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CENTRAL INTELLIGENCE AGENCY WASHINGTON, D.C. 20505

17 August 1976

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MEMORANDUM FOR:	The Director of Central Intelligence
FROM :	William W. Wells Deputy Director for Operations
SUBJECT :	MILITARY THOUGHT (USSR): Determining Balance of Forces and Means

1. The enclosed Intelligence Information Special Report is part of a series now in preparation based on the SECRET USSR Ministry of Defense publication <u>Collection of Articles of the Journal 'Military Thought'</u>. This article is a comment on a previous article concerning the assessent of the balance of forces and means. The author agrees that the use of coefficients of commensurability is a progressive idea, but disagrees with a number of the views expressed in the previous article. He feels that the capabilities of different branch arms, nuclear and conventional weapons should not be equated, since depending on conditions of combat actions the capabilities of individual branch arms will be of primary importance for calculating the balance of forces. The author, therefore, proposes that a combined method be used to account for qualitative distinctions in combat means, which would enable the comparison of combat capabilities of the groupings of two sides under various conditions. This article appeared in Issue No. 1 (86) for 1969

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Determining the Balance of Forces and Means by

Colonel I. Shcherbakov

The search for the most acceptable methods of assessing the balance of forces and means under modern conditions has acquired urgent significance. Combined-arms commanders, the main organizers of the combined-arms battle and operation, are especially interested in the solution of this problem.

The methodology proposed by <u>General-Mayor</u> G. Perventsev and Engineer Mayor D. Sokolov does not give a <u>comprehensive</u> answer to the question posed, but, without doubt, is a step forward.* Until now, the balance of forces was determined by branch arms, types of weapons and combat equipment, and occasionally by their casualty-producing capabilities (Military Academy i/n M. V. Frunze, Armored Academy, Artillery Academy, and others). The authors of this article are striving to find one coefficient of commensurability for all branch arms, and to express the balance of forces simply. They believe that by using a coefficient of commensurability, it is possible to compare the forces not by branch arms and types of combat equipment and weapons, but by divisions, taking into account the capabilities of nuclear weapons, artillery and tanks (included within large units and attached to them). We would point out that in itself the idea of using coefficients of commensurability in assessing the balance of forces is very progressive, but we are not able to agree with the opinions expressed on this by the authors of the article under review for a number of reasons.

To begin with, in such a coefficient the capabilities of different branch arms, operational-tactical and tactical nuclear weapons, and conventional types of weapons are equated. And indeed, the authors themselves explain that the larger coefficient of commensurability for a West German motorized infantry division is due not only to the presence of six Honest John launchers, but also to its having a large concentration of antitank means (2,904). This applies to a Belgian mechanized division, as well. Furthermore, in such a single coefficient, the probable actions of fire means against the depth of the enemy are not considered; i.e., the capabilities of weapons acting against the operational (tactical) depth and weapons for close combat and self-defense are equated. When comparing the forces of the two sides in terms of the capabilities of a division together

*Collection of Articles of the Journal 'Military Thought," 1968, No. 1 (83).





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with its means of reinforcement, the significance of nuclear weapons and artillery not only within the division but also in the army and front is lost to a certain extent.

The methodology proposed by the authors for assessing the balance of forces does not supply the command with enough data to make a decision. Using the methodology, for example, it is impossible to ascertain the weak and strong points of troop groupings, to find ways of eliminating enemy superiority, and to establish which branch arms and types of weapons make it possible to achieve superiority in forces and to decide the outcome of the fighting. The most efficient ways of determining a desirable composition of forces and means when accomplishing tasks in various complicated situations (repulsing counterattacks, etc.) are not examined.

Obviously, depending on the conditions under which combat actions are conducted, the capabilities of the different branch arms will be of primary importance in calculating the balance of forces. Thus, when a nuclear war is being conducted, calculations will be centered around nuclear weapons; during a non-nuclear war, combined-arms large units, artillery, and aviation will figure centrally in calculations; when repulsing counterattacks and counterthrusts by enemy tank units and enemy formations, antitank means will be central to calculations. In assessing the qualitative balance of forces and means, casualty-producing capabilities will, naturally, occupy a central position.

The results of actions by the two sides using nuclear weapons and fire means will have an effect on the composition and combat effectiveness of groupings, including the division. Only by taking this into consideration will a division be able to become an equivalent unit for making comparisons and calculations. In order to assess losses, it is necessary to know the capabilities of the branch arms and to be able to take them into account.

Thus, the command of our troops will have to take our and the enemy's capabilities to inflict losses (damage) into consideration, and based on this, find ways and methods of keeping our troops intact, of sharply reducing enemy capabilities and, in the end, of changing the balance of forces in our favor.

In connection with this, qualitative distinctions in combat means must be accounted for using a combined method. Although the authors are correct on the whole in maintaining that a calculation comparing weapon to weapon and tank to tank does not give the required result, all the same, under certain conditions this method is advisable. Thus, when repulsing TOP SECRET



counterattacks in a meeting engagement such calculations must be made taking into account presumed losses which had been inflicted (suffered) earlier. In this case, capabilities cannot be expressed simply. Consequently, it is necessary to distinguish between situations where only the branch arms or types of combat equipment and weapons are compared among themselves against the background of the effect of more powerful means of destruction, and situations where all the power of each side and the possible results of its employment are taken into account.

In the first case, coefficients of commensurability are applicable for those forces and means among which a relationship exists. Such coefficients have been established for antitank means, artillery, and combined-arms subunits (perhaps only as a first approximation) by the appropriate academies, and the majority of them have been published in the periodical press.

In the second case, the matter is much more complicated. Here, obviously, it is most advisable in the first place to: compare the composition and capabilities of the forces and means of the two sides; clarify the balance of forces in a zone as a whole, by axes and tasks; ascertain the strong and weak points of one's own troops and the enemy; determine mutual damages (losses) inflicted by nuclear weapons and other means of mass destruction, by artillery, and by aviation; and in conclusion, compare the capabilites of combined-arms forces and means in accomplishing various tasks and select variants for their employment.

In so doing, the capabilities of the branch arms, particularly the rocket troops and artillery, can be taken into account using different methods. Thus far there is no common view on this point. They can be accounted for by areas destroyed or by "standard" targets. Such targets are battalions, missile or artillery battalions, launchers, and others. The calculation is made in the following way: knowing (assuming) the composition of the nuclear weapons of the two sides, their capabilities to destroy (neutralize) "standard" targets are determined. On the basis of an account of the probable damage (loss) in terms of battalions, missile or artillery battalions, and launchers, the comparative capabilities of the two sides are specified.

The methodology for showing the capabilities of combined-arms large units (without considering data on launchers and artillery) is analogous to the one given in the article. In this case, the coefficients of commensurability include not only original capabilities but also changes resulting from losses sustained.

