







6 COMBAT INFANTRY VEHICLES (BMP) IN COMBAT. Student research rept, 9 By MAJ James K. /McCaslin, Jr/ May 1976 ACCESSION for White Section NTIS 24 Buff Section DDC UNANNOUNCED JUSTIFICATION. M ... DISTRIBUTION/AVAILABILITY CODES AVAIL. and/or SPECIAL Dist. DISTRIBUTION STATEMENT A 410192 Approved for public release; Distribution Unlimited



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The Soviet BMP combat infantry vehicle is not a tank, but it is certainly much more than an armored personnel carrier in the traditional sense of the term. This amphibious, highly maneuverable vehicle has tremendous fire power. It mounts a 73mm smooth bore gun and a 7.62mm, co-axial machinegun both with maximum effective ranges of approximately 1000 meters and antitank guided missiles (4-5 Saggers) with a maximum effective range of 3000 meters. The BMP was first paraded before foreign observers on 7 November 1967 in Moscow. It has replaced older personnel carriers in many Soviet and some Warsaw Pact divisions, and it is becoming the standard combat vehicle for the Soviet rifle squad.

In order to effectively train for combat against an enemy equipped with BMP's, U.S. and NATO commanders and their soldiers must know how the Soviets intend to employ these versatile

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vchicles. Classified sources and recent unclassified Western publications tell us a great deal about Soviet tactical doctrine, but a careful and continuous reading of the Soviet military press also yields extremely valuable information. Recent articles indicate that Soviet combat arms officers are extremely interested in finding the best uses for the excellent combat capabilities of the BMP. Beginning with the June 1975 issue of the monthly journal Voennyi Vestnik² (Military Herald), various officers have discussed this question specifically in a series of seven articles. The authors range in grade from lieutenant to colonel-general. With frequent reference to recent training exercises, they focus on the use of the BMP in combat at battalion level and below. They cite the existence of regulations and directives on the proper use of the BMP, but they add that they must be applied creatively in each concrete situation, thereby justifying their varying observations and viewpoints. In the final article in the series, Colonel-General V. Merimsky, writing from his authoritative post as Deputy Chief of the Main Directorate for Combat Training of the Ground Forces, attempts to reconcile these differing positions.

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This article will discuss the Soviet view on the use of the BMP in combat as expressed in this recent series of articles.³ The authors reveal a great respect for the techno-

logical achievements of modern science. They view modern warfare as dynamic, characterized by decisiveness, bold maneuver, and the unfolding of combat operations along a wide front, in great depth, and at high speeds. They also understand that corresponding changes in tactics are required. General Merimsky states that units now equipped with BMP's should be earmarked mainly for use in situations requiring maneuver.¹¹ especifically mentions the development of success in the depths of the enemy defense, operations as advance or enveloping detachments, the striking of sudden blows in a new direction, and the rout of enemy reserves.⁴

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Soviet doctrine emphasizes that the offensive is the basic type of combat action leading to victory. The defense is undertaken only as a temporary measure with a view toward gaining time and launching a new offensive. The majority of this discussion, therefore, deals with offensive operations.

THE BMP IN THE OFFENSIVE

Combat intelligence and reconnaissance are of decisive importance in all offensive operations, since success depends on timely detection of the enemy and on forestalling his deployment. The BMP, with its excellent maneuverability, crosscountry capability, armored protection against small arms fire, and fire power, is especially suited to a reconnaissance role. In the meeting engagement, for example, a motorized rifle

battalion will often have an advance guard mission, moving 20-30 km ahead of the regimental main force. Commanders are currently increasing the standard interval between their point element (a reinforced company) and the advance guard main body and between their reconnaissance element (a platoon) and the point element by about five kilometers. Thus the point element will move 10-15 km ahead of the main body, and the reconnaisance element will move up to 20 km ahead of the main body.⁵ These increased intervals give the battalion commander precious additional minutes to make the best decision when his reconnaissance element comes in contact with enemy forces.

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The BMP is not only an excellent reconnaissance vehicle, but it is also an integral part of the Soviet combined arms team in the offensive. A motorized rifle battalion is normally reinforced with a tank company from the regimental tank battalion. The company is usually further broken down so that one tank platoon is attached to each rifle company. The coordination of the activities of the tanks, the BMP's, and the infantrymen themselves in the attack is the central theme of their discussion. The Soviet authors raised several important questions: Under what circumstances should the infantry dismount from the BMP's? Where should the line of attack be located in relation to the enemy forward edge of the battle area (FEBA)? Where should the line of dismount be located? How can the BMP be best employed after the infantrymen have dismounted?

It should again be emphasized that Soviet doctrine envisions a rapid offensive, characterized by bold maneuver, which is designed to keep the enemy constantly off balance and thereby achieve decisive results. Ideally then, the infantrymen will remain inside their BMP's and, firing through the side firing ports, attack the enemy FEBA together with the tanks, rather than slow the tempo of the offensive by dismounting. The key to such an offensive is the massing of sufficient fire power to reliably suppress enemy defenses, especially anti-tank weapons. Most authors agree that, as a rule, this can be accomplished only by the use of nuclear weapons. General Merimsky adds, however, that even on the nuclear battlefield the attack must be reliably supported by artillery, aviation, and combat helicopters.⁶

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When nuclear strikes are not employed, the infantrymen will normally have to dismount in order to bring more effective fire on the enemy FEBA and to support the tanks by engaging anti-tank weapons. Primary considerations in the dismounted attack are maintaining the speed of the attack, reducing the vulnerability of the tanks and BMP's to antitank fire, reducing the vulnerability of the dismounted infantrymen to machinegun and small arms fire, obtaining maximum fire support from the BMP's, and preventing the infantrymen from lagging too far behind the tanks.

In order to take advantage of the speed of the BMP's and to prevent the unnecessary and dangerous massing of vehicles, some commanders have their slower vehicles, such as tanks and artillery, cross the line of departure first and then have the BMP's move no slower than 25-30 kph on separate routes so as to catch the tanks just prior to the line of attack.⁷ LTG of Tank Troops Bondarenko states that current regulations indicate that the line of attack should be located as close to the enemy FEBA as possible. The infantrymen should dismount at some point prior to this line and go into the attack without stopping, immediately behind the tanks.⁸ It is generally accepted that just prior to dismount, the BMP's must move right up to the tanks so as to allow the infantry to dismount immediately behind them and, thereby, reduce the possibility of the infantry lagging too far behind the tanks to effectively support them. General Bondarenko concludes, without contradiction from other authors, that the infantry must stay within 200 meters of the attacking tanks in order to render effective fire support."

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Some authors state that the line of dismount should coincide with the line of attack although they offer no reasons to support the concept. Most agree that the line of dismount should be located as close to the enemy FEBA as possible. Although the regulations apparently call for the

location of the line of attack as close to the FEBA as possible, some commanders think that it should be up to 1000-1500 meters away so that the tanks and the BMP's (with the infantry still mounted) can bring fire on the enemy at a greater range. Others feel that this range is too great for effective fire and suggest a distance of 400-700 meters. Most authors agree that neither the line of attack nor the line of dismount should be closer than 400 meters to the FEBA due to the increased vulnerability of tanks and BMP's at close ranges.¹⁰ General Merimsky sums up this portion of the discussion by stating that the specific location of these lines depends on the tactical situation, but he stresses that commanders must strive to locate both lines as close to the FEBA as possible, to take measures to protect dismounted infantry from machinegun fire and BMP's from anti-tank weapons, and to achieve the maximum effective use of BMP fire power and infantry automatic weapons.11

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There is general agreement concerning the role of the BMP's after the infantrymen have dismounted. They are to occupy advantageous firing positions, provide continuous fire support to the advancing infantry and tanks, and, as the attack progresses, displace forward by bounds. The main point of controversy concerns the distance between the BMP's and the

elements they are supporting. The primary consideration in this regard is locating the BMP's close enough to the enemy FEBA to provide effective supporting fires and yet not so close as to become excessively vulnerable to enemy anti-tank weapons. Some authors state that the BMP's should support from positions between 500-600 meters behind the advancing infantry; others suggest a distance of no more than 400 meters. General Bondarenko, however, notes that the dismounted infantry often fails to stay within his recommended distance of no more than 200 meters behind the tanks. Given this, the above figures, and the generally accepted concept that the line of attack can be no closer than 400 meters from the FEBA, the BMP's will at times be firing on the FEBA from distances in excess of 1000 meters. He states that the effectiveness of the BMP fire is sharply reduced at such ranges and maintains that the BMP's should be no more than 400 meters behind the tanks. Thus, he envisions an assault order, in which the tanks are leading, followed by the infantry at no more than 200 meters, and supported by the BMP's (advancing by bounds) at no more than 400 meters behind the tanks. This order, he concludes, avoids excessive "bunching-up," yields sufficient fire density, and provides adequate security for the BMP's from enemy anti-tank fire.¹² General Merimsky again concludes that

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the distance will depend on the tactical situation, especially on the nature of the enemy anti-tank defenses and on the terrain, but he emphasizes the necessity of selecting firing positions which allow the BMP's to deliver effective fire, while remaining covered from enemy anti-tank weapons to the maximum extent possible.¹³

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General Bondarenko is the only author who discusses the actual conduct of supporting fire from the BMP. Since he is an armor officer, we must assume that he is well qualified in the more technical aspects of the use of the BMP's 73mm main gun. He writes that the BMP's will either fire through the intervals between the advancing rifle squads or from behind their flanks. He cautions that at least a 50-meter interval should be maintained between rifle squads and that certain safety conditions should be observed. With the BMP's approximately 200 meters behind the infantry, he calculates that a firing safety angle of three degrees will preclude hitting friendly forces, even given the maximum lateral dispersal of the rounds and errors in computing side wind and the laying of the gun. Firing over the heads of friendly troops is not excluded, but the minimal vertical safety angle would require the location of the BMP's beyond their effective fire range. This method, the general continues, would be acceptable in mountainous terrain, especially when both the guns and the targets are higher than the friendly troops. He concludes that all types of supporting fire require special training and psychological preparation of the gunners.¹⁴

Certain officers consider BMP fire support to be of special importance when the tanks and infantry are negotiating minefields in front of the enemy FEBA. Unfortunately, this problem is not discussed in great detail. The authors do not reveal their views concerning the location, depth, and width of the minefields they expect to encounter, nor do they discuss techniques for breaching the minefields or the number and width of passages to be constructed. They do tell us that the attacking tanks and infantry are usually negotiating the minefields when the supporting artillery shifts its fire into the depths of the enemy defenses to avoid hitting friendly troops. At this point, the BMP gunners must rapidly identify and destroy remaining enemy firing positions in order to protect the tanks and infantry moving through the passages in the minefields.¹⁵ One author suggests that the BMP's close to within 300 meters maximum of the tanks so as to more accurately engage the surviving targets.¹⁶ CPT Chernikov, discussing this problem at platoon level, recommends, without further explanation, that a tank followed by one BMP move through a passage at maximum speed while the other BMP's cover their movement. Having overcome the obstacle, the first BMP is to occupy a favorable firing position and support the advance of the remaining BMP's.¹⁷ Genral Merimsky, unfortunately, does not discuss this problem at all.

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After the neutralization of strong points on the enemy FEBA, the BMP's rejoin their units, the infantrymen again mount their vehicles, and they continue the offensive behind the tanks. Two authors discuss techniques for coping with an enemy counterattack during the course of the offensive. CPT Chernikov states that, if the enemy counterattacks with superior forces which cannot be suppressed by artillery fire, then the platoons must again dismount and occupy and hold an advantageous line to allow the maneuver of other units. The fixing force must engage the enemy with all available weapons, to include ATGM, cannon, and machinegun fire from the BMP's, located 100-150 meters behind the dismounted infantry.¹⁸ General Bondarenko suggests another approach, which he points out is at variance with existing instructions. He would have the infantry battalion remain mounted, deploy into combat formation, and advance to a favorable line to repel the counterattack. This line should be selected on terrain which allows the firing of ATGM's at maximum range. Having attained this line, the BMP's fire one missile each at the counterattacking tanks. Under this cover, the friendly tanks continue to close with the enemy to a distance of 1300-1500 meters, i.e., into a zone in which the enemy use of nuclear weapons is practically precluded. The BMP's, after firing their missiles, move secretively but swiftly to an enemy flank under the cover of friendly tank fire and defeat the enemy with sudden fire from all types of weapons.¹⁹

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The articles also discuss three other types of offensive operations: the pursuit, the meeting engagement, and "raid tactics" into the enemy rear. They are closely related in that they all emphasize maintaining the initiative and momentum and defeating the enemy by swift, bold maneuver and the massing of fire power. All authors agree that the BMP is extremely well suited for such operations. As a rule, commanders will strive to keep their infantry mounted since the BMP's present relatively small, fast, and highly maneuverable targets. The BMP's and tanks attacking together will force the enemy to engage many targets simultaneously, thereby reducing the effectiveness of his fire and capitalizing on the psychological impact of the shock action of an armor attack.²⁰

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In the pursuit of a withdrawing enemy, units equipped with BMP's can prevent him from consolidating his forces and maintain the momentum of the offensive by forestalling him by seizing key terrain features, road junctions, and water crossings.²¹ Upon encountering an enemy strong point, the battalion commander, in order to prevent the enemy from strengthening his defenses, should fix the enemy from the front with his point element and turn the enemy flank with his main body. Following supporting fires, the unit attacks mounted, destroys the enemy, and continues the pursuit.²²

In the meeting engagement, the tactical procedures will be similar to those described above in repelling an enemy counterattack and in the pursuit. Indeed, counterattacking enemy forces meeting advancing friendly forces is a legitimate example of a meeting engagement, which Soviet doctrine describes as a battle in which both sides are striving to accomplish their missions by offensive action. Speed, rapid deployment, and sudden attacks are critical in the meeting engagement, since it is precisely these factors which disorganize the enemy, prevent him from fully deploying, and, thereby, allow a smaller force to defeat a larger one. Since victory in the meeting engagement does not require a numerical superiority of 2 or 3 to 1 over the enemy, battalions will often attack on a wider front (up to 3 km as opposed to the usual 1.5-2 km) with intervals between BMP's of up to 150 meters. This allows the most effective use of ATGM's and automatic weapons fire through the firing ports, and it reduces the vulnerability of the BMP's to nuclear and artillery fires. If a meeting engagement occurs on difficult terrain or during periods of limited visibility, the infantrymen may have to attack on foot, with the BMP's supporting by fire from extremely close distances.23

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Citing the speed and maneuverability of the BMP, almost all authors enthusiastically agree that units equipped with

BMP's can be effectively used in "raid tactics." CPT Chernikov states that when developing the offensive in the depths of the enemy defenses, units will characteristically conduct bold raids without dismounting in order to attack strong points from the flanks and rear.²⁴ The term "raid tactics" apparently includes almost any special mission which is to be carried out in the enemy rear. General Merimsky clarifies this by stating that raids are undertaken to obtain information about the enemy, to create panic in his ranks, to destroy important objects, and to seize and hold important objectives in the enemy rear. He disapproves, however, of the term "raid tactics" as a concept and maintains that the discussion should instead deal with the activities of units operating as advance, enveloping, or special detachments. The general agrees with other authors that such units will often operate independently and will therefore have to be reinforced with tanks, artillery, and sappers.²⁵ Such tactics are considered to be especially effective in hilly terrain which, without restricting the BMP's maneuverability adds to its ability to stay concealed and deliver unexpected blows. Unless the assigned mission is to attack an enemy strong point, such positions are to be by-passed, if possible. If this is not possible, the tanks and mounted infantry must attack swiftly without stopping, as described in the discussion of the pursuit above. Wide use of smoke screens is recommended. The attacking

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elements are to follow closely behind the advancing artillery fire, and, when the fire is shifted or lifted, they should burst into the enemy positions and destroy him by all means available. LTC Molozev, unfortunately unaware of General Merimsky's views, concludes that "raid tactics" are the wave of the future for units equipped with BMP's.²⁶

THE BMP IN THE DEFENSE

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The most complete treatment of the defense is found in the lead article of the series by LTC Pishakov and MAJ Kirpach.²⁷ Other authors devote relatively little space to this question and limit themselves to disagreeing with specific points raised in the lead article and to adding details. All agree that the proper use of the BMP will allow the rapid organization of a solid defense and the defeat of a superior number of enemy tanks and mechanized infantry.

The first controversial point concerns the assignment of defensive sectors. A battalion normally defends its area (frontage up to 5 km and depth up to 2 km) in a single echelon with a reinforced platoon in reserve. Companies and platoons are assigned strong points which are characterized by both all-round defense and defense in depth. According to present doctrine, squads receive positions with frontages of 50-60 meters, but with no depth. Considering the fire power of the BMP, Pishakov and Kirpach suggest that the sizes of all sectors should be increased, beginning with the squad which

would defend a strong point with a frontage of 100-150 meters and a depth of up to 200 meters. This, they state, would allow the BMP to support from the rear and flanks of the squad sector. Virtually all other authors disagree with this on the basis that the squad does not have the personnel or the fire power to be concerned with all-round defense or defense in depth. They add that the assigning of positions to squads does not preclude the BMP's from being located behind their squads in the company depths. In fact, all authors agree that the BMP's should support from basic positions behind the squad positions (one author suggests $100-150m^{28}$) and that one or two reserve positions should be prepared.

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The foundation for the defense is a well-integrated system of defensive fires. All weapons are to engage the enemy at their maximum ranges. Supporting artillery and mortars will fire first. The infantry small-unit (company level and below) commander must designate maximum range firing lines for his weapons in the following order: ATGM's, tank main guns, BMP main guns, anti-tank grenade launchers (RPG's), and automatic weapons. All weapons fire at maximum intensity when the enemy approaches to within 300-500 meters.²⁹ Special emphasis is placed on selecting BMP positions on terrain which permits the firing of the ATGM's at maximum range, so that the gunners will have time to fire as many missiles as possible. At times this may

require the BMP's to occupy reserve positions deep in the company strong points (usually up to 500 meters from the FEBA), fire their missiles, and then move quickly forward to their basic positions, from which they support by cannon fire.³⁰

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Pishakov and Kirpach caution that one BMP per platoon must be always on watch in order to repel attacks from enemy advance and reconnaissance groups. They add that company commanders usually control the battle from their BMP's located behind the platoon strong points. Platoon commanders may remain with their BMP's to engage the enemy at long ranges, but when he closes to within 500-600 meters, they should join their men in the trenches. General Merimsky, in characteristic fashion, states that commanders should be wherever they can best observe the battlefield and control their subordinates.³¹ If the enemy should wedge into the defenses, the BMP's occupy their reserve positions and destroy the enemy by fire.³²

The final aspect of the defense to be considered is the ambush. According to Pishakov and Kirpach, platoons and even squads will frequently receive ambush missions. Remaining mounted, they will allow the enemy to come within close range, destroy him by fire from all weapons, and then change firing positions immediately. General Bondarenko, however, feels

that the infantrymen must dismount in order to best observe the enemy and make full use of the platoon's fire power. They will also have to be on foot, if they intend to take prisoners and capture weapons and documents. The BMP's, he concludes, must be located where they can take the fullest advantage of their fire power.³³ General Merimsky agrees with each point made by General Bondarenko; however, he does not exclude the possibility of mounted ambushes.³⁴

CONCLUSIONS

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Based on this current series of articles, it is apparent that Soviet combat arms officers are greatly impressed with the increased capabilities offered by the BMP combat infantry vehicle. Due to its excellent speed, maneuverability, and fire power, the BMP is demanding changes in the tactical doctrine for combined arms operations in general and for motorized rifle units in particular. It is having an impact on virtually every type of combat operation. In the offensive, units equipped with BMP's receive additional supporting fires when attacking the enemy FEBA, they are capable of bold maneuver to envelope an enemy flank, and they are well suited for reconnaissance and other special missions deep in the enemy rear. Units equipped with BMP's are capable of conducting a more active defense: they can bring the enemy under fire at greater ranges, they can add weight to a counterattack to eliminate an enemy penetration, and they

can rapidly withdraw to advantageous reserve firing positions. The authors of these articles are well aware that the BMP is being improperly used in many circumstances. Certain commanders seem bound to old-fashioned methods, such as using the BMP mainly just as a means of transportation, as they did with older APC's. Numerous training examples are cited in which the infantrymen have dismounted too soon and were, therefore, unable to attack the enemy FEBA immediately behind the tanks. Many commanders fail to teach their personnel bold maneuver with the aim of enveloping or by-passing an enemy strong point, and they allow stereotyped actions on training exercises.

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Soviet officers are being called upon to eliminate such deficiencies, and it is expected that procedures for employing the BMP will improve constantly. Indeed, in his closing remarks, General Merimsky states that the search for new and better ways to use the BMP in modern combat is one of the most important tasks for officers of the ground forces.³⁵

NOTES

1. See, for example, US Department of the Army, <u>FM 30-40</u>, Handbook on Soviet Ground Forces, 30 June 1975.

2. <u>Voennyi Vestnik</u> is a monthly journal which concentrates its efforts on military training, combat, and combat support functions, and on military leadership. The primary target audience is the regular and reserve officer corps of the army.

3. The articles are: LTC V. Pishakov and MAJ L.Kirpach, "Boevye Mashiny Pekhoty V Boiu" (Combat Infantry Vehicles in Combat), Voennyi Vestnik, No. 6 (June, 1975), pp. 43-47; COL L.Kamensky, "O Primenenii BMP V Boiu" (On the Use of the BMP in Combat), Voennyi Vestnik,No. 8 (August, 1975), pp.49-50; CPT V.Chernikov, Senior LT M.Lobko and LT V.Varenik, "O Primenenii BMP V Boiu" (On the Use of the BMP in Combat), Voennyi Vestnik, No. 9 (September, 1975) pp. 55-57;, LTG A. Bondarenko, "O Primenenii BMP V Boiu" (On the Use of the BMP in Combat), Voennyi Vestnik, No. 10 (October, 1975) pp. 57-61; LTC V.Bukharenko and LTC A.Molozev, "O Primenenii BMP V Boiu" (On the Use of the BMP in Combat), Voennyi Vestnik,No. 11 (November, 1975), pp. 60-62; COL E.Brudno, "Na BMP Vo Vstrechnom Boiu" (In BMP's in the Meeting Engagement), Voennyi Vestnik, No. 12 (December,1975), pp. 55-57; and COL-GEN V.Merimsky. "Boevye Mashiny Pekhoty V Boiu" (Combat Infantry Vehicles in Combat), <u>Voennyi Vestnik</u>, No. 3 (March, 1976), pp. 19-22.

- 4. Merimsky, op.cit., p. 19.
- 5. Brudno, op. cit., p. 56.
- 6. Merimsky, op. cit., p. 20.
- 7. Bukharenko and Molozev, op. cit., p.61.
- 8. Bondarenko, op. cit., p. 58.
- 9. Ibid., p. 59.

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- 10. Ibid., pp. 58-59.
- 11. Merimsky, op. cit., p. 20.
- 12. Bondarenko, op. cit., pp. 59-60.

13.	Merimsky, <u>op. cit.</u> , p. 20.
14.	Bondarenko, <u>op.cit</u> ., p. 60.
15.	Pishakov and Kirpach, op. cit., p. 43.
16.	Kamensky, op. cit., p.50.
17.	Chernikov, Lobko and Varenik, op. cit., p. 55.
18.	Ibid.
19.	Bondarenko, op. cit., pp. 60-61.
20.	Brudno, <u>op. cit.</u> , p.56.
21.	Pishakov and Kirpach, op. cit., p. 44.
22.	<u>Ibid.</u> p. 46.
23.	Brudno, <u>op. cit</u> ., pp. 56-57.
24.	Chernikov, Lobko and Varenik, op. cit., p. 55.
25.	Merimsky, <u>op. cit.</u> , p. 21.
26.	Bukharenko and Molozev, op. cit., pp. 61-62.
27.	Pishakov and Kirpach, op. cit., pp. 45-46.
28.	Kamensky, <u>op. cit.</u> , p. 50.
29.	Chernikov, Lobko and Varenik, op.cit., pp. 55-56.
30.	<u>Ibid.</u> , p. 57.
31.	Merimsky, <u>op. cit.</u> ; p. 22.
32.	Chernikov, Lobko and Varenik, op. cit.,p. 56.
33.	Bondarenko, op. cit., p. 61.
34.	Merimsky, op. cit., pp. 20-21.
35.	<u>Ibid.</u> , p. 22.

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