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|                 | MEMORANDUM FOR:  | The Director of Central Intelli   | igence   |                                     |
| · · · · · · · · | FROM :   | William W. Wells<br>Deputy Director for Operations  | ·  |                                     |
|                 | SUBJECT :  | MILITARY THOUGHT (USSR): Ways<br>Increasing the Rates of Advance<br>Combined-Arms Army  | of<br>e of a   |                                     |
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## Intelligence Information Special Report

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|---------------|--|---|------|-------------|--|
| COUNTRY       | USSR   |   | -    |             |  |
| DATE OF INFO. | Early 1964   | SUBJECT                                       | DATE | 1 June 1977 |  |
|               |  | Increasing the Rates<br>of a Combined-Arms An |      |             |  |
| SOURCE        | Order Documentary  Summary:  The following report is a translation from Russian of an article wh appeared in Issue No. 1 (71) for 1964 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal "Military Thought". The author of this article is Colonel A. Bulatov. This article is a review of a book on ways of increasing the rates of advance of a combined-arms army within the framework of an army offensive operation. Among the areas discussed are questions of increasing the mobility of troops, increasing their air transportability, achieving higher rates of conducting combat actions, and negotiating zones of radioactive contamination. Citing specific examples, the author charges the work wi being too general, restating already known principles, and with having insufficiently supported theoretical propositions and practical recommendations. He also points out that the main focus is on exposing shortcomings in troop armament and organization and on finding ways of improving them, rather than on showing ways of achieving high rates of advance.  Headquarters Comment:  The author also wrote "Some Questions of the First Front Offensive Operation in the Initial Period of a War" in Issue No. 2 (63) for 1962  The SECRET version of Military Thought was publis three times annually and was distributed down to the level of division commander. It reportedly ceased publication at the end of 1970. |   |      |             |  |
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## Ways of Increasing the Rates of Advance of a Combined-Arms Army by Colonel A. Bulatov

High rates of advance have always been regarded as a very important condition for achieving decisive success in a battle, in operations, and in a war as a whole. They are one of the most important indicators of the level of development of the troops' combat skill.

In connection with this, in recent years the problem of achieving high rates of advance in a battle or operation conducted under diverse conditions has been the topic of careful study in the course of operational and combat training, at military science conferences and meetings, and also in the pages of the military press, especially in articles of the Journal 'Military Thought'.

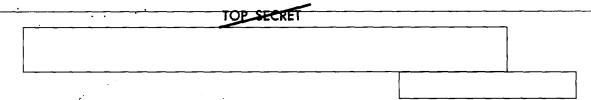
Not only has sufficient theoretical material on this question been accumulated but practical experience as well. Besides this, generalized research on this many-sided and complex problem which, in essence, includes all aspects of the organization and conduct of combat actions of troops, has been little developed until recently.

Colonel V. E. Savkin's monograph being reviewed, Fundamental Ways of Increasing the Rates of Advance of a Combined-Arms Army\* is one of the first attempts to comprehensively research this important matter within the framework of an army offensive operation.

The author shows the importance of high rates of advance for the achievement of the goals of a battle and operation, sets forth the operational-tactical requirements for the development of basic means of destruction and outlines several ways to improve them, examines methods of increasing the mobility of a combined-arms army (increasing the mobility of troops, increasing their air transportability, improving the organizational structure of the troops and their control), and examines methods of achieving higher rates of conducting its combat actions in an offensive operation.

|                   | Fundamental Ways  |              |            |            |        |
|-------------------|-------------------|--------------|------------|------------|--------|
| Combined-Arms Arm | ny. A Monograph.  | Published by | the Milita | ry Academy | i/n M. |
| V. Frunze, 1962,  | 128 pp. and 10 cl | narts.       |            |            |        |

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All of these problems are of definite interest and their study will doubtless aid our command personnel in carrying out the task of achieving high rates of advance in the course of the combat and operational training of troops.

However, in our view, the author of the book did not succeed in supporting with sufficient completeness the more important theoretical propositions and practical recommendations on rates of advance.

The methodology of the calculations and proofs presented gives rise to doubt. In the work, all calculations on rates of advance and the effect of the main means of destruction on their achievement are arrived at as applied to a variant of the offensive that is not typical of present-day conditions -- a breakthrough of a prepared enemy defense. For research on ways to increase the rates of advance, the author took, in essence, the classical defense layout with its branching system of zones and lines and the arrangement of second echelons and reserves which is characteristic of the period of the Great Patriotic War. This led, in our opinion, to insufficiently substantiated conclusions that "the task of determining rates of advance amounts to a determination of the time of the movement forward and deployment of the enemy reserves on one or another line" (p. 11).

Thus, the author's recommendations on the capability of achieving average daily rates of advance of 80 to 100 kilometers (pp. 11-12) are, one might say, bogged down in the classic 'penetration' of the enemy defense and in the overcoming of the resistance of his reserves. Such an approach cannot be called typical for the operations of a future war. In connection with this, we consider that the calculation offered cannot be accepted even 'as one of the possible variants' (p. 13).

The recommendations made in this work are of a general recitative nature. The author sufficiently thoroughly examines, for example, the significance of high rates of advance and the requirements for further improvement of the armament and organization of troops as factors which affect the rates of advance, but says little about how to achieve high rates in a practical way at the present time with existing troop organization, armament, and combat equipment. The material base for solving this problem is more than sufficient. Therefore, it was necessary to research effective methods of utilizing the available objective conditions in order to achieve the specified high rates of advance which, to a considerable degree, predetermine the success of any operation. Unfortunately, this is given little attention in the book.

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The experience of troop and operational exercises was poorly utilized in this book and syntheses and useful recommendations stemming from them are virtually nonexistant.

It is impossible not to note that the work is insufficiently purposefully worked out owing to the fact that the author very often digresses from research of the topic, being attracted to the examination of ancillary questions. Quite often the research of side issues is transformed into an end in itself. Thus, in a section on the effect of means of destruction of the army on its achieving high rates of advance (pp. 13-30) one can find the significance of each means, its weak and strong points, and the directions of further improvements, but nothing specific is said about how these have or will have an effect on the rates of advance or how they can be used in practice for the conduct of rapid combat actions. The presently existing organic interdependence between methods of employing new combat means and methods of troop actions and of organizing a battle and an operation is not revealed.

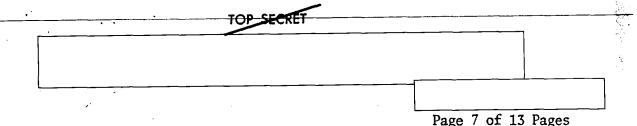
In the chapter on increasing the mobility of a combined-arms army (pp. 31-67) and especially in the section on increasing the efficiency of troop control (pp. 51-61) what was said covered the subject almost completely. Here, almost all problems of troop control are examined, but not one of them is tied in with achieving high rates of advance. Even the material on methods of negotiating zones with high levels of radiation (pp. 87-101) suffers from this same shortcoming.

In reading this work one gets the impression that the main emphasis in it is put on exposing existing shortcomings in the armament and organization of troops and on attempting to find ways of further improving them. In and of itself, this task is important. But we feel that the author should have primarily shown ways of achieving high rates of advance with the existing means of combat, troop organization, and armament, paying primary attention to setting forth and substantiating practical recommendations. After all, it is known that present-day objective conditions -- the new materiel-technical base for the conduct of a battle or operation -- are such as to ensure, as the experience of troop and operational exercises has shown, an extremely successful solution to this problem.

Let us dwell on a number of questions which we feel need refinement.

The significance of high rates of advance and the effect of the main means of destruction on achieving them. Speaking of the significance of





high rates of advance, the author emphasizes that they should be such as to exceed "the rates of maneuvering by the reserves of the defending enemy" (p. 10). And furthermore, "it is necessary to operate at such a rate that the enemy's army reserves would be unable to give assistance to the troops of the first-echelon army corps defending itself on the main axis. In their turn, the army reserves must be routed before they are able to organize cooperation and combine their efforts with the reserves of an army

group" (p. 11).

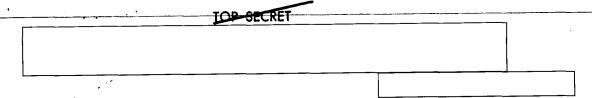
Although we do not take exception to these kinds of troop actions in the course of an offensive operation, we cannot fully agree with the methodological research on this problem. The author's conception, as we noted above, consists in the fact that the enemy will occupy a continuous, prepared, deeply echeloned defense beforehand and that we will break through it. The author also uses the phrase 'breaking open the entire enemy defense system" (p. 7). Of course, such cases may have a place in a future war but they are hardly determinants (typical) of troop actions. First, there will not be time to prepare a deeply echeloned defense, and second, the presence of modern means of destruction does not require one to resort to clearly defined positional forms of defense even though modern defense does not completely exclude elements of positioning, especially at the tactical level. Thus, methods of negotiating such a defense do not require one to resort to a methodical "breaking open" of a defense. Massed missile/nuclear strikes throughout the entire depth of the enemy operational disposition and the presence of gaps and sections of the terrain which are not occupied by troops open up great possibilities for broad maneuvering actions of troops and, consequently, for the conduct of an offensive to a great depth at very high rates.

In connection with this, under present-day conditions it is necessary to direct one's attention not only to the possible nature of actions of reserves and second echelons of the enemy on the defense, even though this is also important, but also to decisive actions to destroy his means of nuclear attack. It is precisely in these means that there lies the greatest danger. The destruction of the nuclear means and the main groupings of enemy troops has a decisive effect, not only on the rates of advance, but also on the nature of the combat actions of army troops as a whole.

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The experience of exercises shows that during an advance at a rate of two kilometers per hour, Honest John free-flight rockets may have six to eight launches from one site, but at an increased rate of 12 kilometers per hour -- only one to two. With such a rate of actions, the enemy





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operational-tactical missiles lose the ability to conduct organized launches as little as one hour after the commitment of the main forces of the army to an engagement, and after three or four hours the entire system of missile-technical supply of the large units and field army will have to be rebased. Consequently, the employment of modern means of destruction for achieving high rates of advance must be subordinate not to the neutralization of the strong aspects of modern defense, as is discussed on page seven, but to the fulfilment of one of the main tasks -- depriving the enemy of the capability to maneuver his missile/nuclear means and to employ them effectively.

The method presented on pp. 11-12 and in Diagram 1 of calculating rates of advance seems to be extremely simplified, even for conditions for breaking through the enemy's prepared defense. If one is to follow it, one learns that with an advance at a rate of 80 to 100 kilometers per day, our troops will, in all instances, preempt the actions of enemy reserves, and the threat of counterattacks and counterthrusts will diminish of itself.

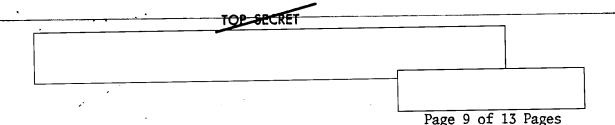
It seems to us that the enemy forces located in the depth of his operational disposition will have more advantageous conditions and possibilities for maneuvering than our advancing troops who, in the author's words, must 'break through' and 'break open' the entire system of defensive zones and lines.

The troops of the army must often repulse counterattacks and counterthrusts in the course of an offensive operation. These actions, as a rule, will take on the character of meeting encounters of the two sides. And this means that, in some cases, it is even necessary to halt part of the forces of the army in order to occupy a more advantageous position for successfully accomplishing this task. Thus, one can hardly agree with such a, one might say, "technical" approach to increasing rates of movement as is presented by the author in Diagram 1.

All calculations on rates should be researched as is done in the practice of military exercises, taking into account a highly maneuverable enemy who is able to move forward at equally high rates, and to conduct powerful counterattacks and counterthrusts against troops on the offensive.

The material presented on pp. 18-30 on the effect of the main means of destruction of a combined-arms army on its achieving high rates of advance is often of negligible importance in that it does not go beyond the limits of generally known principles.





The role and importance of conventional means of destruction -- tanks, artillery, and aviation -- in support of high rates of advance is poorly examined in the work.

The experience of exercises shows that a no less important means of neutralizing the enemy's tactical means of nuclear attack is rocket artillery which possesses a considerable range of fire -- the GRAD launchers up to 20 kilometers and the BM-24 up to 17 kilometers. Sufficiently broad capabilities are also possessed by long-range tube artillery (especially 130-mm caliber). As for aviation, its role in accomplishing this task is indisputable. Modern fighter-bombers are an extremely formidable recommaissance/fire system which is able to independently search out mobile targets and destroy them.

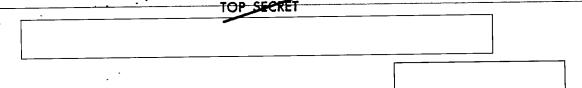
Aviation, especially <u>front</u> aviation, will have great importance in combat against the enemy's <u>means</u> of nuclear attack. Even now it is considered necessary to allocate at least 50 percent of the aviation resources for this purpose. Artillery and aviation possess especially great capabilities when chemical weapons are employed.

Increasing the mobility of a combined-arms army. In examining ways of further increasing the mobility of a combined-arms army as a necessary condition for achieving high rates of advance, the author first poses the problem of the quantity of various forces and means. He shows directly that the 'mobility of a combined-arms army can be increased by means of a greater concentration of tanks and helicopters" (p. 33), by increasing "the relative proportion of the tank troops" (p. 38). In connection with this, the author considers that "at the present time the most typical ratio of motorized rifle divisions to tank divisions in a combined-arms army is 5:2. In the future it will be advisable to have three to four tank divisions and three motorized rifle divisions in its composition" (p. 38).

It is known that the specific composition of a combined-arms army is determined each time by the <u>front</u> commander depending on its place and role in an operation and on the conditions of the situation. The author's proposed number of divisions in the army, and, even more, the correlation between motorized rifle divisions and tank divisions, is groundless and can hardly be called typical. In achieving rates of advance, the main role will be played not by the quantity but by the quality of the forces and means and their skilful utilization.

In our opinion, the most realistic composition of a combined-arms army is that with which it begins combat actions in operations in the initial





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period of a war -- no more than four or five divisions and sometimes even three divisions, one of which is a tank division. But this does not mean that the relative proportion of tanks in an army is insufficient. A modern motorized rifle division has more than 200 tanks and a tank division more than 300 tanks and, thus, a combined-arms army with the specified composition will have more than 1,000 tanks.

In this work it is correctly pointed out that the mobility of the rocket troops must be increased through the broader introduction of wheeled chassis with a cross-country capability and a heavy load capacity. In this case it is also possible to talk of the possibility of employing airlifts by helicopters or aircraft. Proposals on ways of achieving transportability of troops by air and on setting up army aviation and organic aviation are worthy of attention. Here it is appropriate to refer to the experience of the US Army. There they have about 100 aircraft and helicopters in each ground forces division.

As for raising the efficiency of troop control, and improving the tactical and army rear services and the engineer troops, the author, to a considerable degree, repeats well-known recommendations and views on these matters and offers nothing new.

Methods of achieving high rates of advance. All well-known methods of achieving high rates of advance -- reliable fire neutralization of the enemy, timely exploitation of the results of nuclear strikes, conduct of mobile combat actions by axes, negotiation of zones of high radioactive contamination, and the assault crossing of water obstacles -- are set forth in detail in the book (p. 68). The following are described in sufficient detail: the procedure for fire neutralization of the enemy and which tasks in an operation are entrusted to nuclear weapons, to artillery, and to aviation. It is stated that "the fire neutralization of the enemy to the entire depth of his operational disposition creates the objective possibility for swift negotiation of his defense and development of the offensive at extremely high rates" (p. 73).

In the opinion of the author, the successful fulfilment of the task of timely exploitation of the results of nuclear strikes is possible with the landing (drop) following these strikes of tactical and operational landing forces, the employment of tank divisions (regiments) in the first echelon of the operational disposition (battle formation), the wide use of forward detachments, and the swift advance along axes in approach march formations and columns. This is a fact.





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However, it is impossible to agree with the assertion that "an operational airborne landing force, usually in the strength of at least an airborne division, is, as a rule, a means of the <u>front</u>" (p. 73). The fact is that the employment of airborne large units is tied in with complex operational, technical, and materiel support which, within the framework of a <u>front</u>, is at times very difficult. As is known, under present-day conditions they must be employed according to the plan of the Supreme High Command in close cooperation with strikes of the Strategic Rocket Forces.

Much attention is given in the book to employing the most suitable methods of negotiating zones with high levels of radiation (pp. 87-102). We have no particular objection to the questions being examined. But they are not new. That is, what the author says does not differ from what has already been pointed out in the well-known theoretical work published by the Academy i/n M. V. Frunze, Troop Actions in Zones of Radioactive Contamination in a Battle and Operation.\* A similar work was published by the Academy of Armored Troops.\*\*

But the author of the work being reviewed does not mention these works even in the list of materials used. It is no coincidence, therefore, that theoretical generalizations on one of the most important questions of operational art and tactics, on which the achievement of high rates of advance depends, are lacking; that is, generalizations on methods of troop actions in zones of radioactive contamination. The methods cited for negotiating zones, in general, cannot resolve the problem. What is more, certain of them are groundless. Thus, for instance, "the negotiation of zones by means of a swift assault of tank units and large units" (p. 93) is defined as one of the independent methods. But, after all, it is completely obvious that the negotiation of zones with various levels of radiation will occur precisely by means of a swift assault at maximum possible speeds.

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<sup>\*</sup> Troop Actions in Zones of Radioactive Contamination in a Battle and Operation. A Theoretical Work. Published by the Academy i/n M. V. Frunze, 1961.

<sup>\*\*</sup> The Negotiation by Troops of a Tank Army of Zones with High Levels of Radioactive Contamination. Published by the Academy of Armored Troops, 1963.

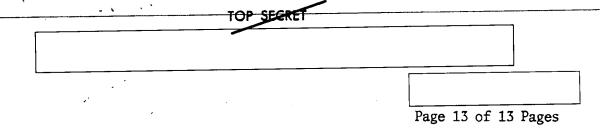
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"Negotiation of a zone after a considerable drop in the levels of radiation" (p. 91) was listed as one of the first methods in the work to be carried out. It should be noted that this method of negotiating zones has long been established in our military literature. It is employed in the course of tactical and operational exercises. However, it is not difficult to see that its employment can unavoidably bring to a halt, if not the entire grouping of troops, then at least its main forces. Incidentally, the author also takes note of this. It seems to us that the frequent halting of troops in front of a zone and the waiting for a drop in its level of radiation will lead not only to a reduction in the rates of advance but will make it easier for the enemy to deliver nuclear strikes against those troops who have been brought to a halt. It is hardly possible to maintain high rates of advance if "in the course of an army operation, the main grouping of the army must sometimes negotiate up to three or four such zones" (p. 92), that is, halt three or four times.

Zones of contamination will often arise as an attendant factor when ground nuclear strikes are delivered against means of nuclear attack, groupings of troops, transportation centers, and other targets; and, in turn, the conditions of the meteorological situation will have a considerable impact on their formation. Consequently, levels of contamination in one and the same sector will always vary. Under these conditions, it will be difficult to avoid halting units of troops of the army in front of a zone, but nonetheless, it is always necessary to strive to negotiate zones by those methods which will not affect the rates of conduct of combat actions. It is evident that this problem requires further in-depth research.

The author treats the negotiation of zones by air as an independent method. He emphasizes that "such a method of crossing zones with high levels of contamination is an extremely promising one" and that it "depends on the quantitative and qualitative growth of military transport aviation, including helicopter aviation" (p. 100). This is true. However, it should be noted that the transport of large masses of troops by air is an extremely complex measure. It calls for advance organization and the allocation of a large quantity of transport and combat aircraft. Is it possible in the course of combat actions upon encountering a zone, even one with high levels of radiation, to organize an airlift over it in a short time if only for part of the main forces of the army? Under these conditions one can only speak of an airlift of small subunits in the strength of a company or at maximum a battalion as landing forces for seizing advantageous lines and installations on the other side of the zone and for supporting the actions of their own units (large units) in the



course of their negotiation of the zone. These will be conventional tactical airborne landing forces.

As for transporting troops by air to the enemy rear on a larger scale, these are measures to be taken by the  $\underline{front}$ .

We feel that the basic methods of negotiating zones of radioactive contamination which, as a rule, will always be employed in the course of combat actions should be: the negotiation of zones on axes with the lowest levels of radiation, the bypassing of them, and a combined method of negotiation, that is, the employment of both methods at once.

|   | levels of radiation, the bypassing of them, and a combined method negotiation, that is, the employment of both methods at once.  In conclusion, it should be said that the problem touched author is very extensive, and he far from fully resolved it. important topic requires further comprehensive research through combined efforts of the academies and troops. And it is very that this work is being continued. Publication of the work Way Methods of Achieving High Rates of Advance of Tank Divisions and Rifle Divisions, which is being prepared by an author collectively Colonel General S. M. Shtemenko, is clear confirmation of the collaboration. | upon by the This the gratifying ys and do torized we and edited |      |
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