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RESEARCH REPORT

AN ANALYSIS OF SOVIET DOCTRINE USING THE PRINCIPLES OF WAR

LT COL MARK Q. BARBOUR, USA

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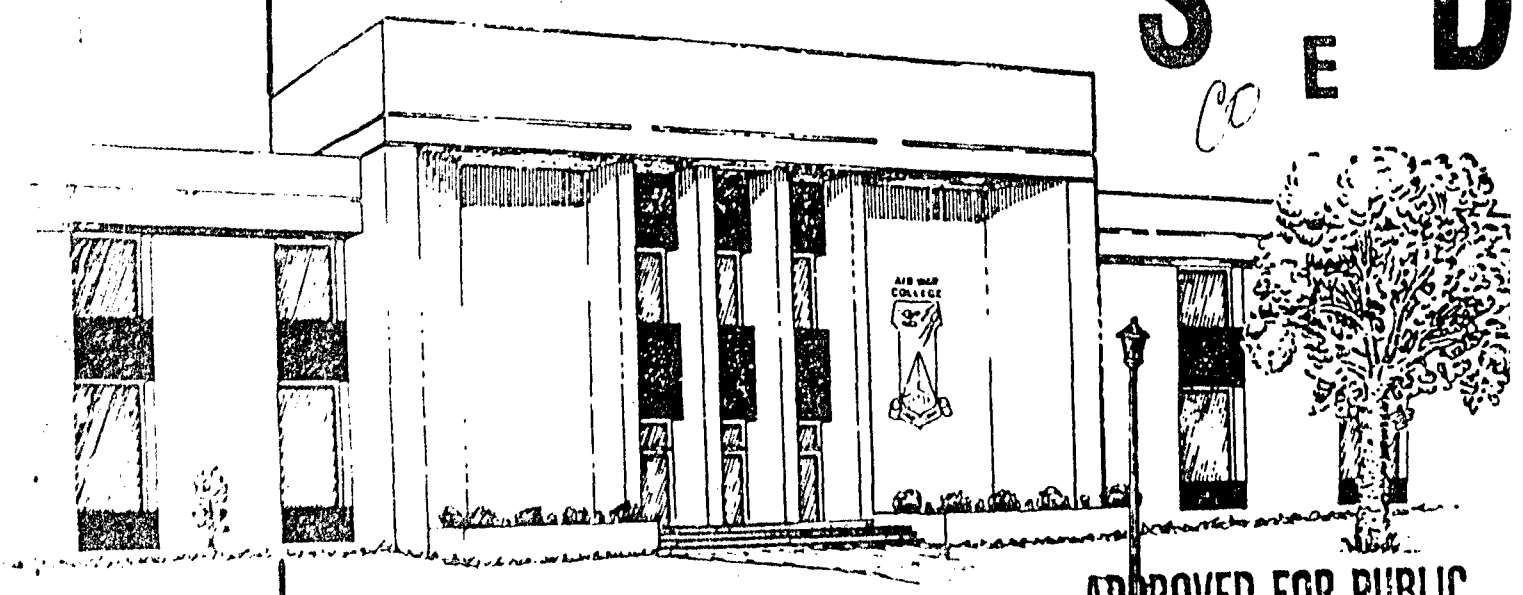

AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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AN ANALYSIS OF SOVIET DOCTRINE USING THE PRINCIPLES OF WAR

by

Mark Q. Barbour
Lieutenant Colonel, USA

A DEFENSE ANALYTICAL STUDY SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE CURRICULUM

REQUIREMENT

Advisor: Lieutenant Colonel (P) Joseph Stroud

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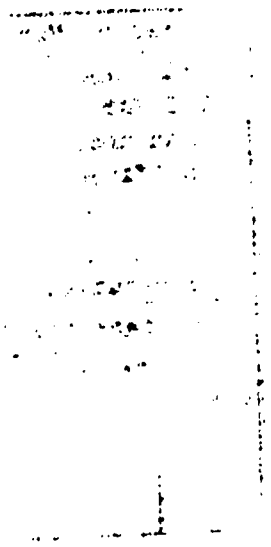

EXECUTIVE SUMMARY

TITLE: An Analysis of Soviet Doctrine Using the Principles of War

AUTHOR: Mark O. Barbour, Lieutenant Colonel, USA

The principles of war as enumerated in Army Field Manual 100-5 are used to analyze current Soviet military doctrine. Strengths and weaknesses are examined in each area. The assessment covers the doctrinal treatment of what the Soviets claim to intend to achieve, the organization and structure designed to execute that doctrine, and the methods and techniques implemented to execute the doctrinal precepts. While the Soviets do not acknowledge per se the validity of the principles as set forth in FM 100-5, their military doctrine and practices largely conform to them. The strengths and weaknesses revealed with regard to individual principles of war fall into a pattern. This pattern is the challenge and the opportunity faced by the United States and NATO.

BIOGRAPHICAL SKETCH

Lieutenant Colonel Mark Q. Barbour (M. A., University of Chicago) has served in the United States Army, Europe for eight years during two separate tours. He has been a platoon leader, company commander, battalion commander, and brigade executive officer in units with General Defense Plan missions to counter possible Soviet attack. He graduated from the United states Military Academy in 1970, the United States Army Infantry School in 1976, the Army Command and General Staff School in 1983, and the Air War College in 1989.

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CHAPTER I

INTRODUCTION

We understand today that the Maginot line was folly. Not a mere mistake or miscalculation, it was a monumental blunder that showed a gross failure to appreciate the principles which govern war and which guide the actions of successful commanders. Similarly, the success in 1940 of the German armor formations that smashed the French army came in spite of French superiority in both quality and quantity of tanks. The German victories were a direct result of a superior understanding and application of the principles of war.

Every defeat is subject to a post mortem analysis according to the principles of war. Every victory is susceptible to the obverse analysis. God may be, as Napoleon alleged, on the side of the big battalions, but the principles of war seem to be on the side of the victor. But if war is indeed governed by principles, if discernible laws, like the laws of physics, govern the conduct and outcomes of war, it must be possible to use them a priori to test and analyze the soundness of tactics, not just ex post to explain the inevitability of whatever the results of battle may be.

In fact, success is not an accident, and the insights of the principles of war are not the exclusive province of

the historian. History might have taken a different turn if DeGaulle had convinced the French high command of the wisdom of massing armored forces, or if Guderian had failed to employ such massing of armored forces on the attacking side. Today, laymen see readily these truths which respected military professionals of the day were unable to discern.

Typically, American officers envy the overwhelming Soviet numbers, but not the Soviet doctrine and organization which are seen as cumbersome, lacking in innovation and encumbered with political and ideological baggage that detract from the conduct of war. If these attitudes are correct, then an objective analysis of the Soviet doctrine according to the precepts of the principles of war should highlight the weaknesses. If the attitudes are not correct, the analysis should help dispel some serious delusions.

The purpose of this paper is to analyze Soviet doctrine in much the same way as an American commander might analyze a course of action which he was considering for his own unit. The question is "does the doctrine, the proposed course of action, adhere to the principles of war?" To the extent that it does, the analysis indicates that the doctrine is sound. To the extent that the doctrine diverges from the principles of war, potential weaknesses are revealed. Two ancillary benefits accrue from this analysis. First, viewing Soviet doctrine from this perspective is a

departure from the routine methods; it affords the insights which come from viewing familiar material in a new way. Americans well versed in what the Soviets plan to do in war may deepen their understanding by reexamining the doctrine from this vantage point. Second, applying the principles of war to Soviet doctrine affords an opportunity to deepen appreciation of the principles. The paths here are not as well worn and clear. This paper intends to determine if the Soviet doctrine is "sound" in respect to its conformance to the principles of war. The course of the analysis should have the side benefit of provoking thought both about Soviet doctrine and about the principles used to analyze it.

A thorough understanding of Soviet doctrine is not a prerequisite for dealing with the issues treated in this paper; neither is such an understanding provided herein. A good thumbnail background is provided by the U. S. Army War College's reference text titled Soviet Armed Forces. It provides a quick overview of Soviet doctrine and structure and a commensurate degree of analysis. Part three, "The Non-Strategic Dimension" of Leebaert's Soviet Military Thinking gives a good general account of the Soviet approach to war. This provides a fuller understanding of the context and the development of Soviet doctrine. The best source for information on the specifics of how the Soviets organize for and conduct warfare is the U. S. Army's Field Manual

100-2-1, The Soviet Army. While it may provide more detail and less context than the casual reader may desire, it is an excellent source for the nuts and bolts of what the Soviets intend to do. It is a less satisfactory source for information on the underlying reasoning. A very good source for those desiring a fuller treatment of the topic is Baxter's Soviet AirLand Battle Tactics.

CHAPTER II

OBJECTIVE

The concept of objective is primus inter pares of the principles of war. It is the linchpin that connects military strategy to the national policy it is designed to implement. The desired political ends will dictate the strategic military objectives; together they set the context in which the military means are chosen. Given that a military objective supports the political ends, it will lead to success if it is clearly defined, decisive and attainable.

The Soviet emphasis on offensive maneuver carries with it the advantages of initiative and the ability to select objectives which force the enemy to react. Clausewitz noted that while the defensive is the stronger form, the offensive is the more decisive. Soviet preoccupation with the offensive supports the paramount political objective of avoiding another catastrophic war fought on Russian soil. Regardless of whether the Soviets desire the ability to intimidate Western Europe and the NATO allies, they are dedicated to a national defense in Europe which is built on the ability to carry the fight out of Russia. This political objective is consonant with the supporting objective of exploiting the inherent weaknesses of alliance warfare by driving military and political wedges between the

NATO allies. Early success could defeat the forces which are forward deployed and automatically committed. If this can be accomplished before uncommitted forces are deployed and reserve forces are mobilized, the opportunity exists to crack NATO by convincing the nations with undeployed forces that the battle is lost before they can join it. Failing this, it may be possible to defeat NATO piecemeal by maintaining a tempo of attack which is faster than the allies' ability to generate and deploy forces. In particular the Soviets might be able to achieve major military and political goals before the NATO decision-makers were able to agree on the necessity of a nuclear response. The advantages are obvious. Theater nuclear targets against Soviet troop formations would now be on NATO soil forcing collateral damage to be borne by the allies; there would be an enhanced political reluctance to risk a nuclear exchange as a denouement to an irretrievably lost cause. Whether such an attempt could be successful is problematic, but what is important here is that the over-arching political goals of the Soviet Union seem to point in the same direction in this context and hence seem to draw its military policy in a unified and coherent direction. By way of contrast, US objectives in NATO are pulled in competing directions by the exigencies of the alliance. The defensive nature of the alliance denies it any meaningful prehostilities commitment

to pursue a conflict aggressively in offensive operations into the enemy heartland as the Atlantic powers undertook to do in WWII. The avowed NATO goal is to defend and restore the existing borders. But even the commitment to defense is taken in the context of cooperation with an alliance whose members have military attitudes which naturally correspond to their capabilities and their politically and geographically determined perceptions of the threat. The United States espouses a deep battle doctrine but defends to retain terrain well forward in NATO and is politically constrained in its ability to conduct deep operations, at least early in a conflict when such operations would necessarily entail extensive force maneuver across the existing borders.

Soviet political objectives are well supported by a hierarchy of implementing objectives at the strategic, operational and tactical level. Tactical depth objectives carry the attacker to the rear boundaries of the forward defending divisions. These penetrations would break the defensive "crust" and allow the attainment of intermediate operational depth objectives which would extend into the rear areas of the defending corps. Operational depth objectives continue the offensive to seize objectives in the rear area of the defending army group. Finally, strategic depth objectives carry the offensive against any remaining

defending military forces and to political and economic centers.[1] Collateral objectives throughout the campaign assign priority to the capture or destruction of the defender's nuclear delivery capabilities.[2] Note that the Soviet tactical, operational and strategic objectives are not merely "more of the same", a series of undifferentiated scraps of terrain. They are a true hierarchy; each element in the series is selected to facilitate the next higher effort and through it the campaign and ultimately the political objectives of the war. An illustration of this coherent hierarchy of objectives is the Soviet determination to execute the war in such a manner as to enable them to terminate hostilities on favorable terms quickly and to preclude an escalation to tactical nuclear war. Special weapons supply facilities, support capabilities and nuclear-capable delivery systems are targeted at tactical and operational levels. Once a penetration is achieved, maneuver forces may bypass NATO defensive positions to destroy nuclear-capable systems before the decision to use them can be implemented.[3] Operational level fires and, if possible, maneuver forces will neutralize deeper nuclear-capable assets. These tactical and operational objectives support the strategic objective of forcing the war to a level where the correlation of forces favors the Soviets,

but they also support the higher objective of avoiding a catastrophic war on Russian soil.

The Soviet adherence to the principle of objective is evident in their organization, equipment and the roles assigned to forces. The complete mechanization of soviet forces facilitates the attainment of objectives in great depth. This capability is enhanced by the echelonment of Soviet forces which allows succeeding echelons to proceed to objectives in increasing depth, building on the success of previous echelons. This echelonment optimizes the attainment of the deeper, more important objectives. The separation of echelons ensures that follow-on forces are not unintentionally committed to the fight for initial objectives. The Soviets do not commit follow-on forces to retrieve failure; they adhere to the principle of reinforcing success. Second echelon forces retain a measure of flexibility and can be committed where success in the first echelon best facilitates success in attaining deeper objectives. The apparent increased Soviet emphasis on operational maneuver groups at operational and high tactical levels reinforces this exploitation of the advantages of concentration on clearly defined objectives. These forces are designed, organized, trained and equipped to seize deep objectives at the operational and strategic levels.[4] They will not be committed to an initial battle to break through

NATO's "crust". They will be committed to exploit a breakthrough.

The Soviets appear to have taken full advantage of the insights of the principle of objective. Their political objectives are well supported by a hierarchy of strategic, operational and tactical objectives. Their military structure is echeloned to achieve these objectives and is particularly structured to avoid being bogged down by tactical setbacks but to press in exploiting any success to achieve deeper objectives. Echelonment allows specialization in missions and mission oriented training.

CHAPTER III

OFFENSIVE

The principle of offensive centers on the concept of initiative. Through offensive actions the enemy is forced to react rather than to pursue his own strategy. Freedom of action and initiative go to the attacker. Defensive actions may form a necessary phase in an overall offensive strategy, and defensive tactics may contribute to the success of a larger campaign. Success of a strategy, however, depends on the attainment of the military objectives which support the political goals. A successful strategy must wrest the initiative in order to force a favorable outcome at the decisive point. In practical terms this entails offensive action.

"The offensive is the only type of combat action...,employment of which attains the complete route of the enemy and the seizure of important objectives and areas." A. A. Sidorenko [1]

The offensive has been rightly described as dominating Soviet military doctrine. At the strategic level the Soviets plan a deep offensive. In case of war with NATO, regardless if the war is fought on short notice or after a prolonged period of rising tensions and military buildup, if it remains conventional throughout its course or if it transitions to theater nuclear war, the Soviets are

projected as planning to initiate actions with offensive operations that take the war deep into NATO territory. They will follow up with continued offensive actions to keep the war off Russian soil and to pursue initial successes to favorable termination of the war.[2]

The clearest evidence of the Soviet devotion to the offensive is the dominance of mechanized and tank forces in the Soviet army. The "foot soldier" does not exist in the Soviet forces.[3] While it is true that the vast expanses of Soviet territory decrease the effectiveness of pedestrian infantry, the relatively shortened and straightened borders of the Warsaw Pact nations after WWII would allow for more economical defensive forces. But Soviet forces are designed to seize and maintain the initiative. The Soviets expect to progress at rates of up to 30 kilometers per day in achieving their initial penetrations. Once a major breakthrough has been achieved, rates of advance will increase considerably so that over a period of several weeks the Soviets expect to sustain rates of advance of 50 kilometers per day.[4] To put this in perspective, Guderian's dash across northern France in 1940 advanced at 20 kilometers per day after they had broken through. This is approximately the same rate of advance achieved by Patton attacking in the opposite direction four years later.[5] The Soviets were able to achieve rates of advance of 50

kilometers per day in their Manchurian campaign in the closing days of WWII. This campaign has some obvious asymmetries from the likely course of a conflict in central Europe, but it has some instructive parallels as well. Whether the Soviets would be able to achieve and sustain these rates of advance is unclear, but what is clear is that they are oriented on exploiting to their fullest the advantages of initiative and tempo which accrue to the attacker. One does not build a Maginot line if one intends to attack; one does not exclusively build tank and mechanized divisions if one intends to defend.

While a confrontation in Central Europe would necessarily be a clash of the two super powers it would take place in the context of alliances on both sides. The alliances are not symmetric but they do present each side with problems and opportunities. Each is a defensive alliance. The Warsaw Pact in particular was forged under the coercive influence of its chief member for the ostensible purpose of deterring aggression from the other side. Such alliances have inherent weaknesses, some of which are exacerbated in offensive operations. A problem of propaganda is that it may work too well. The differences between ideologically inculcated "realities" and what one sees to be true can cause a cognitive dissonance. The Soviet troops dispatched to crush the Prague Spring

experienced such dissonance to the extent that some units needed to be rotated out. This phenomenon might be enhanced in nonSoviet and even in Soviet troops who are ordered on spearheads to the channel in defense of the motherland in response to unclear aggression.[6] Perhaps the most effective counter to this phenomenon would be strong initial success. First, if the Soviets are across the Rhine in the first week of the war, the Poles are not likely to regard the time propitious to reevaluate the Pact and its war aims. Second, to the extent that the Pact allies are committed to deep offensive thrusts in NATO territory, opposition to the undertaking, even if they were so inclined, would be severely complicated. The Soviet experience in Afghanistan, while not marked by conspicuous success, indicates that pessimistic predictions of the reliability of Soviet troops in other than defense of the motherland may be wishful thinking. In fact the Soviets have devoted a considerable propaganda education effort to ensure the reliability of their soldiers in the event of a war in central Europe.[7] To protect the homeland the fight must be forced onto the aggressor's territory, and the forces of aggression must be destroyed. This was necessary to win final victory in the Great Patriotic War. To spare the homeland the attacker must be preempted; this will have the very desirable

additional effect of reducing casualties by stunning the attacker and robbing him of the initiative.[8]

Soviet organization and tactics are well suited to executing deep and sustained offensive operations. The echelonment of forces allows exploitation of initial success by passing through second echelon forces to seize objectives in depth. Following echelons are sufficiently distanced from engaged echelons to prevent unintended engagement by forces engaging the lead echelon. They are designed not merely to thicken the fight but rather to give it depth corresponding to and sufficient to overcome the depth of the defense. Following echelons are assigned objectives in depth and are directed to exploit success by moving through gaps created by the first echelon or, if necessary, picking up the fight from the first echelon. Once a significant rupture in the defense is forced, the operational maneuver group can be committed to previously determined objectives in depth. The offensive is not a creative exploitation of opportunity; it is a calculated creation of opportunity with a subsequent exploitation that is built into the original plan.

CHAPTER IV

MASS

The principle of mass dictates a concentration of combat power at the decisive point and time. This principle complements those of objective and offensive. Having defined the decisive objective and determined the initiatives to attain it, the successful strategy must focus the mass of its combat power at the critical point to ensure success. This term should not imply dead weight but rather the proper type, combination, and amount of combat power to achieve success. In the allocation of forces, first consideration goes to optimizing the likelihood of success where it will be decisive.

The stereotype of the Soviet hordes steamrolling huge formations against NATO seems to be a reducio ad absurdum of the concept of mass. Indeed the superiority in quantities of forces enjoyed by the Warsaw Pact seems to enable them to achieve overwhelming tactical or even operational level superiority in mass of forces almost at will. While the numerical superiority enjoyed by the Soviets is clear, it is dangerously wrong to assume that it is accompanied by a complacent doctrine that superior numbers can be wielded like a blunt instrument. The Soviets understand the liabilities of large troop concentrations in an environment potentially dominated by chemical and nuclear weapons of

mass destruction. Even if Pact forces do not intend a first use of weapons of mass destruction, they recognize that their very success might induce NATO to resort to tactical nuclear weapons to retrieve the military situation.[1]

The classic echelonment of Soviet forces appears at first analysis to be a violation of the principle of mass. A third or even as much as a half of the available combat power might be allocated to the second echelon and reserve in total. The combat power of these forces cannot be brought to bear during the initial engagements. This structure seems to hold a higher proportion of forces uncommitted than the U.S. general rule of holding reserves of up to one third of the force but usually less. In fact, Soviet echelonment commits a much higher proportion of the force. Typical Soviet reserves are small, usually about one ninth of the force, vice one third in U. S. forces. Second echelon forces are committed forces. They are not reserves withheld from the battle to be available to meet contingencies, eg., to block counterattacking forces. The missions of the second echelon are assigned at the beginning of an operation. Clearly the course of the battle determines the exact time and circumstances of the actual assumption of the main fight by the second echelon. In the case of extreme success the first echelon may be able to seize all of the objectives entailed in a penetration and leave the

second echelon free for exploitation objectives. At the opposite extreme, the first echelon may take such substantial losses in attacking its first objectives that the task has to fall to the second echelon.[2] In either case the two echelons are articulated parts of a coherent whole. The dispersion between the echelons allows the Soviets to maintain a nuclear scared posture as a matter of course. They do not need to assume altered formations to allow a sufficient dispersal and at the same time achieve appropriate concentration of forces.

Echelonment in depth allows massing in dimensions that match the dimensions of the defensive formation being attacked. If the defense is determined to be thin and incompletely prepared, as might be the case in a no-notice attack against NATO, the attack might come in a single echelon corresponding to the shallowness of the defense.[3] At the strategic level this was the echeloning used by the Soviets in the offensive against the Japanese forces in Manchuria. The single echelon enabled attacking forces to achieve numerous simultaneous penetrations and to optimize the advantage of surprise by exploiting on converging axes at a tempo faster than the defenders could react.[4] Where defenses are well prepared in depth, the attacking forces are echeloned in corresponding depth to mass sufficient combat power to achieve success. The Soviet campaign in

East Prussia used multiple echelons against well prepared defenses in great depth. The attacking forces were able to achieve rapid penetration by pressing against the defenses without pause or respite throughout their depth. The classic example which the Soviets use to illustrate the possible use of more than two echelons is highly restricted terrain well defended in depth, eg., mountains which do not allow advance on multiple axes.[6]

The Soviets recognize that mass means more than concentration of maneuver forces. Their preferred form of massing combat power is to concentrate fires.[7] The more formidable the defense the greater the fires which will have to be concentrated against it.[8] The massing of fires has the advantage of being achievable without relocating the guns but by retargeting their fires. This allows a speed and flexibility in the allocation of destructive power which is not achievable with maneuver forces. The high ratio of artillery to maneuver forces in the Soviet force structure enables them to make full use of the advantages of indirect fires in massing destructive power.

Two additional aspects of the Soviet use of artillery indicate how formidable their force employment is in its ability to achieve and exploit the effects of mass. The

Soviets plan to synchronize and optimize the effects of fires with regard to the fires themselves and with regard to the supported maneuver forces. Fires themselves are massed so that the effects are synergistic. The effects of a series of small blows may be overcome if pauses between the blows allow the enemy to recover and prepare for the next. If the same blows are delivered together and in an unrelenting series, the effects are magnified . "An enemy front capable of enduring dozens of small strikes may be broken by one big strike."[9] In this regard the Soviets lay great emphasis on the psychological effects of fires, their ability to stun, to disrupt what they do not destroy. These effects are magnified with massing of fires. A second dimension of mass is the integration of fires and maneuver so that their effects are added, each enhancing the impact of the other. Soviet echelonment and its commitment of forces in depth is implemented in a precise application of norms predicting the rate at which forces can advance under various conditions of enemy resistance, terrain etc. The scheme of maneuver demands that attacking forces adhere to prescribed rates of advance. Fires are synchronized with the advance of the maneuver forces to optimize the combined effects. Fires concentrate on a series of targets in advance of maneuver forces. They destroy enemy forces, suppress antitank rockets, and disrupt defensive fires.

Synchronization allows indirect fires to continue until they are enfiladed by the attacking forces. The Soviets calculate that after fires are lifted, defending riflemen will take nearly a minute to reprepare to fight, anti-tank missiles will take a minute or more, and combat vehicles will take two or three minutes to return from hide positions.[10] Here the benefits of massing are apparent; the effects are clearly synergistic; the fires continue to displace according to a schedule to keep pace with the maneuver forces. The concentration of effort continues to focus simultaneously at the decisive point as the attack is pressed against the enemy in depth.

Soviet doctrine appears to maximize the effects of mass. First, echeloning allows massing of maneuver forces in a depth appropriate to the depth of the enemy formations. Second, massing of fires allows rapid responsive concentration of destructive power. Third, the synchronization of fire and maneuver in depth exploits the synergism of their effects.

CHAPTER V

ECONOMY OF FORCE

Economy of force is the reciprocal of the principle of mass. Lacking unlimited resources, a strategy cannot presume overwhelming forces everywhere. Concentration of combat power at the decisive point implies a diversion of forces from other areas and a concomitant risk. Economizing elsewhere to facilitate massing forces at the decisive point must be weighed against the increased hazard of defeat in a "nondecisive" area, causing the attacker to lose the initiative and jeopardizing attainment of the strategic objective.

Clearly the Soviets recognized in WW II that a scarcity of resources imposes the necessity of economies of force if one is going to achieve a concentration of sufficient mass at the decisive point. Thin forces held at Stalingrad in order to allow the massing of overwhelming counter attack forces. When the counter offensive was launched, second quality troops were put against the Germans' allies and the best formations were allotted the critical task of defeating von Paulus. Each phase of the operation was characterized by economies of force which freed combat power for commitment at the critical time and place. But the Soviets are risk averse, and in building their present armed forces they have taken measures to minimize the necessities for

risky economies of force. The sheer size of the Soviet army, the authoritative dominance of the Soviets over the other large forces of the Warsaw Pact, the immense size of trained reserves, and the retention of generations of older equipment combine to provide Soviet planners the means to avoid great risk from large economies of force.

At the tactical and operational levels the Soviet technique of echeloning does allow for economy of force operations in either offense or defense if desired. Single echelons can be used in economies of force to free forces for multiple echeloning of the main effort. The classic indication of the main effort of a Soviet attack is the axis of advance of the second echelon.[1] If enemy defenses are shallow and incomplete, an attack can be made in a single echelon to achieve multiple breakthroughs. This frees up forces for exploitation of the penetration.[2] This economy of force is achieved in a different dimension; the weight of effort is changed to a later phase of the operation, and risk is accepted in the initial phase. The Soviets believe they can use surprise to achieve a sort of economy of force by allowing initial defenses to be penetrated more easily, freeing forces for decisive operations in depth.

Similarly, the small size of the Soviet reserves can be regarded as an economy of force. Reserves allow commanders to exercise initiative. Uncommitted forces can be used to

seize opportunities which develop during an operation, or to react to an unforeseen enemy action. The Soviets assume a risk in allocating forces to this role which are extremely small, about one third the size of the forces that U.S. commanders typically allocate. This economy of force frees forces for the forward echelons; that is, forces are freed to be committed to decisive operations according to the plan instead of being held out of the battle to be committed where circumstances demand. The Soviets intend to achieve success by seizing the initiative and forcing the tempo of operations according to their scheme of massive offensive and deep maneuver. Even if the Soviets had unlimited resources, they must avoid concentrating lucrative targets for weapons of mass destruction. This in itself implies a requirement for economy of force. Here the attacking echelons and the exploiting operational maneuver groups are the decisive forces; they are weighted in a force structure which achieves this end in part through small reserves.

The Soviets plan to keep committed forces in the fight until they are either successful or rendered combat ineffective because of high casualties, perhaps as high as 40 or 50 percent. Soviet troops are expected to continue to fight even when exhausted and to hold ground stubbornly in the defense.[3] This is a sort of draconian economy of force, at least from the perspective of current operations. This

system relieves commanders of the necessity of replacing or reinforcing formations before they become combat ineffective. Troop formations make a larger contribution if it is not necessary to preserve sufficient infrastructure to allow rapid reconstitution. Accepting this degree of attrition allows the assignment of more demanding missions to a unit, allowing economies in the number of forces assigned.

These economies of force are unattractive to U.S. military doctrine. They are achieved at the cost of forces which provide for initiative and flexibility. But this application of the principle is consistent with the realities of the Soviet military. The economies come at the expense of capabilities which are not central to the Soviet methods of fighting their forces; they allow a weighting of the forces which are key to the Soviet style. Soviet success demands that their plan be forced to work; ad libbing from a developing situation is not the Soviet way. They have economized to ensure that the forces will be available where they are planned to be needed.

CHAPTER VI

MANEUVER

The principle of maneuver encompasses flexibility, mobility, and maneuverability. This principle calls for concentration and dispersion of forces to achieve success with reduced losses. The physical mobility of forces is complemented by mental agility in plans and subsequent execution to take best advantage of enemy weakness and to maintain initiative.

The Soviets believe strongly in the importance of maneuver and have worked to create a force capable of tactical and operational maneuver in depth. They understand this principle to embrace not only the maneuver of troops, but that of fires as well. Tanks are said to maneuver with treads and with fires; artillery is said to maneuver with wheels and with fires.[1] Maneuver of fire prepares the conditions for maneuver by troops and combat equipment.

Soviet doctrine calls for dispersed forces to be able to concentrate rapidly while on the move, without a requirement to pause in an assembly area where they would be vulnerable to weapons of mass destruction. Concentrated forces move directly to the attack, echeloned according to the requirements of the terrain and the enemy dispositions. Once the attack begins, the intention is to maintain a tempo which keeps the defender off balance, to maneuver fires and

troops against the enemy faster than he can effectively react.[2] The echelonment of forces, coordination planning tables, and schedules of fires orchestrate the maneuver of fires and troops to attack defenses through their depths and create the opportunity to employ exploitation forces.

The full motorization and mechanization of the Soviet army, including the ongoing conversion to self-propelled artillery, is an indication of the completeness of the Soviet devotion to the idea of maneuver. They have resourced a force that is well suited to deep offensive maneuver. Soviet planning figures project a rate of advance of up to 50 kilometers per day to out pace the enemy's ability to recover. This plan and its dependence on maneuver has no place for pedestrian infantry, and in the Soviet structure there is none.

The operational maneuver forces in the Soviet structure embody the principle of maneuver. They are especially designed and equipped to maneuver in depth to seize objectives of critical importance. These forces represent a premeditated commitment to deep offensive tactics to achieve decisive results. These forces are created to exploit the successes of the leading echelons in overcoming NATO's initial defenses. They will move through these holes and attack not enemy maneuver forces but rather key logistical, communications, and political targets.[3] The key

to maneuver is to gain advantage not in opposing strength but in bypassing strength to attack vulnerabilities.

Two weaknesses with regard to this principle are worthy of note. First is the Soviet lack of initiative which is discussed more fully below. In this context lack of initiative is likely to translate into failure to take advantage of opportunities which arise in a fluid maneuver situation. There is an inherent tension between the demands of a precise, prescriptive, and centralized plan on one hand and the fast developing circumstances of deep maneuver on the other. MG Grigorenko opines that attacking Soviet forces will be vulnerable to being stacked up in unintended and vulnerable concentrations because they will not have the requisite low-level initiative and flexibility to distinguish between covering forces and main battle area forces. Because the maneuver of the whole force is set in motion together, the synchronization of the whole force is jeopardized.[4] Perhaps this lack is partially ameliorated by the specialized capabilities of the OMG, but the specialization of the force structure is itself an example of the purchase of preplanned efficiency at the price of flexibility and lower level initiative. The second notable weakness is the lack of an appreciation for the usefulness of maneuver in the defense. The Soviets eschew the notion of delay, of the use of terrain to gain time, disrupt and

destroy enemy forces but not necessarily to hold.[5] Clearly, history shows that Russians can be made to give up ground, and the Soviet denial of delay as a maneuver may be a matter of semantics. But language can indicate underlying attitudes. Given the Russian history of being invaded, of seeking to surround itself with buffers, and of planning to fight the next war on foreign soil, the Soviet aversion to giving ground in maneuver may be an exploitable weakness.

CHAPTER VII

UNITY OF COMMAND

The principle of unity of command is usually typified by the vesting of authority and responsibility in a single commander. This principle contributes to the focusing of combat power at the decisive point and time by insuring all factors are controlled by a single coherent authority. Unity of command prevents dissipation of combat power through disagreement or lack of coordination between commanders.

The Soviets have a well-developed structure for insuring that the will of the commander is effectively imposed on all of his subordinate forces from the initiation of planning through the completion of execution. The very completeness of this system, coupled with the particular cultural and ideological slant of the Soviet style, combine to give Soviet unity of command great strengths but significant and exploitable weaknesses as well.

The "norms" which the Soviets use in battle calculus form the context and the foundation for unity of command. By U. S. standards these norms are extraordinarily prescriptive. For any given set of circumstances the norms tell the commander the proper rates of advance, volume and duration of fires and associated decisions in fine detail. This system reflects the Soviet conviction that the conduct

of war is governed by a set of knowable scientific truths. These relationships can be empirically derived and presented in tables, algorithms, and nomograms. These norms then drive the decision-making process.[1] Medicine is not an exact science, but doctors are guided in treating their patients because they have the insights gained in experiments and in the treatment of previous patients. War is not an exact science, but commanders can be guided by the knowledge of their craft. Leaders do not look to their subordinates to exhibit innovation in finding new ways to do things; they look for cleverness in applying the scientific principles in the most advantageous way. The desired trait is the peasant cunning to "get a quart out of a pint pot".[2]

Soviet commanders are guided by the norms in planning the rates of advance of forces and the accompanying schedules of fires. Because they are guided not just by general insights like the Principles of War but by more precise laws and derived relations, the Soviets feel able to plan in depth and in detail. This system is entirely compatible with the Soviet system of echelonment of forces. The precision of the norms allows plans which "commit" the second echelon when the fight is first joined by the first echelon. Unity of command is achieved in committing both echelons to the planned course of action according to a highly directive order. While war may well be characterized

by fog and friction, these impediments can be diminished by the application of science. The Soviets use this science to plan past contingency so that the original plan can carry the operation in depth. Combined with the initiative inherent in the offense, the science of their norms imbue the Soviets with the confidence that they will control the battle. This is reflected in MG Grigorenko's critique of FM 100 - 5 where he decries the American argument that an attack should be directed against an enemy weak point. He offers the counter argument that if the attacker makes the correct decisions and dispositions, even a strong adversary will "become quite powerless,... will collapse,... and will pull down the entire grouping with it."[3] An additional benefit of the Soviet norms is that they give the army a common professional language. Unity of command demands communication and mutual comprehension. Orders can be issued and reports rendered in a system where calculations are guided by norms, and understanding is enhanced even if specific reference to the norms is not made. Superiors can expect that the actions of subordinates will conform to accepted principles and that knowledge allows precision in planning and coordination.

There are dark aspects to the unity of effort achieved in a top-driven structure based on precise norms. These are magnified when performance expectations are enforced with

extremely draconian sanctions. Hundreds of Soviet generals were stripped of their rank and sent to penal battalions in WWII for failing to perform as expected. Today, failure to follow accepted principles is a risky business. Unorthodox undertakings which are not unambiguously successful are not well accepted. "Vertical stroke," the practice of punishing commanders for the minor infractions of their subordinates, naturally increases the pressures on subordinates not to stray from accepted methods.[4] There is, in fact, a tremendous disincentive to admitting failure; that is, there is an enhanced incentive to withhold all but favorable information from superiors who need information on which to base decisions.

The Soviet characteristic of adhering to a plan in the face of extreme enemy resistance is a natural manifestation of the authoritarian and centralized development of unity of command. On one hand, German commanders noted in WWII that Russians would persevere on a set course of action until they either gained their objective or ran out of resources.[5] The rewards to centralized control include the ability to force the action through to victory. On the other hand, German commanders recognized in the Soviets an inability to make substantial changes in a plan when the course of combat took a turn which made adjustment necessary. In large part this was attributed to an unwillingness to accept the fact

that a change was necessary. This is understandable given the credence and authority accorded the orthodox solutions derived from the norms and the incentive for subordinates to withhold negative information which would indicate that a revision of the plan was needed. The loss of flexibility and initiative inherent in the Soviet system of enforcing unity of effort is an exploitable weakness.

Two aspects of Soviet command structures have the anomalous effect of appearing to undermine the authority of the commander while at the same time they tend to reinforce effective unity of command. Except for motorized rifle and tank, every branch of service has a chief of branch on the division staff. These Soviet staff officers have a "dual allegiance" which subordinates them not only to their commander but also to their staff counterparts at the next higher headquarters. Clearly this system, where officers receive instructions from two different sources, violates unity of command since it does not give the division commander exclusive control over his forces. But from another perspective it aids efficiency and even enhances unity of command. Branch chiefs receive their slice of the army plan. This has the effect of ensuring integration of subordinate unit efforts into the larger whole. The division can then plan its portion with assurance that it will not conflict with or be preempted by higher

headquarters.[6] The second infringement on the exclusive authority of the commander is the Soviet provision for "skip echelon" command, a practice in which a commander can skip his immediate subordinate and issue orders directly to units two levels down if he sees fit. This is a direct violation to the principle of unity of command, but it gives the higher level commander a practiced means of assuming direct control in time-critical situations. This has large potential benefits given the vulnerability of communications and the cumbersomeness of Soviet decision making. Despite their admitted advantages, these are violations of an important principle and carry with them the dangers that implies. Under the most demanding conditions ambiguities in authority may make a bad situation worse or may make remedial action more difficult. A low level commander who is faced by an unexpected turn of events and who is out of communication with his own commander may need to undertake corrective action quickly and on his own initiative. His ability to do so will be diminished if his branch chiefs abjure deviation from a higher headquarters plan and if his subordinates are receiving conflicting "skip echelon" guidance. Like a paper umbrella, these arrangements may be least useful when most needed.

CHAPTER VIII

SURPRISE

The purpose of surprise is to gain advantage by striking at a time, in a manner and in a place which the enemy does not expect, and therefore for which he is unprepared. Surprise enhances the opportunity to apply strength against weakness at the decisive point. The crux of surprise is the enemy's unpreparedness and his inability to redispose forces quickly enough to overcome the effects of surprise.

Soviet doctrine places heavy emphasis on the efficacy of surprise. The object of surprise is to stun the enemy, disorient him and disrupt his ability to react, "to astonish is to vanquish". In the extreme case the surprised enemy may be so disoriented as to direct fires against friendly troops; in this case surprise can in itself achieve partial destruction of the enemy. In less extreme cases surprise is hoped to paralyze the enemy's will to resist. At the very least surprise can be expected to frustrate enemy preplanned operations, necessitating their revision under conditions in which he is deprived of knowledge.[1] The Soviets believe that these effects of surprise, like the effects of massed artillery fires, are transitory. Thus while surprise can afford a tremendous advantage, it is a fragile one which must be husbanded. The effect of surprise is to put the

enemy in a state of "time deficit" so that his reactions are too slow to be effective.[2] If this initial surprise is not exploited and reinforced, the enemy can be expected to recover and return to his original condition of readiness.[3] The key to this exploitation of surprise is to maintain a continuous and rapid tempo of operations to keep the enemy off balance. The Soviet doctrine of operations in depth conducted by echeloned and following forces committed at the outsets to objectives throughout the depth of the enemy is well suited to achieve the desired tempo and continuity of operations. The opportunities afforded by surprise are built into the plan; the norms which are used in the planning and coordination process take into account the effects of combat multipliers. There is not a need to develop the plan as the operation unfolds, and there is slight need to seize initiative as opportunities present themselves. The opportunities are part of the plan which is then executed in depth. In success the rewards are the speed gained by working on a prearranged plan; this reduced requirement for decision-making time can help the Soviet forces maintain a tempo that enhances and sustains the effects of surprise. If the plan is disrupted, however, the time needed to react and redirect efforts is extended because of the weak capacity for adjusting on the run.[4]

The Soviets make extensive use of drills. These standardize reactions and executions of critical combat skills. The benefits of drills are increased teamwork, greater speed, and enhanced likelihood that in the heat of battle soldiers will respond in the desired way. These advantages make repetitive drills a common military technique, but the Soviets enjoy a reputation for exceptionally intense use of drills. These drills and the highly developed combat formations that go with them would have obvious advantages in enabling the Soviets to maintain a tempo of combat that would exploit initial surprise. But they carry the strong liability of predictability which must certainly attenuate the effects of surprise. If the Soviets are known to work with machine-like precision, an enemy knocked off balance can recover more quickly as he can calculate what the next move must be. This reassuring stereotype is not entirely accurate. There is room for variation in drills and the room for flexibility increases at levels of increased responsibility.[5] The Soviets naturally value success above all, but they tend to be cautious in deviating too far from accepted techniques in obtaining it. Commanders value in their subordinates the capacity to respond quickly to orders. This generally means doing things in the accepted way. At lower levels Soviets use predictable drills. At higher levels this bestows an

ability to attack from the march, to change the axis of an attack, or to rapidly regroup forces. These capabilities greatly enhance the ability to gain surprise and, having gained it, to maintain a tempo of combat that will sustain surprise and its advantages.

CHAPTER IX

SECURITY

The obverse of surprise is security. Security is gained by denying the enemy observation of friendly forces, by planning against enemy capabilities to prevent success from unexpected enemy initiative, and by disposing forces to allow agile response.

As the Soviets place great emphasis on surprise, it is small wonder that they also put great emphasis on security. They devote considerable resources to deception operations which became standard during WW II. For example, in a four month period in 1942 the Germans gathered false information on 261 divisions, 3 armies, 6 corps, 30 artillery regiments, and 54 tank brigades.[1] Deception operations are not an add-on; they are accorded equal status with other operations and are allocated separate resources. Soviet deception can be expected to use a full range of techniques from such well known practices as night movements to the most modern electronic deception techniques.[2] Under the auspices of the Conference on Disarmament in Europe (CDE) agreements, American officers have had the opportunity to observe several Soviet exercises in the past few years. They report an impressive Soviet execution of security measures at all levels. Unit camouflage discipline was outstanding when viewed from the air or from the ground. This standard was

maintained throughout lengthy exercises and evidenced the results of rigorous training which had firmly ingrained standards. Observed Soviet units made extensive use of smoke. This use was a routine part of almost all operations and was executed to a high standard that indicated persistent and effective drilling. These are examples of a generally high state of awareness and execution of operations security. The Soviet practice of using command posts that are small, mobile, echeloned, and redundant greatly enhances security. Such command posts are much less likely to be detected, and if detected, are much less subject to a catastrophic loss of command control assets.[3]

The Soviets practice aggressive reconnaissance and counter reconnaissance. Their formations provide for strong, well constituted reconnaissance elements well forward of the main combat forces. With chemical and engineer assets as well as artillery and combat vehicles, these elements are able to give the commander excellent combat information. The counter reconnaissance effort blinds the enemy commander by stripping away his reconnaissance assets before the deployment of the main battle forces. In these matters the Soviets can be said to be aggressively adhering to the principle of security but not engaging in any applications of the principle which are particularly novel or unusual.[4]

The Soviets are particularly concerned about vulnerability to weapons of mass destruction. As far as possible they seek to avoid offering lucrative targets for NATO nuclear weapons and they will follow this policy even if they do not intend to initiate the first use of nuclear weapons. If successful, this approach could allow the Soviets to gain critical objectives in depth before offering NATO the opportunity of a momentum-breaking nuclear strike. The Soviet system of echelonment allows them to commit forces in depth without necessarily massing them into nuclear lucrative targets. Additionally, the Soviets practice dispersion of forces until as late before commitment as possible. They train units to be able to assemble on the move rather than to spend long times organizing in assembly areas.[5] This technique is facilitated by minimizing changes in task organization. This assembly on the move greatly reduces the vulnerability of units to being interdicted by fires in assembly areas. Additionally, avoiding the use of assembly areas helps prevent revealing friendly intentions to enemy observation. The dark side is the vulnerability of concentration on the move to disruption. The more the assembly is finely timed to avoid lingering in the assembly areas, the more it is sensitive to disruption. If the enemy can determine the

critical choke points for such an assembly, they are a great vulnerability for a closely synchronized plan.

CHAPTER X

SIMPLICITY

The principle of simplicity demands clear, well defined objectives and directives free from ambiguity. The contributions of actions which add to complexity must be weighed against their potential increase of the natural frictions of war. The relative simplicity of a strategy will enhance its probability of success in the event of unforeseen enemy action or obstacles to communication and coordination.

Much of the Soviet conduct of war takes astute advantage of the benefits of simplicity. The drills and the standardization of formations create a simple context for the maneuver of forces. Gen. Collins, the former Chief of Staff of the U. S. Army said he thought the army made a grave mistake in doing away with the triangular division. In the triangular divisional structure each level of organization was essentially composed of a headquarters and three identical subordinate units; a company had three platoons, a battalion had three companies and so on. The virtue Collins saw in this structure was the symmetry of its form in each level of command. He maintained that this simplified command because the same principles were applied in much the same way by commanders at each level. For this reason each level could more easily comprehend the actions

of its superiors and track the actions of its subordinates. When the exigencies of combat required a commander to assume the duties of his superiors, the transition was made more simple.[1] The Soviet system has the virtues of these simplicities, and it accrues the benefits.

In a like manner the highly prescriptive form of Soviet plans and orders and the scientific nature of the decision-driving norms combine to create a context for command that must be clear of the clutter of opinion and diversity.[1] While these conventions may not be highly conducive to originality and innovation, they facilitate a system where ideas can be communicated economically and responded to predictably.

An example of a maneuver which is inherently very complex and difficult but which the Soviets do routinely and simply is the passage of one unit through another unit which is in contact with an enemy force. The Soviets need to be able to do this well if they can hope to make their system of echelonment work. They generally have the lead element halt and assume a hasty defense. They have the trailing element move around rather than through the lead element. They do not in general try to maneuver the elements simultaneously or on the same ground.[3] The third simplifying procedure is to make the maneuver a routine part of operations which is drilled to high standards of

execution. The result is a reliable tool which can be relied upon to accomplish a difficult and critical task under tough conditions.

But the Soviet system is not magic. Even sound norms when applied in haste are prone to produce error, and these errors ripple through the system of other units and calculations that rely on the soundness of the original application.[4] The simplicity which is gotten through a high degree of centralization is gotten at the expense of flexibility, initiative and responsiveness.[5] Properly applied, the principle of simplicity does not apply to plans but rather to operations. Measures may render plans that are simple in that they are uniform and reflect a disciplined and set way of doing things. But these measures will not render true simplicity if the central direction creates a vulnerability in that a disruption of command will cause confusion in which the subordinate elements cannot adjust. The goal of simplicity is to make efforts easier not just to make them appear less complicated. While there is a great deal in the Soviet system that genuinely simplifies operations, there is also a great deal that, in the name of simplicity, imposes rigidity which will be unproductive in crisis.

CHAPTER XI

CONCLUSION

The Soviets have a profound confidence in the correctness of their approach to the scientific conduct of war. "The victory over Nazi Germany ... proved Soviet military science to be superior to that of the Germans and to be the sole advanced, true military science in the world.[1] Historically the Soviets have shown a great deal more interest in Western technology than in western military doctrine.[2] "Soviet military doctrine is not just a set of tactical regulations (as it is often misrepresented in the West). It is an all-embracing military philosophy which is applied to the whole system as the military element of Marxist-Leninist doctrine."[3]

It would be comforting to regard Soviet military doctrine as a dogmatic application of irrelevant Leninist dogma. NATO's task would be much easier if the Soviets were led by the likes of T. D. Lysenko who took Soviet science back to the middle ages by rejecting genetics as anti-Marxist and persecuting its proponents as class enemies. But this is not the case. The brief analysis above demonstrates that for the most part Soviet military leaders are canny practitioners whose plans and actions conform well to what we regard as principles of war.

The core of Soviet military doctrine is the use of a surprise offensive to penetrate deep into enemy territory and seize operationally and strategically significant objectives before the defender can react effectively. If successful, this doctrine means a short war fought almost exclusively on foreign soil. This in turn minimizes the costs to the Soviet Union and avoids the devastation of captured territory which would certainly result from a prolonged war even if it were successful.

This central focus of Soviet doctrine is reflected in its strengths; the Soviet army is well organized trained and equipped to execute the kind of war which the Soviets regard as most important. The above analysis reveals a force well designed for deep offensive operations. Military operations are focused on a hierarchy of objective well structured to achieve the national aims. The surprise required to insure initial success is incorporated into operations at all levels on a routine basis. The related security of forces is similarly a matter of routine not just in initial operations but in drills, formations and standard tactical techniques. The maneuver which will achieve deep quick success is built into the Soviet system: in the total mechanization of its forces, in the echelonment and OMGs which provide for continuous operations through the depth of the enemy and in the doctrinal norms that demand ambitious

and sustained advances. The mass required to smash enemy forces at the decisive point is provided in large ready forces, echelonment, and large concentrations of artillery. Analysis of Soviet doctrine with regard to these principles shows that they have had genuine success in preparing their force.

But The Soviets have real weaknesses as well. The goal of deep, surprise, offensive maneuver, and the limitations of a large, peasant-based, short-term conscript army have combined to require the development of a command and control structure that may be the Soviet Achilles heel. The success of Soviet operations depends on success. At each level, but especially at lower levels, the actions of subordinate units are part of a finely integrated whole. Nearly the entire force may be committed simultaneously, and each unit must perform its mission as directed since each other part of the integrated plan depends on the execution of the whole. The command structure is designed to enforce the plan, to ensure that it is executed according to the accepted norms. It is not designed to improvise in the face of the unexpected. This sort of structure is likely to amplify either success or failure. When things go well, every gear turns in place and the plan is executed with synergistic force. When one or more parts go awry, they knock others off course and the entire plan may fail. When operations are executed as

designed, the Soviets appear justified in believing that "native wit" is not a "substitute for a well-thought-out plan.[4] When the failure of a critical part dooms the entire plan and the commanders on the scene are unable to react properly and in time, the lack of initiative which the Soviets recognize in themselves[5] may be a decisive deficiency.

The strengths and weaknesses apparent in the Soviet military seem to validate the appropriateness of current NATO doctrines. The decisive point of attack may be against the plan itself. An attack against the synchronization of the plan exploits the relative inability of the Soviets to adjust during the execution of an operation. Attacking the command and control structure will exploit the lack of flexibility and initiative at lower levels. When the operation cracks on these weaknesses, the strengths are rendered less potent. The attacker is robbed of the agility bestowed by his plan. Units committed to a broken plan mass unintentionally; freedom of maneuver, surprise, and security are all diminished. To attack the plan is to strike at the most vulnerable point to deny the Soviets the advantages they expect to achieve in offensive operations against deep objectives.

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