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**SOVIET TROOP CONTROL:
THE TRUE TARGET ON THE AIRLAND BATTLEFIELD**

**A Monograph
by
Major Gregory B. Conover
Armor**



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Soviet Troop Control
The True Target on the Airland Battlefield

by

Major Gregory B. Conover
Armor

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

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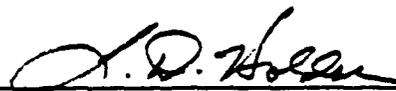
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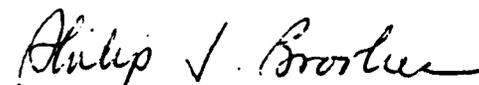
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ABSTRACT

SOVIET TROOP CONTROL: THE TRUE TARGET ON THE AIRLAND BATTLEFIELD
by Major Gregory B. Conover, USA, 45 pages.

The challenge to an American battalion commander is clear. The issue is how to stop a Soviet regiment moving at high speed and still live to fight another day. This monograph argues that the disruption of troop control is the key for defeating a Soviet regiment.

The monograph initially exposes the reader to the Soviet concept of troop control and its critical role in Soviet operations. It then shows that the Soviets are currently attempting to reform their approach to troop control by injecting new standards for accountability and initiative. The author then argues that troop control is vulnerable to disruption due to overreliance on accurate intelligence, discouragement of commanders from acting outside of approved norms, excessive rigidity in battalion-level planning and execution, and a fragile chain-of-command.

The monograph concludes with the proposals of several actions within current US capabilities that may successfully disrupt Soviet troop control at the regiment and below. In particular, the author develops a detailed and innovative scheme for the use of Abrams tanks and Bradley infantry fighting vehicles to attack the excessive rigidity of Soviet command and control procedures.

I. INTRODUCTION

In historical terms, many would argue that United States doctrine has embraced an attrition approach to warfare. Even after the introduction of AirLand Battle, many would continue to argue that this remains true today, particularly at the battalion-level where the focus is firmly fixed on the destruction of enemy combat forces. If we limit our view to just the tactical defense, for both US strategic policy and existing NATO agreements suggest that the bulk of our units will at least start the next war in that posture, we find several disturbing trends. While the famed military theorist Carl Von Clausewitz may have believed that the superiority of the defense over the offense was "very great," recent exercise experience has produced some rather grim results.¹ At the US Army's National Training Center, at Fort Irwin, California, US armor and mechanized infantry battalions defending against aggressor forces based upon Soviet motorized rifle regiments, often failed in their mission, and, even when successful, routinely suffered appalling casualties. Granted, the NTC is not "real" combat, nor can the bias introduced by using American soldiers in lieu of "real" Soviets be calculated, but it still provides a serious, and probably our best, insight into what future combat with the Soviets

may be like. Given these caveats, defend in sector missions often produce loss rates of over 75% of all task force vehicles, with losses being highest among the battalion and company chains of command.² Simply put, a "well fought" battalion, using our best equipment and current AirLand Battle doctrine, may succeed in stopping a Soviet regiment, but it is completely "spent" in the process. Having been rendered combat ineffective after just one engagement, the unit is unlikely to be available, at least in the near term, for any other missions. All of this is without consideration of the moral impact of real "flesh and blood" casualties in place of "laser losses". History is full of examples of units that broke and fled long before three out of four soldiers fell (not to mention the impact of such anticipated casualty rates upon the resolve of units waiting to be committed into action).

While the attitude of some peacetime soldiers is to shrug-off the implication of these exercises with a "you can't make an omlette without breaking some eggs" approach, I believe a search must be launched to find a way to defeat the enemy while better preserving our own force. The Soviet intent is clear:

Offense is the principal form of battle. It has decisive significance to victory over the enemy. Only decisive offense conducted at a high pace and to a great depth can ensure the enemy's complete rout. A swift of-

fensive makes it possible to foul the enemy's plan and to capitalize most completely on the results of one's own nuclear and fire strikes.³

To our battalion commanders the question is clear. How do you stop a Soviet regiment moving at high speed and still live to fight another day?

The Soviets may help us find a solution to our dilemma. In their discussions of their own doctrine, they identify troop control as a component that is absolutely critical to their success on the battlefield. Without it they will be unable to attain and sustain the rapid tempo upon which all of their strategic, operational, and tactical plans rest.⁴ The purpose of this paper is to seek to determine whether there are weaknesses within the Soviet approach to troop control that may be subject to exploitation. Simply put, is the disruption of troop control a key for defeating a Soviet regiment? If weaknesses can be identified within their approach to troop control at the regiment and below, a more effective path to victory may be to shift the focus of our efforts away from our current lethal attempts at attrition to the disruption of his control and the defeat of his plan. In addressing this issue, I will:

- 1) familiarize the reader with the Soviet concept of troop control;
- 2) show that the Soviets are attempting to reform

their approach to troop control by injecting new standards for accountability and initiative;

3) argue that troop control is vulnerable to disruption due to overreliance on accurate intelligence, discouragement of commanders from acting outside approved norms, excessive rigidity in battalion-level planning and execution, and a fragile, overworked, chain-of-command; and

4) propose several actions within our current capabilities that may serve to successfully disrupt Soviet troop control at the regiment and below.

II. SOVIET TROOP CONTROL

Fundamental to understanding the function of troop control in Soviet military operations is an appreciation for the scientific perspective which the Soviets bring to interpreting all aspects of natural and human activity and the role that control plays not just within the military, but within all of society.⁵ The tenets of Marxism-Leninism envision an optimal solution to all natural and human problems, with the idea of control being a natural extension of the recognition that once the method for determining the optimal solution has been developed, fallible human beings must be directed in their efforts in order to avoid wasting precious resources.⁶ In this discussion of troop control, I will address the following:

- 1) the definition of troop control,
- 2) the importance that the Soviets place on troop control as one of their "Principles of Modern Combined Arms Battle,
- 3) the components of the troop command and control system,
- 4) the execution of troop control in battle, and
- 5) the Principles of Troop Control which serve to guide Soviets leaders at all levels.

Troop control is defined as the "purposeful activity of commanders, staff, and other command and control organs to maintain combat readiness and combat capabilities of the troops, to prepare them for battle, and to lead them in the performance of assigned missions." As such, troop control is not synonymous with the US concept of "command and control". The Soviet concept is much broader, embracing not only the US concept, but extending to a whole array of sequential management and leadership activities before, during, and after combat which affect the behavior of troops.

The importance of troop control cannot be overstated. Firm and continuous troop control is one of the ten Soviet "Principles of Modern Combined Arms Battle". Success in combat is seen as depending on the quality of troop control, without it defeat can occur even when sufficient

resources are available and the combat situation is advantageous.⁹ To avoid such a possibility, the Soviets organize themselves using the vehicle of a battle plan.

The battle plan is intended to clearly define the objective of the battle and the means for attaining it. The commander must derive the goal of battle from the mission received from his superior commander and the means to attain it by conducting an estimate of the situation.¹⁰

For the battle plan to be acceptable, the commander must ensure that it aligns the combat capabilities of his unit with the conditions of the combat situation. He is required to use a series of computations covering both quantitative and qualitative factors to scientifically substantiate his solution.¹¹ These factors have been derived by the Soviets through an intense historical study of earlier battles and exercises.

To assist the commander in meeting his responsibilities, the Soviets have created a four-part troop command and control system designed to achieve dependable and effective command and control of units during the preparation for and conduct of battle. The system is comprised of four basic elements: command and control organs, command and control equipment, command and control posts,¹² and a command communication system.

Command and control organs are the individual members of the leadership cadre and small collectives of officers charged with executing troop control. While the commander is the central figure, he is joined by his deputy, staff, political assistant, and the chiefs of branches of troops, special troops, and services.¹³

Command and control equipment comprises the complex of various vehicles, instruments, and devices used in the course of troop leadership with the intent of increasing its effectiveness. Of particular interest is the Soviet effort to bring computer automation to troop control. They feel that computers can bring speed, efficiency, and standardization to the vast majority of troop control processes, but are still uncertain to what degree man should be removed from the equation.¹⁴ As the Soviets wrestle with that problem, they are following technological command and control advances in the West with great interest and giving our papers wide circulation within their military.¹⁵

Soviet command and control posts are specially outfitted locations from which troop leadership is exercised during the preparation and conduct of battle. There are two principal types of facilities, although their scale naturally varies with level of organization. The first is the commander-observation post, designed to be relatively

small, mobile, and well forward. It is generally manned by the commander, his deputy, staff officers, and the commanders of any attached units. From it the commander can observe the battle and issue his immediate commands. The second is the command post. Generally larger and somewhat further removed from the front than the commander-observation post, it has most of the staff and the bulk of the technical resources leadership assigned there. The Soviets anticipate that future demands on the battlefield will require command posts to be more mobile than in the past and anticipate moving them frequently.

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Command and control communications is a system of special communication resources designed to provide prompt and high-quality information flow between levels of command. The Soviets are particularly concerned about security and survivability of communications and appear to have taken steps to use redundant systems to ensure the flow of necessary troop control information.

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During the actual conduct of battle, the principal focus of troop control narrows to four particular functions: acquiring intelligence, adopting or updating the battle plan, transmitting the plan to its executors, and monitoring the subunits in the fulfillment of their assigned missions. Particular attention is paid to acquiring information on the battlefield situation. The intent

is to meticulously process the raw data prior to reporting it to the commander so as to sift out any inaccurate or doubtful information. The sole exception is information on enemy nuclear and chemical weapons or other mobile, high precision weapons, which are reported immediately to the commander.¹⁸

The commander's battle plan is the foundation for all combat activity. It is an extremely detailed directive on what must be done, where, when, and how in order that the assigned mission can be completed on time with the minimum effort and expenditure of resources. It is the Soviet intent to issue a new or updated battle plan during the course of battle if the combat situation changes significantly. Speed of planning and transmission¹⁹ of the new plan is heavily emphasized.

The Soviets have made a significant investment of effort in applying the program evaluation and review technique (PERT) to common troop control processes. By developing detailed network diagrams of common troop activities, they have identified and sequenced a standard view of what actions must be accomplished to execute a given mission. They believe that working from these common network diagrams enhances their ability to adapt rapidly²⁰ and clearly to a change in the combat environment.

The Soviets place special emphasis upon the trans-

mission of the updated battle plan to the subunit leaders. If at all possible, the commander personally delivers the plan to his subordinate commanders. In turn, the subordinate commanders are required to issue their operation orders in person, orally, and generally on the ground over which the mission will be conducted. ²¹

The emphasis upon personally issuing orders is tied to the Soviet concept of "coordination". This specific step in their troop control process is designed to ensure harmonious actions by all subunits, units of troops and special troops, and weapon systems participating in the combat. This demand for personal meetings between commanders and staff at different organizational levels helps to facilitate the flow of information and the resolution of any misconceptions about the commander's intent. ²²

The final and, to the Soviets, most important part of troop control during battle is monitoring the precise and prompt fulfillment of orders and instructions by the subunits. Given the anticipated rapid and abrupt changes envisioned for future combat, the Soviets see this step as the means by which subordinate units will be able to continue operations in accordance with the commander's intent. Again, personal visits by the commander or his immediate assistants are seen as the best method for monitoring the troops. ²³ An additional benefit of their

commitment to the PERT diagrams mentioned above is the ability of commanders to focus their monitoring efforts on what have been identified as critical events for any particular mission. Thus, at least in theory, they will use their available monitoring time to best effect and check only those things which are most likely to have an immediate impact upon mission accomplishment.²⁴

The Soviets now have seven "Principles of Troop Control" to guide their leaders in the conduct of this function. These principles are identified in their new manual, Tactics, and apply to commanders at all levels.²⁵

1) One-man command. Identified as the most important principle of troop control, it means that commanders are endowed with "full executive powers" in relation to their subordinates. It is seen as the key through which unity of effort can be achieved by subordination of the "will of many to the will of one."

2) Personal responsibility of commanders. Seen as inseparable from one-man command, this states that commanders are personally responsible for the decisions that they make and for the results they achieve in their assigned missions. If poor decisions are made, subordinates and their units used incompetently or ineffectively, and assigned missions not completed, the commanders are "liable to the full extent of martial law".

3) Centralized command and control. Consistent with the first two principles is the recognition that the plan of the senior commander is the combat goal and that achieving it requires the "coordinated efforts of all personnel and equipment participating in combat". Centralized command and control is not seen as excluding extensive initiative by subordinates. If the situation on the battlefield changes, subordinates are required to display initiative in changing the methods to the degree necessary to fulfill the intent of the original plan.

4) Constant knowledge and deep analysis of the situation. Effective command and control is seen as impossible without them. They make it possible to identify just what is important out of the flow of information, from which predictions can be made about the development of events and decisions reached for reacting to changes on the battlefield.

5) Firmness and persistence in implementing decisions and plans. Soviets believe that these characteristics have always led to success in battle and believe that they are even more important on a nuclear or chemical battlefield due to the confusion and unforeseen difficulties that will arise. Political work is seen as playing an important role in developing faith within the troops that victory can be achieved through the performance of

duty.

6) Achievement of a high degree of organization and creativity in the work of command and control organs. Seen as a key support to the leadership of the commander are the members of the leadership cadre working as a single unified collective. Soviets believe that this can be accomplished through a "clear distribution of tasks and functions among executors, coordination of their efforts in their work, discipline and strict order ensuring precise and timely fulfillment of troop control measures". At the same time they ask for a rejection of "stereotypes" and encourage a "constant search for new ways" to solve problems.

7) Knowledge of personnel and reliance upon subordinates. This gives recognition that it is the human factor, "the political consciousness and the high fighting, moral, and psychological qualities of the personnel" that gain success on the battlefield. For a commander to make best use of the abilities of those in his command, he must make every effort to get to know them as individuals.

The key to Soviet battlefield success must be considered to be the maintenance of tempo in the rapid projection of combat power deep into the battlefield. ²⁶ This in turn relies upon effective troop control at every level of the operation. For troop control to be effective, it

must be stable, continuous, efficient, and covert. If any of these factors can be disrupted, troop control will be degraded and with it, a corresponding loss of tempo in overall combat operations.

III. PRESENT AND FUTURE TRENDS IN TROOP CONTROL

Significant changes have occurred within troop control doctrine in the last two years. For a good discussion of pre-1986 troop control, articles by Steven Argersinger²⁸ and Bruce Meisner²⁹ are recommended. In this section I will focus on the tenor of the changes that have taken place. In particular, I will address:

- 1) changes to their Principles of Troop Control, and
- 2) the relation of changes in troop control with other reforms in Soviet society.

The 1987 publication of Tactics marked a revision of the Principles of Troop Control. Of the nine principles that had previously existed,³⁰ collectivism was dropped, purposefulness and firmness of control combined, flexibility redefined in terms of creativity, and continuity and concealment of control changed to standards. Added to the new list of principles were personal responsibility and accountability of the commander and the requirement for him to know and rely on his subordinates.

The tenor of these changes suggests a strong move to

unleash the creativity and initiative of both leaders and subordinates. This suggests a degree of dissatisfaction with leadership as currently demonstrated throughout the ranks. It may be that there has been a recognition that the relatively rigid troop control approach of the past can no longer be sufficiently effective to sustain a rapid operational tempo on a battlefield characterized by sudden change.

By stripping away the shield of collectivism from each commander, increasing his authority, and emphasizing a higher standard of personal accountability, the regime appears to be sending a message to the leadership to produce or else. As an effort to bring efficiency to the battlefield, this approach has an internal contradiction. On the one hand the commander is being given greater opportunity to exercise independent judgment, yet the penalty for error appears to be very high. The personal risks for the commander have increased, it is questionable whether this will lead to a reduction in the demand for guidance from a superior commander when the combat situation is unclear.

The directive to know and rely more on your subordinates is clearly an effort at unleashing greater initiative, particularly within the ranks of subunit leaders. Yet it is important to remember the difference in the

meaning of initiative between the Soviets and the US.

A noted British expert on Soviet military affairs described the difference in terms of two football quarterbacks. The US quarterback, needing to score a touchdown, goes into the huddle, creates his own pass routes, calls the play, and throws the ball. The Soviet counterpart, understands the coach's gameplan, sees that the defense won't work for the play that the coach called, changes it to a carefully developed alternate play with rigidly structured routes, and hopes that it works so that he won't be benched when he returns to the sideline. ³¹ The example reflects two very different interpretations of the same word. The question remains as to which interpretation will prove more effective in dealing with sudden change on the future battlefield.

What is clear is that the changes in troop control reflect similar reforms being undertaken within Soviet society as a whole, just as troop control is an extension of the concept of control existing within the larger society. As one changes, it is not surprising to see corresponding changes in the other.

The Soviet leadership appears to believe that stagnant and inefficient economic and social institutions must break the bonds of overcentralization and rigid bureaucratic procedures and tap the creativity and initia-

tive of the individual to produce effective organizations. The slow pace of Soviet reforms suggest that it is not easy to change the social, cultural, and historical predispositions of a people. It is unclear whether the changes in troop control will produce any significant change in troop performance. It is also unclear whether such a change is even truly desirable. It may be a weakness of a Soviet approach which requires comprehensive and consistent solutions to extend economic and social reforms into military troop control. In the final analysis, the demands of the battlefield may be far different in terms of organizational outputs than the neighborhood or the marketplace.

IV. TROOP CONTROL VULNERABILITIES

Having gained an appreciation for the domain and nature of troop control, we can now turn to a consideration of its vulnerabilities. While troop control spans the entire range of units from smallest to largest and is operative throughout the entire theater of war, I will limit my observations to vulnerabilities that would come into play during the close battle. I will focus on five specific weaknesses:

- 1) dependence on early and accurate intelligence.
- 2) discouragement of commanders to act outside of

approved norms,

3) excessive rigidity in command and control procedures,

4) fragile chain of command, and

5) overburdened commanders.

The Soviet approach to troop control appears to be very dependent upon their ability to generate and sustain an accurate assessment of the battlefield situation. The battle plan, upon which all combat operations rest, demands detailed knowledge of the terrain and enemy dispositions prior to its dissemination. The need for intelligence is great and the Soviets have dedicated a significant amount of resources to its collection.

Successive reconnaissance units are designed to precede the combat formations and feed back current intelligence. Unit and subunit commanders are required to personally conduct a ground reconnaissance prior to the start of operations. A large part of the staff is dedicated to the collection and analysis of intelligence.

The system will undoubtedly work well if accurate and timely intelligence is generated. To the degree that such intelligence is lacking, troop control will accordingly suffer. This is particularly likely in fluid combat situations. In a movement to contact or attack from the march, early intelligence is likely to be sketchy. Soviet

doctrine acknowledges this possibility and directs commanders to limit their reconnaissance to a map study if necessary. ³³ Information generated by external reconnaissance units takes time to circulate and may not be available when it is needed. A mobile enemy may move into a previously cleared area. The routine for the intelligence staff is to carefully process information and not provide any data to the commander unless it's completely verified. This may cause the intelligence staff to serve as an unintentional barrier to the timely flow of critical information. These and many other possible disruptions of intelligence serve to degrade troop control.

A second weakness in Soviet troop control is the discouragement of commanders to act outside approved norms. The commander is required to substantiate his battle plan carefully so that the correlation of forces will be scientifically validated prior to the start of operations. If the correlation of forces falls outside of the approved norms, he is required to seek additional combat power. Starting an operation with insufficient combat power is grounds for disciplinary action should it result in mission failure. ³⁴

The computation of correlation of forces and the substantiation of the plan is done primarily by weapon type. If additional combat power is not readily available or

some systems fail to meet the required norms, the commander is thrown into the gray area of judgment, knowing that to operate outside the norms carries with it the risk of personal censure. This requirement must serve as a drag upon the exercise of initiative and aggressiveness and motivate commanders to constantly seek additional guidance and approval from more senior commanders. Such an approach carries with it time and opportunity costs on the battlefield.

A third weakness in troop control is an excessive rigidity in command and control procedures at the battalion and below. The battle plan generated by the battalion commander is extremely detailed in terms of the disposition and actions of subunit commanders. Once the start point has been crossed in either a march or an attack, most actions are limited to the execution of a set of standard drills. It is unlikely that any maneuver element smaller than a company would be used for an independent or semi-independent mission. Any major change to the original plan requires the creation and dissemination of a new battle plan.

In a sense, the reliance upon rigid procedures and battle drills can be seen as both a strength and a weakness. Detailed orders and well understood drills allow for very rapid and effective action whenever the expected

is encountered. The weakness arises when the unexpected occurs. If the original order has been based on inaccurate information, the effort to issue corrections can be very cumbersome and confusing. Likewise, drills are only effective if the situation that is encountered fits the purpose for which the drill was designed. More will be said about this later.

A fourth weakness in troop control is the Soviet penchant for standardization which may leave their chains-of-command subject to identification and destruction on the battlefield. The desire to enhance troop control by collocating command and observation posts and placing them where they can visually observe the battle creates a high risk of losing the commander and his supporting commanders through enemy actions. During World War II, this practice resulted in the loss of approximately 40% of command post personnel per engagement.³⁶

Taken down to the lowest tactical levels, the placement of leader vehicles in fixed positions within standard formations increases the probability of their identification and destruction upon contact. This situation is exacerbated by the unique profile of leader vehicles, easily identified by such characteristics as their antenna arrays. This further increases the probability of their recognition by the enemy.

These risks are particularly important when the troop control principles of one-man command and centralization are taken into consideration. By elevating the role of the commander and consolidating the exercise of control largely in his hands, the impact of his loss has an even greater effect on his unit's ability to adjust to change and accomplish the mission. This situation applies equally as well to subunit commanders and leaders down to the lowest squad.

A fifth weakness in troop control is that Soviet commanders are burdened with a heavy load of requirements and may be unable to fulfill their complex responsibilities effectively during the stress of combat. In addition to being the principal decision-maker, he is heavily involved in the development of a very detailed battle plan which, among other things, requires his personal reconnaissance of the battlefield and participation in the scientific substantiation of the correlation of forces. Further, he must personally brief his subunit and supporting commanders on his plan of action. Once the operation begins, he is supposed to be well forward, prepared to adjust the old or create a new battle plan, while constantly monitoring the performance of his subordinates in the accomplishment of their assigned missions. He is, needless to say, a very busy man.

The Soviets recognize this as a potential problem and believe that they can keep it within managable limits by providing the commander with automated troop control assistance. ³⁷ The problem for them then, just as it is for us, is that system requirements tend to expand to use the full capabilities of the machine, while serving to further increase user reliance on the automated device. This is not to mention the problem of computer survivability in the violent and dirty environment that is war.

While there may be other weaknesses in the area of Soviet troop control, those identified above are particularly significant. They not only directly impact upon the ability of the Soviets to attain and sustain high offensive tempo, but they are all subject to attack by capabilities that are currently available to the commanders of our close battle.

V. EXPLOITATION OF TROOP CONTROL

We can now address the critical question of how commanders, using AirLand Battle doctrine, can take advantage of the vulnerabilities that have been identified in Soviet troop control. The focus remains on countering a Soviet offensive thrust by disrupting its operational tempo and with it, defeating the Soviet commander's plan. Any attrition of the Soviet force is desirable, but only if it can be accomplished while protecting our own force as a combat effective unit. I will offer three general observations on the exploitation of vulnerabilities noted in the areas of intelligence, routine operations, and commander survivability, and then develop a fourth observation on rigidity of troop control in a more comprehensive fashion.

The first vulnerability to attack is intelligence. We have already noted the Soviet's dependence on timely and accurate battlefield information. It is unrealistic to expect that we will be able to completely stop his intelligence gathering activities. He simply has dedicated too many resources to it. Division reconnaissance patrols will be operating 50 kilometers in front of the 1st echelon regiment's advance guard, the regiment's own reconnaissance patrols will be about 25 kilometers further behind, then there is the regiment's advance guard of prob-

ably a reinforced battalion, all before the main body arrives.
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What can be done is to destroy that part of the reconnaissance effort that we can detect through our counter-reconnaissance battle. More importantly, we must take actions to ensure that the information that is collected presents an inaccurate and confusing picture to the battalion and regimental intelligence staffs.

The Soviet attempts to template defensive positions just as we do. He expects to find concentrations of combat power in platoon and company battle positions astride probable avenues of approach. He expects to see us using our engineer effort to enhance the survivability of our positions. Once known, depending on his mission, he will attempt to destroy or fix and bypass those positions.
39 We must play upon those expectations to confuse his picture of the battlefield.

One technique for accomplishing this is to adopt the practice of not occupying fighting positions until just prior to expected contact. Soviet forward reconnaissance patrols may see you, but they need not see you where you intend to fight. This will present a particular problem to the Soviet battalion commander in the development of his battle plan.

Assume that any defensive position extensively devel-

oped or dug-in using engineer assets will be known to the enemy. Operate on that basis and use it, where appropriate, to help sell a deception plan. Knowing of our scarce engineer assets, the Soviet is unlikely to believe that they would be used to construct dummy positions.

It is probably more beneficial to use engineer assets in mobility and countermobility modes. The Soviet reconnaissance effort may discover the minefield or obstacle, but he won't know where the covering fires will come from, nor will he be sure of the intent of the obstacle. Is it designed to hold him in an engagement area, to channel his movements, to deny him access, to simply slow his movements, or to protect a firing position? Uncertainty will undermine Soviet troop control.

A second troop control vulnerability to attack is the routine procedures used by the Soviets. Using his network diagrams, he is most comfortable conducting activities in a sequential and standardized manner. This is particularly true of organizational activities when he is preparing for operations in such places as his forming-up areas.

It stands to reason that striking him during these organizational periods could significantly degrade his troop control. Having disrupted his carefully structured processes, his preferred control tool, the network diagram, would have little utility in repairing the damage

of the strike. While it is unlikely that such an action would keep him from projecting his force, it is likely that it will degrade his efficiency in doing so. This area should be of particular interest, both to commanders conducting the deep battle and to those employing indirect fire assets in the close battle.

A third troop control vulnerability open to attack is the relatively exposed condition of the Soviet chain-of-command. As noted earlier, the Soviets tend to cluster their key command and control players at particular times and places on the battlefield, accepting the risk of engagement by both direct and indirect fires. This approach has cost them in the past and, with sufficient attention, could be made to cost them even more in the future.

During the prebattle period, our security and counter-recon forces should be particularly vigilant for the presence of the Soviet command reconnaissance parties along the forward edge of the battle area. Required by doctrine to seek a position from which they can visually survey the prospective battlefield, they tend to leave themselves subject to acquisition and destruction. Where terrain offers such a vantage point, counter-reconnaissance forces should move beyond that feature toward the enemy and seek to position themselves along likely routes leading to the vantage

point. The destruction or capture of one of these reconnaissance parties would have an extremely adverse effect upon the troop control of the affected units, particularly at this stage of battle plan development.

The Soviet practice of collocating commander-observation posts well forward also presents a lucrative target throughout the course of battle. Both the leadership and troops of our combat forces should be trained to look for indicators of their presence and, upon discovery, should immediately engage with direct or indirect fires.

The loss of a commander-observation post will degrade troop control by reducing the ability of participating units and subunits to react to change on the battlefield. The initial battle plan will already be in effect, but the personnel critical to making adjustments to it will no longer be available.

The acquisition and destruction of the larger command posts by indirect fires should also be within the capability of our close battle units. In this regard, electronic warfare assets are particularly important as a means for locating the command post through its electronic signature.

Last, but not least, is the identification and targeting of command vehicles within combat formations. Our close battle forces should be well prepared to pick-out

leader vehicles by their location and configuration. The Soviet force lacks depth in professionally trained leaders at the small-unit level. The loss of leadership at the platoon and company levels should have an immediate disruptive influence on troop control throughout the battalion.

The fourth and final troop control vulnerability that I will examine as a target for exploitation is the excessive rigidity of command and control procedures. I intend to develop this more fully to show one of several possible ways in which innovative use of existing armor and mechanized infantry forces can defeat a larger force by attacking its troop control.

For the purposes of this discussion, envision a Soviet motorized rifle regiment in a doctrinal attack or attack from a march formation, with battalions in column, battalions in company or platoon columns, with the lead battalion acting as an advance guard with a forward security element consisting of a reinforced company. They will be opposed by a balanced armor-mechanized infantry task force equipped with Abrams tanks and Bradley infantry fighting vehicles conducting a defend in sector mission.

Further envision that this conflict will occur in compartmentalized terrain typical of southern Germany. Imagine a series of ridges running roughly parallel for

about 12 kilometers, eventually opening into an open bowl, but allowing little cross movement and creating three distinct avenues of approach into the US task force sector.

In the following discussion I will first propose what I believe would be the result of this encounter using AirLand Battle tactics as currently practiced throughout the US Army. Second, I will propose a set of organizational and rules of engagement changes and show how I believe they would change the result of our encounter. Third, I will review these proposed changes in terms of the four dynamics of combat power (maneuver, firepower, protection, leadership) and show why I think they will have the desired effect.

Anticipating typical AirLand Battle tactics and assuming that all three avenues of approach lead toward their objective, the Soviet regimental commander would send out his reconnaissance patrols to determine which approach was least defended, expecting to find platoon and company-sized battle positions defending in one or more of the valleys.⁴¹ Since his concern will be striking deep into the enemy's rear, he will attempt to destroy, or at the minimum fix, the US force along the avenue he selects with his first echelon battalion and then quickly bypass with the remainder of the force, rupturing the con-

tinuity of the US defense.

The US task force commander, using all the agility, initiative, depth, and synchronization that he can muster, will move to concentrate the combat strength of his uncommitted companies to stop the Soviet regiment. Based on NTC experience, if he is successful the Soviet regiment will be destroyed and the US task force will be combat ineffective, suffering about 75% casualties. In this exercise in attrition warfare, the U.S. commander will have traded his force for one about three times larger.

Now let's reconsider our scenario, leaving the Soviet actions unchanged but introducing two major changes into the US approach, the first in organization, the second in rules of engagement. We'll continue to defend with a company team on each avenue of approach, but instead of organizing in platoon and company battle positions, we'll create a series of section positions arrayed in depth along each avenue.

Each section will consist of one Abrams tank and one Bradley infantry fighting vehicle; in essence, a combined arms force at the lowest tactical level. Under current AirLand Battle doctrine, platoon integrity is always maintained, allowing for the positioning of up to 12 pure armor or infantry positions within a battalion task force sector, each enjoying the tactical strengths and weakness-

es associated with its weapon systems. Under the proposed reorganization, a more flexible combined arms section is produced by fully integrating an armor and mechanized infantry company.

This will allow for the positioning of up to 28 Abrams/Bradley sections within the same battalion task force sector (see Appendix 1 for more details on how this organization could be formed). For our scenario, this would allow the positioning of up to 7 section positions per company, with initially one company forward on each avenue of approach. The remaining armor/mechanized company and the anti-tank company are to be positioned in depth within the sector.

Ideally, these section positions will be carefully selected to use natural cover and concealment, be widely dispersed, and be positioned along the flanks of the avenue of approach with fields of fire that, though possibly limited, will fire into the flanks and rear of a passing unit. Each position should have a covered route of egress leading away from the avenue of approach and leading to predetermined platoon and company rally points.

Each section position should have one or more alternate positions associated with it. Limited protective minefields or other obstacles may be placed to slow any force attempting to attack the position from the avenue of

approach. Positions may well be placed within wooded areas, given that close-in security can be provided by the dismounted squad from the Bradley.

Starting with Soviet company and battalion commanders, this reorganization into section positions creates some very specific troop control dilemmas. These dilemmas can be further exacerbated by a set of general rules for engagement which would control the fires of each section, each of which would be led by an officer or platoon sergeant. These rules may be best demonstrated by considering the probable flow of events as the lead Soviet motorized rifle battalion moves down our avenue of approach.

Since our combined arms sections were wise enough to not occupy their fighting positions until after the division and regimental reconnaissance patrols had passed through their sector, their exact number and location will be a surprise to the lead battalion. When their initial fires impact upon the Soviet column, the commander of the nearest Soviet company will be faced with making one of three choices. He can:

- 1) attempt to suppress the section with indirect fires and continue to move,
- 2) ignore the fires and continue to move, or
- 3) maneuver against the section and attempt to des-

troy it by direct and/or indirect fire.

Considering his first option, indirect fires, he has at least one problem. He must attempt to rapidly bring effective fires to bear against a very small two-vehicle target which he may or may not be able to clearly acquire in their concealed positions, all the while continuing to absorb casualties from their fires into his flanks and rear. While this option maintains the tempo of his advance, it is at a cost and is not likely to be a very attractive solution.

The US rules of engagement, should the Soviet elect to try this first option, are very simple. If the Soviet indirect fires are effective, move to one of the alternate positions and reengage. If the Soviet fires are ineffective, simply hold positions and continue to fire.

If the Soviet company commander elects the second option, simply continues to move, he again maintains the tempo of the attack, but at a steady attrition of his combat strength. Again, the rules of engagement for the combined arms section are very simple. Continue to engage with direct fires and call for and spot indirect fires.

Should the Soviet commander select the third option and attempt to maneuver against the section, the true dilemma to his troop control becomes apparent. What size force should he send? His company is designed to operate

as an integral part of the battalion in its attack against a company-sized defensive position. His scientific norms tell him that he can defeat a US platoon and that is what he expects to be used against. But this threat doesn't meet the purpose of his battle drills. It is too small to justify diverting his company, yet too large to be handled by a platoon (even if the platoon leadership and training is strong enough to be sent on an independent mission, which it usually isn't).⁴²

The dilemma for the Soviet battalion commander is equally stark. He is prepared to attack and defeat a company-sized defensive position using all four of the companies that he is likely to control, in a coordinated attack. He cannot afford to have his companies engaged in separate fights at different locations against section-sized elements, dangerous though they may be.

To do so means failure in his mission to sustain the tempo of the attack by fixing or defeating forces in sector so that the follow-on battalions can by-pass and strike deep. There are simply too many sections for him to cope with. He has no good answers, none of his tools are designed to efficiently meet this threat.

The US rules of engagement for this situation are again relatively simple. If a weak element (platoon) moves against the position, destroy it and continue to engage.

If the attacking element (a company) is too strong, withdraw. If the attacking element continues to pursue into broken terrain, every opportunity to ambush it using main gun or dismounted Dragons should be used. Every meter covered and every minute used in this effort by the attacking force makes it more difficult for it to recover back into the attacking column and further disrupts the troop control of its parent unit. Mobility in broken terrain rests with the smaller unit, so the initiative on when to break contact and move to the rally point should always remain with the US section.

Why should this proposed reorganization into combined arms sections be superior to our current use of armor and mechanized infantry platoons? An examination in terms of the four dynamics of combat power (maneuver, firepower, protection, and leadership) should settle the point.

1) Maneuver. By increasing the number of "points of resistance" from 12 to 28 within the battalion sector we can increase our coverage in terms of both width and depth. We can, in a sense, be "everywhere at once". The dispersed, yet lethal, resistance will force the enemy to expend his combat power inefficiently, reducing the tempo of his attack.

The expanded coverage should also greatly improve our ability to "see" the battlefield, allowing us to act

with confidence on improved intelligence. The coordinated use of countermobility obstacles and fires, combined with the superior cross-country mobility of the Abrams/Bradley family of vehicles, should allow us to rapidly and decisively concentrate combat power against the enemy's main attack at a point and manner of our choosing.

2) Firepower. The combined arms section produces a more flexible organization of firepower, allowing it to be sited in almost any kind of terrain. The reduced ability of the enemy to suppress dispersed sections, compared to concentrated platoons/companies, should allow for an actual increase in the volume, effectiveness, and depth of our direct fires. Our improved ability to continuously monitor the enemy's movements should allow for more effective use of observed indirect fires.

3) Protection. Preservation of the force is the area in which the proposed reorganization should reap the greatest benefits. Many have noted the steady rise of the "empty battlefield" as organizations have dispersed to survive. By creating an effective fighting force that operates below the Soviet's threshold of reaction, we make it very difficult for him to effectively focus combat power against us. If he reacts with a large force, our dispositions allow us to exercise local initiative and break contact before suffering significant damage. If he reacts

otherwise, he suffers heavy attrition. No matter what he does, he suffers serious damage to his troop control, and with it, his ability to sustain the projection of combat power against us on his terms. The extension of combined arms principles down to the section level greatly enhances the survivability of the unit against any kind of threat.

4) Leadership. The proposed reorganization plays to our leadership strength and against the Soviet's leadership weakness. Aggressive, well trained small-unit leaders and a professional non-commissioned officer corps is what will allow combined arms sections to be effective. Each of those sections can be lead by an officer or platoon sergeant. Each will need to exercise superior initiative and judgment on the battlefield.

The beauty of the challenge offered by the combined arms section approach is that the Soviets, for cultural and institutional reasons, are unlikely to be able to effectively counter it. They appear to lack the small-unit leadership skills and experience to allow for independent or semi-independent platoon actions. Their troop control system is definitely not designed to encourage flexibility and initiative at that level.

VI. CONCLUSION

The purpose of this paper was to seek to determine whether there were weaknesses within the Soviet approach to troop control that could be exploited. The answer to that question is clearly yes. The disruption of troop control IS the key to defeating a Soviet regiment. That is where our efforts should be focused.

We've come to understand that troop control is the Soviet effort to maintain combat readiness and combat capability, to prepare their forces for battle, and to lead those forces in battle. More importantly, we've come to realize the central role that troop control plays for the Soviets in their whole philosophy of war.

They've created a system of people, equipment, organizations, and communications to ensure that troop control will be effective. We know how they intend to execute troop control in battle and the principles they will try to apply in that execution. In short, we know what, how, and why troop control is important to the Soviets.

It is also clear that the Soviets are not satisfied with the demonstration of troop control by their current force. In the last two years they have launched an obvious attempt to inject a higher level of individual responsibility, initiative, and creativity into both their leaders and their subordinates.

I have argued that there are several vulnerabilities inherent in their approach to troop control. It relies too heavily on early and accurate intelligence, discourages commanders from acting outside of approved norms, suffers from excessive rigidity in command and control procedures, exposes their chain of command to excessive risks, and overburdens their commanders.

There are several obvious steps open to us to take advantage of these vulnerabilities. Denying him good intelligence through an aggressive counterintelligence battle, targeting his chain of command, and deep strikes to disrupt his preparations for battle are just three. But the most important point to recognize is that if troop control can be disrupted at the lowest level, it will have a ripple effect that will bring down the entire system.

In my example, I have attempted to show an approach for attacking the rigidity of his troop control that would impact at the regiment and below. I challenge each reader to consider all the vulnerabilities that have been identified and apply the potential benefits of the Abrams/Bradley section approach throughout the depth of the sector in terms of both time and space. I believe that the result would be a defeated Soviet regiment with a US battalion holding the battlefield, ready and able to succeed in its next mission.

Appendix A: Organization of a Balanced Armor/Mechanized Infantry Task Force by Abrams/Bradley Sections

1. Summary of principal weapon systems in armor and mechanized infantry batalions:

	TOW	Dragon	Tank	IFV	CFV	Mortars (107-mm)
Tank Bn			58		6	6
HHC			2			
Sct Plt					6	
Hv Mort Plt						6
Tank Co (=4)			14			

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	TOW	Dragon	Tank	IFV	CFV	Mortars (107-mm)
Mech Bn	12	36		54	6	6
HHC				2		
Sct Plt					6	
Hv Mort Plt						6
Inf Co (=4)		9		13		
AT Co	12					

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2. Possible combinations to produce Abrams/Bradley sections out of a balanced mech/armor task force:

A. Each mechanized infantry company retains its company commander and a platoon and a half of its organic elements (total of 7 Bradley M2's):

M2(CPT) M2(LT) M2(E6) M2(E7) M2(E6) M2(LT) M2(E6)

The remaining vehicles are cross-attached to one of the tank companies. Each mechanized infantry company receives in return a platoon and a half of tanks with the tank company executive officer (total of 7 tanks):

M1(LT) M1(E6) M1(E7) M1(E6) M1(LT) M1(E6) M1(E7)

Combining these forces together would produce two companies with the following configurations:

...			
M2(CPT)	M2(LT)	M2(E6)	M2(E7)	M2(E6)	M2(LT)	M2(E6)
M1(1LT)	M1(E6)	M1(E7)	M1(E6)	M1(LT)	M1(E6)	M1(E7)

B. Each tank company retains its company commander and a platoon and a half of its organic vehicles (total of 7 tanks):

M1(CPT) M1(LT) M1(E6) M1(E7) M1(E6) M1(LT) M1(E6)

Its remaining vehicles have been cross-attached to the mechanized infantry companies. Each tank company receives in return a platoon and a half of Bradley infantry fighting vehicles along with the mechanized infantry company executive officer (currently in a M113A1 personnel carrier):

M113(1LT) M2(E6) M2(E7) M2(E6) M2(LT) M2(E6) M2(E7)

Combining these forces together would produce two company teams with the following configurations:

...			
M1(CPT)	M1(LT)	M1(E6)	M1(E7)	M1(E6)	M1(LT)	M1(E6)
M113(1LT)	M2(E6)	M2(E7)	M2(E6)	M2(LT)	M2(E6)	M2(E7)

C. Task force HHC and anti-tank company remain unchanged.

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