text with "airborne division" (lit. *vozdushno-desantnaia diviziia*—air-assault landing division), and airborne operation (lit. *vozdushno-desantnaia operatsiia*—air-assault landing operation).]

VOZDUSHNYI KOMANDNYI PUNKT (VKP) Airborne command post: An alternate command post providing continuity of control. Its composition is specified by the commander in each case. This means that if a larger helicopter or aircraft is employed, a larger number of personnel can be assigned. If not, a smaller complement will be detailed.

VSPOMOGATEL'NYI PUNKT UPRAVELNIIA (VPU) Auxiliary control point: An auxiliary control point is established under special conditions. It may be assigned to control the troops operating on a separate or isolated direction. Its composition and the individual in charge are both specified by the commander.

VYZHIDATEL'NYI RAION Waiting area, attack position: An area of terrain occupied by troops before going over to the offensive. All measures associated with preparation for the offensive are taken here. In recent years, the term refers to the forming-up area and is the final area in which troops wait prior to commitment into combat. It is the area typically associated with the final waiting area occupied by the first echelon unit prior to combat, if such an area is occupied at all. The preferred method now is for the unit to enter combat straight from the approach march, in which case no waiting area is occupied. This area may also be the final waiting area of a second echelon unit. In this case, the unit is formed in columns and makes final preparations while waiting for the first echelon units to accomplish their mission. However, this area, in general, is not always designated in any special terms. During the course of an operation, units (including second echelon units) are generally on the move and, therefore, do not occupy areas, but rather stop periodically in column formation.

VZAIMODEISTVIE Coordination, interaction, or cooperation: See entries for *operativnoe vzaimodeistvie, organizatsiia vzaimodeistviia, takticheskoe vzaimodeistvie,* and *strategicheskoe vzaimodeistvie.*

ZADACHA DNIA Daily mission: The daily mission is assigned to large units in the attack to be accomplished by the end of the daily operation. It may include the destruction of enemy corps reserve in coordination with adjacent formations, and seizure of areas (objectives and lines) to the depth of 40-60 km.

ZAGRADITEL'NYI OGON' Blocking fire: A type of artillery fire conducted on specific lines of terrain on the front and flanks of units and subunits operating in a defensive action. This fire is preplanned and prepared in the course of a defensive operation. It is conducted in order to inflict losses and casualties on enemy infantry and tank units and to prevent their attack against the lines supported by artillery. Blocking fire is conducted by regimental artillery groups and divisional artillery groups. These fires are prearranged, prepared, and conducted at a specific time. Blocking fire is divided into two types: fixed (*nepodvizhnyi*) and mobile (*podvizhnyi*). Fixed blocking fire is the highest density of artillery fire used to stop the movement of the enemy, i.e., to repel his attack and counterattack at the specific lines selected beforehand. It is conducted at a specific time by guns using prearranged fire data. Mobile blocking fire is a type of artillery fire used in the defense to repel the assault and attack of enemy tanks and infantry troops by inflicting casualties on them, and to prevent the advance of the enemy to the main defensive line. This fire is conducted continuously along specific lines and is shifted from one line to another successively. The lines are preselected on the most dangerous direction of tank attack.

ZAMYSEL OPERATSII Concept of the operation: The concept constitutes the basis of the decision on conducting a combat action. The concept includes the following elements: the direction of the main attack and other attacks or the area where the main efforts are going to be concentrated; the sequence and forms of destroying the enemy; the method of conducting fire; in the case of nuclear war, the method of inflicting losses on the enemy by nuclear means; and the grouping of forces and the establishment of an organization for operations (see *operativnoe postroenie*).

ZAMYSEL STRATEGICHESKOI OPERATSII Concept of the strategic operation: The concept of the strategic operation in a continental TSMA constitutes the principal content of the decision of the Supreme High Command, and normally reflects the ideas of simultaneous or successive destruction of the groupings of the enemy armed forces and the destruction of important military and economic targets in the entire depth of the TSMA. In the concept of the operation the following points are specified:

- destruction of important groupings, above all enemy nuclear aviation and space groupings, destruction or seizure of important economic and military targets on which the morale and technical support of the armed forces are based; foiling the enemy's mobilization, disrupting his state and military control by the initial strategic nuclear strike or, in the absence of the use of nuclear weapons, by conducting an air operation, which inflicts losses on enemy targets;
- direction of launching the main attacks and other attacks;
- method and form of the destruction of the main enemy groupings in the TSMA and the seizure of vital and most important enemy areas, the seizure of which foils or greatly restricts enemy military action;
- groupings of the Armed Forces and establishment of the strategic formation of forces in the continental TSMA;
- conduct of airborne and seaborne operations to seize the most important areas and targets and to force the withdrawal of some of the enemy's allies from the war.

ZAPASY MATERIAL'NYKH SREDSTV Reserves of materiel: Materiel reserves constitute a specified quantity of weapons, combat equipment, ammunition, fuel, food, engineer supplies, medical supplies, and other items. Reserves are maintained in rear service arsenals, depots, and bases and in formations, large units, units, and subunits. Reserves of materiel are specified in accord with anticipated peacetime and wartime requirements. In terms of their level of echelonment, they are classified as strategic, operational and troop (tactical) materiel reserves. More specifically:

- strategic reserves are maintained in central arsenals, depots, and bases;
- operational reserves are maintained in the bases and depots of operational rear services found in the various Services of the Armed Forces, where they are under the control of formation commanders;
- troop materiel reserves are maintained in the depots of large units, units, on the transport vehicles of subunits, on combat vehicles, in the launch positions of rockets, with guns, mortars, machineguns, in repair and medical subunits, and with personnel. Troop reserves are divided into materiel reserves of divisions, brigades, regiments, battalions, companies (batteries), and platoons.

Index

Personal Statement

by Ghulam Dastagir Wardak

I dedicate this book to the spirit of the people who were taken to death chambers and torture rooms in the middle of the night by KGB agents in violation of human rights when their only crime was wanting freedom. I also wish to recognize the Afghan freedom fighters who have exposed the hypocrisy of Kremlin colonialism and proved that the "dictatorship of the proletariat" was nonsense.

Colonel Wardak

In 1965, while attending the Frunze Academy, I made extensive efforts to copy the important points from textbooks and lectures into classified notebooks (bearing official seals at the first and last page) so that in the future I could use them in the service of my own country's armed forces. Noticing our painstaking effort in copying entire books, the Academy management used to suggest (hypocritically) not to waste time in copying these materials, since they would send the original textbooks and lecture material to our Ministry of Defense through official channels. However after graduation they not only failed to send textbooks and lecture materials but kept even our own handwritten, classified notebooks, a total of 40. They sent only seven non-essential notebooks and only after blacking out significant parts of them with special marking pens, and in essence they sent us back empty-handed to our country.

The purpose of Soviet authorities accepting foreign students was to indoctrinate them with Marxism-Leninism philosophy, to provide conditions for establishment of Communist parties abroad, to recruit foreign nationals for their espionage network, to secure surrogates for staging military coups and establishing of pro-Marxist or Communist regimes, and finally to support the expansion of the world Communist system. The Soviet authorities were trying to keep their allies and Third World "friendly" countries dependent on Moscow and thereby ensure continued expansion of their weapons trade, sale of their obsolete weapons, assignment of their advisors and specialists to foreign countries, and support for the expansion of their espionage network.

By the second time I was sent to the USSR, to attend the Academy of the General Staff in Moscow in 1973, I had learned my lesson from the previous tour of study in the USSR. Thus, I concentrated my principal effort on translating and copying the major strategic and operational issues of any possible future interest to my nation and my army from Soviet classified textbooks, manuals, and lecture materials, so that I would not return empty-handed to my country a second time. I succeeded to a great extent in this effort. I wanted to free my army from continued dependence on Soviet advisors and help to organize and author a new theory of tactics, operational art, and strategy in accordance with the geographic, political, and economic realities of our nation.

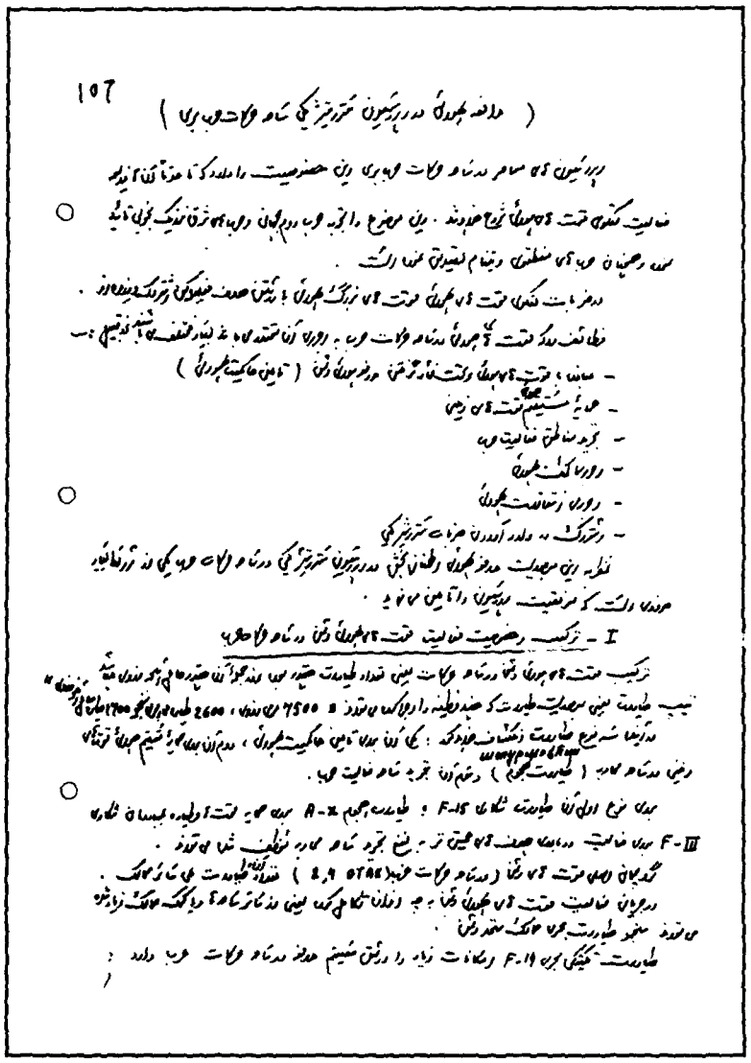
Marxism-Leninism was one of the major subjects of instruction in the Academy and was included in the State examination. Since the content of the subject was against our faith and beliefs we did not feel any interest in and any need to take it, and it was boring for us indeed. Thus we refused to study it on the grounds that we were unfamiliar with the subject and had no past experience with it. The higher management of the Academy received a report of this, and I remember that the Deputy Commandant for Political Affairs, Colonel General F. A. Mazhaev, came to our classroom and told us, "We do not want to impose our philosophy on foreign students nor

do we want to export it. However, since Marxism-Leninism is a modern science you should make yourself aware of its content. We, the Soviets, have a very large country and we do not need to annex other territories."

The statements of that colonel general were, in my view, misleading and false. History has revealed that the Soviets have often failed to respect their commitments and treaties, and when expedient, they have violated them. They behaved this way in the case of a friendly country, Afghanistan, a nonaligned nation.

The Soviets violated the contents of their treaties of friendship with Afghanistan and began to interfere in the internal affairs of the country. They established the Communist Party in Afghanistan; they financed the Party, conducted widespread propaganda against the government of Afghanistan, and planned and executed military coups. Mohammed Daud, the founder of Afghan-Soviet friendship, was brutally massacred along with all members of his family, including women and children, when the first Marxist government in Afghanistan was established. As their surrogates in Kabul lost power to overcome the national resistance, the Soviets flagrantly violated the so-called "border of peace and friendship," invaded Afghanistan, and began to occupy the country militarily. They assassinated the president of the Communist regime, Hafizullah Amin, who had overthrown and killed his predecessor Nur Mohammed Taraki. The Soviets installed Babrak Karmal, who had been kept and trained for such an occasion in Moscow. He was brought to power by the might of the Soviet Army. Reacting to the international criticism of the invasion, the Soviets pretended that they went to Afghanistan in response to an invitation of the Afghan Government. But no one has seen nor has identified the originator of the "invitation."

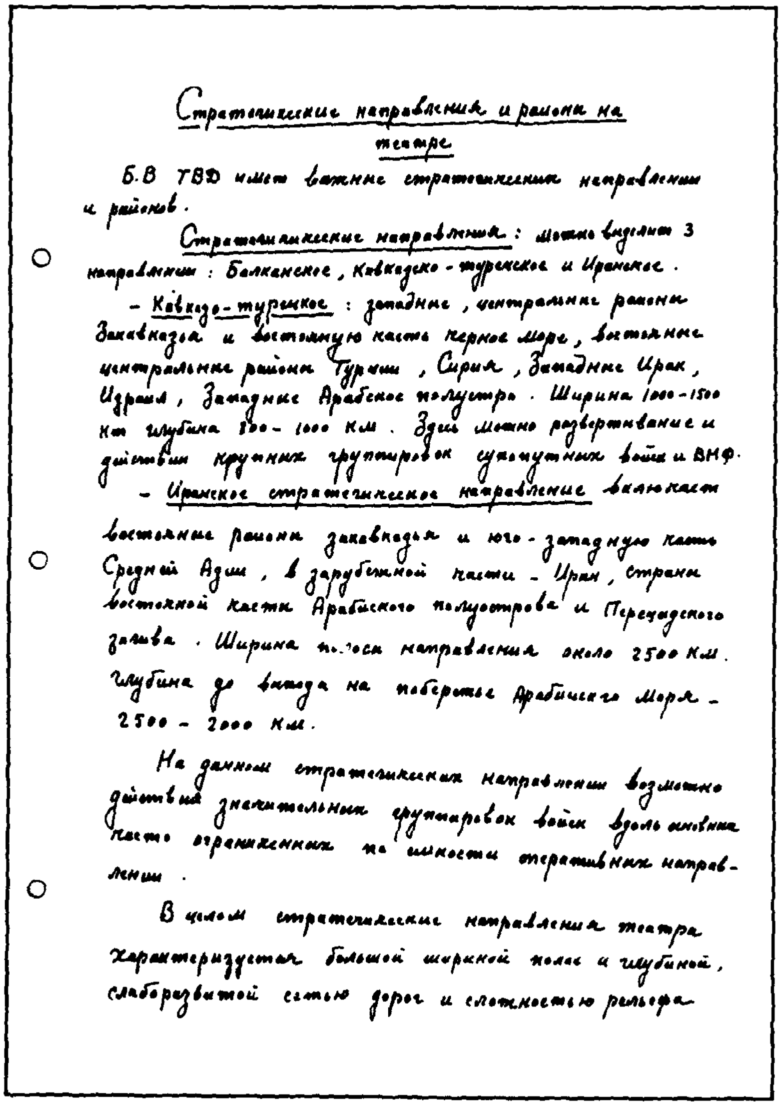
The destruction and devastation suffered by Afghans because of the Soviet invasion and occupation during the past nine years reach billions of dollars, while the psychological losses will take many, many years to remedy. Atrocities committed by



A page from Colonel Wardak's notebooks, recorded in Dari.

the KGB, Soviet advisors, and Soviet military forces in Afghanistan have been widespread. The atrocities include the massacre of 1.5 million of the Afghan population, forcing half the Afghan people into exile (5 million out of the country and 2 million inside the country); mass executions of prisoners of war, women, children, and elderly; bombing, destruction, and burning of villages of workers and peasants, whom the Soviets in their philosophy hypocritically pretended to protect in Afghanistan against the "imperialism" of "America, China, and Pakistan"; use of chemical weapons and napalm against defenseless people; use of toy bombs and mines to maim and kill children; burning of agricultural products; destruction of irrigation systems, cutting the trees and destruction of orchards, killing of domestic animals to weaken the economic basis of the Mujahideen; punishment of men and women who refused to disclose the Mujahideen strongholds by dropping them from flying helicopters; burning of religious books and mosques; massacre of women and children who had taken refuge in mosques; confiscation of radio receivers in occupied areas to deprive the population of listening to the Voice of America, BBC, Deutsche Welle, and other foreign broadcasts; raping of women; and application of new systems of torture to detainees using the newest methods developed by the KGB. In areas where the Soviet forces faced defeat, they often went mad, killing indiscriminately all the civilian population in the path of their retreat.

The aim of the Soviet invasion was not only the occupation of Afghanistan; they also aimed to destroy religion and change the social, economic, and cultural order, sowing the seed of dissension among different ethnic groups, distorting the history of Afghanistan, and bringing about other changes in the context of the Soviet revolutionary objectives. Reading Marxism-Leninism textbooks and instructional material in the Academy, I noted that the Soviets consider not only the NATO countries their ideological enemies; the Third World nations with democratic systems and free economies are also included in the list of their enemies. To destroy such regimes and to



Стратегические направления и районы на театре

Б. В ТВД имеет важные стратегических направлении и районов.

Стратегические направления: можно выделить 3 направлении: Балканское, Кавказско-турецкое и Иранское.

– Кавказо-турецкое: западные, центральные районы Закавказья и восточную часть Черное море, восточные центральные районы Турции, Сирия, Западные Ирак, Израиль, Западные Арабское полуостро. Ширина 1000–1500 км глубина 800–1000 км. Здесь можно развертывание и действии крупных группировок сухопутных войск и ВМФ.

– Иранское стратегическое направление включает восточные районы закавказья и юго-западную часть Средней Азии, в зарубежной части – Иран, страны восточной части Арабского полуострова и Персидского залива. Ширина полосы направления около 2500 км. глубина до выхода на побережье Арабского Моря – 2500–2000 км.

На данном стратегических направлении возможно действия значительных группировок войск вдоль отдельных частно ограниченных на шкости оперативных направлении.

В целом стратегические направления театра характеризуется большой шириной полос и глубиной, слаборазвитой сетью дорог и сложностью рельефа

Colonel Wardak recorded some subjects in their original Russian.

establish a Moscow-led, worldwide Communist system, planning and conduct of strategic operations of various Services of the Armed Forces in various continental and oceanic TSMAs are considered inevitable.

Thus to familiarize the people around the world and especially those who do not have a deep understanding of the Soviet political and military doctrine, I chose to let these lectures be translated and published to serve worldwide public awareness of the military policy of the Soviet Union aimed at the final global domination, and by doing this, I wish to contribute to the cause of freedom, democracy, and humanity.

THE VOROSHILOV LECTURES:
MATERIALS FROM THE SOVIET GENERAL STAFF ACADEMY

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