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COMMENTS ON FM 100-5
From A Soviet Point of View

by Special rept.

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DISCLAIMER

The views of the author do not purport to reflect the position of the Department of the Army or Department of Defense.
This special report is intended to be a companion piece to the US Army Field Manual on Operations (FM 100-5). The author reviews the manual through the eyes of a Soviet officer and comments on some similarities and differences between Soviet and US doctrine as outlined in the manual. In addition, the author considers two instances where he believes Soviet operations are inadequately portrayed in FM 100-5, and develops cases supporting his contentions. Key Soviet open source publications are used throughout to provide the reader a better grasp of Soviet military perceptions.

This special report was prepared as a contribution to the field of national security research and study. As such it does not reflect the official view of the College, the Department of the Army, or the Department of Defense.
FOREWORD

This paper was prepared for presentation at the Tactics and Military Posture Symposium which was held at the Combined Arms Center at Ft. Leavenworth, Kansas 30 March - 1 April 1978.

The paper is written with the idea of helping the reader to better understand and become more familiar with the US Army Field Manual on Operations (FM 100-5) as well as to learn about and increase understanding of the Soviet Ground Forces and their operational principles and tactics.

There are a large number of quotes from Soviet open source publications—perhaps an excessive number. However, many readers will not have read some of the key books and other publications which help one to understand the essence of Soviet operations. This paper provides the reader with a more extensive view of Soviet military thought in the Soviets' own words.

In the two cases where I feel an incorrect or incomplete picture of Soviet operations is portrayed in FM 100-5 (one dealing with the type of Soviet offensive action which NATO should expect and the other with tactical nuclear warfare), I have developed in detail not only what I feel should be written or included in FM 100-5, but also the case supporting it.

I have tried to write a companion piece to FM 100-5, following it and paralleling it chapter by chapter, subject by subject—in sequence—and in some cases quoting FM 100-5 in order to make the comparison or contrast more vivid.

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SUMMARY

In this paper, the author, attempting to look at FM 100-5 through the eyes of a Soviet officer, comments on some similarities and differences between Soviet doctrine and the US doctrine as outlined in FM 100-5. This includes comments on doctrine ascribed to the Soviets in the manual.

The author uses exclusively Soviet sources both written and oral, and interpreted based on his extensive contact with Soviet Ground Forces personnel in the 1960s and 1970s to highlight some of the similarities and differences in US and Soviet military thinking. Using FM 100-5 as a vehicle, the writer of this paper proceeds chapter by chapter in sequence to emphasize many of the salient points in the manual and simultaneously provide the reader with considerable information regarding Soviet operations and tactics as well as a myriad of other minor but interesting details, observations and comments about the Soviet military.

Since the mid-sixties we have seen an impressive outpouring of Soviet books/manuals which describe, develop and illustrate tactics and operational principles. The author uses extensive quotes from some of these recent Soviet publications, cites conversations he has had with Soviet officers, and gives his impressions and thoughts—often "thinking aloud" by means of comments in parentheses.

The paper criticizes FM 100-5 explicitly on two counts and implicitly on a third.

There is in FM 100-5, in the opinion of the author, excessive emphasis on Soviet concentration of divisions echeloned in depth on a narrow front for a breakthrough. While this is one of the basic tried and proven offensive techniques, the meeting engagement (a movement to contact followed by a hasty attack) is given at least as much emphasis in Soviet publications where indications are numerous that in any Soviet offensive (and offensive not defensive is the basis for Soviet military operations) the meeting engagement is just as likely if not more likely than the deliberate breakthrough attack. The trend, the author believes, is toward having less second echelon forces below front level due to increased weapons capability and staying power as well as the size of the combat zone, enemy disposition and the type of warfare expected. The author suggests that in any subsequent changes to FM 100-5 "equal time" should be given to the likelihood of the "meeting engagement" being the predominant type of Soviet operation, and he points out why the current NATO situation makes that more likely than the deliberate "breakthrough" attack.

Second, he highlights the Soviet emphasis on nuclear warfare although with a possible initial conventional phase, while FM 100-5 (with the exception of one chapter) is devoted almost entirely to conventional war in Europe. The author points out the Soviet declaratory doctrine that nuclear war cannot be limited to a local or regional area once initiated and the advocacy of preemption by the Soviets in case they learn of a planned strike by US/NATO forces. The Soviets expect and prepare for nuclear warfare which, they feel, can and will probably escalate from a tactical nuclear to a
strategic exchange, but they are prepared to go conventional for an indeterminate period of time. This the Soviets consider to their advantage in that enemy nuclear weapons and delivery systems can be knocked out before the time arrives for their use. Preemption is also advocated since if both sides are going to use nuclear weapons, the first user has a big and perhaps decisive advantage over the second user. The writer also feels insufficient emphasis is given to US tactical nuclear warfare as a cornerstone of the "flexible response."

While the US stresses leadership based on decentralization of responsibility and authority to the commander on the ground and seeks a leader who will act on his own, the Soviets depend on centralization, with decisionmaking and initiative at higher levels. Flexibility in command, control and communications at higher levels, the Soviets believe, permit this initiative (regiment and above) to affect the actions at lower levels and to substitute for lower level initiative. A dilemma posed for the Soviets is that the meeting engagement, which the Soviets advocate as the most likely and effective type of offensive warfare, requires the greatest low level initiative in order to be successful—and the Soviet system stifles low level initiative.

This paper is keyed directly to FM 100-5: chapter by chapter, subject by subject.
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COMMENTS ON FM 100-5 -- FROM A SOVIET POINT OF VIEW

(or The New Americanskiy Manual on Operational Art)

Introduction

In 1964 the Military Publishing House in Moscow translated and published an edition of US Army Field Manual 100-5 (probably the February 1962 edition). It is thus likely that the Soviets will also translate and publish the new bicentennial year edition of FM 100-5. However, as of early 1978 (if one judges by the lack of references to the 1976 edition of FM 100-5 in the Soviet open press) it would appear that the Soviets have decided to treat it as a non-event. One could speculate that the absence of comment is due to their belief that the new manual simply formalizes what has long since been in practice or that they are still comparing it with the NATO Allied Tactical Publication (ATP) on Land Force Tactical Doctrine to determine our commitment to coalition warfare and standardization of operational principles and tactics.

Since the Soviets have chosen not to comment on our new manual on operations, this author will take the liberty of speculating on comments which a Soviet officer might make or the reactions or thoughts which he might have upon picking up and perusing a translated copy of the new FM 100-5. The author of this paper intends to quote liberally from and interpret Soviet manuals/books; to give the probable outlook of the Soviet professional military, based on open source Soviet publications and the writer's own conversations with Soviet officers; and to offer his comments and observations--often in the manner of "thinking out loud"--with comments in parentheses.
The Soviet officer is the product of his own unique environment in a Marxist-Leninist militarized society and the graduate of a three to five year military commissioning school as a minimum (perhaps also of a ten-month combined arms commander course, or possibly, instead, of a 3-5 year command academy course at the Malinovski Tank Academy or the Frunze Military Academy, and much less likely, of the two-year course for selected colonels and one star generals at the Military Academy of the General Staff). Thus, the American reader should understand that the Soviet Russian reader may well have a different understanding of many of the basic words which appear to translate so easily.

The Soviet officer in reading FM 100-5 will undoubtedly compare it with what he has read in his Officer Library Series, other military books, articles in military magazines such as The Military Herald (Voyennyi Vestnick) - the monthly publication of the Ground Forces, and newspapers such as Red Star (Kraznaya Zvesda) - the daily publication of the Ministry of Defense. Much of what is found in FM 100-5 the Soviet reader can subscribe to wholeheartedly. One of the techniques employed by Soviet military authors is to state the western view on a matter and teach by taking issue with it - or by implication accept it.

Military Strategy

The Soviets did their major soul searching regarding doctrine and strategy in the late 1950's and early 1960's. This was the period when Nikita Khrushchev tried to place major emphasis on his Strategic Rocket Forces (SRF), and Marshal Sokolovski was moved from his job as Chief of the General Staff of the Armed Forces to a task as Chief Editor of the book Military Strategy, editions of which appeared in 1962, 1963 and shortly after his death in 1968. Once the military
doctrine and military strategy had been agreed upon and the dialogues in the military press were concluded, the Soviet military turned to the development of operational principles and tactics. An impressive number of books and articles on the implementing operational principles and tactics have appeared since the mid sixties.

Military strategy has not changed essentially since 1968, as outlined in the last edition of the volume authored by a collective of officers holding graduate degrees and representing military, party and civilian institutions which form part of the so-called "strategy establishment." These institutions include the Military Academy of the General Staff, Frunze Military Academy, Malinovski Tank Academy, Gargarin Air Academy, Lenin Military-Political Academy, the Military History Institute of the Ministry of Defense, the Military History Department of the General Staff, the Institute of Marxism-Leninism (of the Central Committee of the Communist Party of the Soviet Union), the Academy of Sciences, the Institute of World Economy and International Relations (IMEMO) and the Institute for the Study of the USA and Canada (IUSA). This latest (1968) version of Military Strategy — now ten years old — was edited by Marshal Sokolovski (as the two earlier editions had been) and the chapters were written largely by the same authors who had written the earlier two versions. This volume is considered by the Soviets to be a major achievement of the late marshal and is read as a key work and milestone by Soviet officers.3

The Revolution in Military Affairs

In 1964 Marshal Sokolovski co-authored an article in Red Star entitled "The Art of War at a New Stage - A Revolution in Military Affairs, Its Meaning and Consequences."4 This "revolution in military
affairs" was cited as the reason for the changes in doctrine and strategy - which would shortly be followed by corresponding changes in operational art and in tactics. It was brought about by the (1) development of nuclear weapons, (2) development of intercontinental missiles and other delivery means, and (3) the technical innovations in command, control and communications.

Operations and Tactics

Once the key decisions had been made concerning military strategy and doctrine, the Soviets turned to the development of compatible and supporting operational art and tactics. Some of the key books published since the first two editions of Sokolovski's Military Strategy in 1962 and 1965 and his Red Star article in 1964 are the following: Major General Reznichenko's Tactics in 1966, Colonel Sidorenko's The Offensive in 1970, Colonel Savkin's Basic Principles of Operational Art and Tactics, 1972, The Tank Battalion in Battle by Colonels Konoplya and Maitov in 1972 as well as Colonel Garbuz (and other members of the author collective) The Motorized Rifle Battalion in Battle the same year, Colonel General Lomov's Scientific-Technical Progress and the Revolution in Military Affairs in 1973, Army General Radziyevski's edited series Regimental Tactics through Combat Examples--authored by a collective including Major General Reznichenko and Colonel Garbuz in 1974, and Division Tactics through Combat Examples in 1976, as well as Radziyevski's 1977 volume on Tank Strike--the offensive operations of a tank army, based on World War II operations. My comments regarding possible Soviet reaction to FM 100-5 will be based largely on these books and various talks I have had with numerous Soviet officers during my years of contact with Soviet Ground Forces personnel.
The Soviet publication closest by title to FM 100-5 is probably Colonel Savkin's book on Operational Art and Tactics. A Soviet officer comparing the two would first contrast the multi-shade-green, cardboard covered, 375 page, almost pocket-sized Soviet volume with the loose leafed, green and black camouflage covered US volume which has about 200 pages, larger print, impressive graphics and is of large notebook size.

In contrast to the Soviet book which is listed inside the cover as being printed for officers and generals of the Soviet Army (there being also soldiers, sergeants and warrant officers in the Soviet Army), the US manual is obviously designed for Army personnel down to squad level. The manual on tactics by General Reznichenko, by comparison, is listed as being provided for officers of the Soviet Army, students at military institutions and officers in the reserve (but not for generals or warrant officers, sergeants and soldiers). In the Soviet Army, instruction for soldiers and sergeants is normally conducted by use of training boards—although personnel are literate and can certainly read the material printed in books. However, Soviet books and articles do not have the illustrations and tabular/outline, easy-to-read format which serves to emphasize the main points and which characterize US military publications. The Soviet military reader has to "dig" for his information with many diamonds lying in an expansive rough.

The Soviet reader probably would turn to the last page of the book looking for the table of contents, rather than to the front where one finds it in the US field manuals and books. The absence of an author will surprise him since his military books are written by military (and usually graduate) specialists in the "military academies" (similar to our war colleges and command and staff colleges). Often they are
authored by a group (or collective) of officers and sometimes are edited by the Commandant of the "academy" having principal responsibility for the subject covered.

Military Doctrine

The title "operations," which translates in Russian to "operational art" is understandable to a Soviet reader since operational art is one of the three components of military art, the other two being strategy and tactics. Thus, a manual on operations, as the Soviet understands it, deals with lower level strategy or higher level tactics, usually found at front (army group) or army (army corps) level. The reference to the manual setting forth the basic concepts of US Army doctrine, however, would probably leave him confused. In the first place, he probably will have read "army" as "ground forces" (which is correct) rather than the Russian term "army" which is a generic term referring to four of the five services (ground forces, air forces, strategic rocket--or missile--forces, and the national air--or aerospace--defense forces, but not naval forces). However, military doctrine, which includes the methods and forms of conducting the war (and by Soviet definition also the preparation of the country and its armed forces for war) is "developed and defined by the political leadership of the state" (i.e., the Communist Party).15 According to the Soviets, military doctrine is based on politics, the social structure, the level of science and technology, and the nature of the anticipated war. The Soviet officer is taught that his military doctrine is "based on the peace policy of the Soviet Union," has been developed on the basis of instructions from the central committee of the party, and is based on military
science (not military art) and the "political and economic might of the USSR and the other countries of the socialist commonwealth."16 This military doctrine involves preparing the armed forces and the country as a whole for a "struggle against an aggressor."17 The Soviets consider that military strategy is based on military doctrine (rather than vice versa). Current Soviet military doctrine was developed in the late 1950s, based on guidance from the post-Stalin 20th Communist Party Congress in 1956.
US ARMY OBJECTIVES (Chapter 1)

The US Army objectives—to win the land battle, destroy enemy military forces and secure or defend important geographic objectives—are similar to those of his own ground forces ("routing of enemy tactical groupings confronted and the capture of important areas of terrain"). Notice that the defensive orientation is missing, since the Soviets advocate that the best defense is a good offense and they will reply to aggression only by a sweeping offense. The American emphasis on preparing to win the first battle of the next war may seem strange to the Soviet whose experience in WW II leads him to concentrate on winning the last battle—hence the war. His professed desire is to avoid war and perhaps from an ideological point of view to consider any future war as the **final war** rather than the **next war** (since according to Marxist-Leninist ideology any future war with the West will be a struggle to the death between socialism and capitalism with socialism winning and ending wars for all time—the single economic, political and social system of socialism—later developing into communism, and having no internal contradictions which will lead to war).

Not only is the US Army prepared to fight outnumbered and win, but so is the Soviet Army. The Soviet reader understands the theme that soldiers need the best weapons that industry and technology can provide. Recently his Defense Minister, Marshal Ustinov, wrote that:

... those who even consider attaining military supremacy over the Soviet Union with the help of such weapons (new types of weapons of mass destruction) should remember that our country's economy,
science and technology are now at such a high level that we are in a position to create any type of weapon in the shortest time. \[^{20}\]

There is certainly no disagreement on the importance of crew/team proficiency or tactics which, under the direction of well-trained leaders, can maximize weapons capabilities.

The Soviet reader will certainly concur with the idea expressed that combat development is based on a search of combat experiences and technology for ways to provide better weapons systems, organization, tactics and techniques. His only concern might be the relative importance of experiments and tests in the process. To the Soviet the tactics which have been tried and proven in combat cannot be easily disproved by a series of experiments and tests, although they may serve to reconfirm the validity of combat tested methods. This, of course, makes the Soviet dependent on WW II experience, since there has been no other Soviet combat experience since then. The Soviet officer sometimes questions the value of US combat experience in Korea and Vietnam since that was not in Europe and the terrain and operational conditions in a non-European engagement are not generally applicable to a European scenario. The Soviets thus update cautiously their WW II combat experience on European soil against an advanced Western military power and alliance.

Where the manual speaks of communicating an effective doctrine throughout the forces, the Soviet with another understanding of doctrine will be interested in communicating accepted principles of operational art and tactics to those levels of the forces which require knowledge (and this is often to a higher level than in the US forces since the
Soviets consider that each soldier, sergeant and warrant officer needs to know only his part of the operation—a specialist versus generalist view).

The Soviet would certainly say an equivalent to "amen" to the emphasis on unit training involving effective combined arms teamwork, although the frame of reference is somewhat different.

The mention of readiness could come easily from a Soviet publication—the aim being to produce a unit ready to fight and win now. Combat readiness is a frequently used term in Soviet publications, and with no major recall problems (military personnel remaining in or close to barracks even on a weekend) the units are able to clear barracks areas in a short period of time.

Finally there is the subject of confidence with the Army being convinced it will win and soldiers understanding what to do and why it must be done. The Soviet is used to being bombarded with written and oral testimonials to the "glorious" and "victorious" Soviet Army (generally called the Red Army until WW II). The what to do is covered by the repetitious training of units, teams and crews. The why it must be done is supported by the party political-moral education which takes about 10 percent of the soldiers' time and is reinforced by all oral and written information media. As outlined in Chapter I, the courage, skill of soldiers, quality of leaders, and excellence of technique and tactics all play an important part in the Soviet Army as does resolve, although there is less emphasis on the need for leaders at all levels to operate independently and follow mission-type orders.
MODERN WEAPONS ON THE MODERN BATTLEFIELD (Chapter 2)

The Soviet reader is very aware of his fielded capability in modern weapons, although as he looks around at the various types of trucks in a unit and reads letters from friends who serve in semi-ready (polurazvyortavyie), cadre (kadrirovanaya) or training (uchebnaya) divisions, he is aware of the presence of large numbers of old tanks and artillery pieces which have "trickled down" from the ready (razvyortivyie) divisions such as those in Groups of Forces and along the Sino-Soviet border.

Lethality

That war is lethal is no secret to the Soviet, who hears constantly about the loss of 20 million Soviet citizens in the Great Patriotic War. On the Eastern Front during the final years of WW II, the Soviets were renowned for the prodigious amounts of ammunition fired and combat equipment utilized. Thus, he certainly accepts the description of the "new lethality" posited by FM 100-5. However, he reads and hears that surprise and the effective use of weapons of mass destruction (nuclear and chemical) can minimize this lethality against his own troops. This writer suggests that the Soviets have increased the numbers of tanks in many units and areas by one-fourth to one-third as a partial counter to this increased lethality caused largely by the increase in the number and effect of antitank weapons.21 The change from the three-tank to the four-tank platoon in motorized rifle units increases the number of tanks by one-third. The relatively new separate tank battalions in the divisions add to this tank strength and permit greater losses to antitank weapons while still maintaining an equal or greater tank strength.
Role of the Tank

If the US view is that,

... The tank is the primary offensive weapon in mounted warfare ... has the firepower, protection and mobility to carry the battle to the enemy and destroy him ... (and) ... all other elements in the combined arms team must be employed to support and assist the forward movements of tanks ... .

the Soviets feel no less strongly. In the words of the CINC of the Soviet Ground Forces in 1975,

... Despite the improvement and growth of the effectiveness of antitank weapons, tanks remain the main strike force and mobile force of the ground forces and a powerful means of resolving important tasks in modern warfare. Moreover, compared with other types of combat equipment, they (tanks) are the best suited for decisive, maneuvering actions.22

Thus, there is uniform agreement that the battlefield will be dominated by tanks (although many of them will be lost to antitank weapons), and the Soviet military reader is used to hearing and reading that "the tanks of the Soviet Army are the best in the world."23 General Lomov continues: "They (Soviet tanks) have strong armor, powerful weapons, a dependable motor, a great range and advanced driving and fire control instruments ... the tank could carry various weapons, use combustible case ammunition as well as AT guided missiles (PTURS) to include a nuclear charge." He also suggests use of aluminum and plastics to replace steel armor. Regarding the organizational trends for tanks, Colonel Sidorenko in The Offensive writes,
Tanks are making important qualitative changes during the postwar period. Their proportion as part of the ground forces increased. Tanks are now organized into strong tank soyedineniye and chast (armies, divisions and regiments). Along with this they are organically included as part of the combined arms soyedineniye and chast (i.e., tank divisions in combined arms army, a tank regiment in the motor rifle division, and a tank battalion in the MR regiment).\(^{24}\)

The number of old and new models of Soviet tanks suggests that the Soviets have bet heavily on the tank for the foreseeable future, and a battlefield replacement for the tank is not discussed.

**Infantry**

The Soviets agree with the requirements for infantry, weapons, mobility, helicopters and airborne forces. On the lethal modern battlefield where the antitank weapon is contesting the tank for mastery, the Soviets are also increasing the numbers and models of ATGMs. General Lomov’s statement that "our PTURS (antitank guided missiles) are capable of neutralizing any armored targets at a distance of two or more kilometers" is typical of the claims made for Soviet antitank weapons.\(^{25}\)

The Soviets often use foreign writings to intimate agreement, if unchallenged in the article. Thus, such phrases as "according to foreign specialists" and "abroad they say/believe" are common introductions to requirements to "create new combat and transport vehicles with high cross country capabilities, able to move off the roads, over swamps, through deep snow, across land and water, and even fly at low altitude."

The Soviet infantry combat vehicle (BMP—bronovaya mashina pekhoti—armored vehicle infantry) is said to have "demonstrated high qualities."

In the new Soviet Military Encyclopedia (the first four volumes of which
had been published at the time this article was written), references to
the BMP point out that it was designed for movement and conduct of
battle. It increases the mobility, firepower and protection of the
crew against nuclear explosions, conventional rounds, and chemical and
biological weapons. One of the 1976 volumes, under the authoritative
editorship of Marshal Grechko, the late Minister of Defense, and
including on the editorial board others such as Admiral Gorshkov, CINC
of the Soviet Navy, and General Altunin, Deputy Minister of Defense and
Civil Defense Chief, points out that the BMP permits combat under
favorable circumstances without having to dismount and facilitate
cooperation with tanks. These BMPs can also support the operations of
dismounted infantry with the fire of their own machine guns and cannons.
The modern BMP is listed by the Soviets as being a tracked vehicle (but
also produced in a less common wheel model) which is usually amphibious,
aerotransportable, and droppable by parachute. The crew of 2-3 is in
addition to the 8-9 motor rifle personnel who can either fire on the
move through embrasures in the sides or quickly leave the vehicle to
fight in a dismounted formation. The BMP is armed with antitank guided
missiles/ATGMs (PTURS) and equipped with an air filtration system for
nuclear and chemical warfare and night vision equipment for night combat.
Based on the BMP, the Soviets are developing various combat vehicles
designed for antitank, staff, repair and maintenance, medical evacuation
and engineer purposes.26

Field Artillery—Gun and Missile

According to the Soviets, "the role and proportional amount of
rocket artillery have increased even more." Artillery, which is generally
considered together with rockets/missiles and is under the command of the Chief of Rocket Troops and Artillery (CFTA), has long been known as the "God of War" (Bog voini). FM 100-5 points out that artillery was the greatest casualty producer in WW II. The current Soviet emphasis is on suppression by covering an area with a large amount of firepower, rather than using artillery for pin point "neutralizing targets on the battlefield" as in the "conventional field artillery of the capitalist armies." The Soviets have long commented about "the continuous rise in the proportional amount of self-propelled artillery" in the West and they seem now to have joined the trend with their new 122mm and 152mm self-propelled artillery pieces. The Soviets, however, feel that missiles (rockets as they usually call them) are a Soviet development (going back to the Katyushas in WW II--120mm multiple rockets fired from vehicles in salvos of 20-30) and they are particularly proud of them. Soviet military personnel are constantly subjected to statements similar to that of General Lomov who wrote that "Soviet tactical-operational and tactical missiles...are the best in the world and surpass similar missiles in the armies of the capitalist nations."27

Air Defense Artillery--Gun and Missile

The Soviet reader would agree wholeheartedly with the statement that "air defense is integral to the combined arms team" and he looks at his motorized rifle (MR) regiment for an example of a fielded capability.

Airpower

The Soviet reader, when encountering the term close air support, probably does not have a clear picture. Except for support of river crossings by high performance aircraft (where the area to be attacked is well delineated), he is used to high performance aircraft being used as
an extension of artillery (i.e., what the artillery cannot reach, frontal aviation can). The introduction of helicopters into frontal aviation has provided an opportunity to provide close air support across the FEBA without the aircraft having to leave Soviet airspace. Regarding helicopters, the Soviets have paid close attention to US development of the helicopter as a combat vehicle. They have long scoffed at the capability of the helicopter to stand up on the modern battlefield in a major conflict, but the alacrity with which they are introducing the helicopters to the frontal air army belies their statements. It is common to see such statements as:

In the United States and certain other imperialist nations, particular attention has been paid to developing helicopters and to raising their proportional amount in army aviation... They can be armed with air-to-ground missiles, rapid firing cannons, ATGMs (PTURS), rotary ammunition, machine guns, cluster bombs and so forth.

The Soviet reader must muse that "we seem to be joining the trend and it is certainly logical considering that a Russian invented the autogiro/helicopter."

Night Combat

If the Soviet reader thought back over the number of articles on night tactics in his Military Herald (Voyenni Vestnick) carried in 1976 and 1977, he would probably conclude that night combat was not considered nearly as important as other variations of combat. However, he would remember his frequent night movements and mobility exercises and the night vision equipment on his combat vehicles. Thus, he can certainly agree that the aim is to have weapon sight effectiveness equal the weapon
range effectiveness. The IR, thermal sight and image intensifiers may some day turn night into day for combat operations. However, until that day there is still a need to increase visibility in the northern European area where fog, haze, snow and smoke are frequent and winter nights aren't broken until about nine o'clock in the morning (by local, not Moscow time).

Mine Warfare

The Soviet reader will likewise realize that his Military Herald reading over the past two years has been somewhat deficient in articles on mine warfare, at one time one of the Soviets' heralded strong points. Of course, if as is written, "Soviet military strategy will have a decisive, active and offensive character," he should not be surprised to find less emphasis on a defensive weapon.

War in the Electromagnetic Spectrum

In the Radio Electronic Struggle (radio—elektronnaya borba), generally translated as radio electronic combat (REC), the Soviet is extremely aware of the capability afforded by modern technology. He subscribes completely to the ideas of FM 100-5 (that battles may be won or lost by the fight in this medium, that EW is now a form of combat power, that command, weapons and surveillance can be attacked and defended "in the struggle" and that direction finding (DF) and jamming can be very effective against an enemy unit). He would probably tie in the use of rockets and artillery as the result of DFing to neutralize enemy capabilities and could easily consider that the subject matter had been written by a Soviet.
The Soviet reader knows that the US has long championed the cause of tactical nuclear weapons and such weapons play an important role in the "forward defense" and "flexible response." His leaders do not accept the so-called "conventional-nuclear war," but he is expected to be able to be victorious in a nuclear, conventional or "conventional-nuclear" conflict. The reference to enhanced radiation weapons will probably make him see red (not necessarily the Communist variety). Articles in his daily military newspaper, such as the one on February 10, 1978, constantly condemn the projected new weapon and offer to reach an agreement on the ban of production of neutron weapons.31

**Mobility and Tempo**

The Soviet is used to emphasis on mobility and tempo of the offensive. He can certainly appreciate the capabilities of an "aerial antitank force," particularly in a fluid situation, and airmobility (air mobile units) seems to be an idea whose time has arrived or is arriving—even for the Soviet Ground Forces. Sea lift doesn't particularly ring a bell for him, but strategic mobility as evidenced by the air lift with his militarized civilian airline Aeroflot helping to bring his replacements twice yearly to the Groups of Forces in Eastern Europe makes him appreciate the problem confronting American planners who send replacements to Europe. Tempo in the offensive is a constantly played Soviet theme. Articles in 1977 issues of Military Herald with titles such as "A High Tempo of Attack--The Indispensable Condition for Victory" and "Maneuver--The Key to Victory" are typical of the plethora of writings which stress the speed of movement. The first article, by MR Division Commander Colonel
Lobachev, who commands the Taman Division near Moscow, points out that,

A high tempo is not a goal in itself, but a means of achieving victory in offensive combat. The speed of movement of the attackers denies the enemy the opportunity to freely maneuver with his forces and equipment, to utilize the reserve . . . and it neutralizes many of the strengths of the enemy defense. . . . The presence of the modern means of combat opens today wide possibilities for an increase in the tempo of the offensive. The struggle to keep up the tempo of the advance is equalled with maintaining the initiative. A high tempo of attack is senseless without reliable suppression of the firepower of the defender, above all of his antitank fire and without the ability of the combined arms commanders to properly utilize the results of nuclear strikes, the firepower of the attached and supported units, especially the artillery and air and also ATGM units (battalions, companies and platoons). . . . In directions (on axes) where nuclear weapons are used, the tempo of the advance can equal the cruising speed of the tanks and BMPs.32

The second article, by a Colonel Simchenkov, published two months later, refers to the earlier article and suggests that,

The tempo of the advance is directly dependent on the capability of the battalions and companies to operate under conditions of radioactive contamination. . . . A high tempo of attack is, especially in the depths of the defensive area, impossible without skillful envelopments and seizure of strong points by taking advantage of weakly defended road junctions, unoccupied areas and uncovered flanks.33

Tempo is to the Soviet reader a familiar and key word.
"The most demanding mission that could be assigned the US Army remains battle in Central Europe against the forces of the Warsaw Pact."

The Soviet reader is well aware that his forces must split their attention between NATO in the West and China in the East. This chapter, which concentrates on how to fight a conventional battle in Central Europe against the Warsaw Pact Forces, espouses a combined arms team fighting with maximum combat effectiveness. Most articles published in Soviet publications involving tactics still concentrate on a nuclear battle-field but caveat with expressions such as "if nuclear weapons are not used."

**Leadership**

The Soviets certainly agree on the need for competent leaders, brave soldiers, good discipline, and feelings of duty, pride, trust and obligation. That the leader must act intelligently is an article of faith, but the requirement for him to act "responsibly on his own" is going too far. Although the strength of the US Army may lie in the "decentralization of responsibility and authority to the commander on the ground," the Soviets tend toward centralization, and the regimental commander (by American standards) often ends up running the battalions and companies. There is little emphasis on flexible mission-type orders and the Soviet tactical system is characterized by a lack of flexibility. Skill is demanded and expected from leaders, but initiative and imagination are not really encouraged at levels lower than regiment. The Soviet reader is used to a demand for step-by-step fulfillment exactly according to the plan.
However, initiative is considered of great importance by the Soviets. They maintain that it is based on a thorough knowledge of military art and of the enemy's views on conducting combat operations, and an understanding of the senior commander's plans. It involves the skillful utilization of existing conditions and a readiness to take upon oneself the responsibility for making an independent decision.

The display of initiative is one of the most important conditions for successful operations. . . . Its importance in operations with the development of equipment and capabilities for armed combat is steadily growing . . . and it is especially essential when the orders/missions received no longer correspond to the situation and there is not time or possibility to receive new orders from the higher commander. . . . The dynamic character of present day operations, the frequent and radical changes in the situation, (and) the increasing possibility for the breakdown in communications especially increases the role of initiative by all commanders and chiefs. 34

Terrain

US manuals emphasize movement on covered or concealed routes for maximum protection. The Soviets try for surprise until the attack is launched, but attempt to cover the ground distance in the shortest possible time to overrun the enemy with superior forces and weapons. The Soviet reader does not expect his tank platoon to utilize the terrain for maximum protection; terrain is a tool used by higher level commanders to successfully execute the attack. The emphasis is on surprise and the time-distance race with superior numbers to overwhelm. Time, formation and suppressive fires are more important than individual use of terrain and firing accuracy. In a defensive operation the individual soldier is expected to use the terrain, and the Soviet
soldier in the Great Patriotic War achieved great acclaim for his ability to camouflage, dig in, use the terrain, and operate in the dark. The average Soviet soldier in the 1970s, however, no longer comes from the rural village and does not have the innate ability of the rural soldier to use the land and to become accustomed to the dark and the cold—as did his father of World War II fame. The soldier, who is the product of a cradle-to-grave togetherness, also has a tendency to bunch up and stay close to his comrades. Soviet articles are constantly calling for commanders to keep their personnel spread out to avoid bunching up. The Soviet reader might well wonder if his army was the only one with that problem.

**Battlefield Dynamics**

The rules that are outlined in the manual could be copied from Soviet publications. Concentrate adequate forces and weapons (the Soviet "norms"); control and direct the battle, use cover, concealment, suppression and combined arms; and use maximum capabilities of weapons. Only the emphasis on cover and concealment would be less for the Soviet—and the school of the soldier provides instruction on proper use, particularly in the defense.

**Generals, Colonels and Captains**

The Soviet reader will definitely have difficulty in understanding the thrust of this oversimplification. Many Soviet division commanders are colonels (for example, the colonel who was the author of the Military Herald article cited earlier) and it is normal for a colonel to be selected as a division commander and serve in that grade for six months or longer while proving that he can handle the job. The Soviet pay and allowances
system is also based on position pay (example: division commander), which can amount to more than half of the total pay and allowances, while the rank pay (example: colonel) may be only about half the amount of the position pay. Thus, the important criteria is position, not rank, and it is not uncommon to find a senior lieutenant, captain, major or lieutenant colonel as battalion commander. The Soviet reader would understand it much better if he read that "division and army commanders concentrate forces." The objective of never being outnumbered or out-gunned more than 3:1 at the point and time of decision, and of attacking with concentrations providing 6:1 superiority would sound logical to the Soviet.

As for colonels controlling and directing the battle, once again the important thing to the Soviet is the position rather than the rank. In any case, it is the regimental commander (who may well be a lieutenant colonel) who is going to do the directing and controlling—rather than the brigade and battalion commanders as in the US Army.

The statement that an attacker should seek combat power ratios (the Soviets call them "norms") of at least 6:1 at the point of decision or (the Soviets might say "and") supplement by firepower, surprise, deception or superior skill—is a Soviet maxim. The agreement is complete.

Building Blocks

Whereas the basic building block for the US Army, particularly in defensive warfare, is the cross-reinforced tank/mech battalion task force or tank/mech company team, the Soviets do not practice cross reinforcement. The Soviet combined arms teamwork is based on the regimental organization with, for example, companies of the MRR tank battalion being attached to or placed in support of each of the MR battalions
and the platoons (4 tanks each) being sometimes further attached to or placed in support of the rifle companies. (Note: With the four-tank platoon it is possible for the platoon leader to remain with or near the MR company commander and still have a single tank working with each of the three rifle platoons.) The tanks of the regimental tank battalion often remain on a single battalion net and control can be exercised by MR officers sending requests for tank support up the MR regimental net to the regimental CO, who then contacts his tank battalion commander, who in turn issues instructions to tank company and perhaps platoon commanders in support of MR units. Soviet combined arms operations are characterized by the co-location of principal commanders and a limited task organization which does not include cross attachment. The Soviet reader would find it hard to understand the cross attachment/reinforcement system which we feel provides us with great flexibility.

The Soviet reader will certainly not take issue with the guidance that the commander must be forward to see, feel and control the battle and that his deputy/executive officer must be informed and ready to take command. Only the terminology would be confusing to the Soviet reader who would expect his Chief of Staff (at battalion, regiment, division, army or front) to be the one to assume command (although his first deputy commander at army or front might also assume command at a later time).

Night Operations

Passive viewers and sights will soon enable the US Army to fight at night almost as in day. The Soviet reader would expect his Army to be able to do the same.
OPSEC

If US generals are expected to execute strategic deception and large scale feints, the Soviet reader feels that anything they can do, his generals can do better--particularly in the field of strategic and tactical surprise. The Soviets write and speak often of the Manchurian campaign at the end of the Great Patriotic War when they claim to have achieved both strategic and tactical surprise against the Japanese. This campaign, incidentally, is cited as a model for future operations.

If colonels and captains are supposed to be involved with communications security, the Soviet reader would agree with its importance. The Soviets stress communications security and limit the personnel transmitting by radio largely to officers. The large number of stations on a net (for example, every tank in a battalion of some 30-40 tanks) makes it essential that communications be closely controlled from the top down. An advanced or flank guard with its special mission would, of course, have a different SOP. In any case, operations security has a high priority which the Soviet reader would readily recognize.
OFFENSE, DEFENSE AND RETROGRADE (Chapters 4, 5, and 6)

The Soviet reader might well look at the next three chapters as a group (offense, defense, and retrograde operations). His text on Tactics (1966) has chapters on the meeting engagement, the attack/offense, and the defense (in that order). The 1972 text on the Motorized Rifle Battalion in Combat has only three chapters covering, in order, the march and meeting engagement, the offensive (which also contains a section on attack from march formations against a defending enemy), and the defense. The 1974 and 1976 texts on regimental and divisional tactics through combat examples have chapters on the attack/offense, the meeting engagement, and the defense (in that order). The 1977 text, Tank Strike, by Army General Radzievski, which deals with tank army operations, has chapters on preparation for offensive operations and execution of offensive operations (but no chapter on defense). Sections of the chapter on the execution of offensive operations deal with the meeting engagement, pursuit, river crossing, conduct of the defense in the course of offensive operations, etc. Thus, the Soviet reader is offense oriented and is primed for the meeting engagement.

He has been told repeatedly that Lenin recognized the attack to be the basic and decisive form of armed conflict and pointed out that only through resolute offensive actions is it possible to win victory and the war. Soviet military science considers "the offense as the basic form of combat actions, since only by a decisive offense conducted at high tempo and to a great depth is total defeat of the enemy achieved."
As he scans the purpose for the offense and the fundamentals of offense in FM 100-5, he feels he could well be reading from a Soviet text except that the method of expression is different in certain cases and there is no ideological slant. Certainly the fundamentals listed (concentrate overwhelming combat power; suppress enemy defensive fires; shock, overwhelm and destroy enemy; attack deep into the enemy rear; and provide continuous mobile support) can be found in Soviet texts. Only the "see the battlefield" fundamental might cause momentary confusion until he connected reconnaissance, intelligence (and perhaps radio-electronic capabilities) with the figurative as well as literal idea.

However, what he was probably expecting to find listed as "fundamentals" were the principles listed and expanded upon in his "operations manual."

Savkins' Principles of Operational Art and Tactics devotes a large part of its text to explaining what the Soviets consider to be the seven (or eight) basic principles: mobility and high tempos of combat operations, concentration of efforts (and the necessary superiority in men and weapons over the enemy at the decisive place and time), surprise, combat activeness (to seize the initiative through offensive action), preservation of combat effectiveness of friendly troops (particularly in a nuclear conflict), conformity of the goal of the operation to the conditions of the actual situation (a good estimate of the situation regarding capabilities, appreciation of time-space factors and the maintenance of a strong reserve), and interworking or coordination (combined arms units for combined arms operations). Savkin posited an
eight principle which apparently has not yet been officially accepted: the principle of simultaneous action upon the enemy to the entire depth of his deployment and upon objectives of the deep rear. He bases this principle on the "introduction of nuclear weapons and longer range means of warfare."

As to the admonition that one attacks outnumbered only if the eventual outcome promises higher enemy losses (than his own) or capture of a crucial objective, one does not find such prescribed limitations on offensive combat in Soviet publications.

Reading that in mounted offensive combat the basic element of the combined arms is the battalion task force, he is once again on strange ground. His basic element of combined arms is the regiment (with MR/ tanks, artillery (field and antiaircraft) and administrative, supply, political and rear service functions); the task force idea (cross attachment) is alien to him. He is in complete agreement with the further statements about the tank being the primary offensive weapon—a common meeting ground.

As he finds the offensive operations being broken down into some five categories, the Soviet reader is probably beginning to recall how the offensive is presented in Soviet publications. The movement to contact and the hasty attack are combined and called the meeting engagement. However, he would not agree that in the movement to contact one should "move so as to meet the enemy with the least force possible, thus avoiding excessive casualties in the first moments of battle." He would also not understand the emphasis on having the task forces and teams move from "one covered position to another," although he would be
reassured by reading that the attacker "moves aggressively toward the enemy." The deliberate attack he would certain equate with his own breakthrough operation, but he would not consider the exploitation as warranting equal consideration with the deliberate attack (probably since to him part of the successful deliberate attack is a form of exploitation). He recognizes pursuit as requiring distinct and separate tactics, parallel pursuit and frontal pursuit.

Reading the purposes of the defense, he agrees that they are academically valid if you are forced into the defense. However, his own military doctrine has stressed that it can be only a temporary condition. He probably has to chuckle when he reads that the "defender has every advantage except initiative," since one of his basic principles of operational art teaches that the initiative is of overwhelming importance. He does agree, however, with the expressed thought that the "attack is a vital part of all defensive operations."

As to organizing for the defense, the Soviet reader would understand the covering force area which they used to call security lines (polosa obespecheniya); the main battle area which they subdivided into forward positions, 1st positions, 2nd positions, main line of defense, third positions—and then further back a second line of defense; and the rear area. It is interesting that in Reznichenko's Tactics (1966) they show the US schematic defensive organization ("according to US Army views 1954–1964") on what appears to be a division level as the last in a series of schematics portraying the development of defensive lines and positions (most of which are Soviet) and by implication infer that the US defense is the most advanced. They often point to the multiple lines
of defense which they established at Kursk to blunt the German attack as an example of how to conduct an effective defense. They do not consider their main battle area to be an "elastic" defense as is ours, but it is based on a series of strong points.

On coming to the chapter on retrograde, the Soviet reader would have to pause and think. There is generally a single Russian word used for retrograde, withdrawal and retirement (otkhod). Delay is not considered as a separate form of action. Little emphasis is placed on retrograde in the Soviet Army. The book Tactics has its shortest chapter on the subject (5½ pages). The Motorized Rifle Battalion in Battle does not even discuss the subject; neither does Colonel Savkin's book on operational art.

Thinking back to a chapter in The Offensive entitled "Defeat of a Defending Enemy and Exploitation of Success" and another section in the same book entitled "The Possible Character of Modern Defense of the Troops of the NATO Countries," he reads with great interest in FM 100-5 (chapter 4) the references to his own army and the expected form of offensive operations. Thus, he learns that "the Soviet army attacks in very narrow fronts in great depth with artillery massed at 70-100 tubes per kilometer in the breakthrough sector." Also that there can be 600 tanks in the leading echelon and as many more behind. Already in Chapter 3 (3-6) and glancing ahead to Chapter 7 (7-13) he finds identical references to Soviet doctrine describing concentration of forces up to six divisions echeloned in depth on a 10-12 kilometer front (breakthrough). An example given has three successive echelons of two divisions each and some 20-25 battalions and 600 tanks in the first echelons. The US
division is expected to concentrate 6–8 battalions in a narrow sector to block the advance and to accept risks on the flanks.

Now this is nothing new to the Soviet reader who is certainly familiar with his own breakthrough operations. However, he has two baskets in which to put his offensive eggs (the offensive operation involving the breakthrough as developed to a high degree during the Great Patriotic War) and the meeting engagement (which involves an attack from the march and a hasty attack). Judging by the coverage of both offensive variants in magazines and books over the past decade, it is obvious that considerable thought has been and is being given to both. One could also make a case for the conclusion that the trend is from the breakthrough to the meeting engagement—or that the meeting engagement would be used or considered first if conditions gave any reasonable chance for success. The Soviet reader on sitting back and thinking for a moment might wonder if FM 100–5 didn't place too much emphasis on defense against the breakthrough—to the exclusion of consideration regarding what could well be a much more likely threat, the meeting engagement. He also might wonder if there were not an overemphasis on the Soviet second echelon, since there may be only one echelon at various levels and a smaller combined arms reserve may be more useful in the 1970s, particularly if used in conjunction with the meeting engagement.

Meeting Engagement

To refresh his memory on what the latest party and MOD line is regarding variants of offensive warfare and combat formations, he picks up the newly published Soviet Military Encyclopedia, edited by among
others, Marshal Ogarkov, Chief of Staff of the Armed Forces; Admiral Gorshkov, CINC of the Navy; Air Marshal Kutakhov, CINC of the Air Forces; Army General Pavlovski, CINC of the Ground Forces; Army General Yepishev, Chief of the Main Political Administration; Army General Shavrov, Commandant of the Military Academy of the General Staff (somewhat similar to our War College) who is responsible for agreed and published strategy and operational art; and Professor Zemskov, a noted strategist and writer. He then proceeds to look for meeting engagement and combat formations, to see if there is any late guidance. 37 Alphabetically he first comes to meeting engagement (vstrechnoye srazheniye) at operational level involving fronts and armies. The article fills almost two complete pages and aside from reminding him that the first meeting engagement was carried out successfully by the Russian General Suvorov fighting against the Napoleonic forces in Italy in 1799 at the battle of the Trebbia River, he learns that the meeting engagement (at army or front level) can be used at the beginning of a war; is characterized by fierce struggle to seize and hold the initiative; that the battle is usually developed from march column; that it is developed by forward elements who facilitate the entrance into combat of main force elements under favorable circumstances; that an excellent example in the Great Patriotic War was the meeting engagement at Prokhorovka on 12 July 1943 (during the Kursk Campaign when the 5th Guards Tank Army and the 5th Guards Army met elements of a German panzer army head on); that if the meeting engagement is unsuccessful it is recommended that a deliberate attack be launched to destroy the enemy and start the pursuit; and that the success of the meeting engagement is dependent on the initiative of
commanders at all levels, the persistence, and the decisiveness in carrying out the decision. The article was written by one N. I. Kratinsky.

The next article alphabetically is also on the meeting engagement (vstrechniy boy) at tactical level. This article is slightly shorter (a little over one page) with a sketch showing an MR battalion reinforced by a tank company and supported by an artillery battery. It covers some of the same historical information as found in the previous article, but also comments on the post war mobility which makes the meeting engagement increasingly feasible, the development of combat over a wide front, a confused situation, sudden changes in the situation, and the limited time to organize forces for the operation. It advocates bringing heavy suppressive fire on the enemy, hitting him quickly with major forces, and striking the enemy on the flank and in the rear with the aim of defeating him in a short period of time. The most important criteria to ensure success are continuous and deep reconnaissance, a timely decision and a quick issuance of orders to the troops. The decision is made based on the map and verified on the ground. It advocates the quick exploitation of the results of nuclear weapons (if they are used) and fire of conventional weapons with tanks and BMPs/BTRs being used for the main attack. The article goes on to cover the opportunities for aviation to strike the enemy columns moving forward through road junctions, valleys, defiles and river crossings. The main attack is strengthened by battalions and regiments from the second echelon and the reserve. The article ends by pointing out that the meeting engagement calls for the utmost in "moral and physical strength,
good training, bravery, initiative and decisiveness." The article is written by A. A. Sidorenko, and the name does ring a bell.

Colonel A. A. Sidorenko, Doctor of Military Science, is a member of the faculty at Frunze Military Academy, one of the institutions responsible for the determination and elaboration of tactics based on the new strategy and doctrine. Sidorenko's work as an official spokesman for Soviet military thought has spanned more than a decade. In 1966 he was a member of the author collective from Frunze Military Academy which wrote and edited Tactics, one of the first and basic books of the "Officers' Library" series; in 1967 he wrote an article in Red Star on "Meeting Engagements"; in 1970 his definitive work on The Offensive was published; in 1973 he wrote an article on ground force armaments in the Military History Journal; and in a 1977 volume of the Soviet Military Encyclopedia published by the Ministry of Defense and the Institute of Military History, there was this article written by the same A. A. Sidorenko. So let's look at what he writes about the meeting engagement and also about the second echelon in his book, The Offensive, which was published to "facilitate the broadening of the officers' tactical horizon."

Quotes from Sidorenko's The Offensive (Nastupleniye)

As he turns the pages looking for references on meeting engagements, these are some of the words which catch his eye: 39

In the chapter on "Combat Missions and Formations of Troops," Sidorenko counsels that,

The combat formation must ensure swift use of results of nuclear strikes and destruction by fire of the enemy so that he has no time to
collect himself, execute a maneuver, close the breaches, restore his system of fire and control, and conduct other measures to eliminate the aftereffects of nuclear strikes and the effects of fire. This requirement can be met by assigning tank podrazdeleniya (i.e., tank battalions) to the first echelon on the main axis, by operations of motorized rifle podrazdeleniya (battalions and companies) on armored combat vehicles on axes of nuclear strikes, and by the wide employment of airborne landings. . . . For fullest use of results of nuclear strikes, the podrazdeleniya (battalions) on each axis must be given a certain degree of tactical independence so that they can overcome the resistance of the surviving enemy, areas of destruction, centers of fire and other obstacles on the battlefield, and also cross zones of radioactive contamination and eliminate the aftereffects of enemy nuclear strikes with a minimum radiation of personnel.

There is no doubt that the Soviets are looking very carefully at NATO defensive capabilities and tactics. In fact, one of the major subparagraphs in the chapter on "The Nature of the Offensive Under Conditions Where Nuclear Weapons are Employed" in Sidorenko's The Offensive is entitled "The Possible Character of Modern Defense of the Troops of NATO Countries." This author suggests that the same relative freedom of action, increased initiative at lower levels, and fast tempo operation which is posited here is compatible with the meeting engagements in Central Europe as the Soviets see them. They would be advantageous both in a situation where the enemy was not yet present in force in strongly organized defense positions or where there was a reasonable possibility of the conflict suddenly turning nuclear with the penalty for concentration of forces which could be decimated by a nuclear strike.
The combat formation is echeloned deeper on the main axis and in places where strong enemy resistance is expected. It is less deeply deployed on secondary axes and in anticipation of weak enemy resistance. With commitment of the second echelon or reserves, measures are taken for immediate restoration of the combat formation.

The composition and forms of deployment of modern combat formations of troops in offensive combat are the result of prolonged historical development. During the Great Patriotic War soyedineniya (generally a division—or corps) and chasti (generally regiments) formed a combat formation of one, two, and sometimes even three echelons depending on the situation. Podrazdeleniya (generally battalions) formed a combat formation in one or two echelons. Single echelon deployment was employed primarily in attacking a defense which was poorly developed in depth, or on a secondary axis where the attacking soyedineniya (divisions) or chasti (regiments) were given a wider zone. Here the single echelon deployment of troops of one level was usually compensated by a deeper deployment of the combat formation of another level. (Perhaps in the 1970s a second echelon army or front since with modern transportation movement is much faster?) Experience of the war showed that the single echelon deployment of divisions facilitated best organization of coordination with attached and supporting means of reinforcement, eased the rapid commitment of podrazdeleniya (battalions) of second and succeeding echelons of regiments and made control more stable. (And control is the name of the game.)

He continues by pointing out that the division commander had no means for exploiting success "... and as a result the attack took place at a slow tempo." (Hopefully the new equipment and condition of enemy defenses might change that.) He further lists some of the advantages of a one-echelon deployment (albeit at battalion level) as being maximum use in combat of the fire of small arms, increased force of the initial blow, eased control, and a reduction in infantry losses from enemy artillery, mortar and aircraft fire (wouldn't this also
apply to a possible nuclear situation where there is an advantage to "hugging" the enemy?). He analyses contemporary conditions by advocating varying combat formations depending on the combat mission, availability of men and materiel, nature of the enemy defense, and terrain conditions. He did state that the battalion level attack would most likely be carried out in two echelons (when he wrote the book in 1970).

The first echelon is the most important element (of the combat formation). . . it must be capable of delivering a powerful and deep initial attack, exploit swiftly the results of nuclear strikes, and complete the defeat of the first echelon of the opposing enemy with a continuous attack against the depth of his disposition, or accomplish his defeat independently if nuclear weapons are not employed.

(Notice the caveat on the use of nuclear weapons.)

Employment of nuclear weapons against an enemy defense permits allocating not only motorized rifle troops to the first echelon, as was usually done previously, but tank troops as well. Tank podrazdeleniya (battalions) possess high maneuverability, great firepower and attacking force, and lower vulnerability to enemy nuclear attacks than other combat arms. They are capable of quickly exploiting results of friendly nuclear strikes, attacking at high rates, and penetrating to a great depth while operating a considerable distance from the remaining forces. They are more adapted to delivery of swift, bold and crushing attacks. Presence of tanks in the first echelon permits shifting combat operations to the depth in a short time and, under favorable conditions, achieving the ultimate goal of the attack without commitment of the second echelon or the reserve. Therefore the question of use of tank units in the first echelon is resolved each time depending on the degree the enemy has been hurt by nuclear and conventional weapons, the nature of the enemy's defense (is he ready and in position?), the combat
composition of friendly forces, the assigned mission (could we read the depth of the final objective?), terrain conditions, and other data on the situation.

The distinction of the second echelon from the reserve was that it (second echelon) was created ahead of time with a precisely defined mission—to intensify the force of attack of troops of the first echelon from a specific position and exploit success in depth. The immobility of defensive positions of the enemy permitted assigning a combat mission ahead of time to troops not only of the first echelon, but of the second echelon as well, and not improvising it in the course of combat operations as was the case in the presence of a reserve. The combat mission was assigned to troops of the second echelon at the same time as assignment of missions to troops of the first echelon. Under contemporary conditions the second echelon has not lost its significance. It is especially needed when podrazdeleniya (battalions) conduct combat operations without the employment of nuclear weapons.

The reserve is usually created when deploying the combat formation in one echelon. It is designed primarily to accomplish missions which arise unexpectedly.

Sidorenko speaks of "the necessity of intensifying troop efforts by the maneuver of fresh forces or reserves, or by the maneuver of battalion-size units from secondary axes to the main axes. (A flexibility that transportation and communications denied the Soviets in WW II.)

... a build-up of efforts of the first echelon must be accomplished before the rates of its attack drop, i.e., before its offensive capabilities are exhausted. The commitment of fresh forces after an advance of attacking podrazdeleniya (battalions) has slowed down or completely halted what would occur under unfavorable conditions. Such a situation will indicate loss of initiative and an unfavorable ratio of forces in the given sector.
In contemporary warfare the battalion reserve may be committed according to different variations.

It is most advantageous to commit the reserve into the intervals between the first echelon units or from behind their flanks. It precludes mixing with the first echelon and overcrowding a combat formation.

The commitment of fresh forces from the depth by leapfrogging over the first echelon was recognized to be extremely disadvantageous in the past war.

The direction of commitment of the reserve usually is chosen where the attack is being developed most successfully and where the direction can lead to a decisive turning point.

Commitment of the reserve must be supported by the massed fire of all available means of destruction.

Enemy resistance must be broken by fire.

Now, however, the presence of combat vehicles with high cross country ability permits broad execution of maneuver on the battlefield not only by reserves and second echelon but also by first echelon podrazdeleniya (battalions and companies).

For this reason it is necessary to employ more boldly the maneuver and regrouping of the podrazdeleniya of the first echelon and retarget them opportunely onto those axes where greatest success may be achieved.

Contemporary reserves are highly mobile.

The presence in ground forces of bourgeois armies of a large number of tanks, APCs, other armored combat vehicles, self-propelled artillery, ATGM, and also high-capacity engineer equipment permits creation of a firm, stable defense in the shortest possible time. Therefore winning time has very great significance for successfully overcoming such a defense.

At the present time the attacker possesses real possibilities for reliably suppressing the enemy to a great depth (with his air, missiles and artillery) and for conducting the attack at high rates, which permits taking intermediate defensive positions primarily from the march. This method to the fullest extent meets the character of a contemporary attack. Its employment ensures surprise in the attack, deprives the enemy of the opportunity to improve his defense, and often even to take up a defense, and permits the attacker to avoid a dangerous accumulation of men and weapons.
in front of the defensive position, to take it with least expenditure of efforts, and, most important, to maintain a high tempo and continuity of the attack. . . . Attacking units (battalions and companies) approach the defensive position in a dispersed manner along a broad front in march, approach march, and sometimes even combat formations, depending on the degree of enemy resistance. In all cases it is considered desirable . . . that tanks be at the head of the unit columns.

(From chapter on "Defeat of a Defending Enemy and Exploitation of Success.")

. . . it is advisable to take the intermediate defensive position across a wide front along axes primarily passing through areas of nuclear strikes, intervals and gaps in the enemy's deployment, and also areas weakly occupied by enemy troops. The absence of a solid front and the enemy's hasty shift to the defense create favorable conditions for a rapid breakthrough by attacking troops along axes, the wide employment of deep and close envelopment, and the rapid completion of the defeat of the defending units and overcoming of the defense at a high tempo. . . . A brief preparatory fire in the form of one or more concentrations may be conducted on those axes where nuclear weapons were not employed or where the enemy was insufficiently neutralized as the units approach the defensive position. . . . The reserve is usually created when deploying the combat formation in one echelon. It is designed primarily to accomplish missions which arise unexpectedly in the course of an attack such as repulse of counterattacks, combat against enemy airborne landings, replacement of weakened first echelon units, reinforcement of attacking units, etc. But it can also be used to perform missions assigned to second echelon, primarily to intensify efforts and exploit success. The combat mission is assigned to the reserve as it is committed. Before this it is only given an area of disposition, direction of movement, and a time for general readiness for action on specific threatened axes. As it is committed, the reserve may be reinforced by artillery and other means.

Tank and motorized rifle units (battalions) can operate in the approach march formation not only on axes of nuclear strikes, but also in all other cases where enemy organized resistance is broken and the need for a combat formation disappears.
In his chapter on "Defeat of a Defending Enemy and Exploitation of Success," he writes that,

The line of deployment of the battalion into an approach march formation usually is recommended to be designated at such a distance from the enemy so as to be outside the range of fire of enemy ATGMs, guns, and tanks which are firing by direct laying as well as outside the range of mortars. . . . This can be on the average within the limits of 3-4 kilometers from the enemy forward edge of defense. . . . For tank units the line of attack is chosen approximately 1-2 km from the forward edge of the enemy's defense, and for MR units it is chosen based on the selected method of attack. . . . It is advantageous to have tanks at the head of columns so that MR units deploy under their cover and so that a strong initial blow against the enemy is ensured.

A halt of attacking troops even for a short time involves the risk of being subjected to enemy nuclear strikes. In addition, this would provide the defender an opportunity to execute a maneuver of reserves and set up a defense capable of halting the attack or of considerably slowing its tempo.

. . . on approaching the defensive position . . . it is well to move the artillery at the head of the podrazdeleniya (tank and MR battalion) columns. . . . The attack on the enemy is conducted from the march right after nuclear and fire strikes. The podrazdeleniya move into the attack independently on each axis as they approach the enemy position. With their move into the attack, the units destroy the enemy defending on the forward edge, wedge boldly between his strong points and centers of resistance, deliver strikes against his flank and rear and, without delaying, develop the attack forcefully into the depth. . . . In order to maintain a high tempo of attack, the podrazdeleniya operating on axes where the enemy has been reliably neutralized by nuclear weapons, and also everywhere the situation permits, advance in approach march formations. They deploy into combat formations only with organized resistance. As a rule, surviving centers of enemy resistance are bypassed. It is not advisable to divert first echelon units for the destruction of these centers . . . it is also possible to
have meeting engagements with enemy reserves moving up for counterattacks or to occupy a new position.

... the presence of nuclear weapons in the hands of withdrawing troops gives them an opportunity to actively counter the pursuit, inflict heavy losses on the attacker, set up zones of contamination and destruction, sharply lower the rates of attack of the pursuing troops, and even disrupt the pursuit. Under these conditions success will be on the side of the one who is able to employ nuclear weapons more skillfully and overcome the obstacles created by the 'enemy'... As the experience of past wars shows, the greatest results in the pursuit are achieved when it is conducted by the main forces along routes parallel to the enemy withdrawal (parallel pursuit), in combination with pursuit by a part of the forces from the front (frontal pursuit)... Under contemporary conditions... for conduct of a parallel pursuit primarily tank units are assigned since the combat capabilities of the tanks permit them to advance swiftly, execute a maneuver, and suppress or bypass an enemy who is offering resistance in the depth of his defense... Units which have lost contact with the enemy may become a profitable target for his nuclear strikes.

In his conclusion he cites the goal of the attack as being "total defeat of the enemy in short periods of time and the seizure of important areas." This is to be achieved,

... by the destruction of the main enemy groupings and his means of mass destruction (nuclear launchers and warheads)... the swift attack of tank and motorized rifle troops to a great depth in coordination with aviation and airborne landings, and by their bold movements to the flanks and rear of the enemy... The sharp increase in troop combat capabilities has led to an increase in the depth of combat missions and attack frontage of units. The grouping of men and weapons in the attack has changed substantially (perhaps lesser emphasis on second echelon, using a smaller but more capable and flexible reserve)... Units have received the opportunity to make wide use
not only of combat, but also approach march and march formations in the course of an attack. Troops attacking in a different way will overcome the enemy's defense, not by "gnawing through" on narrow sectors and a solid front, as was the case in past wars, but simultaneously across a broad front, along axes, from the march, at high tempos, right after nuclear strikes (can we substitute surprise for nuclear strikes?), taking advantage of breaches, intervals and gaps in the enemy's combat deployment, and by wide employment of maneuver.

Leaving the words of "The Meeting Engagement" and The Offensive behind, the Soviet reader checks one additional source, the Great Soviet Encyclopedia (Bolshaya Sovetskaya Entsiklopedia). The listing informs him that the meeting engagement,

... is characterized by changing and confused situation, fluidity of combat action, lack of time for organization, engagement from march column, presence of exposed flanks, and freedom to maneuver.

It can also involve,

... anticipatory fire strikes at the enemy, use of advanced detachments and airborne troops, speedy commitment of the main forces to combat, and strikes by the main force at the flanks and rear of the principal enemy grouping in order to split it up and rout it in a short time. ... A meeting engagement (vstrechnoye srazheniye) may also grow into an encounter battle (large scale) (vstrechnoye srazheniye).

More on the Meeting Engagement (at Army, Division, Regimental and Battalion Level)

Army

By the third and final period of the war offensive operations at front (army group) level had the goal of

the destruction of 16-18 enemy divisions, the development of an offensive extending to a depth of 150-300 km in the enemy rear, and the seizure of important regions, objectives and lines ...
the possibility was revealed under certain conditions for the use of tank armies in the first echelon of the front in an offensive operation... in some cases tank armies advanced in the front's first echelon... in those cases where tank armies were in the first echelons of a front, they operated on a frontage of 20 km... on breaking through the exploitation was conducted on a frontage of 20-60 km... meeting engagements involving tank armies in wartime developed on the main axis at the start of the operation, in the course of its development, (and) in the final and concluding phase... even if not used for breakthrough or against the initial enemy defensive positions, the tank army was used to smash strategic reserves. This was usually done by a meeting engagement. After a breakthrough, to it (the tank army) belonged the leading role in the defeat of approaching enemy reserves and the repulsing of their counterattacks—which most often were accomplished by means of meeting engagements... meeting engagements involving tank armies in the course of offensive operations developed on frontages of from 20 to 60 km and lasted 1-3 days and sometimes longer... the success of tank army operations was greatly enhanced by the achievement of a surprise tank strike. This caught the enemy unaware, paralyzed his will, sharply lowered his combat capability, disorganized his control, and created favorable conditions for his defeat... In seven meeting engagements involving tank armies, the enemy was routed in two, he suffered heavy losses and reverted to the defensive in three others, and in two the Soviets had to go on the defensive... the duration of these seven meeting engagements ranged from 1-5 days... they developed over a depth of 20-345 km. 40

The Soviets consider the Manchurian Campaign in 1945 to be a prime example of what a tank army can do if it achieves strategic and tactical surprise.

In the Manchurian campaign the 6th Guards Tank Army advanced on a frontage of some 200 km with spearheads on frontages of up to 100 km... the 6 GTA in Manchuria was in the first echelon of the front... the tank army was usually committed on the afternoon of the first day or the morning of the second day (of the offensive) when the leading units had driven a wedge 4-6 km in the enemy defense... the 6 GTA in the Manchurian campaign achieved the amazing rate of 180 km/day. 41
Meeting engagements involving tank armies were characterized by:
dynamism, maneuver, the decisiveness of combat operations, the presence of open flanks and considerable intervals (between units), and by frequent wedges (into each other's positions) by combat spearheads... one of the peculiarities of meeting engagements involving tank armies was that they were conducted regardless of the season or time of year.

Examples of meeting engagements at night and in snowstorms were given. In most of the meeting engagements the number of tanks and SPs on both sides was in excess of 500 with up to 1500 supporting mortars and artillery pieces. The deployment for combat was carried out in a "limited period of 3-24 hours in a complex and tense situation."

The depth of operations involving tank armies grew steadily during the war and this capability has been enhanced by increased capabilities for extended mobility, maneuver and communications. In 1944 the six Soviet tank armies "were operating over considerable distances before having to stop for resupply and reorganization." These distances ranged from 250-400 km in 1944; in 1945 the 1 GTA advanced 600 km, the 2 GTA some 700, and the 6 GTA (in Manchuria) over 800 before making a major halt. The pattern of the 1 GTA was given as 20 days of combat followed by 16 days of preparation for the ensuing 30 days of combat; this was followed in turn by 19 days of preparation for the next combat phase. The Soviets expect to do better now.

The experience in meeting engagements showed that the basic conditions for successful defeat of the enemy were:
timely receipt of information on the enemy, speed in making the decision and notifying the units, preventing the enemy from executing air strikes, opening artillery fire, planning and executing tank attacks on the flanks and in the rear of the principal enemy units, and the swiftness and decisiveness of unit action.
All this was tied to the development of "decisive superiority over the enemy in forces and equipment on the axes of attack and above all on the main axis." Tank units were generally reinforced by artillery (field and antiaircraft), engineers, and aviation.

Key decisions in conjunction with the meeting engagement included determination of the area of the probable meeting engagement, organization and conduct of an active, deep and continuous reconnaissance, the creation of the appropriate forces and equipment, protection of one's forces from enemy air strikes, and the implementation of necessary measures for rear support (CSS).42

"A large role in the successful conduct of meeting engagements was played by aviation. For support of the tank armies, significant forces from the air army were concentrated." The average sorties per day in support of three meeting engagements involving tank armies were 114, 692, and 850; total sorties for the entire meeting engagement varied from 630 to 2280. "These sorties included attacks on the approaching enemy reserves and protection of the front line and rear area troops and supply units from enemy air attacks."

In addition to aviation, the success of meeting engagements "often was dependent on the rapid and skillful maneuver of troops and equipment from one axis to another."

**Division**

Similar emphasis is placed on the meeting engagement at division level. In one new book on division tactics, 34 of the 294 pages are dedicated to the meeting engagement. The book outlines the principles and characteristics, provides a number of combat examples to illustrate them, and then reviews the teaching points and principles.
Some typical quotations include:

The more maneuver oriented and rapid the combat operations became, the more often meeting engagements occurred . . . thus, combat experience demonstrated that success in executing a march with the expectation of a meeting engagement depends on how carefully it is organized . . . An analysis of meeting engagements shows that success in many cases depended on the effectiveness of the reconnaissance, the actions of the security detachments and forward detachments (advanced guard) . . . As experience shows the best results were obtained by the rapid execution of attacks on the flank and in the rear of the enemy . . . Combat experience teaches that successful conduct of a meeting engagement is inconceivable without a well organized command and control of units. As in no other form of combat, there is a requirement in the meeting engagement for commanders at all levels to display skill, initiative and resourcefulness. 43

Regiment

The book on regimental tactics devoted an even greater proportion to the meeting engagement—51 of the 283 pages. The reader learns that "an analysis of experience in meeting engagements showed that the combat formation of the regiment depended on the combat mission of the regiment and the concept of the commander for the meeting engagement."

It is also pointed out that the experience of the Great Patriotic War was an important step in the "development of the methods of organization and conduct of the meeting engagement." This, according to the Soviets, helps to determine the best way to resolve "the problems of today's meeting engagement." Under current conditions the Soviets expect the commander to have information on the strength and equipment of the enemy long before the engagement takes place and thus be able to make his decision based on a realistic appraisal based on accurate
calculations. The introduction of new technology is also considered, as are tendencies toward increased speed, sharply changing situations, limited time to organize for the engagement, increase in maneuver capabilities, etc. "Under present day conditions" the regiment is encouraged to have its battalions in a meeting engagement "attack or envelop one or both of the enemy's flanks."

At battalion level the emphasis on the meeting engagement continues: "The meeting engagement, especially for tank subunits (battalions and companies) is the most common form of combat action." and further "The immediate task of the tank battalion in this case (a meeting engagement) is usually to defeat the opposing enemy and seize the terrain facilitating favorable conditions for subsequent actions." The chapter on the meeting engagement also points out that emphasis is placed upon time (speed) as the most significant determining factor in the meeting engagement.

Thus, the meeting engagement involves units from battalion to army; and the Soviets emphasize that present day conditions make this form of combat even more likely and more decisive than it was in World War II.

Second Echelon and Reserve

According to the definitions of "second echelon" (as found in the Dictionary of Basic Military Terms published in 1965 for the "Officers' Library" series and the Explanatory Dictionary of Military Terms published a year later) the second echelon is composed of units of combat troops not taking active part in combat operations at the given moment and designated to increase the striking power of the offensive, add strength to the defense, or to replace first echelon units which have suffered heavy losses. It has the same mission as the first echelon and usually knows its mission well in advance. The "reserve" on the other hand is a unit, now almost
always combined arms, which can be used to exploit success, destroy surviving enemy formations, repel counterattacks, lead counterattacks against the enemy, break through into the enemy rear, and replace units which have lost their combat effectiveness. In general, the reserve is smaller than second echelon forces, and is much more flexible and responsive in its employment.

The commander determines the composition and mission of the second echelon. The mission is given during the preparatory phase of the operations and at the same time as the mission for the first echelon; it can be modified as the second echelon prepares to enter combat. In WW II Soviet second echelon forces were generally a battalion of each regiment, a regiment of each division, a division or two of each army, and an army of each front.45

Soviet battle formations and use of echelons change according to the conditions expected or met. For example, "in 1942, when the enemy (Germans) had not yet taken up a deeply echeloned defense, an order was given (Order No. 306) for a single echelon formation at all levels--from motorized rifle platoon to motorized rifle division."46 Thus, in 1942 the battle formations of the company, battalion, regiment and divisions were usually first echelon formations. In 1943 they changed to two echelons as a reaction to the deep trench defense by the German Army. This increased the depth of the battle formation of the larger units.47

This idea would appear to be reinforced by an entry in the new Soviet Military Encyclopedia under the heading of "combat formation" which reads in part as follows:
After the 2nd World War the introduction into the forces of new means of warfare—nuclear weapons, missiles, BMPs, ATGMs, military helicopters, a significant increase in the number of tanks, (and) an improvement in the capability of conventional materiel—led to the further development of combat formations. In them there appeared some new elements and several older elements underwent a qualitative change. The combat formation began to include first echelon, second echelon or a combined arms reserve, missile rocket units, artillery, air defense units, specialized reserves (antitank, engineer, etc).

At a lower level, in the *Motorized Rifle Battalion in Battle* one reads:

> A strong initial blow is, as we know, one of the important requisites for achieving success once a meeting engagement has begun. This can be achieved if the battalion combat formation is grouped in one echelon... but the battalion will not always be able to organize its combat formation in this manner. When waiting for the approach and deployment of a third company can lead to the loss of initiative, two companies of the MR battalion join battle immediately, while the third comprises the reserve.  

Likewise, regarding the tank battalion, one can read: "The combat formation of the tank battalion in the meeting engagement is usually in one echelon with a designated reserve (one or two tank platoons)."

"Deep Operations"

Like the meeting engagement, the theory and practice of "deep operations" (glubokaya operatsia) is said to have been of Soviet/Russian origin. According to the Soviets it was a form of military operations..."
conducted at army or front level (or sometimes divisional or regimental) which was "worked out by Soviet military science in the 1930s," and based on theories of Marshal Tukhachevsky. "Deep Operations" involve long range artillery, tanks, combat vehicles, aviation, and airborne units. The Soviets credit much of their success in World War II to "deep operations." It certainly helped them to "think big." Thus, army level offensive operations extended to 100-180 km in depth and the operations of a front (like GSFG?) reached for some 400-600 km. By these criteria (400-600 km), a front on the West German border could be expected to conduct "deep operations," at least as far as the French border (less than 600 km away). If you get there "the fustest with the mositest," a Soviet might think maybe your adversary won't get there at all, maybe he'll decide not to fight, and if he does decide to fight you have an advantage which you may be able to maintain by bringing up additional forces.

In the postwar period the increase in mobility, firepower, and shock action has made it possible to break through the enemy defense at an increased tempo. According to the new Soviet Military Encyclopedia the term "deep operation" has not been used in official documents since the 1960s, but "the general principles of this theory have not lost their meaning/value even at this time." The article was written by one N. V. Ogarkov.

The Importance of World War II Combat to the Soviets

In the 1970s the Soviets still write at great length and in great detail regarding the lessons learned in the Great Patriotic War, to include the Manchurian Campaign at the end of the war. They consider that much of the experience and many, if not most, of the conclusions are still valid. There is, of course, always the danger of preparing
for the last war rather than the next one; and the Soviets attempt to
caveat the WW II experience in light of the changes in weapons, tech-
ology, and mobility since the 1940s. However, the tactics and principles
outlined in the three new manuals/books and underscored in the new Soviet
Military Encyclopedia are those which the Soviets feel have stood the test
of time.51

As Army General Radziyevski wrote in his 1977 book on tank army
offensive operations,

... the wide use of tank armies ... significantly
changed the character of offensive operations. ... They increased the decisive character, increased the
depth and rate of advance (of operations), shortened
the duration (of operations), and combat operations
greatly increased in maneuverability and dynamics. ... Present day offensive operations will also be charac-
terized by decisiveness of objectives, broad scope,
maneuver, and the dynamic character. ... It is for
this reason that the study of the experience of the
combat operations of the tank armies during the years
of the Great Patriotic War have so much importance
today. ... The combat experience ... in many
respects has not lost its significance even under
present day conditions. ... Their study, creative
mastery and use - is one of the important tasks of
Soviet military science.52

The reader is also cautioned,

Although since the end of the Great Patriotic War over
thirty years have passed, its thorough study can pro-
vide much that is useful for the broadening of the
operational-tactical horizons of our commanders. One
should, however, examine the experience through the
prism of new conditions, new equipment, new forms and
methods of combat action and thus enrich his military
outlook.53

The former defense minister, Marshal Grechko, was no less certain
of the value of World War II experience, writing that The Great Patriotic
War subjected Soviet military theory and practice to a merciless test
and convincingly proved that "Soviet science and art as military science
and military art of the Socialist social system have indisputable advantages over the military theory and military art of the obsolescent capitalist world."\(^{54}\)

The 1976 book on *Tactics Through Combat Examples--Division* underscores the great value of the Soviet combat operations "for the training and education of our forces and for the further development of tactics... The process of perfection of tactics will develop further with due regard for the experience of the past war." However, it duly warns the reader that he "should not draw direct parallels between the examples of combat actions involving tank and mechanized corps during the Great Patriotic War and the tactical operations of present day combined arms divisions."\(^{55}\)

The first, apparently, in the new series of green and white tactics manuals/books appeared in 1974. One of the members of the author collective which wrote the book was V. G. Reznichenko, who as a Major General in 1966 served as chief editor of the original work on tactics; another was G. E. Garbuz, one of the authors of the 1972 work on tactics for the motorized rifle battalion (as was also D. F. Loza). The foreword to this volume points out that "the generals and officers forming the author collective for the work were active participants in the Great Patriotic War and also mentions the fact that "the greater part of the officer corps of our army... does not have combat experience." The book on regimental tactics "is intended for a large number of readers--the commanders and political workers of the various arms and services, students at military educational institutions, officers in the reserve..."\(^{56}\)
The reader learns that,

The past war was a most important stage in the development of Soviet military art in general, and tactics for combined arms operations in particular. . . . More than a quarter of a century has passed since the Great Patriotic War ended. Much has changed during this period in military affairs. . . . There have been great changes in the form and methods of military operations. However, the experience of the war has not lost its meaning, even under present day conditions. The fact is not only that familiarity with the combat experience of the past war is interesting from a cognitive point of view, but that it will awaken creative thoughts in officers, thus facilitating the successful resolution of present day tasks. . . . The serious study of this experience . . . also provides rich material for practical conclusions.57

The conclusion to the book continues in the same vein:

The Great Patriotic War made an enormous contribution to the development of the theory of combined arms combat; it enriched the tactics of motorized rifle and tank units with invaluable experience in preparing and executing decisive offensive operations, the creation of an unsurmountable and active defense, diversified maneuver, and flexibility in troop control. . . . Under contemporary conditions (and) under the influence of scientific-technical progress, the theoretical state of tactics has changed considerably. However, the experience of the past does not mean to put it into practice blindly. . . . In this work we have examined a relatively small number of examples from the experiences of the Great Patriotic War in many types of combat and in a variety of tactical situations, but that is enough to show how varied and rich is the tactical mastery of Soviet commanders. An analysis of this experience will help officers to more thoroughly learn the essence of modern warfare.58

What it All Means

I suggest there is a direct connection between the meeting engagement and what I consider is less emphasis on and a lesser number of second echelon units. This permits maximum forces forward where in a fast moving situation they can bring maximum pressure on the enemy,
and the multiple regimental and battalion formations seeking meeting engagements (followed by hasty attacks) would be backed by a smaller number of combined arms reserves. New combat vehicle mobility complemented by an increased communications capability makes possible lateral movement of the first echelon units (the same as FM 100-5 advocates for the defense) to exploit breaches in the forward defense or to increase strength and pressure along the main axis or threaten the flanks (and rear) of defensive strong points.

The meeting engagement meets the criteria for a Soviet attack. As outlined in the Soviet Ground Force Regulation, such an attack involves:

... a combination of fire and swift movements of units (regiments) and subunits (battalions) in order to strike and rout the enemy. An attack is carried out by tank and motorized rifle troops with the supporting artillery fire and air strikes; the attack is supported by engineer, chemical, and other special troops. An attack is carried out at the start of an offensive from march column or from an occupied position in direct contact with the enemy. The artillery and aviation carry out preparation fire and provide fire support during the attack. Motorized rifle troops attack most frequently behind tanks, moving either on foot or in APCs.59

The meeting engagement is certainly an alternative to the breakthrough and massive second echelon support. It would take advantage of any lack of NATO readiness, NATO deployment or redeployment difficulties, and the possibility that the conflict might turn nuclear at any time and presence close to the defender would offer some protection against heavy casualties from nuclear weapons. It would maximize the chance to break through a thin line of defense and head for the Rhine River and points west, and the presence of advancing second echelon fronts to the rear, with their increasing capability for rapid movement, would
ensure that any NATO counterattack would not threaten the integrity of
the Warsaw Pact nations and the LOC.

What appears possible is an offensive where in each army (corps)
all the divisions are in first echelon except one which is in reserve.
The other divisions in first echelon have all their regiments and bat-
talions in what is effectively a line of columns, each advancing in
march column seeking a meeting engagement. The division in reserve will
be used to exploit whichever axis appears to facilitate a "deep operation"
as the result of a successful meeting engagement. Perhaps one army would
be kept in second echelon or reserve for the front and there would be one
second echelon or reserve front for each first echelon front. Thus,
the emphasis would be on maximum combat power forward along the broad
front of each front (army). The reserve division would take advantage of
its mobility and the success of one or more forward battalions or regiments
in order to initiate the "deep operation." The second echelon army could
be used for a preplanned (truly second echelon) insertion along a main
axis, a preplanned substitution for one of the first echelon armies, or
a blocking force in case of unexpected enemy counterattack or success.
The second echelon front would follow in the wake of the first echelon
fronts and be used in any second phase of the operation.

The Soviets feel they have the fielded mobility and communications.
They certainly have the doctrine. The questions seem to be whether they
have the initiative and leadership to carry it out, whether they practice
it sufficiently to ensure a reasonable chance of success, and finally
whether they feel that the conditions leading to any WP-NATO conflict
would favor surprise and the meeting engagement over the lengthy buildup
to a superior and overwhelming breakthrough operation with large second echelon
forces at every level from battalion to front. A dilemma posed for the Soviets is that the meeting engagement, which the Soviets advocate as the most likely, effective, and decisive type of offensive warfare, requires the greatest low level initiative in order to be successful—and the Soviet system stifles low level initiative. I suggest that judging by what the Soviet military leader is reading in his publications, it is obvious that the Soviets are hedging their bets and are prepared to go in two radically different directions.

I also suggest, incidentally, that the same mobility and communications will permit us to effectively defend against the breakthrough or the meeting engagement—provided it is a defense in depth. For political reasons it may be an anathema to advocate trading space for time, but we cannot afford to place everything on the line (literally or figuratively) and slug it out in a "winner take all" battle which could decimate the FEBA or make it difficult for the forces engaged to be effective in lateral movement or defense in successive positions.

The Soviets suggest that the first echelon variant would be advantageous in situations where (1) the enemy is not in position or is unable to defend across a broad front and in depth, (2) nuclear weapons might be used and it is advantageous to "hug" the enemy to avoid being hit by his weapons, (3) the depth of the combat zone is so limited that frontal operations can probably reach the final objective without having to stop for refitting or substitution by a following second echelon front, and (4) time is of the essence.

The situation in Central Europe would seem to meet most if not all of the criteria, and it would thus appear ideal for the Soviets to try their meeting engagement. The Soviet reader must certainly wonder why FM 100-5 does not make its reader aware of the importance the Soviets place on the meeting engagement and the lessened emphasis on the second echelon.
INTELLIGENCE (Chapter 7)

As the Soviet translates or reads the translation of intelligence, he is in a quandry since the Russian word is identical for intelligence and reconnaissance (razvedka). This is similar to the Russian "mir" which means both peace and the world (as well as a village community); so it is difficult to tell if the Soviet Russian is prepared to fight for "peace" or for "the world" in his commonly used expression.

When found in most Soviet open press publications the word (razvedka) refers to reconnaissance (such as a February 1977 article in the Military Herald entitled "Reconnaissance in the Mountains.")

It is a little bit as if intelligence were a dirty word, or is it that intelligence is reconnaissance and reconnaissance is intelligence?

In any case the downplaying of intelligence is perhaps manifested uniquely by looking at an English translation of the Great Soviet Encyclopedia where razvedka is listed under both reconnaissance and intelligence. The entries under intelligence are (1) counterintelligence (2) state security and (3) intelligence service (British). Tactical and strategic intelligence do not exist--if one judges the book by its cover.

In any case the Soviet reader would probably not disagree with the statement that the Soviet's primary means of collecting tactical intelligence is through the electromagnetic spectrum--although he doesn't read very much about that in his open publications. However, the profusion of radio-electronic equipment and the presence of radar and radio intercept battalions makes him aware of the effort and capability, even if it isn't overly publicized.
The difference in philosophy and organization regarding the air-land battle is absolute. The Soviet reader would probably not agree that the Army cannot win the land battle without the Air Force. The Soviet Ground Forces expect the air defense units (missile and cannon) to protect them against enemy air. All Soviet frontal aviation will be under the command of the front commander, a ground forces officer, although Long Range Aviation, under Soviet Air Force command can be used to strike targets in the enemy rear—or to supplement Frontal Aviation. The air army commander works for the frontal commander as do all the other tank, shock, and combined army commanders. Since ground air defense units (many of them mobile) are to protect the Soviet ground forces against enemy air, Frontal Aviation can then be used to influence action in the enemy rear by striking air fields, nuclear delivery units and nuclear storage areas, depots, command and control targets and reserves. The Soviet does not seem to place as much importance on the aerial battles which we expect to determine air superiority (perhaps because efficient use of surprise strikes by missiles—or aircraft—could result in NATO aircraft being destroyed on the ground).

The technique of Close Air Support is also different. The Soviet Forward Air Controller (or "pointer") directs the aircraft in the right direction (usually over the FEBA, to an area to the rear of the first echelon enemy positions which the Soviets feel they can better neutralize by artillery fire). The Soviets also express confidence that they can
jam our close air support aircraft by being closer to the aircraft with a greater source of power than our FAC—and besides, once an enemy aircraft comes over Soviet positions, it is subject to missile and cannon fire from the air defense units traveling with and supporting each regiment (the Soviets also advocate having all troops mass fire on the aircraft—to include even the main armament of tanks). 60

Thus, the Soviet cannot but disagree with or have difficulty in understanding our view of the air-land battle.
ELECTRONIC WARFARE OPERATIONS (Chapter 9)

The Soviet reader on turning to this chapter feels he has almost a proprietary interest, as if he had written it himself. His organization is different, he emphasizes destruction as well as listening and jamming, and his fielded capability is all around him. He is used to seeing jammers in his front areas; however, on thinking, he might consider that they lack protection and need better mobility. In any case, the Soviet reading this chapter should have no difficulty in understanding the subject and agreeing to the importance and capabilities of radio-electronic warfare.
TACTICAL NUCLEAR OPERATIONS (Chapter 10)

In reading the statement, "In any battle we must have the capability to use nuclear weapons effectively, along with our conventional weapons, in support of the land battle," the Soviet reader is in accord. He probably, however, would have written the statement, "... have the option to use exclusively conventional weapons as well as nuclear weapons (supported by conventional weapons) in support of the land battle." In fact, the Soviets have always hedged a little on the option to use conventional, although the name of the game is and has been nuclear.

As for envisioning the nuclear battle, he certainly will not disagree that "the use or threatened use of nuclear weapons will significantly influence every phase of the battle"—as stated in the manual. He remembers how Marshal Sokolovski, in a two part article written with Major General Cherednichenko and entitled "The Art of War at a New Stage," described the expected nuclear battle. The article appeared some fourteen years ago. However, most of the views are still considered valid today, although the exact relationship and sequence between strategic and tactical nuclear warfare has become clouded. Specifically, they read in part as follows:

Under contemporary conditions... the outcome of war will be determined by the nuclear strikes by strategic means. The results of attack by strategic means or, in other words, strategic success, determine the success of battles and campaigns. The combat, battle, or campaign in the normal sense loses the significance as a single means for destroying an enemy and for achieving victory. The combat, battle, or campaign in an active ground or naval theater will be conducted on the basis of exploiting the results of nuclear attacks by strategic forces with the intent of completing the defeat of the enemy... Then the basic missions of combat and battle, as well as campaigns will be settled by nuclear attacks with tactical weapons.
Certainly there may be rare occasions in the course of war when combat missions may be performed by conventional weapons without using nuclear weapons. Troops, therefore, must be able to wage even such a (conventional) war. . . . Nuclear attacks against the enemy are the quickest and most successful course toward victory in modern war.

Military ideologies of imperialism steadfastly profess that a nuclear war in principle will not be distinguishable from other past wars except for somewhat greater losses. There is a great deal of talk going on about "limited" nuclear war and of employing nuclear weapons only against military targets, against armed forces. The concept of regulating nuclear war is demagogy, a hypocrisy by the military groups of imperialism.

Nuclear missile weapons and other new means of warfare sharply increase the possibility of surprise attack. . . . The possibilities for timely discovery of the launching of an attack are growing. Owing to the far-sighted policies of the Communist Party and Soviet Government, the Soviet Union has at its disposal all necessities for disrupting the aggressive plans of imperialists for the initial phase of a war. Modern means for discovery and prevention insure the timely launching of a crushing retaliatory nuclear attack, the successful repulse of a surprise attack and the frustration of criminal intentions.

A distinguishing feature of this phase (the initial phase of a world war) will be the conduct of vigorous, decisive military activities from the very beginning of a war with a commitment of the greatest possible quantity of ready forces and means along with the use of nuclear weapons accumulated during peacetime. The initial phase of a world war will be the time in which it is possible to predetermine the development and outcome of the entire war. Armed conflict in this phase will be especially vicious and destructive. In connection with this, special significance is now assigned to maintaining a high state of combat readiness by the armed forces. . . .

In a new world war, if it is launched by the imperialists, time will be of decisive significance for victory. Those tasks which formerly were settled in months and years, will be determined in a nuclear missile war in the course of minutes, hours, a few days. . . . In our opinion, an indisputable conclusion: a thermonuclear war cannot be of long duration. It is necessary, therefore, in our view, to be prepared in top
priority for a short war . . . one should not exclude the possibility of the outbreak of a relatively protracted war. This may be related to a war in which nuclear weapons will not be used (for example, a local war capable of expanding to a global conflict). One should not, therefore, neglect the preparation for a relatively drawn out war.

In the event war is unleashed by imperialist aggressors, nuclear attacks will be carried out against these concentrations (NATO ground troops and tactical aviation). Following this, decisive offensives by ground troops and frontal aviation will be launched to complete the defeat of enemy troops in the theater, to seize enemy territory and to deny a penetration by aggressor forces onto the territory of the socialist countries. Offensive operations on a strategic scale (strategic offensives with participation by various ground armies and divisions, armies of other services of the armed forces) will be deployed in the ground theaters.

Nuclear weapons delivered by intermediate range missiles and long range aviation together with tactical rockets and tactical aviation are the primary means of armed combat in ground theaters. Tank and motorized rifle armies and divisions, as well as air-land divisions, will exploit the results of nuclear attacks to complete the annihilation of enemy troop concentrations and to penetrate into the depths of his territory. The objectives of armed combat in a theater will be, to an equal extent, the enemy's nuclear means, his tank, airborne, motorized rifle or rifle divisions and the subordinate units.

The absence of continuous fronts will be typical. Military activities will be carried on simultaneously over a great area both in frontage and in depth; they will be distinguished by a high tempo and maneuverability of troops, by great violence.

Tactical aviation will play an important role in the theater. It is capable of destroying enemy aviation, missiles, artillery, antitank weapons and troops by using nuclear weapons and conventional means, performing air defense missions, reconnaissance and troop transport. The tactics of aviation is basically altered by the equipping of tactical aviation with supersonic jet aircraft and air-to-ground and air-to-air missiles. The flight of large numbers and the long, overhead combat
patrols have passed into history. In their place has appeared maneuver by small groups, two or even single aircraft operating at low level and relying on complex methods to deliver attacks—over the cockpit (LABS), etc.

Airborne landings, carried by helicopter to the enemy rear areas, will be widely employed. Motorized rifle regiments and battalions may be used for such landings.

The tactics of tanks and motorized infantry are being changed. The offense will be carried out primarily by tanks, armored carriers, and even by helicopter along the principle approaches. The dismounted attack will be a rare phenomenon. Since the threat of enemy nuclear attack will always hang over the attacking troops, they must be dispersed, maneuverable, always on the move while being constantly prepared with defensive measures against flash blindness or radiation and to use their vehicles or terrain irregularities for protection from shock waves. In the course of combat these troops complete the defeat of enemy concentrations destroyed by nuclear strikes. Meanwhile they must be ready to annihilate separate enemy groupings with conventional weapons.

Four years later (1968) in the third edition of Military Strategy, the Soviets were still tilting nuclear, but not ruling out the conventional as these two paragraphs indicate:

... armed conflict in theaters of military operations will be characterized by great violence, the mass destruction of troops, colossal destruction, and the formation of broad zones with a high level of radioactive contamination.

The basic means for armed combat in land theaters in a future world war will be the nuclear weapon used primarily with operational-tactical missiles, and also frontal aviation. In addition, the Strategic Rocket Troops and long-range aviation will deliver nuclear strikes against important objectives in the zone of the offensive fronts. Airborne landings will be widely used. As before, tank units and formations will be used in mass concentration on the battlefield. The motorized infantry will be just as important, although it will not be the "queen of battle" as in past wars. On the battlefield the
decisive role will be played by fire or nuclear weapons; the other means of armed combat will utilize the results of nuclear attacks for the final defeat of the enemy. Personnel of the army and navy learn to wage combat operations both in conditions of the use and without the use of the nuclear weapon. It is important to decide all study tasks so that the soldier will be always ready to successfully operate on the battlefield in circumstances that take shape in different ways.\textsuperscript{63}

In Sidorenko's and Lomov's books in the early 1970s, the emphasis was still on the nuclear as shown here.

\begin{quote}
It is held that the side which uses nuclear weapons first and suddenly, can resolve the issue of the battle in its favor.\textsuperscript{64}

The employment of nuclear weapons permits inflicting heavy losses on the enemy's personnel and equipment almost instantly, annihilating entire units. \ldots destroying installations and other targets, annihilating the enemy's centers of resistance.\textsuperscript{65}

As a rule, the upper hand has always remained with offensive weapons and this has been particularly apparent with nuclear missile weapons. \ldots for achieving operational level goals (army or front objectives) it is now important to defeat not only the land and aviation enemy groupings in the theater, but above all its nuclear grouping, since without their decisive destruction one can hardly count on the successful carrying out of the missions in the operation. \ldots decisive victory in an offensive is achieved by using the results of nuclear strikes, by having the commanders at all levels make daring decisions. \ldots The possibility of rapidly shifting efforts in depth and from one axis to another \ldots and the conduct of surprise attacks from different directions require new methods of conducting operations in a nuclear war.\textsuperscript{66}

An offensive under modern conditions will be carried out, as a rule, in a deployed battle formation. \ldots on those axes where decisive destruction with nuclear
weapons will be made against the enemy and he will be incapable of organized resistance, the motorized rifle and tank battalions will be able to advance in depth in approach march formation and route columns, organizing reconnaissance ahead.

Combat, under the conditions of prepared enemy defenses with the impossibility of skirting them or capturing them on the move, will begin with a breakthrough which consists in breaking the defenses by nuclear weapons and air strikes, by artillery and tank fire, and an offensive by battalions with the subsequent development of actions in depth.

However, Soviet publications often hedge on the use of nuclear or conventional warfare with phrases such as "both with and without the use of nuclear weapons," "in case nuclear weapons are not employed," and "if a nuclear attack is not delivered." This makes it clear that the Soviets are keeping their options open. Even Sidorenko hedges on the use of nuclear weapons by statements such as this one:

In spite of the fact that nuclear weapons will become the chief means of defeating the enemy, their role and capabilities cannot be made absolute, especially in the attainment of goals of combat by battalions and regiments. In a number of cases battalions and regiments will have to perform various combat actions, including the attack, without use of nuclear weapons, using only conventional, organic means of armanent—artillery, tanks, small arms, etc. Therefore, along with the development of the nuclear missile might of the Soviet Armed Forces, our party and government have attached and continue to attach great importance to the development and sophistication of these means of warfare, which have not lost their importance in any way whatsoever.

And the Great Soviet Encyclopedia keeps the conventional option alive in its statement that,

The appearance in the 1950s of totally new means of war, nuclear weapons and missile-created new conditions in which combat could be waged with or without the use of nuclear weapons.
If nuclear weapons and other fire means are employed, combat will be characterized by even greater maneuverability, dynamism, rapid and extreme changes in the situation, unevenness of development along the front and in depth, great extensiveness and high rates of advance.

The basic principles of modern combat include coordination of regimental and battalion size units of the various combat arms and various branches of the armed forces, the element of surprise in combat operations, aggressiveness and persistence in the achievement of a given objective.

The subject of nuclear weapons is a common theme even at battalion level. In the book on the motorized rifle battalion it is mentioned fifteen times in the single chapter on the meeting engagement; the chapter on the meeting engagement in the book on the tank battalion only mentions the subject four times. The subject is often caveated, as these two examples show: "If nuclear weapons are used, the battalion commander coordinates the movement and deployment of the main body with the time of the nuclear attack, and also with the time of the air strike and fire by attached artillery."

The tank battalion in the first echelon moves at top speed, using cover and concealment, and by the shortest route, "utilizing the results of the nuclear strike (if it was delivered), air strikes and artillery fire."

Recent authoritative statements include this one by the late Marshal Grechko, which hedges on the use of nuclear weapons:

Depending on their scale, modern wars may be local, limited to the participation of two or several countries, or worldwide between two opposing systems. . . . Due to a qualitative improvement in conventional means of destruction and the increase of these weapons in units and formations, there has been a great improvement in the fire, shock action, and maneuver capabilities of troops, which permits assigning
them very decisive missions on the battlefield which they are capable of accomplishing without resorting to nuclear weapons.69

and this statement by Marshal Kulikov which makes it clear that nuclear weapons are still considered the principal means of combat:

Military strategy has determined the most expedient ways of repulsing aggression and inflicting a crushing retaliatory strike and methods of nuclear and conventional weapons in the course of a strategic offensive by major groupings... (with operational art formulating) the use of nuclear weapons in operations and combat actions by formations of the different services of the Armed Forces--principles concerning in particular, the organization and delivery of massed nuclear strikes. Profound changes occurred in the tactics of all service branches with the introduction of nuclear weapons.70

The Soviet reader is naturally interested in the controls on nuclear release. He does not expect to be so restrained (the preplanned packages, specified time frame, and specified geographical area) when and if nuclear launch is ordered. He is somewhat amused by the statement "Where the use of nuclear weapons by the other side is a possibility..." since he wonders how it can be otherwise when the Warsaw Pact organic divisional weapons can fire them.

He is impressed by the determination implied in the statement that defensive capability must not be allowed to deteriorate to the point where available forces cannot conduct post strike operations (before requesting nuclear weapons), but when he turns the page and looks at the request sequence he is surprised to see an example in which it requires some 24 hours between the Corps request and receipt of authorization by the delivery system to fire.

This should be more than enough time for him to preempt, as suggested by Lomov--"One of the decisive conditions for success in an operation is
the anticipation of the enemy in making nuclear strikes, particularly against the enemy's nuclear missile weapons.\textsuperscript{71} and Savkin—"The importance of the principle of surprise increases as the means of warfare develop. Surprise permits anticipating the enemy in delivering strikes. . ..\textsuperscript{72}

Reading about employment, he notes that the first use of US tactical nuclear weapons would probably be in a defensive mode; he is not sure how he would know this if he were the adversary or what difference it would make.

He further reads that to convey to the enemy that we are using nuclear weapons in a limited manner, all weapons in a package should be fired in the shortest time. Both Sokolovskii and another author have indicated Soviet refusal to distinguish between limited and general use of tactical nuclear weapons.

In advocating the theory of limited war, American strategists strive to secure the safety of the USA from retaliatory nuclear strikes. . ..\textsuperscript{73}

. . . By its character, a limited war contains two problems: on the one hand such a war must be conducted decisively . . . to achieve the set political and military goals; on the other hand, in a limited war, the armed forces must be used in such a way as to reduce (to a minimum) the risk of a limited conflict escalating into general war. The contradiction of this situation is clearly seen, if only because the need for success in a limited war is incompatible with the requirement for limiting the scale of combat operations, as regards territory, forces and means, the number of participants in the armed conflict, etc. . . . The most candid statement of opinion by the military-political leadership of the USA on this question was the statement of the former Deputy Secretary of Defense of the United States, Gilpatric, who in one of his press conferences in June 1961 announced: '. . . As for me, I never believed in a so-called limited nuclear war. I simply do not see how one can establish such limitations, once any sort of nuclear weapon is launched.'\textsuperscript{75}

In allowing for the possibility of unleashing war against the Warsaw Pact countries with conventional weapons, the NATO command envisages in its plans the maximum lowering of the 'nuclear threshold.' That is, the changeover to
nuclear weapons employment at the earliest stage of military conflict, even at the start of it, the Soviet Armed Forces cannot fail to take this into account.74

In keeping the option open to operate at least initially in a conventional environment, the Soviets feel that NATO use will be delayed until they have an opportunity to knock out at least some of the delivery means.

This has been suggested:

By Sokolovski in his book on strategy:

Without the destruction or neutralization of the enemy's nuclear means, it is impossible to count on the successful conduct of any combat actions in the theater, whether they be offensive or defense.75

By Savkin in his book on operations:

... in delivering strikes (not necessarily nuclear) on the nuclear attack means of the enemy, one can knock the 'sword' out of his hands ... (and) deprive him of the possibility of employing nuclear weapons, or in any case substantially reduce that possibility.76

The maintenance of continuous contact with the enemy, the deep penetration into his zone of deployment increase the relative safety ... of the troops of the first echelon ... rapid penetration into the deep rear of the enemy brings the forces into the zone where the long range means of nuclear assault are based, which forces the enemy under the threat of seizure to change his position and (which) does not allow him to inflict response mass nuclear attacks.

By all means are to be destroyed or captured not only the delivery vehicles of nuclear weapons themselves, but also the forces and means supporting them--stocks of nuclear weapons, command posts and intelligence organs ... troops fulfilling support functions.

And by Reznichenko in his book on tactics:

... advancing within the enemy positions, the attacking troops seize or destroy his nuclear attack means, his stores of nuclear ammunition ... advance detachments ... may be given such ... tasks as the combat against the enemy's nuclear attack means.77
the greater the speed of the attack, the smaller the possibility for the defense to deliver a response strike on the offense.

We have indicated that we are going to use tactical nuclear weapons, and the Soviets believe us. They appear confident that they can find out when we intend to use them and successfully preempt. Thus, the Soviets are keeping their options open—arguing against a "limited war," for preemption, but also reserving the right to fight conventionally while attempting to destroy the NATO tactical nuclear capability. While there has been no formal decoupling of the theater level and intercontinental level nuclear conflict in the Soviet open press, the fact that a strong coupling is no longer stressed may indicate a change. In any case the Soviets do not subscribe to the conventional-nuclear theory, insisting that a theater war is either nuclear or conventional—but may be conventional first.
CHEMICAL WARFARE AND NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) DEFENSE
(Chapter 11)

After reading US policy and the threat, the Soviet reader cannot help but remember that most of the articles he reads in his military publications are oriented on the defensive use of equipment. He realizes he does have a lot of equipment and is particularly confident of the ability to use it. The constant training of radiation detection and chemical survey teams, the presence of chemical defense units, the frequent publication of articles (for example, an article entitled "Radiation Detection and Chemical Survey at Night" by Major General Moiseyev in the January 1976 issue of Military Herald), and the frequent exercise of protective masks and clothing and decontamination of personnel and equipment serve to make the Soviet officer aware of the emphasis on chemical and nuclear defense.

Of course, if you can operate against enemy chemical or nuclear attack (with the chemical or nuclear contamination), you can certainly operate more effectively to exploit your own use of nuclear or chemical weapons. The few Soviet officers who can read East European publications find them often more hawkish on the use of chemicals than are the Soviets—at least in the open press.
COMBAT SERVICE SUPPORT (Chapter 12)

The "arm, fuel, fix and man" requirement is familiar to the Soviet reader—although not in those exact words. The Rear Services is his organization for CSS, and "the role of the rear services has grown immeasurably." The Rear Services is now headed by a four star general and Deputy Defense Minister who earlier served as CINC of the Group of Soviet Forces in Germany. He agrees that arm and fuel come first in priority and believes the "the mass, character, and diversity of materiel demands a large expenditure of amm0 and fuel." Reading about the generals authorizing basic loads, he equates that with his boyevoy komplekt, translated as unit of fire, which is defined as "the quantity of ammunition prescribed for one piece of armament or for a combat vehicle as determined by combat experience, transportation to move it, and vehicular storage space and carrying capacity."

As for "fixing it," he understands the "organization for technical support" as being based on "quickly repairing combat equipment in its areas of greatest accumulation" with mobile repair bases being set up "to repair first those vehicles which can be returned to duty soonest." Maintenance in the battalions and companies is performed by driver mechanics and vehicle crews. The battalion has a deputy battalion commander for maintenance who rides a recovery vehicle and directs the battalion effort from there.

His system for "manning it" and priorities appears to differ from what he reads in FM 100-5. Replacements in combat are generally on the unit rather than individual replacement basis, food service supply
includes "mobile bakeries, flour mills, refrigeration units and trucks, mobile slaughterhouses, etc," and his medical service is oriented on "high mobility and moving rapidly toward the areas of destruction."

Although his diet is considerably different, the reader still expects cooked rations, since "it is very important to feed small units a hot meal before a battle." If this is impossible "permission is granted to use part of the dry rations" and for liquid refreshments "thermos bottles will be filled with tea."

Troop health is also considered of great importance. From first aid (which is "often administered by the servicemen themselves" using individual first aid kits and the medical chests carried by tanks and combat vehicles) to the battalion medical point (at which the wounded are assembled for evacuation by higher echelon medical transport vehicles to the regimental or higher level medical point where doctors are available) to the various "medical battalions, hospitals, hospital bases, ambulance units, sanitation-epidemiological laboratories"—the emphasis is on quick evacuation by higher level units and combatting the "effects of the enemy's use of weapons of mass destruction." Antidotes, data on the radiation and chemical situation, and designation of contaminated areas and water sources are all considered important. "The vehicles of small units (platoons, companies, battalions) that have been victims of enemy weapons of mass destruction can be used for the rapid evacuation of casualties."

Reading about logistic command and control, the Soviet reader would come to the conclusion that the principles are the same even if the organizations are different. He is also used to increased dependence
on computer based systems, and conservation and austerity are nothing new for him. The use of civilian transportation for military transport he has developed to a high degree with his "avtokolonas" (vehicle columns) which mobilize the trucks of state enterprises along with the drivers who are usually members of the reserve.
OPERATIONS WITHIN NATO (Chapter 13)

The Soviet reader hears constantly about NATO—the reason for his being in the Group of Forces. He reads with interest about the variations in tactics, organization, training, logistics, food and customs. He wonders about the difference in equipment and notes that the factors listed as affecting NATO operations also affect the Warsaw Pact. He knows his Soviet books in Russian on tactics are translated into Polish, Czech, German and other languages and assumes these must be the equivalent of the Allied Tactical Publications.

He is used to seeing his weapons in the hands of the "fraternal countries," although he does occasionally see some weapons and equipment that are unique to a particular country. Sometimes he questions (to himself) whether his country should provide the latest weapons, sophisticated electronics and missile launchers to the Germans (East), for whom he has the greatest personal dislike—although there is an official policy of friendship.

As far as logistics responsibility remaining with the national headquarters, he thinks that is the policy of the Warsaw Pact and sees each country he passes through supporting its own forces. Host nation support is also understandable, his troops dig potatoes in German fields (if in GSFG). However, local nationals do not work in his garrisons or major training areas.

He knows of the US control of warheads, just as he knows of US and NATO strategy. He remembers having read a recent article concerning US nuclear warheads in Europe and changing US/NATO strategy and reaches for
his magazine to check it out. The January 1978 issue of the Military History Journal recommends to the Soviet military reader a book by the title of **NATO--Strategy and Forces**. The book, written by a collective of East German and Polish authors, traces NATO strategy from 1949 to 1975. The Soviet reader learns of "document 'MC14/3' from 16 January 1968," and of the "principal elements of the strategy of 'flexible response,' especially the principles of 'forward defense' which determined the development of the armed forces of the bloc." He also learns that "In the US depots in the 1960s there were concentrated 7200 nuclear warheads, including 5500 on the territory of the FRG," and that "The USA in January 1971 adopted the strategy of 'realistic deterrence' while NATO continued to operate under the strategy of 'flexible response,'"88

He is surprised to read in FM 100-5 the extensive orientation on European weather and terrain. He is still on his continent, and the weather and terrain in Eastern Europe is not too different from that in the Soviet Union. In his normal five years (officer) of service in Eastern Europe he will get to know it well.

He cannot help thinking about the emphasis on NATO Europe in this American manual. He knows his Ground Forces do not have the luxury of being able to concentrate completely on one global area--Europe. About a quarter of his Ground Force units are on the Chinese border, thousands of miles away. This is something he never forgets.

On the other hand, he is not too impressed with his allies, the non-Soviet Warsaw Pact Forces; he feels that they are there to protect the northern and southern flanks of the Soviet Forces, but that any principal "task" would be carried out by Soviet Forces. He wonders what the situation is within NATO where he hears mostly about American and German forces.
MILITARY OPERATIONS IN SPECIAL ENVIRONMENTS (Chapter 14)

Reading the first sentence, "Although the primary mission of the US Army is to prepare for the defense of NATO," the Soviet reader cannot help but recall that his primary mission is said to be defense of the homeland (the Soviet Union)—looking west toward NATO and east toward China—with a secondary and complementary mission being defense of the "fraternal socialist countries." There is seldom any discussion of being committed to battle elsewhere; although he feels strongly that the next war should be fought on non-Soviet territory. It is hard for him to understand why America is so committed to Western Europe, unless as he has heard for years it is for the purpose of using Europe to attack the Soviet Union and its allies.

As for military operations in mountains there is an occasional article in the Military Herald such as "Reconnaissance in the Mountains," by Sr. Lt. Sitnikov in the February 1977 issue; however, there is normally little discussion of or training in mountain warfare, although part of the 7000 km border with China (including Mongolia) is mountainous—and there are mountains throughout northern, southern, and much of central Europe. The lack of emphasis could well be because the Soviets expect any war to be a quick one with a massive offensive, and they would attempt to go over or around for a decisive encounter.

The Soviet reader encounters almost nothing in his publications regarding jungle fighting. While there have been Soviet advisors in jungle areas (assisting in "wars of national liberation"), the Soviet troops are not trained for jungle warfare. This is probably because it
is not decisive, because it is decentralized, because it has a slow
tempo of operations, and because there are no jungles in the Soviet
Union.

Deserts there are, and semi-desert areas along the borders with
China, Turkey and Iran. Soviets write about and train for desert war-
fare which permits fluid warfare, wide envelopments, and the use of
mobile forces (normal Soviet offensive operations). The Soviet officer
may well have trained for desert operations and probably has read arti-
cles such as "A Meeting Engagement in the Desert," by Major General
Grubi in the September 1976 issue of Military Herald.91

The fourth of the special environments covered deals with northern
regions. This, of course, is the area about which the average Soviet
military reader is most familiar—not from reading articles such as
"In Winter Conditions," by Captain Lubicher in the January 1976 Military
Herald92—but from being there. The long daylight hours in the summer,
the long winter nights, the freeze, the thaw, the problems of equipment
maintenance—all are familiar to the Soviet. He is acclimated to
northern regions, and it is hard for him to realize that most Americans
are not. In any case he does not expect any large scale engagements of
ground forces in the northern regions.

The final subject, built-up areas, is one which the Soviets
do not neglect in open literature. (An occasional article such as "The
Peculiarities of Combat in Cities," by Colonel Yefimov in the April 1977
Military Herald.)93 However, Soviet tactics and operations involve
bypassing cities wherever possible. Once I was told that the reason
for this was to avoid destruction of "class brothers," the working class,
most of whom live in cities. Like mountains, the Soviets would prefer to go over or around, rather than through. FM 100-5 makes it clear that US/NATO forces expect considerable combat in built-up areas; this the Soviet reader does not relish or expect.

Incidentally, the 1974 and 1976 books on regimental and divisional tactics do have sections under the offensive on attacks in cities, mountains and northern regions as well as the forcing of water barriers, and a section on the regiment only concerning attack at night. Both cover defense in cities, in northern regions and of river lines, while only the regimental book has a section on defense at night. The monthly magazines, however, and in particular the Military Herald, bring this Soviet reader numerous articles on military operations in special environments.
CONCLUSIONS

As the Soviet officer reader closes the manual, he cannot help but have been impressed by its appearance, organization, format, new tactical approach to the defensive operation, and the indicated "gung ho" spirit of the US Army, his so-called "class enemies." If the services other than the "American ground forces" have the same attitude, backed by the chemical, electronic warfare, and other capabilities as outlined in FM 100-5, it is not surprising that the USSR has had some difficulty in catching up with and overtaking America (dognatz i peregnotz Ameriky).

As Marshal Kulikov wrote in Kommunist in 1976, there is a need to further develop the tactics of modern combined arms operations in order to more fully utilize the capabilities of modern weapons and equipment, increase maneuverability and surprise, and improve electronic warfare and reconnaissance (or is it intelligence?). The current Warsaw Pact commander in his relatively new post has the opportunity to train to reduce the gap between theory and practice and to integrate the new and improved combined arms tactics which he was seeking as Chief of the General Staff. The US Army has the same opportunity.

If communications and mobility permit US(NATO) to concentrate forces, if Soviet suppressive fire does not prevent US(NATO) forces from moving laterally to execute an effective defense, and if sufficient US (NATO) reserves in a defense in depth can stop any Soviet (Warsaw Pact) "deep operation" (glubokaya operatsia) either from a second echelon supported breakthrough or a broad front, largely first echelon meeting engagement scenario, the defensive operation advocated in FM 100-5 should work.
The USSR and USA both profess to have no aggressive intentions, to be concerned with a threat presented by the other party (or alliance), and to be prepared to defend their vital interests by resort to arms, including nuclear weapons if necessary. The vital interests America considers worth defending obviously include Western Europe, and the emphasis in the manual is on defense (but not the Soviet view of the best defense being a good offense). This author believes that the average Soviet reader hopes that the future does not hold a test shoot-out of Soviet and US operational art in Western Europe involving NATO and Warsaw Pact forces. The concern, however, arises when one ponders what action the Soviet Union might take if it felt things were not going its way in support of "historical determinism." (The "correlation of forces" supposedly shifting in favor of the Soviet Union.) A visiting Soviet professor stated that such a situation would be considered "unnatural," "counterrevolutionary" and "against the laws of history"— and the Soviets "would act accordingly."94 The world well remembers what occurred in the case of "counterrevolutionary" activity in Czechoslovakia during the "Prague Spring" and earlier in Hungary. The Soviets regard gains by communism as being irreversible. This is exactly the sort of ideological mind set misunderstanding which could bring about a test of the operational principles of FM 100-5.

The Soviet reader cannot help but be struck by three major differences in approach found in FM 100-5. First, he would consider it strange that there is so much emphasis on the defense, as he is taught that the offense is everything. This is perhaps summed up best by an entry in the Great Soviet Encyclopedia:
Defensive  (1) Defensive tactics in war (obsolete)95
(2) In Polish . . .
Note: underlining is the author's

Second, he is unable to understand why the new US manual on operations, published in the 1970s, is based largely on non-nuclear operations; since practically all of his books and manuals (but not all of his articles) are predicated on the use of nuclear weapons sooner or later. They infer that with slight variations nuclear tactics will work even if the weapons are not used—although the rate of advance will be slower. Whether the Soviets are prepared to play the game (conventional-nuclear warfare) by US/NATO rules is subject to conjecture. Their declaratory doctrine is certainly at odds with US policy on limited tactical nuclear warfare. There are, however, certain indications that the Soviets are initially prepared and willing to play by "conventional" rules as long as everything is going in their favor and while they attempt to destroy or weaken the Western capability to resort to tactical nuclear warfare.

The third thing which would have stood out in FM 100-5 as being different from all Soviet military literature is the absence of reference to ideology (Marxism-Leninism), of stress on moral-political training, and of comment on the role of the Communist Party in the training and combat effectiveness of the Soviet soldier. The Soviets maintain that "military training and political education is one process."96 The importance of this party-political work is emphasized in The Offensive as follows:97

On the degree to which soldiers master sophisticated equipment, on their ideological stability and conviction of the correctness of the cause which they are defending, and on how much they surpass the enemy in moral-political and psychological attitude depends to a deciding degree the course and outcome of combat operations.
Looking at the probable Soviet offense against a NATO defense, what this author suggests the Soviet reader would see is a close connection and logical relationship between the meeting engagement, a change in the organization and strength of the second echelon and combined arms reserve, and the "deep operation" (for want of a better and more current name). The indications of change are all there; the Soviets write and talk about them. They educate their officers regarding them. What a waste of time, space and effort if they do not intend to concentrate on the meeting engagement/first echelon-combined arms reserve/"deep operation" offense.

This does not mean that the traditional breakthrough with a deliberate attack is passe. I submit that the breakthrough and the meeting engagement are two separate and distinct forms of offensive combat for different situations. However, I also suggest that when one looks at Central Europe where the Soviets may perceive an unprepared, unreinforced and unwarned NATO defense that is vulnerable to a Soviet military move in the face of a perceived future "provocation" or "counterrevolutionary" trend (and to that we can perhaps add a little of the highly touted Soviet surprise), the handwriting is on the wall and FM 100-5 should so reflect this to its readers.

The reader is reminded that this article reflects the possible thoughts and reactions of a Soviet officer reading a Russian language translation of FM 100-5 based on his background, education and mindset. Thus, a statement or observation should not necessarily be accepted as fact merely because a Soviet may think or say it is so.

The above mentioned Soviet professor also gave some good food for thought when he said, "The Soviets do not think in the way the West does."
The West deludes itself by trying to attribute Western thought processes to the Soviets." Even though I have spent over five years in close and continuous contact with Soviet Ground Forces personnel as an officer accredited to the Group of Soviet Forces in Germany, it may well be that this author is wrong on many of the thoughts, reactions and comments attributed or ascribed to the "typical" Soviet officer perusing FM 100-5 (and the "typical" Soviet officer is certainly much more typical than the "typical" American officer). It could even happen that by the time you read this, the real Soviet Russian will have stood up and Soviet open press comment on FM 100-5 will be available. If so, and to the extent such open press comment may reflect the Soviet reader's true reaction (and it certainly will reflect official reaction), this writer will be happy to stand corrected regarding 'The New Amerikanskiy Manual on Operational Art.'
ENDNOTES


2. The only reference the author has seen in Soviet open press publications since FM 100-5 was published in 1976 is a quote in the 10 February 1978 Red Star/KZ (Krasnaya Zvezda) on page 3, an article on the enhanced radiation weapon or "neutron bomb." The quote, when translated from Russian back into English, went as follows:

"In the US Army Field Manual FM 100-5 it says directly: 'Critical serious conflicts in Germany without a doubt will involve repeated, almost unbroken battles for large cities, small cities and towns/villages.'"

The FM 100-5 passage from which this was apparently taken (13-16) reads as follows: "Combat in Germany will automatically involve repeated, almost continuous battle for cities, towns, villages, and adjacent built up areas."

The article rails against the neutron bomb (actually an artillery shell). Perhaps its principal thrust is that the US talks about the weapon being used against tanks and by inference cutting down on collateral damage and injury to civilians, although the new FM infers that much of the combat will be in built up areas where civilians will be automatically affected.


5. See footnote 3 for translation which incorporates all three editions and highlights additions, deletions, and changes.


8. V. Y. Savkin, Osnovniye printsipi operationovo iskusstva i taktiki, the Basic Principles of Operational Art and Tactics, Military Publishing House, Moscow, 1972. (There is a USAF translation.)

8a. P. I. Konopleya and N. A. Maikov, Tankovy batalyon v boyu (The Tank Battalion in Battle), Military Publishing House, Moscow, 1972. (I know of no translation.)

This book was published first in 1966. The 1972 edition added a chapter on "Movement of the Tank Battalion by Rail," a section on movement using wheeled tank transporters, and other entries on "breaking contact and withdrawal of the tank battalion (essential for lateral movement and commitment on another axis)," and "occupation of an area and its security." The chapter on the meeting engagement (Chapter 4) was written by Colonel Maikov.


10. Lomov, op. cit.


17. Ibid.


21. Soviet officers with whom I have spoken have pointed out that the change from the 3-tank to the 4-tank platoon in MR units was in progress in the early 1970s on the Sino-Soviet border. However, this
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instant organizational increase of one-third in MR platoons together with
the relatively new divisional independent tank battalions has at least
in East Germany since the 1973 war (in the Middle East) provided the
Soviets with a considerably larger number of tanks. Thus, any increased
attrition on a European battlefield due to AT weapons would be offset by
the increased number of tanks.

22. Pravda, 15 Sep 75. (Army General Pavlovski)
23. Lomov, op. cit., p. 82.
24. Sidorenko's The Offensive, p. 45.
25. Lomov's op. cit., p. 80.
26. Sovetskaia voyennaya entsiklopedia (Soviet Military Encyclopedia),
27. Lomov, op. cit., p. 81.

28. During the 1960s and the 1970s numerous Soviet officers have
indicated to me that they considered the helicopter too vulnerable for
high intensity combat. "We know what our antiaircraft guns and missiles
can do to your helicopters and we assume you could do the same to ours.
The helicopter just can't fly over modern armed troop units. They will
be shot down" - one typical statement.

31. KZ, 10 February 1978, p. 3.
32. Voyenni vestnick (Military Herald) (VV), No. 2 (Feb), 1977, p. 44.
33. VV, No. 4 (Apr) 1977, p. 68.
34. Soviet Military Encyclopedia, Vol. 4, p. 547. Marshal Grechko,
Minister of Defense, was the Chief Editor of the first two volumes which
were published in 1976. Marshal Ogarkov, Chief of the General Staff, is
listed as Chief Editor of Volumes 3 and 4 which were published in 1977.

35. V. I. Lenin, Pолн. собр. соч. (Complete Collected Works),
Vol. 39, p. 245.
39. Sidorenko's The Offensive. The quotes in the following section are from chapters 2, 3, 5 and 6.

40. Radziyevskiy's Tank Strike, pp. 4, 140, 254.

41. Radziyevskiy's Tank Strike, pp. 43, 47, 48.

42. Radziyevskiy's Tank Strike. The pages which the author considered most important regarding the meeting engagement and from which all of the quotes are taken are pages 4, 5, 38-41, 43, 44, 47-49, 139, 140, 144, 254, 265.


51. The three books are the regimental and divisional series on Tactics Through Combat Examples written by an author collective under the general editorship of Army General Radziyevskiy and the volume Tank Strike which was written by Radziyevskiy himself.

52. Radziyevskiy's Tank Strike, p. 5.

53. Radziyevskiy, op. cit., p. 256.

55. Radziyevskiy's Tactics Through Combat Examples - Division, p. 5.


60. I have had Soviet combat arms officers (combined arms/motorized rifle, tank, and artillery) tell me that the suppressive fire directed at both high performance aircraft and helicopters attacking troops, particularly along the FEBA, includes that of the tank's main armament.

61. Sokolovski and Cherednichenko, op. cit.


63. Sokolovskiy, op. cit., p. 291.

64. Sidorenko's The Offensive, see chapter 4 on "The Employment of Nuclear Weapons and the Destruction of the Enemy by Fire." The Soviet author in this chapter frequently presents Western views -- and by implication agrees with them.

65. Ibid. The Soviets declaratory doctrine rejects the theory of Mutual Assured Destruction (MAD). Since the mid-60s there have been almost no military voices that have spoken out against the use of nuclear weapons -- and few party or government spokesmen. Prior to that time there were a number. Thus, it is interesting in 1977 to read in the conclusion to Tank Strike the statement by Army General Radziyevskiy that "The means for the mass destruction of people has reached such a level that a new war, if the imperialists unleash it, will create an enormous danger for mankind." This is certainly a recent exception to the rule that military men do not discuss the danger of nuclear weapons which could lead to a defeatist attitude. Of course, the recent discussions of the neutron bomb may have changed that.

66. Lomov, op. cit., pp. 132, 133, 144.

67. Sidorenko, op. cit.


71. Lomov, op. cit., p. 147.


73. Sokolovskiy, op. cit., (Harriet Fast Scott translation), pp. 43, 68.


75. Savkin, op. cit. That the Soviets do not expect the use of nuclear weapons by NATO once a breakthrough occurs and there are rapidly maneuvering units/targets in the rear is suggested by a LTC Molozov in an October 1975 article in VV (The Military Herald) entitled "The Utility of the BMP in Combat."

76. Sokolovskiy, op. cit.

77. Reznichenko, op. cit.

78. Lomov, op. cit., p. 118.

79. Army General Semyon Konstantinovich Kurkotkin, present Chief of the Rear Services, served as CINC, Group of Soviet Forces in Germany, while I was accredited to HQ, GSFG.


82. Lomov, op. cit., p. 119.

83. Garbuz, op. cit., p. 41.

84. Lomov, op. cit., p. 121.

85. Lomov, op. cit., p. 119.

86. Garbuz, op. cit., p. 40. Also see Reznichenko, op. cit., p. 158.


89. One notable but not widely publicized exception to this is found in an article entitled "The Leading Role of the CPSU in Building the Army of a Developed Socialist Society" in Questions of History of the CPSU, No. 5, 1974. The article was written by the former defense minister, the late Marshal Grechko, and reads in part as follows:

"At the present stage the historic purpose of the Soviet Armed Forces is not limited merely to their function in defending our Motherland (rodina) and other socialist countries. In its foreign policy activity the Soviet state actively and purposely opposes the export of counterrevolution and the policy of oppression, supports the national liberation struggle, and resolutely resists imperialist aggression in whatever distant region of our planet it may appear. The Party and the Soviet government rely on the country's economic and defense might in fulfilling these tasks... The development of the external functions of the Socialist armies is a natural process. It will continue further."

91. VV, No. 9, 1977, p. 39.
92. VV, No. 1, 1976, p. 43.

94. Soviet Professor M. Voslensky at the 1975 Convention of the American Association for the Advancement of Slavic Studies (AAASS) was a member of a panel on "Detente and the Correlation of Forces." He made several comments in response to questions.

97. Sidorenko's The Offensive, p. 222.
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<td>In this paper, the author, attempting to look at FM 100-5 through the eyes of a Soviet officer, comments on some similarities and differences between Soviet doctrine and the US doctrine as outlined in FM 100-5. This includes comments on doctrine ascribed to the Soviets in the manual. The author uses exclusively Soviet sources both written and oral, and interpreted based on his extensive contact with Soviet Ground Forces personnel in the 1960s and 1970s to highlight some of the similarities and differences in US and Soviet military thinking. Using FM 100-5 as a vehicle, the writer of this paper</td>
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proceeds chapter by chapter in sequence to emphasize many of the salient points in the manual and simultaneously provide the reader with considerable information regarding Soviet operations and tactics as well as a myriad of other minor but interesting details, observations and comments about the Soviet military.

Since the mid sixties we have seen an impressive outpouring of Soviet books and manuals which describe, develop and illustrate tactics and operational principles. The author uses extensive quotes from some of these recent Soviet publications, cites conversations he has had with Soviet officers, and gives his impressions and thoughts——often "thinking aloud" by means of comments in parentheses.

The paper criticizes FM 100-5 explicitly on two counts and implicitly on a third.

There is in FM 100-5, in the opinion of the author, excessive emphasis on Soviet concentration of divisions echeloned in depth on a narrow front for a breakthrough. While this is one of the basic tried and proven offensive techniques, the meeting engagement (a movement to contact followed by a hasty attack) is given at least as much emphasis in Soviet publications where indications are numerous that in any Soviet offensive (and offensive not defensive is the basis for Soviet military operations) the meeting engagement is just as likely if not more likely than the deliberate breakthrough attack. The trend, the author believes, is toward having less second echelon forces below front level due to increased weapons capability and staying power as well as the size of the combat zone, enemy disposition and the type of warfare expected. The author suggests that in any subsequent changes to FM 100-5 "equal time" should be given to the likelihood of the "meeting engagement" being the predominant type of Soviet operation, and he points out why the current NATO situation makes that more likely than the deliberate "breakthrough" attack.

Second, he highlights the Soviet emphasis on nuclear warfare although with a possible initial conventional phase, while FM 100-5 (with the exception of one chapter) is devoted almost entirely to conventional war in Europe. The author points out the Soviet declaratory doctrine that nuclear war cannot be limited to a local or regional area once initiated and the advocacy of preemption by the Soviets in case they learn of a planned strike by US/NATO forces. The Soviets expect and prepare for nuclear warfare which, they feel, can and will probably escalate from a tactical nuclear to a strategic exchange, but they are prepared to go conventional for an indeterminate period of time. This the Soviets consider to their advantage in that enemy nuclear weapons and delivery systems can be knocked out before the time arrives for their use. Preemption is also advocated since if both sides are going to use nuclear weapons, the first user has a big and perhaps decisive advantage over the second user. The writer also feels insufficient emphasis is given to US tactical nuclear warfare as a cornerstone of the "flexible response."

While the US stresses leadership based on decentralization of responsibility and authority to the commander on the ground and seeks a leader who will act on his own, the Soviets depend on centralization, and decisionmaking and initiative at higher levels. Flexibility in command, control and communications at higher levels, the Soviets believe, permit this initiative (regiment and above) to affect the actions at lower levels and to substitute for lower level initiative. A dilemma posed for the Soviets is that the meeting engagement, which the Soviets advocate as the most likely and effective type of offensive warfare, requires the greatest low level initiative in order to be successful—and the Soviet system stifles low level initiative.

This paper is keyed directly to FM 100-5: chapter by chapter, subject by subject.