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# **Soviet Union** MILITARY HISTORY JOURNAL

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#### MILITARY HISTORY JOURNAL

#### Unifying Multinational Troop Collectives— Responsible Task for Commanders, Political Workers

18010068a Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 12, Dec 87 (signed to press 24 Nov 87) pp 3-9

[Article, published under the heading "Toward the 70th Anniversary of the Soviet Armed Forces," by Col Gen M.A. Moiseyev: "Unifying Multinational Troop Collectives—A Responsible Task for Commanders and Political Workers"]

[Text] The regiment went into battle "over hill and dale," as the expression has it well-known throughout the nation and particularly popular with us in the Far East. In observing its close, coordinated actions in moving up, deploying and going over to the assault, I involuntarily was aware that the tactical exercise involved a close- knit and united troop collective.

In actuality, this could be seen from the high mark received by the motorized rifle troops in the exercise as well as from the important fact that for more than 3 years now the unit commanded by Officer S. Fen had no infractions of military discipline. The second factor, in my view, also to a significant degree determined the regiment's success.

In our regiment there are numerous similar examples. For more than 5 years now there have been no infractions in the artillery regiment where Col V. Konstanchenko is the commander and his deputy commander for political affairs is Lt Col Ye. Ozerov; for 4 years in the unit under the command of Lt Col G. Chernov. Good renown has also been won by such troop collectives where Officers A. Kirillov and A. Kulemin, V. Kudryavtsev and V. Buchiyev, A Varaksin and V. Dovidovich and A. Dirin and Yu. Kuznetsov serve. As a consequence, the achievements of these close-knit collectives have been high in the socialist competition in honor of the 70th anniversary of the Great October Socialist Revolution.

Friendship, unity and solidarity have become a source and strength and might for the Soviet state and its Armed Forces and one of the most important factors in successfully carrying out the tasks of building communism.

The springs of proletarian solidarity and international unity of the peoples in our multinational state go back in their roots to the heroic history of the class struggle of the Russian proletariat for their social and national liberation and for the defense of the revolutionary victories. Even in the first years of Soviet power, V.I. Lenin scientifically established the vital necessity of the close unity and international solidarity of the peoples of Soviet Russia in the fight against the united forces of the domestic counterrevolution and the foreign military intervention.

"...In confronting the enormous front of imperialist powers," he pointed out, "we, in fighting against imperialism, represent an alliance requiring close military solidarity and any attempts to violate this solidarity will be viewed by us as a completely inadmissible phenomenon, as a betrayal of the interests of the struggle against international imperialism."(1) This important thesis has gained concrete embodiment in Lenin's teachings about the defense of the socialist fatherland and in the practical activities of the party in creating a new type of army.

From the first days of its existence, the army of the young Soviet republic benefited from exceptional support from the workers and peasants and for them its development and strengthening became a vital concern. In contrast to the armies of the capitalist states, where an ideology of class, social and national suppression prevails, our army from the very outset of its existence represented to the entire world an army of friendship and international fraternity of peoples.

As is known, in Tsarist Russia, many peoples of non-Russian nationality, including the Kazakhs, Tajiks, Kirghiz, the Turkmen and the nationalities of the North and Northern Caucasus were not permitted in the army. The ruling classes of the old Russia feared entrusting weapons to those who over the centuries had been kept in colonial subordination.

The Soviet government granted the honorary right to defend the revolution's victories to all the workers regardless of their national and racial affiliation, considering here the overcoming of national hostility and mistrust a major condition and guarantee for the victory over the enemies of Soviet power.

In speaking in August 1918 at a meeting of the Warsaw Revolutionary Regiment which was being sent off to the front, V.I. Lenin said: "And I, comrades, are confident that if you will unite your military forces into the powerful international Red Army and advance these iron battalions against the exploiters, against the oppressors, against the Black Hundreds of the entire world under the combat slogan: 'Death or Victory!' no force of imperialism will resist you!''(2)

The Communist Party and the Soviet government in fact confirmed equality for all peoples, they strengthened the confidence of the previously suppressed nations and nationalities and were able to establish a unified, centralized, mass regular army. On the basis of the Decree of the RSFSR SNK [Council of People's Commissars] of 15 January 1918, the Red Army could accept each worker regardless of his nationality.

Granting the peoples equal rights, including in the military area, had an enormous mobilizing and indoctrinational effect but in no way meant that an internationalist soldier would develop automatically. On the one hand, the war necessitated the rapid uniting of representatives from different nationalities into a monolithic fighting family. On the other hand, it required a certain amount of time for overcoming the national hostility and mistrust implanted over the centuries. In resolving this contradiction a particular place was assigned to international indoctrination and to the unification of the multinational troop formations. The necessity of this work was also dictated by the exceptionally complex ideological situation. In playing on nationalistic feelings and utilizing the illiteracy and religiousness of the workers and Red Armymen of non-Russian nationality, the bourgeois nationalists made strong attempts to draw them into the struggle against Soviet power.

Employed in indoctrinating the servicemen was the entire arsenal of ideological means: reports, meetings, talks and cultural-educational measures. The men of non-Russian nationality were taught Russian and explained the party's policy and slogans. Individual work played the primary role.

The international nature of the Red Army was apparent even in the first days of its founding. Fighting along with the Russians for Soviet power were Ukrainians, Belorussians, Latvians, Georgians, Armenians, Kazakhs, Uzbeks, Turkmen, Kirghiz, Estonians and soldiers from the nation's other peoples. By the end of the Civil War, in the Armed Forces there were 50 nationalities and here Russians comprised 77.6 percent, Ukrainians 13.7 percent, Belorussians 4 percent, while Latvians, Tatars, Bashkirs and representatives of the other nationalities were 4.7 percent.

For widening the involvement of the various nations and nationalities in the defense of the socialist fatherland during the years of the Civil War the founding of nationality troop formations began under the leadership of the party Central Committee.(3)

With the formation of the USSR, a new stage began in the party's activities to carry out Lenin's nationality policy in the organizational development of the Armed Forces. The functions of national defense were turned over to the Union government. The republic people's commissariats for military affairs were abolished. The minority formations from the Union republics were incorporated in the appropriate military districts and separate armies. Command personnel developed from among the representatives of the previously backward nationalities.

In the prewar years, the world reaction intensely disseminated the fabrication about the weakness of the Soviet state with the reason being its multinationality. Thus, on the eve of the attack by Nazi Germany against our motherland, the English newspaper Daily Mail trumpeted that the USSR "which consists of an enormous number of diverse nations can split into pieces in encountering a military situation."(4)

The Nazi rulers were hoping for this. In preparing aggression against the USSR, they were counting on a rapid victory the achieving of which should be accelerated by the existing, in their opinion, national division of Soviet society. However, the hopes of world imperialism of the collapse of our state were not to be realized. In those hard years the Soviet people stood shoulder to shoulder in defense of the united motherland, they fought heroically and worked unstintingly for the sake of a common victory over the enemy. "Mankind knows no other example," commented M.S. Gorbachev, "when a war so closely united all the nations and nationalities of our country to fight against the aggressor."(5)

The Soviet people of different nationalities were united and inspired by the great Russian people, the courage, tenacity and unbending nature of whom were an inspiring example of an unbeatable will for victory.

The Soviet people stood to the death. The famous Pavlov House in Stalingrad for more than 50 days was defended by a "garrison" which along with Russians, included Ukrainians, Georgians, Uzbeks, Kazakhs, Jews and men from the other nationalities. Many similar examples could be given. The great spirit and combat mastery of the multinational family of the motherland's defenders are embodied by the great cohort of Heroes of the Soviet Union which include soldiers from 62 nationalities!

Motivated by a single drive, tens and hundreds of thousands of workers joined up in the newly organized regiments, brigades and divisions. The significant influx of soldiers of different nationalities into the army required the greatest possible strengthening of political and organizational work in the troops on the part of the command, the political bodies, the party and Komsomol organizations. On 17 September 1942, the Directive of the RKKA GlavPU [Main Political Directorate of the Worker-Peasant Red Army] "On Indoctrinational Work With Red Armymen and Junior Commanders of Non-Russian Nationality" was issued. In commenting on the substantial shortcomings in these activities, the directive pointed out that political work among the Red Armymen and junior commanders of non-Russian nationality and primarily among the nationalities of the Transcaucasus and Central Asia, was of enormous importance. It should be aimed at strengthening iron military discipline, the battleworthiness and combat readiness of the units as well as the unshakable friendship of peoples. The attention of commanders and political workers was drawn to the fact that each servicemen is accustomed to his mother tongue and own national habits and these particular features must be considered in the indoctrinational work.(6)

In carrying out the demands of the directive, the Military Council of the Transcaucasian Front, for example, adopted measures to provide the troops with popular literature in the national and Russian languages concerning the heroic past, the mores and customs of the Transcaucasian peoples. The political bodies of the fronts and armies introduced the position of instructor for work among the men of non-Russian nationality. In 1943, an all-army conference was held for the front and district agitators working among men of non-Russian nationality. Here speeches were given by the prominent figures of the Communist Party M.I. Kalinin, A.S. Shcherbakov, D.Z. Manuilskiy and Ye.M. Yaroslavskiy. "The national pride and patriotism of our people," said M.I. Kalinin in bidding farewell to the conference participants, "must be embodied in combat deeds. Each people has its national heroes. Let there be more of them...."(7) This conference played an enormous role in further strengthening the patriotic and international indoctrination of the men of non-Russian nationality and all the personnel of the Armed Forces.

The political bodies gave great attention to increasing the role of the party organizations in indoctrinating the men in the feeling of friendship among the Soviet peoples. This was achieved by admitting to the party the best representatives of the Soviet peoples. The clash against German Naziism showed all the Soviet people that only in a close alliance and by common efforts could they securely defend their freedom and independence and protect the revolutionary victories. This is one of the main conclusions and lessons from the Great Patriotic War bequeathed to the present and future generations of our people and which should be profoundly assimilated and recognized by each serviceman.

Many years distance us from the Great Patriotic War and even more from the Civil War. During this time, fundamental qualitative changes have occurred in national relations. "The Great October Socialist Revolution established the principles for resolving the nationality question in our country.... National suppression and national inequality have been abolished once and for all in all forms and manifestations. Unbreakable friendship of peoples, respect for national culture and the national dignity of all peoples have been established and become part of the conscience of tens of millions of people."(8)

But our achievements in strengthening nationality relationships should not foster notions that there are no problems in this area. "At present," as was pointed out in the Decree of the CPSU Central Committee "On the Work of the Kazakh Party Organization in the Area of the International and Patriotic Indoctrination of the Workers," "when the revolutionary processes of renewal encompass all aspects of society's life, a prompt solution to the arising problems in the sphere of nationality relations gains major importance. Any manifestation of chauvinism, nationalism, national exclusiveness and pretention must be viewed as an infringement on the greatest victory of socialism, the fraternal friendship of peoples and the international unity of Soviet society."(9)

Under the impact of the demographic situation developing in the nation, there is a constant trend toward a rise in the multinationality of the military units. For example, in a district a subunit in which men of 10-15 nationalities in a single formation carry out the complex tasks of maintaining high combat readiness are no exception.

"The multinationality of the troop collectives," commented Army Gen A.D. Lizichev, "has left its imprint on the work of the commanders, the political workers, the party and Komsomol organizations. A consideration of the national features and habits, character traits, a knowledge of the literature and art of the various peoples, the ability to unite and organize all the men and direct their efforts at carrying out the tasks confronting the subunit, unit or ship—this is what is required from each officer."(10)

The work being carried out considering the acquired experience ensures the indoctrinating of the district's men in a spirit of internationalism and friendship of the Soviet peoples. However, not all the indoctrinators still fully consider the changes occurring in the national structure of the formations and units. The search for new, more effective forms and methods of work considering the individual features in the psychology of the men of different nationalities is still going on slowly.

Not everywhere is attention as yet high to the state of relations among the soldiers of the national minorities, and their special needs are not fully satisfied. Certainly life shows that a solution to these questions is of primary importance. For this reason the task of the commander and the political worker in organizing service, on the one hand, is to apply strict prescribed exactingness to all and, on the other, no and completely consider the national features of subordinates, respect the national dignity of the men and maintain a high moral atmosphere in the barracks.

The work of uniting the personnel has general patterns and principles characteristic of the establishing and developing of any multinational socialist collective. However, its success depends upon the professional competence of the commanders and political workers, upon their over-all culture and pedagogical tact. This presupposes first of all a profound understanding by each officer of the nature of socialist internationalism, the particular features of the national psychology, the history and culture of the peoples of our nation, and the showing of sensitivity to the men, particularly as this involves personal interests and national feelings.

What are the main areas of organizational and ideological indoctrinational work of the commander and political worker of a subunit in uniting the men in a multinational troop collective? One of these is to unify the subunit's personnel for achieving the main goal of military activity, that is, the defense of the socialist fatherland. This is why from the first days of service it is essential to explain systematically to the men the high purpose of their military service and the constitutional notions that defense of the socialist fatherland is a concern for all the multinational people and a sacred duty for each Soviet citizen. It is important to so organize the training and indoctrinational process that the servicemen themselves can be certain that success in military and political training depends upon the personal contribution of each of them. There should be no passive, indifferent and irresponsible men.

The unifying of the soldiers and sergeants from different nationalities is also aided by involving them in active social work of the subunit. One recalls the motorized rifle company of Capt A. Baytalokha and his deputy for political affairs, Lt I. Porozov. Representatives of 16 nationalities serve in it. And virtually all of them are active in social life. Thus, two Russians, an Ukrainian, a Belorussian, two Uzbeks and an Azerbaijani were elected to the Komsomol bureau. The Lenin room council is represented by four nationalities and on the editorial staff of the wall newspaper are the representatives of three nationalities. All the agitators in the platoons, the sports organizers and the editors of the combat leaflets are men from different nationalities and peoples. In this subunit, all the questions of life, combat and political training are settled in a professional and involved manner, with a contribution by each to the common cause of raising combat readiness, strengthening military discipline, organization and maintaining firm prescribed order. And it is fully understandable why here for several years now there have been no deviations from the prescribed standards in the relationships among servicemen and the company year after year has achieved high results in combat and political training.

The uniting of men from different nationalities has also been aided by the profound elucidation of the historical importance of the unification of peoples in our nation into a single, mighty, multinational state in the form of the USSR as a decisive condition for the development and flourishing of the economy and culture of all the Soviet nations, for ensuring their sovereignty and favorable foreign policy conditions for peaceful, creative labor. On this level the historic decisions of the 27th Party Congress under present-day conditions are a truly invaluable source in the work of explaining and propagandizing Lenin's nationality policy of the CPSU.

In the work of uniting the multinational troop collectives an important place is held by a skillful and well-argued unmasking of the aggressive policy of imperialism and primarily the United States, requiring on behalf of all the personnel greater combat readiness, high political awareness and strong discipline. In the work with the men it is essential to propagandize more the best works of the literature and art of the Soviet peoples, to more widely utilize the diverse genres of amateur artistic creativity and the enormous capabilities of the mass information and propaganda media, and more frequently organize the visiting of museums and rooms of combat glory and creative meetings with the scientific and cultural figures from the Union and autonomous republics. Of important significance on this level were the contests for readers, singers and musicians, the viewing and discussion of artistic and popular scientific films and rented by the Union republic studios. In the subunits it is essential to cultivate national types of sports and sports games, and hold contests involving all the men. This will enrich their spiritual life and indoctrinate feelings of friendship and military comradeship.

Unfortunately, it must be stated that, as in previous years, help is not always provided to the men of non-Russian nationality in their mastery of Russian. Clearly, the language barrier holds up the process of the adaptation of the young men in the collective, particularly during the first months of service, it impedes the mastery of the complicated military equipment and weapons and at times is a major obstacle in establishing close contacts between the men of different nationalities. The linguistic span even in small military collectives at present is so diverse that mutual understanding can only be reached under the condition of the complete mastery of Russian by all members of the collective. It is possible to prevent caution and mistrust, national exclusiveness and the development of microgroups based on linguistic affinity only by a planned study of Russian, as is done in the unit where the holder of the Order of the Red Star, Guards Sr Lt A. Kovyrshin, serves.

Practice shows that negative phenomena can occur on the grounds of national prejudices and vestiges of the past. Harmful and dangerous are anticollectivism, the egoism of certain soldiers and malicious jokes directed against national features, customs and traditions. There have been instances where servicemen have shown national conceit and a disrespectful attitude toward a representative of a different nationality.

In order to prevent such phenomena, the commander and the political worker, by the force of his authority, the granted power and personal example, must create and maintain in the collective an atmosphere of high morality and positive attitudes between the men of different nationalities. In his daily activity and in personal contact with the men in each specific instance he must find a correct solution, by word and deed help subordinates rectify mistakes and promptly spot and commend even an insignificant success and endeavor in service. All of this is possible only in the instance where the commanders and political workers are truly close to their subordinates.

The entire history of the development of our multinational state shows that the indivisible friendship of the peoples of the USSR and their unity are the basis of the

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might of the Soviet Armed Forces. The army is a good school for indoctrinating fraternity, solidarity and mutual respect for all the nations and nationalities of the socialist motherland.

#### Footnotes

1. V.I. Lenin, PSS [Complete Collected Works], Vol 40, pp 98-99.

2. Ibid., Vol 37, p 26.

3. "Partiya i armiya" [The Party and the Army], Moscow, Politizdat, 1977, p 74.

4. O.A. Belkov, "Yedinoy boyevoy semyey" [As a Single Combat Family], Moscow, Izd-vo DOSAAF SSSR, 1984, p 20.

5. M.S. Gorbachev, "Bessmertnyy podvig sovetskogo naroda" [Immortal Feat of the Soviet People], Moscow, Politizdat, 1985, p 11.

6. TsAMO SSSR [Central Archives of the USSR Ministry of Defense], folio 32, inv. 795436, file 6, sheets 129-130.

7. M.I. Kalinin, "O vospitanii sovetskikh voinov" [On the Indoctrination of Soviet Soldiers], Moscow, Voyenizdat, 1975, p 255.

8. "Materialy XXVII syezda KPSS" [Materials of the 27th CPSU Congress], Moscow, Politizdat, 1986, p 53.

9. Pravda, 16 July 1987.

10. A.D. Lizichev, "Sovetskaya armiya—shkola druzhby i bratstva" [The Soviet Army—A School of Friendship and Fraternity], Moscow, Voyenizdat, 1982, p 23.

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#### Second Echelons in Offensive Operations

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[Article, published under the heading "Soviet Military Art," by Col Yu.K. Loskutov: "Second Echelons in Offensive Operations"; the article was written from the experience of the Great Patriotic War]

[Text] During the years of the Great Patriotic War, the operational configuration of a front (army) most often included first and second echelons, mobile and artillery groups, general and special reserves.(1) The second echelon was an important means in the hands of the commander for influencing the course and outcome of the operation and was basically designed to build up the effort.

The decisive aims of the offensive operations, their great scope as well as the nature of the enemy defenses required the establishing of a troop grouping which would be capable rapidly, not only of breaching the opposing defenses but also rapidly exploiting the tactical success into an operational one and, having defeated the enemy's operational reserves, carry out the set tasks.

In each specific instance the make-up of the second echelon was determined by the over-all plan of the operation, by the available forces, by the nature of the enemy's defenses, by the terrain conditions and so forth. As a rule, the second echelon of a front included one or two combined-arms armies and in an army there was at least a rifle corps.(2)

The commitment of the second echelons to battle was planned ahead of time, in preparing for the operation. Sometimes this had several versions. Combat experience showed that the preliminary elaboration of several versions for employing the second echelon made it possible, proceeding from the developing situation, to commit it to battle more effectively and more rapidly shift the forces assigned to support the commitment and the fighting in depth.

The use of second echelons in each operation had its particular features. However, almost everywhere the second echelons of the corps were committed in the fight for the third position of the first zone or the second defensive zone on the first or second day of the operation. Thus, the second echelons of the VIII, XVI and XXXVI Guards Rifle Corps of the 11th Guards Army of the Western Front, the XXII Guards Rifle Corps of the 6th Guards Army and the L and LI Rifle Corps of the 38th Army of the Voronezh Front in the Kursk Battle were committed to the fighting on the second day of the offensive at a depth of 8-12 km.(3)

Usually, the second echelons of armies were not employed in breaching the tactical defensive zone. These tasks right until the end of the war were carried out by the strong mobile groups of the armies. The second echelons were employed for breaching the defensive lines in the operational depth and only when there were no mobile groups in the operational field forces were they committed to complete the breakthrough.(4)

In preparing for the offensive operations, the positions of the second echelon formations were usually chosen in terrain where there were natural shelters and a sufficient amount of roads running to the front line. These areas were carefully "combed" for detecting and destroying

enemy sabotage and reconnaissance groups. Disinformation measures were planned and carried out by establishing false areas and simulating the moving up of second echelons and mobile groups on a false axis (60th Army in the 1945 Vistula-Oder Operation).(5)

The distance of the position of the second echelon from the front line was set in accord with the over-all plan of the operation, the plan for employing the second echelon formations in the course of the engagement and so forth.

It was considered that with a significant distance the second echelon would waste a good deal of time in moving up to the start line and this could tell unfavorably not only on the achieving of surprise but also on combat capability, as with long moves the troops were more easily detected by the enemy and came under air and artillery attack. In addition the covering of large distances before commitment to battle required an excess expenditure of motor life and fuel.

In the course of the war it became clear that the second echelons of the armies (the mobile groups) prior to the start of an operation should be positioned a distance of 30-50 km from the line of contact of the sides. This would make it possible for them to advantageously employ the terrain conditions, remain unnoticed by enemy reconnaissance, to be beyond the reach of the enemy ground weapons and in a relatively short period of time to enter the fighting.(6)

With the start of the offensive by the first echelon troops, the distance between them and the concentration areas of the second echelon inevitably increased. To avoid the formation of a large gap the second echelon, in the course of the fighting, was to periodically move up behind the advancing troops in such a manner that its formations did not suffer losses and constantly maintained combat readiness. This was achieved by the early equipping and maintaining the routes in constant readiness, particularly water crossings and bridges over them. The organizing of the movement of the units at night or under conditions of bad visibility, at maximum speed, without extended halts and delays also helped to protect them against air strikes.

If the second echelon was not to be committed to battle on a given day, it was left in the new concentration area. The troops were positioned with all measures of operational support and the maximum use of the protective properties of the terrain, the positions and shelters left by the troops previously in these areas. Of important significance was the rapid engineer organization of the positions.

During the Great Patriotic War, the most complicated and crucial moment in employing the second echelons was their moving up to the start line and the process of commitment itself. Here of great importance was careful reconnaissance and the neutralization and destruction of the enemy aviation and artillery. In the moving up and commitment of a second echelon, a cover for it was planned employing fighter aviation and all calibers of antiaircraft artillery of both the formations being committed as well as the troops where the commitment was being made. Warning of an air enemy was carried out within the general air defense system of the field force. By the orders of the superior command the first echelon forces were also involved in air defense for the troops being committed to battle. The second echelon formations were to move up to the starting line with all measures of operational support, giving particular attention here to constant readiness to repel air attack.

In committing to battle the second echelons and the mobile groups of the fronts and armies, special attention was paid to organizing air strikes and artillery fire by the combined-arms armies where the effort was to be boosted. For example, in the course of the Vistula-Oder Operation, upon the decision of the commander of the First Belorussian Front, up to 35 percent of the flying time of the 16th Air Army was employed to support the commitment to battle of the 2d Guards Tank Army (commander, Col Gen Tank Trps S.I. Bogdanov). Aviation was entrusted with combating the approaching reserves and making bomb and strafing strikes against the enemy strongpoints in the near depth while the artillery was to neutralize the enemy artillery, including the antitank, on the start line.

The planning of fire damage to the enemy was carried out by the staffs and commanders of the artillery, the armored and mechanized troops of the front and by the staff of the air army. The plan set out the sectors of artillery fire for the 5th Assault Army where the 2d Guards Tank Army, two howitzer brigades and one cannon artillery brigade of the RVGK [Reserve of the Supreme High Command] (to a depth of 12-16 km) were to be committed, and the tasks of the VI Ground Attack Air Corps and III Fighter Air Corps as well as the first echelon corps of the 2d Guards Tank Army.(7)

It was usually planned that the second echelons would be employed for building up the effort on the axis of the main thrust. The experience of the Great Patriotic War showed that this provided an opportunity to fundamentally alter the situation on the decisive sectors and establish good conditions for the further development of the operation. Thus, the commitment of the 59th Army to battle in the morning of 14 January 1945 for following up the success of the offensive by the main grouping of the First Ukrainian Front on the axis of Dzialowszice, Miechow and subsequently the outflanking of the Krakow enemy grouping to the northwest made it possible for the front to increase the pace of the offensive on the axis of the main thrust, and by the end of 17 January. carry out the immediate task and create good conditions for continuing the offensive against Breslau as well as for attacking the flank and rear of the enemy Krakow grouping.(8)

Vistula-Oder Operation).(11)

At the same time, in the course of numerous offensive operations the previously compiled plans for employing the second echelons had to be adjusted, as at times crisis moments arose requiring a decisive adjustment in the use of the existing second echelon. Most often in such instances the second echelons were employed for defeating the enemy counterstrike groupings (5th Guards Army of the First Ukrainian Front in the Lwow-Sandomierz Operation)(9) or for surrounding and destroying the surrounded enemy (28th Army of the First Ukrainian Front and the 3d Army of the First Belorussian Front in the Berlin Operation).(10) In individual instances, the second echelon was employed for completing the breakthrough of the tactical defensive zone and for exploiting a tactical success into an operational one (63d Army of the Western Front in the Smolensk Operation) and for supporting the flank of an assault grouping (3d Assault Army of the First Belorussian Front in the

The battle tasks which were carried out by the second echelon field forces (formations) depended largely upon the methods of conducting the offensive operation. If a front's operation was carried out in the aim of splitting and defeating piecemeal the opposing grouping, then of crucial significance was the effective continuation of the success in depth and the second echelon in this instance was employed for building up the effort of the first echelon in the aim of rapidly breaching the defensive lines deep in the defenses, defeating the enemy reserves brought up in a meeting engagement and repelling their counterstrikes (First Ukrainian Front in the Vistula-Oder Operation). The second echelon of a front which was part of a combined-arms army was employed, as a rule, after the commitment of the mobile troop grouping to the breakthrough in the aim of continuing the success in depth.

From the spring of 1942, the combat might of an army rose sharply due to the appearance in its operational configuration of a stronger second echelon and a mobile group. However, as before the lack was felt of the necessary combat experience on the part of numerous commanders. Thus, for example, in the course of the Kharkov Operation in May 1942, regardless of the sharp deterioration in the situation and the threat of a breakthrough by a large enemy panzer grouping into the flank and rear of the 6th Army (commander, Lt Gen A.M. Gorodnyanskiy), on 17 May, the mobile group (the XXI and XXIII Tank Corps) were committed to battle and then a portion of the army second echelon (103d Rifle Division) for further continuing the offensive. The ignoring by the command of the Southwestern Front of the unsuccessfully developing situation produced a lamentable result. On the very next day, these formations had to be given new tasks to ensure the army rear. The tank corps had to make a forced march to an area to the west of Petrovskaya, where with a portion of the forces from the army second echelon (248th Rifle Division) it had to go over to the defensive to prepare counterstrikes against the enemy grouping which was pushing in from the south.

However, these measures as well were late in being carried out, occurring only on 20 May. The withdrawal of the formations and their arrival at the designated concentration areas under the conditions of enemy active operations and its air supremacy were a complicated matter requiring careful preparations and complete support. The low mobility of the rifle formations was felt as at that time they were unable to carry out rapid regroupings. All of this made it possible for the enemy on 21 May with its panzer units to outflank the concentration areas of the formations of the mobile group and second echelon of the 6th Army, to check the thrust being prepared, to come out in the rear and surround the army's main forces.(12)

In the army offensive operations, when the mobile troop formations were being committed in the zone of a combined-arms army, the army second echelon was usually employed in the aim of widening the breakthrough toward one of the flanks or for repelling enemy counterstrikes. In those instances when in an army zone of advance there was no plan to commit the mobile troops, the second echelon was employed for boosting the force of the first echelon thrust in the struggle for the main zone or for taking the second zone without a pause.(13)

In the 13th Army (commander, Lt Gen N.P. Pukhov) in the Voronezh-Kastornoye Operation, two rifle divisions were to be committed to battle on the first day at a depth of 16-20 km for continuing the offensive toward the right flank in the aim of establishing an external perimeter of encirclement against the enemy. One division was to be committed to battle to a depth of 8 km for continuing the offensive toward the army's left flank. One division was also to be used on the axis of the main thrust. However, with such a staggered commitment of the divisions on different axes, it was difficult to achieve a powerful build-up of the forces and a fundamental change in the situation on the axis of the main thrust.(14)

An analysis of the army operations has shown that the army second echelon frequently was given the task of continuing the offensive on one of the flanks or in the direction of the gap formed between the first echelon formations. Thus, the XXIII Rifle Corps of the 38th Army (commander, Col Gen K.S. Moskalenko) in the Kiev Operation in November 1943, had the task of entering battle on the morning of the third day of the operation on the right flank of the army. The XXI Rifle Corps which was also fighting in the army second echelon was given the task, by the end of the third day, to deploy to the left of the XXIII Rifle Corps and, having filled the gap between the first echelon corps, to continue the offensive to the southwest.

In August 1944, the XXXIII Rifle Corps of the 27th Army (commander, Lt Gen S.G. Trofimenko), in being in the second echelon, was to be committed to battle on the first day for continuing the offensive to the southwest into the enemy flank and rear in the aim of broadening the breach toward the right flank.(15) The further actions of the corps indicated that such a commitment would provide better organization of cooperation and command as well as a stronger cover for the flank of the front's assault grouping. In that instance when the enemy was concentrating its efforts in depth and had committed the tactical and close operational reserves to defending previously prepared lines, the need arose of committing the second echelon formations to battle in the tactical depth (Western Front in the 1943 Smolensk Operation).

At the start of the third period of the war, when there was still no corps organization, the second echelon rifle divisions frequently were given the tasks of relieving the fighting divisions. Thus, upon the decision of the commander of the 21st Army, Lt Gen I.M. Chistyakov, in November 1942, the 333d Rifle Division from the second echelon was to advance on the axis of the main thrust behind the 293d Rifle Division ready to relieve it and by the end of the first day of the offensive to dig in on the designated line on the right flank of the assault grouping. The 277th Rifle Division had the task of advancing in the second echelon behind the 76th Rifle Division ready to repel enemy counterattacks from the east and southeast and by the end of the day to dig in on a line, covering the space on the left flank between the 293d and 76th Rifle Divisions.(16)

Under conditions where fighting was highly fluid, success was often found not on the main axis but rather on an auxiliary one. In this instance, the bold and decisive commitment of the second echelon on the new axis ensured the rapid development of the offensive, as the enemy did not expect fresh forces there. For example, in the Belorussian Operation in 1944, two rifle divisions of the 11th Guards Army (commander, Lt Gen K.N. Galitskiy) and the II Guards Tank Corps were in the second echelon and were to be committed to battle after the breaching of the enemy defenses on the axis of the main thrust (on the army left flank along the Minsk Highway). Initially, the advancing troops were unsuccessful. But on the secondary axis (on the army right flank) the first echelon formations successfully breached the enemy defenses and, regardless of the difficult terrain conditions, the army commander committed his second echelon to battle here and this told positively on the course of the entire operation.(17)

However, as a whole the employment of the army second echelon for carrying out tasks on secondary axes, in our view, in a majority of instances was not justified. Thus, in January 1944, in the course of the Leningrad-Novgorod Operation, the second echelon of the 59th Army (commander, Lt Gen I.T. Korovnikov) of the Volkhov Front, the CXII Rifle Corps was committed to battle not for bolstering the effort of the troops on the axis of the main thrust, but rather for surrounding the enemy together with the adjacent units (54th Army) on the army right flank. This led to the scattering of the army's efforts and told negatively upon achieving the over-all goal of the army offensive operation.(18)

In preparing the army to fight as a second echelon, the front commander clarified its tasks, the procedure for moving up, deploying and cooperating with adjacent units as well as measures to support the commitment to battle. For the successful commitment of the second echelon, the frontal aviation launched massed strikes against the opposing enemy grouping, hitting chiefly its tanks, artillery and reserves. The air strikes were bolstered by artillery fire from the first and second echelon armies of the front.

The establishing of the necessary artillery grouping frequently involved regroupings within a limited time. Thus, for supporting the commitment to battle of the 11th Guards Army in the East Prussian Operation on 19 January 1945, there was a regrouping of the artillery of the 39th, 5th and 28th Armies with the shifting of it an average of 50-65 km along the front.(19)

The commanders of the formations committed to battle traveled beforehand with a group of officers and communications equipment to the starting line and directly in the field clarified the procedure of actions for the troops and coordinated the efforts with the first echelon field forces. Here they received the tasks primarily from the commanders personally in order to achieve maximum effectiveness in bolstering the effort or in carrying out other suddenly arising tasks.

Thus, in the course of the Iasi-Kishinev Operation, the Commander of the 37th Army, Lt Gen M.N. Sharokhin, having traveled to the line where the second echelon (LXXXII Rifle Corps) was to be committed to battle, clarified the battle task for its commander and there issued instructions to coordinate efforts with the first echelon formations and the army artillery group. In the Sinyavino Operation (September 1942) the task for committing the IV Guards Rifle Corps to battle was received by its commander in arriving at the command post of the commander of the 8th Army, Lt Gen F.N. Starikov.

In organizing the commitment to battle without a pause for the formations of the 28th Army in the Berlin Operation, the commander, Lt Gen A.A. Luchinskiy, in being at the army observation post, on the map pointed out the battle tasks for the commanders of the formations which had arrived at the starting line. Frequently involved in giving the tasks were the deputy commander and chief of staff who visited the subordinate troops. This was the case, for example, in the course of the Vistula-Oder Operation of the 13th Army with the approach of its formations to the Oder.(20)

An important stage in employing the second echelons was their commitment to battle. The simultaneous commitment provided a decisive superiority in forces over the enemy and made it possible to effectively increase the pace of the offensive thereby creating conditions for successfully carrying out the set tasks. However, with such a method of commitment, a large accumulation of troops frequently arose in a relatively small area, and the danger appeared of being exposed to enemy massed air strikes. Moreover, great difficulties arose in the moving up and deployment of the troops as well as in the supporting of their commitment.

The successive commitment to battle by the second echelon formations in the course of the Great Patriotic War was usually determined by the necessity and possibility of their gradual carrying out of various battle tasks. As experience was to show, this method was the only possible one in conducting combat in areas with a poorly developed road network. Its main advantage was that a minimum number of routes was required for the moving up of the troops, and on the start line it was possible to avoid the dangerous overfatigue of the troops and the creating of advantageous targets for strikes by enemy aviation and artillery. In committing the formations to battle sequentially, the operational field forces gradually boosted the effort on one of the sectors of the front. An example of such a bolstering was a commitment to battle of the 3d Guards and 4th Tank Armies (commanders, respectively, Col Gen Tank Trps P.S. Rybalko and Lt Gen D.D. Lelyushenko) through the Koltov corridor in the Lwow-Sandomierz Operation; the formations of the 68th Army (commander, Maj Gen Ye.P. Zhuravlev) in the Spas-Demensk Operation, where initially the 192d and 199th Rifle Divisions were committed in the zone of the 10th Guards Army from a line to the north of Shimen, Rasava, and later the main forces of the 68th Army.(21) The commitment to battle of individual formations was better supported to air strikes, artillery fire and engineer forces. Moreover, command over the committed forces was simplified on behalf of the commander and staff.

The drawback of the successive committal to battle was that the commanders committed their forces piecemeal and this weakened the force of the attack. The procedure for committing a second echelon to battle was determined depending upon the nature of the enemy's actions, the strength of the second echelon, the task which had been given to it, the nature of the terrain and other situational conditions. Great importance was given to concealing the position of the troops to be committed from the enemy, their unnoticed advance and surprise entry into battle.

The army commanders carefully monitored the course of the operation and determined the time and start line for the army second echelon, in order to promptly boost the strike force of the first echelon troops (see the table). Thus, in the Bobruysk Operation in June 1944, the 3d Army on the first day of the offensive advanced just 1-1.5 km on the axis of the main thrust and 3-4 km on the auxiliary. Then the army commander, Lt Gen A.V. Gorbatov, with the permission of the front's commander, decided to shift the mobile group (IX Tank Corps) to the right front, where there had been success and there commit it to battle, moving up the XLVI Rifle Corps, the army second echelon, behind it. The army commander personally set the tasks for the corps commanders and organized strict control over the regrouping of the troops and their prompt arrival at the forming-up place. From the morning of the second day of the operation, 25 June, the offensive of the 3d Army resumed. The IX Tank Corps was committed to battle and its formations advanced up to 13 km. In the morning of 26 June, the XLVI Rifle Corps was committed and as a result of this the enemy defenses were breached to the entire tactical depth.(22)

#### Commitment of Army Second Echelons to Battle\*

Name of Operation and Its Time	Army	Strength and Time of Commitment to Battle	Immediate Task
Klin-Solnechnogorsk (6-25 Dec 41)	30	Rifle division on 2d day Rifle division on 3d day	Boosting effort on axis of main thrust Boosting effort on axis of auxiliary thrust
Voronezh-Kastornoye (24 Jan-2 Feb 43)	13	2 rifle divisions on 1st day	Capturing 1st zone for offensive toward right flank
		Rifle division	Boosting effort on axis of main thrust
		Rifle division	Boosting effort toward left flank
Kiev (3-13 Nov 43)	38	XXXIII Rifle Corps on 3d day	Boosting effort on right flank of army
		XXI Rifle Corps by end of 3d day	For supporting breakthrough with adjacent front
Vitebsk-Orsha (23-28 Jun 44)	l l th Guards	Rifle division on 2d day	Capturing 2d zone
Bobruysk (24-29 Jun 44)	3	Rifle division on 2d day, XLVI Rifle Corps on 3d day	Capturing 1st zone
· · · · · ·		•	Capturing 2d zone (XLVI Rifle Corps)
	65	Rifle division on 1st day	Capturing 1st zone
Iasi-Kishinev (20-29 Aug 44)	37	LXXXII Rifle Corps on 3d day	Breaching army defense without pause toward right flank, pursuing enemy
East Prussian (13 Jan-25 Apr 45)	2d Assault	CXVI Rifle Corps on 2d day	Boosting effort on inside perimeter of encirclement of Pultus enemy grouping

\* See: "Armeyskiye operatsii" [Army Operations], pp 65, 66; "Obshchevoyskvaya armiya v nastuplenii" [Combined-Arms Army on the Offensive], pp 97-98.

The commitment to battle of the second echelon of the 37th Army in the Iasi-Kishinev Operation in August 1944 was carried out somewhat differently. By 1400 hours on 21 August (on the second day of the operation), the troops of the assault grouping had breached the second defensive zone. The mobile group (VII Mechanized Corps) which had been committed to the breach by this time was fighting 10-15 km ahead of the rifle formations. However, on the right flank of the army the LXVI Rifle Corps was advancing slowly. A significant gap had formed between the LXVI Corps and the VI Guards Rifle Corps which was advancing on the axis of the army main thrust.

Then the army commander, Lt Gen M.N. Sharokhin, decided on the boundary of the LXVI Rifle Corps and the VI Guards Rifle Corps to commit to battle the second echelon, the LXXXII Rifle Corps, having given it the task of pursuing the defeated enemy units and without a pause to breach the enemy army defensive line. Having a battle formation of two echelons, the corps advanced to the starting line along two routes in a zone 10-12 km wide. On the starting line a 15-minute artillery softening up was carried out to a depth of 6-8 km and a bomb strike was made by the aviation against the enemy strongpoints.

For fire damage the artillery was employed from the first echelon corps (six artillery regiments) and an army artillery group. The traffic-control service was organized by the army staff and this involved a rifle battalion in the army reserve. Engineer support (the equipping of the routes, the mine-clearing of the terrain and the reinforcing of bridges) was provided by the forces of the army engineer units. For accelerating the advance the corps was reinforced by a front motor vehicle battalion.

As the first echelon divisions of the corps reached the starting line under the cover of the forward detachments consisting of reinforced rifle battalions, the commander and the chief of staff in the field adjusted their battle tasks, giving the necessary instructions on cooperation. Here also were officers from the staffs of the LXVI Rifle Corps and VI Guards Rifle Corps who, after organizing cooperation, drove to the command posts of their corps.

The promptly committed formations of the LXXXII Rifle Corps defeated the enemy reserves, without a pause they breached the army defensive line and by the end of the day had advanced 25 km, establishing contact with the VII Mechanized Corps. The adopted measures made it possible for the army to increase the rate of advance and prevented the enemy from organizing its defenses both on the army and other lines.(23)

The spent second echelons and reserves of the armies over the next 1 or 2 days recuperated by withdrawing formations and entire field forces from the first echelon and in certain instances by the RVGK transferred to the front. Thus, the experience of the war showed that the commanders of the fronts (armies) showed a creative approach to employing the second echelons, in avoiding routine, in accord with the existing situation, the available time as well as the possible development of the operation. Definite patterns were apparent in their activities: there was a constant increase in the amount of time spent on organizing activities in the subordinate staffs and groups, primarily for carrying out the range of tasks involved in assessing the field and the enemy, coordinating the efforts of the troops and setting the battle tasks. The work in the field in the aim of concretizing and detailing the commitment began to be carried out on all command levels and not only in the tactical element. The desire of the commanders for personal contact with subordinates became evermore apparent.

The experience of working out the most effective operational configuration for a front and an army, particularly the establishing of such elements as the second echelons and various types of reserves, has not lost its importance under present-day conditions. The high dynamicness of combat can lead to complex situations and to the rise of new tasks and different types of reserves and second echelons may be needed for carrying these out.

#### Footnotes

1. "Sovetskaya Voyennaya Entsiklopediya" [Soviet Military Encyclopedia], Moscow, Voyenizdat, Vol 6, 1978, pp 58, 59.

2. Ibid., Vol 2, 1976, p 421.

3. Voyenno-Istoricheskiy Zhurnal, No 11, 1973, p 17.

4. Ibid., No 12, 1975, p 15.

5. "Armeyskiye operatsii" [Army Operations], Moscow, Voyenizdat, 1977, p 64.

6. Ibid.

7. "Operatsii Sovetskikh Vooruzhennykh Sil v Velikoy Otechestvennoy voyne 1941-1945" [Operations of the Soviet Armed Forces in the Great Patriotic War of 1941-1945], Moscow, Voyenizdat, Vol 4, 1959, pp 112-115, 122.

8. Ibid., p 161.

9. Ibid., Vol 3, 1958, p 419.

10. Ibid., Vol 4, pp 352, 354.

11. Voyenno-Istoricheskiy Zhurnal, No 2, 1964, p 34.

12. "Obshchevoyskovaya armiya v nastuplenii" [Combined-Arms Army on the Offensive], Moscow, Voyenizdat, 1966, pp 133, 134. 13. "Armeyskiye operatsii," p 61.

14. "Obshchevoyskovaya armiya...," p 50.

15. Ibid., p 51.

16. Ibid., p 50.

17. "Istoriya vtoroy mirovoy voyny 1939-1945" [History of World War II of 1939-1945], Moscow, Voyenizdat, Vol 9, 1978, pp 48, 49.

18. Ibid., Vol 8, 1977, p 124.

19. "Sovetskaya artilleriya v Velikoy Otechestvennoy voyne 1941-1945 gg." [Soviet Artillery in the Great Patriotic War of 1941-1945], Moscow, Voyenizdat, 1960, p 601.

20. Voyenno-istoricheskiy zhurnal, No 12, 1975, p 15.

21. "Operatsii Sovetskikh Vooruzhennykh...," Vol 2, 1958, p 325.

22. "Velikaya Otechestvennaya voyna Sovetskogo Soyuza 1941-1945: Kratkaya istoriya" [Great Patriotic War of the Soviet Union of 1941-1945: Concise History], Moscow, Voyenizdat, 3d Revised and Supplemented Edition, 1984, p 312.

23. "Armeyskiye operatsii," pp 64, 67.

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#### Improving Troop Antiaircraft Cover in Years of Great Patriotic War

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[Article by Maj Gen A.S. Sherstyuk, professor: "Improving Troop Antiaircraft Cover in Years of the Great Patriotic War"]

[Text] From the very outset of the war, as a result of the treacherous attack by Nazi Germany on the USSR, the Soviet troops were put under difficult conditions. Many of the planned measures to strengthen their air defenses had still not been carried out. Thus, the antiaircraft artillery battalions of the rifle divisions and corps which on the eve of the war were the main formations for organic air defense, were only 28 percent of their strength in terms of small caliber weapons (1,382 instead of the 4,900 as set in the TOE).(1) A significant number of 85-mm guns had gone to arm the antiaircraft units covering rear installations and the antitank artillery brigades of the RVGK [Reserve of the Supreme High Command] and regiments which were in the process of

being constituted. There was an acute lack of ammunition and there were not enough sound locators and searchlights as well as range finders for the medium caliber artillery (SZA). For these reasons, as well as due to the losses suffered, the antiaircraft battalions at the end of 1941 were to be found only in the mountain rifle, motorized rifle and cavalry divisions and individual antiaircraft batteries in the rifle divisions and tank brigades

According to the prewar views, the distance between the positions of the batteries in the antiaircraft artillery battalions with guns of 76.2 mm was to be 3-7 km and in the platoons of the antiaircraft machine gun companies some 0.6-1 km. This would ensure fire coordination, and mutual covering against air strikes and the conduct of concentrated fire by two or three subunits against one target.(2) However the developing combat situation (wide defensive zones hurriedly organized by the combined-arms formations, the organizational disintegration and the small amount of antiaircraft artillery) forced the command to significantly increase the distance between the antiaircraft batteries. The SZA batteries were positioned more than 10 km apart and the small caliber (MZA) were 4 km. Here the latter often fought platoon-by-platoon (1-3 km apart) and even gun-by-gun. The crews of the 7.62-mm machine guns were positioned in the field in pairs and singly while the 12.7-mm large caliber DShK machine guns were individually positioned, respectively, up to 0.8 and 1.5 km apart. Thus, the antiaircraft artillery cover for the troops had a markedly expressed focal nature.

Roaming antiaircraft subunits were widely employed for misleading the enemy on the air defense strength and the troops being covered. In addition, the MZA platoons and batteries fought from ambush, in moving up at night to the detected routes of flight of the enemy bombers and meeting them with unexpected fire in daylight. From the autumn of 1941, they began establishing maneuvering antiaircraft artillery groups which carried out the tasks of covering the troops on the sectors assigned them. The gun crews fired at the air enemy while on the move or from brief halts. However, the desire to cover as many installations as possible with a limited amount of forces led to the scattering of resources and to reduced efficiency in combatting enemy aviation. Nevertheless, during the first year of the war, the ground troop antiaircraft artillery destroyed 3,569 aircraft causing thereby tangible loss to the Nazi Luftwaffe.(3)

In June 1942, by an order of the people's commissar of defense, all the air defense units and subunits fighting as part of the fronts were put under the Soviet Army artillery chief and the artillery chiefs of the fronts, armies and divisions making them fully responsible for the air defense of the troops. At the same time they began constituting the special RVGK units, the army antiaircraft artillery regiments (azenap). Each regiment consisted of three antiaircraft batteries and two antiaircraft machine gun companies and was armed with 12 37-mm cannons and 20 DShK machine guns.(4) By July, there were 34 azenap in the operational army and by November, 104 azenap.(5)

The organizing of the army air defense regiments made it possible to carry out a decisive massing of forces to cover the main groupings, to maneuver them widely and increased the dependability of the air defenses for the troops and the installations in the operational rear. Even by August 1942, the armies fighting on the main axes began to receive from three (the 20th Army of the Western Front in the Rzhev-Sychevo Offensive Operation in August 1942) to six army air defense regiments (the 1st Guards Army of the Stalingrad Front in the offensive operation of 10-20 September 1942) and this made it possible to create densities to 6-7 antiaircraft guns per kilometer of breakthrough sector (during the operations of the first year of the war, the figure was 2-3).(6)

The increased number of downed enemy aircraft was proof of the higher effectiveness of air defenses. Thus, while in the first year of the war the antiaircraft artillery destroyed an average of 300 aircraft a month, in the second half of 1942, the figure was over 400.(7) With the appearance of the army air defense regiments in the fronts, the losses of the air enemy rose and this forced it to increase the bombing altitude and limit the time the bombers spent over the targets. This reduced the results of the enemy raids and freed the troops from continuous air strikes.

However, at first mistakes were made in the combat employment of the azenap. The regiments were more frequently involved in covering facilities in the operational rear than the situation called for. In the offensive operations, because of shortcomings in planning the moves and poor communications, the antiaircraft weapons at times fell behind the battle formations of the covered troops. The absence of regular communications equipment deprived the army deputy artillery chiefs for air defense communications (this position was introduced in June 1942) of the opportunity to effectively issue battle tasks to the units as well as closely control the actions in the course of the operations.

In the aim of eliminating the detected shortcomings, in September 1942, the people's commissar of defense approved the Instructions for the Combat Employment of the Army Air Defense Regiments and in October issued a special order which condemned the practice of scattering the antiaircraft forces and demanded a switch to the massed employment of the antiaircraft artillery by setting up antiaircraft artillery groups (ZAG) incorporating in them from one-half to two-thirds of all the organic antiaircraft forces of the fronts (armies) regardless of the TOE subordination and the assigning of them to the assault groupings. This document played an important role in improving organic air defense. The command of the ZAG was entrusted to the deputy air defense artillery chiefs of the armies (fronts) with the combined-arms staffs providing them with the required communications.

An important stage in the development of the organization and establishment and tactics of the ground troop air defense formations was the organizing of the RVGK antiaircraft artillery divisions (zenad) and which began in 1942. By the end of the year it was possible to oppose the massed enemy air raids with the massed employment of ground troop air defenses. By the start of the Stalingrad Counteroffensive, the Southwestern, Don and Stalingrad Fronts, for example, had a total of 707 MZA and SZA antiaircraft weapons and 907 large-caliber antiaircraft machine guns organized into 5 antiaircraft artillery divisions, 20 army air defense regiments, 15 separate antiaircraft artillery battalions and 31 separate MZA batteries.(8)

The RVGK antiaircraft artillery divisions were to be employed for covering the main army groupings against air strikes during the period of preparing and conducting the operations. They were incorporated in the antiaircraft artillery groups and were employed, as a rule, at full strength, receiving rather frequently the army air defense regiments and the separate SZA battalions as reinforcements. The division's battle formation was initially formed up in a single echelon while that of the regiments was in three lines of batteries some 2 km apart abreast and in depth. This provided their dependable fire cooperation and mutual coverage against air strikes. In the event of the organizing of ZAG, the battle formations of the SZA battalions (regiments) were superimposed on the battle formations of the MZA regiments. The distance between the SZA batteries did not exceed 5 km. Here the maximum distance of the first line batteries from the forward edge was on the offensive up to 2-3 km for the SZA, 1-1.5 km for the MZA and 0.3-0.5 for the antiaircraft machine guns; on the defensive the distances were, respectively: to 3, 2 and 0.7 km.

At first for establishing the ZAG, the zenad for various reasons were divided into units. For example, in the Stalingrad Offensive the ZAG of the 21st Army of the Southwestern Front consisted of two subgroups. The first included two regiments from the 1st Antiaircraft Artillery Division and two SZA battalions, while the second had two other regiments from the 1st Antiaircraft Artillery Division, four army air defense regiments and two SZA battalions. The two regiments of the 1st zenad from the second subgroup covered the army mobile formations (cavalry and tank corps), since of them only the tank corps had a TOE battalion and a MZA battery. The reason for splitting the zenad was the shortage of motor transport and traction sources in the remaining antiaircraft units due to previously suffered losses.(9)

The experience of conducting the offensive operations showed the necessity of strengthening the air defense cover for the tank, mechanized and cavalry corps, since namely they were the prime objectives of air strikes in moving up, in commitment to battle and in fighting in the operational depth. In the spring of 1943, the TOE of the these corps included on MZA regiment while that of the tank armies had two. For combatting enemy aviation at all altitudes by the own forces, the RVGK antiaircraft artillery divisions included one SZA regiment which consisted of four batteries.(10) In addition, a headquarters battery was added to the TOE and as a result of this, the commanders had a significantly greater opportunity to control the fire and maneuver of the antiaircraft forces.

The overall nature of the combat of the ground troop air defense units and formations in the second half of 1943 was caused the by the change in the balance of forces in favor of the Soviet Air Forces and by the forced going over of the German Armed Forces to a defensive strategy. The enemy, unable to employ its aviation with sufficient effectiveness along the entire Soviet-German Front, endeavored by maneuvering forces to achieve a temporary superiority in the air on the most important sectors for itself. In the aim of combatting enemy bombers, the armies fighting on the main axes were reinforced with one or two and sometimes three or four antiaircraft artillery divisions (in the Kursk Battle) and this made its possible to create densities up to 2 SZA guns and 8 MZA guns per kilometer of front on the defensive and, respectively, up to 4 and 14 on the offensive.(11) Due to such massing of the ground forces air defense weapons, in the second period of the war some 6,762 Nazi aircraft were destroyed, included 6,374 in 1943.(12)

During the third period of the war, some 355,000 enemy overflights were recorded in the combat zone of the fronts. The Nazi aviation grouping opposing the Soviet Air Forces by the summer of 1944 numbered some 3,200 aircraft and still could make substantial strikes against our troops on individual axes by decisively maneuvering the forces.(13) This created significant difficulties in organizing air defenses for our troops, since the offensive operations were carried out successively on a wide front. Due to the fact that the Nazi Command employed its Air Force chiefly over the battlefield and in the frontline zone, the main burden of combatting it rested on the front's fighter aviation and antiaircraft artillery. In the aim of releasing the fighter aviation and antiaircraft artillery units for providing direct cover of the ground troop battle formations, Hq SHC took a decision to place responsibility for the air defense of various objectives in the front rear and the lines of communications on the National Air Defense Troops while defense of the airfields was the responsibility of the airfield air defense regiments. The greater effectiveness of organic air defense was aided by the increased number of MZA regiments in the combined-arms armies, in the tank, mechanized and cavalry formations as well as by the greater firepower of the RVGK antiaircraft artillery divisions. In the spring of 1944, in the TOE of the zenad, the total number of small-caliber weapons was increased from 48 to 72 by reconstituting the four-gun batteries of the three MZA regiments into six-gun ones.

The forces began to be maneuvered more effectively considering the particular features of the situation. The front's air defense formations and units began to shift their efforts in the more planned and consistent manner from covering rear installations and the troops in the concentration areas to covering them in the forming-up places for the offensive, in breaching the defenses and then to covering the mobile groups in commitment to battle and in actions in the operational depth.

During the third period of the war the defense of the Soviet Army against air strikes involved almost 11,000 antiaircraft guns, including 8,000 of the organic air defense and 3,000 of the National Air Defense Troops.(14) This provided a possibility to significantly increase their density per kilometer of front (for example, to 24-33 guns in the Berlin Operation). The fire capabilities of the ground troop air defense formations and units also increased substantially. From January 1944 through May 1945, the Nazi aviation losses from antiaircraft fire were 8,419 aircraft.(15)

The increased number of antiaircraft artillery required a further improvement in the methods of organizing and carrying out cooperation with the fighter aviation of the fronts. The appearance in May 1944 of a special Instructions on Organizing Air Forces Cooperation with the Organic Antiaircraft Forces was the result of a thorough generalization of the experience acquired in this area. The Instructions defined the cooperation procedures between the antiaircraft artillery and the fighter aviation in terms of targets (with the granting of priority to the fighters in attacking the targets), areas (zones), altitudes and times. They also concretized the content and methods for working out a cooperation plan, the procedure for employed mutual identification and target designation signals, the choice of the overflight corridors for our aircraft and also examined other questions.

Thus, during the years of the war in the aim of providing a dependable cover for the main ground troop forces, large antiaircraft artillery groupings were set up. This new phenomenon in organizing air defense means a changeover to the decisive massing of the antiaircraft artillery on the crucial axes. The organic air defense formations and units destroyed over 21,000 aircraft, hundred of tanks and scores of thousands of Nazi soldiers and officers, including around 40,000 of flight personnel.(16) In cooperation with the Air Forces and the National Air Defense Troops, they successfully carried out their main task of covering the ground troop groupings and made a worthy contribution to winning air supremacy and defeating the Nazi Luftwaffe.

#### Footnotes

1. "Istoriya vtoroy mirovoy voyny 1939-1945" [History of World War II 1939-1945], Moscow, Voyenizdat, Vol 3, 1974, p 421.

2. "Nastavleniye po protivovozdushnoy oborone voysk" [Regulation Governing Troop Air Defense], Moscow-Leningrad, Gosizdat, 1929, pp 10, 12, 18.

3. TsAMO SSSR [Central Archives of the USSR Ministry of Defense], folio 35, inv. 12559, file 474, sheet 15.

4. "50 let Vooruzhennykh Sil SSSR" [Fifty Years of the Soviet Armed Forces], Moscow, Voyenizdat, 1968, p 304.

5. TsAMO, folio 36, inv. 12559, file 478, sheets 79, 80.

6. Ibid., file 476, sheets 82-85, 161; file 10, sheet 226.

7. Ibid., inv. 12552, file 10, sheets 67-69.

8. Voyenno-istoricheskiy zhurnal, No 3, 1976, p 32.

9 Ibid., pp 33, 34.

10. "Istoriya vtoroy mirovoy...," Vol 4, 1976, p 99.

11. P.G. Levchenko, "Voyska protivovozdushnoy oborony Sukhoputnykh voysk" [Air Defense Troops of the Ground Troops], Moscow, Izd. Upravleniya Nachalnika Voysk Protivovozdushnoy Oborony Sukhoputnykh Voysk, 1978, p 19.

12. TsAMO, folio 36, inv. 12559, file 207, sheet 266.

13. "Istoriya vtoroy mirovoy...," Vol 9, 1978, p 19.

14. TsAMO, folio 36, inv. 12552, file 103, sheets 180, 244, 245, 310; file 144, sheets 70, 110, 156, 333.

15. "Nauchnyy sbornik [Scientific Collection], Moscow, Izd. Voyennoy Akademii imeni M.V Frunze, No 143, 1985, pp 82, 83.

16. "Sovetskaya Voyennaya Entsiklopediya" [Soviet Military Encyclopedia], Moscow, Voyenizdat, Vol 1, 1976, p 280; P.G. Levchenko, Op. cit., p 35.

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#### Ways of Increasing Effective Collection of Situation Data 18010068d Moscow VOYENNO-ISTORICHESKIY

ZHURNAL in Russian No 12, Dec 87 (signed to press 24 Nov 87) pp 25-31

[Article by Col (Ret) V.P. Savelyev, candidate of military sciences, docent: "Ways of Increasing Effectiveness of Collecting Data on the Situation"; the article was written drawing on the experience of the 108th Guards Rifle Division and from June 1943 until the end of the war, V.P. Savelyev was the chief of staff of this division]

[Text] During the years of the war during an offensive, the divisional staffs were confronted with the urgent task of promptly obtaining the essential data on the situation. Experience showed that well-organized work in the area of data collection was an important condition for ensuring the continuous, effective, firm and flexible leadership of the units. In a number of formations, following the example of the army and front staffs, there was the practice of assigning officers from the operations department to certain staffs (bodies) both superior and subordinate, for obtaining and transmitting information. For example, in August 1944, during the Iasi-Kishinev Operation, the chief of the staff operations department of the 108th Guards Rifle Division, Lt Col N.V. Popov, was responsible for providing information to the operations sections of the staffs of the XXXVII Rifle Corps and the 46th Army, the adjacent units, as well as the divisional headquarters; his assistants, Maj F.P. Shachenko did the same for the staffs of the 305th and 311th Guards Rifle Regiments and Capt A.K. Babich for the staff officers of the 308th Guards Rifle Regiment, the artillery units and the planning and organizational department of the divisional rear services.(1)

Such assignments reinforced the personal responsibility of the officers for the prompt obtaining of information and helped improve the organization of their work. The executor, in maintaining constant contact with certain officials, more quickly established a common tongue with them and could more quickly receive or transmit the necessary information. A significant amount of data which did not change so often was retained permanently in his memory and this made it possible for him to reduce the amount of routine information to be transmitted, thereby reducing the length of talks over communications equipment.

If, in the course of an offensive, the executor was to be involved in carrying out unforeseen tasks, his duties in the area of collecting data through stand-in procedures was entrusted to another officer who had been warned ahead of time of this.

But such an organization of the work did not eliminate the parallelism in the collecting of information. With all the high professional preparedness the operator officers were unable to assemble the data which would equally satisfy the needs of all the departments of a staff, the

chiefs of the combat arms, the special troops and services. All these bodies, in receiving general information from the officers of the operations department, in turn were forced simultaneously to be involved in collecting data considering their specific area. The given problem could be solved only by establishing a composite staff group with the incorporation in it of various specialists, however the decision to make such a change in the organization of the work of the divisional staff was not taken before the end of the war.

For systematizing the receipt and transmission of information, in particular, on the staff of the 108th Guards Rifle Division, in preparing for certain offensive fighting, fixed dates for oral reports by subordinates were established. It might seem that there was nothing new in this as the table for the submission of time reports and sometimes the battle orders and instructions always gave what was to be reported on and when. But the problem was that the dates of the oral reports were not always clearly determined. A significant portion of the information, and the most valuable for control, was received in such reports and it was precisely this flow of information that was less organized.

The irregularity of the oral reports could not be justified by the heavy workload of the staff officers, by a lack of communications or an ignorance of the situation. Of course, these factors did have an impact, but more often it was something else: in a number of officers there was the deeply rooted habit of waiting for a request from higher up. Such a procedure, in essence, was implanted by the superior staffs themselves, including the divisional staff. Regardless of the established dates for the situation report, the senior staffs requested information at any time.

For eliminating such a shortcoming, the staff of our division in organizing a number of offensive battles not only determined the precise dates for the oral reports on changes in the situation for the regimental commanders and their staffs but also made sure these were observed. The frequency of the reports was set depending upon the assumed degree of intensity in the forthcoming fighting. Thus, in breaching the enemy tactical defensive zone in the Iasi-Kishinev Operation in August 1944, when the situation might undergo frequent and abrupt changes, the periodicity of the reports was to be 1 hour. In the course of pursuing the enemy in the operational defensive depth the frequency was to be 1.5 hour; in conducting combat only with a portion of the forces it was 2 hours. These demands were set out in the report submission table. The periodicity of the priority reports was set considering the instructions from the staff of the XXX-VII Rifle Corps and was 4 hours.(2)

With such an organization for submitting information, there was no need to request situational information from the regimental staffs and this undoubtedly increased the personal responsibility of subordinates for the high quality preparation and prompt submission of the data.

The experience of the war showed that in combat it is impossible to rely solely on data transmitted according to previously set times. At times, information appeared which had to be delivered to the recipient immediately. Usually there was not so much data of this sort in the course of the fighting. The priority transmission of them did not disrupt the general procedure for receiving information.

The rigid fixing of the rules for submitting verbal information could have produced more tangible results if this procedure had been firmly observed on all levels. But up to the end of the war the superior staffs did not completely free themselves from the unsystematic requesting of situational data and this forced the divisional staff to violate its rules.

The most essential shortening of the time required to collect and transmit data was achieved with the **personal observance of the battlefield by the commander and staff officers**. In this instance, information of the events of what was happening on the battlefield was received on a real time scale and this provided an opportunity to respond effectively to changes in the situation. In the course of the offensive battles conducted in 1943-1945, a majority of the divisional commanders with a group of officers, as a rule, were at the observation post.

At other times, as an exception to the general rule, the formation commanders controlled the units from their command posts. Such commanders did not see the enemy and did not know how our troops were behaving in combat and what help they required. They provided control, as was pointed out in the order of the commander of the Third Ukrainian Front in February 1945, "just by telephone and using a map...."(3)

The location for an observation post was usually chosen in direct proximity to the forward subunits in order to see our own and the enemy units on the axis of the main thrust or in an area where the successful execution of the set battle task was decided. The nearby location of the observation posts of the commanders of the formations and units which were attached and supported the division had a positive impact upon increasing the up-to-theminute receiving of situational data and accelerated the issuing of them to all involved persons.

Positioned along with the commander, as a rule, were the artillery commander, the chief of the operations department, the chief of intelligence and the assistant signals chief. In a number of divisions also at the observation post were the chief of staff while the chief of the operations department remained at the command post.

Of important significance for the continuous receipt and transmission of information was the precise organizing of the moving of an observation post. The carrying out of this task depended largely upon the presence of dependable communications. Usually the signal troops had a reserve of equipment hear the observation post in order

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as the first echelon battalions advanced to immediately build up the wire communications along the axis of the move of the control posts. With a high rate of troop advance communications was provided by radio and for this reason in the moving of the observation posts there were no failures in the receipt of information.

The functioning of the observation posts did not stop at night. In the event that the commander returned to the command post or to the regiments, his deputy or one of the staff officers remained in charge at the observation post.

The effective collection and transmitting of situational data was increased by reducing the volume of the battle reports and extensively using short telegram reports. An analysis of many reports sent by the tactical-level staffs during the war years showed that they contained a good deal of redundant information which was virtually not employed by the superior staff.

In particular, the first point of the priority reports frequently described the previous fighting which had already been reported by the staffs. Such events which could not have direct bearing upon the carrying out of current tasks in troop command would have been better given at the end of the day in the final battle report or in the operational summary.

Little useful information was also found in the regimental reports on the situation and actions of adjacent units. Frequently here inaccuracies and distortions were encountered and this created additional difficulties in studying the situation and forced the staff to recheck the received information. One might ask: why did they write about the adjacent unit, if it itself objectively set out the data on its subunits? An exception could be information on the actions of the adjacent units of the next division as these would substantially influence the carrying out of a task by a regiment.

One of the reasons for the large bulk of the reports was the low skills of certain officers engaged in working out the report documents and their inability to profoundly analyze the combat actions of the subunits and units and clearly set out what was required. This shortcoming was eliminated as the executor gained experience and skill in preparing the documents. Greater skill was also aided by the professional help from the chiefs and experienced officers of the staff in selecting the generalizing the situational data.

In a number of instances the volume of reports was increased due to the fact that the senior chiefs demanded various supplementary information. Thus, the commander of the 1st Tank Army in 1944 in one of his orders demanded that the battle reports "particularly point out the successful activities of the individual commanders and officers as well as instances when as a consequence of bad actions...on the part of individuals of the command personnel a subunit (unit)...suffered significant unjustified losses in personnel and materiel."(4) In carrying out such instructions, it was impossible to limit oneself to merely listing the events and the names of the officers. It was essential to set out in detail these data so that the superior chief could objectively assess the actions of one or another officer and draw sound conclusions. Such an analysis of the questions was impossible only after a thorough study and this undoubtedly required time. As a result, there was an increase not only in the volume of the battle report but also in the time of its writing.

Experience convincingly showed that in combat it was essential that the staffs did not write bulky report documents and waste a great deal of time on their elaboration and transmission. Loquaciousness in battle reports was a major obstacle in reducing the time required to collect and transmit the situational data.

Important in this context for command during the war years were the **brief battle reports** compiled in an arbitrary form. The battle orders and instructions and the priority battle reports and operational summaries were written following the corresponding forms which to a significant degree helped the officer in taking up the essential questions in a complete and consistent manner, in widely employing customary, standard expressions and words here. But the brief battle reports were unique in form, they had their own particular features of exposition depending upon the specific situation, the mastery and experience of the executor himself as well as the ability to isolate the most crucial in a clear commander language.

Here is one of the examples of such a report received from the staff of the 305th Guards Rifle Regiment in the fighting on the Dniester bridgehead on 17 February 1944: "At 0530 hours by a surprise attack, the 2d Rifle Battalion captured elev. 91.4. The enemy counterattack by the forces of 80 soldiers and 8 tanks from the 36th Infantry Regiment and 9th Infantry Division aiming at recovering the hill was driven off. Up to 45 enemy soldiers were destroyed. Our losses were 17 men. One daily ration of food and no fodder."(5) From this report it is possible to ascertain that the situation of the other battalions as well as the enemy grouping remained unchanged. The shortage of food and fodder was causing serious concern for the regiment's commander.

The working out of such brief telegram reports containing just the new situational data and their delivery to the addressee took a minimum time.

There were great possibilities for reducing the volume of information and the time for transmitting it in **using** signal reports. Signals previously elaborated by the staff considering the content of the tasks and the particular features of executing them were widely employed in the course of continuing an offensive. With their aid important data were delivered in a short time. The staff prepared its own signals for each offensive battle. The

words and expressions about the actions and state of the units (subunits) in carrying out the battle task were carefully chosen. Also effective was the practice of working out standard signals for the regiments and battalions. Since the number of such signals in their majority did not exceed 10-12, it was not difficult to remember them.

Increased efficiency in collecting information depended upon the **ability of the officers to quickly and expressively plot the situational data on a working map**. A well-trained officer under any conditions including under heavy enemy firing, during the night with poor lighting and in bad weather, could plot the received information on a map clearly and without any corrections and erasures. In recalling the wartime staff officers it might be pointed out that a majority of them, particularly the officers from the operations department, the chiefs of staff of the regiments and their first assistants were experts in drawing up graphic documents. The working maps for them were not only a mirror of the existing situation but also an indicator of their preparedness for troop control.

For example, the Chief of the Operations Department of the Staff of the 108th Guards Rifle Division, Lt Col N.V. Popov on a map always plotted the most recent situational data, the coordinates and code names of the terrain features and to the side of the zone of advance wrote down the main control signals, the call numbers and a calculation of the balance of forces and forms were prepared for the tables to calculate the most important materiel. In working out the battle documents or in a situational report, N.V. Popov had all the necessary information at hand, on the map, and this ensured speed and clarity of work.

The example of the commander had a substantial influence on improving the quality of keeping the working maps, in particular by the officers of the 108th Guards Rifle Division. Col S.I. Dunayev always himself kept a map on the course of the fighting and this was always done in an exemplary manner. Before hearing the report of a subordinate, he usually took the subordinate's map and studied the situation on it. All the officers of the formation knew this trick and endeavored to keep their maps carefully.

Not every officer was skillful in handing the graphics, but it one thing when the data on the map were not as clearly and neatly plotted as one might want but another when the established rules and demands were not observed in plotting them. As a result, inaccuracies got into the staff reporting documents and thereby led to errors in calculating the time and the content of the tasks for the subunits and the weapons.

The officers gained sound skills in handling a map basically in the course of carrying out their duties. This process was effective where the immediate superiors showed the required exactingness on their subordinates in their observance of the rules for drawing up such a battle document. The effectiveness in assembling and issuing the data also grew due to the greater skill and ability of the officers to talk over the communications equipment. As is known, depending upon the skills of the officer in carrying out these talks, information of one or another content could be of varying duration. Frequently, in reporting on the situation there were superfluous words, repetition, a lack of sequence and the focusing on secondary details. It is no accident that the directive of the commander of the Kalinin Front in 1942 emphasized that in "90 percent of the telegrams the number of words could be reduced by up to 40 percent while conversations could be reduced by 50 percent in volume and even 70 percent without detriment to the content of the transmitted documents." As a consequence of this the task was set of "teaching the commanders and staffs to set out their thoughts in telegrams and in talks with maximum brevity and clarity employing the 'telegraph' command language."(6)

For this reason from the very first days that an officer worked on the staff, experienced chiefs of staffs and departments drew his attention to the need prior to reporting on the situation to think through the content, prepare the map, check the digital data and become familiar with the commander's decision and the measures which were to be carried out in the existing situation. The observance of these requirements made it possible for the officer to quickly generalize the essential information and transmit it to the superior staff.

Loquaciousness and a lack of specificness in the reports at times also had a different cause: the officer did not possess information on the last changes in the situation. In order not to appear uninformed in the eyes of the superior chief, he repeated the previous data, he gave secondary details, in tying up the communications equipment and distracting the officials from resolving essential questions. In order to avoid such situations, the officers were indoctrinated in a feeling of personal responsibility for carrying out the calls. Great attention was paid to training and during the periods of a lull on the front, staff drills and radio drills were held.

A reduction in the time for collecting and issuing data was also achieved by excluding situation details which were superfluous and unessential for the commander and staff in command. Practice showed that there could not be any routine approach to establishing the details of a report. Each situational element under different conditions could have a varying impact upon the taking of a decision and the development of combat. Thus, in crossing large rivers, a divisional commander needed the most detailed information which in the course of an offensive under ordinary conditions was received by the regimental and battalion commanders. In order to have this information and on a real time scale, the staff in a number of instances had to establish contact not only with the battalion commanders but also with the chiefs of the crossing points and the persons in charge of the crossings.

The lower the pace of troop advance the more detailed the data had to be essential primarily for the effective use of the weapons. Conversely, with the rapid development of the offensive, there was no need for superfluous detailing of the situation.

A significant amount of all the reports was made up of information concerning the enemy. Most often there was no surplus information about it and for this reason all the data, particularly when comparatively little was received, were reported to the staffs, as a rule, fully. Here it was essential that the report contain information on the strength of the counterattacking enemy grouping not in the form of generalized TOE units (platoon, company, battalion) but rather in quantitative terms (for example, 55 soldiers and 9 tanks). Such information provided a more accurate and objective notion of the enemy.

The degree of detailing of the information in assembling the latter depended largely upon the work style of the commander. At various times I worked with two divisional commanders. Col S.I. Dunayev did not intervene without an urgent necessity into the functions of the regimental commanders, giving them independence in resolving their questions. Maj Gen D.G. Piskunov responded personally to substantial changes in the situation not only in the regiments but also in the battalions. This required that the staff obtain more detailed information and in the shortest time.

In the process of troop control, they determined the optimum degree of detail for the information being reported to a superior staff. Thus, the regiment received data down to the company (battery), inclusively, and the division down to the battalion. This made it possible to profoundly assess the situation, to take an intelligent decision and helped in effectively utilizing the forces available to the commander.

Of great importance for reducing the time required to accumulate and transmit the information was the ensuring under any situational conditions of dependable contact with the subordinate and superior staffs, particularly in the course of moving the control posts. The difficulties in carrying out this task depended not only upon the technical capabilities of the communications equipment but chiefly upon their skillful use under various situational conditions. The orders of the army commanders on the state of troop command pointed out: "Interruptions of 6-8 hours in receiving data occur in the moving of the divisional staffs" (13th Army, 1943).(7) "Control was lost in the divisions, and the staffs did not know for 10-12 hours the position of the 1278th, 1024th Rifle Regiments of the 391st Rifle Division, the 727th Rifle Regiment of the 219th Rifle Division. The staffs of the 207th and 391st Rifle Divisions were located far from the advancing troops (6-7 km). Information was very late in reaching them" (3d Assault Army, 1944).(8)

It has been pointed out with complete justification that most often the interruptions in receiving data occurred during the movement of the control posts. The observation post, as the most mobile body, moved up behind the troops. A commander changed his position without waiting for the arrival of wire communications from the superior staff. The command post was forced to remain at the previous position until telephone communication of the corps (army) was established with the new area. The waiting for such communications frequently led to a situation where the divisional command post became separated from its units and the observation post and as a result of this the receipt of data from them was disrupted. In order to exclude delays in the receipt of information at the command post and, consequently, at the superior staff, in a number of instances it was essential to move up an intermediate radio for relaying the transmission of the data. If the staff of a corps (army) permitted the start of the movement of the command post without waiting for the establishing of wire communications with the new position and relying on radio communications, interruptions in the receipt of data were excluded. The best method ensuring continuous communications and prompt receipt of the information was one where the command post and the observation post moved alternately and their distance apart did not exceed the capabilities of the available radio equipment.

Nor must we exclude such a way of accelerating the obtaining of data as the skillful organization of the interrogation of prisoners. Up to mid-1944 they unswervingly observed the demand of forwarding captured prisoners as quickly as possible to the superior staffs which had experienced translators. However, it must be agreed that with the dispatching to the rear of prisoners who could in the field point out the strongpoints, firing positions and covert approaches to the enemy defenses, we lost one of the most important sources for obtaining the information essential for organizing combat in the subunits. Only from the summer of 1944, when the number of prisoners increased, did they begin to be left for a certain time in the subunits.

Finally, of important significance was the systematic supervision over the objectivity of information received from subordinates. The realization of this helped to indoctrinate in the officers a feeling of personal responsibility for the reliability of the data. The officers, participating in the inspections, carefully studied the situation and the information submitted by them, as a rule, was marked by high objectivity and contained not only situational information but also a sound assessment of this.

The examined ways of increasing the effectiveness of collecting and transmitting situational data by the divisional staff on the offensive altogether ensured the resolving of this important problem in 1942-1945.

The skillful use of combat experience can help to increase the effective work done by the staffs under present-day conditions.

#### Footnotes

1. TsAMO SSSR [Central Archives of the USSR Ministry of Defense], folio 1299, inv. 1, file 10, sheets 54, 57.

2. Ibid., file 44, sheets 141, 152.

3. "Sbornik boyevykh dokumentov Velikoy Otechestvennoy voyny" [Collection of Battle Documents of the Great Patriotic War], Moscow, Voyenizdat, No 6, 1948, p 107.

4. TsAMO, folio 229, inv. 37724, file 8, sheets 147, 148.

5. Ibid., folio 4794, inv. 244509, file 5, sheet 71.

6. Ibid., folio 213, inv. 2038996, file 2, sheet 3.

7. Ibid., folio 361, inv. 8007, file 5, sheet 23.

8. Ibid., folio 317, inv. 13497, file 2, sheet 239.

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#### Notes on Biography of G.K. Zhukov

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[Article, published under the heading "From Unpublished Manuscripts," by K.M. Simonov: "Notes on the Biography of G.K. Zhukov"; concluding installment; for previous articles of series see VOYENNO-ISTORI-CHESKIY ZHURNAL, No 6, 7, 9 and 10 for 1987]

[Text] 4. In knowing that Zhukov had long been working on his memoirs, I decided not to take up his time with requests to describe his biography to me. But in the course of our conversations in which the subject of the war was the main one, spontaneously it happened that he himself from time to time turned to various events in his life, both very distant and nearer. He described the people with whom he had worked and voiced various views on life generally and his own experience in particular.

I cite this portion of our talks in being perfectly aware of the diverse nature of the notes quoted here but in which one will find, however, the integrity of nature inherent to Zhukov.

[The paragraphs below are Zhukov's words] When I was writing the memoirs of my childhood and youth, I reread them and wondered: how similar are the biographies of virtually all our generals and marshals virtually each of which came from some distant hamlet or village and virtually each from a poor, usually peasant family. It was a striking similarity. I sometimes reflected on why my experience in the war and life generally developed precisely as it did and not otherwise. In essence, I could have ended up in Tsarist times in a warrant officer school. I completed a 4-grade school on Bryusovskiy, previously Gazetnyy Lane [in Moscow] and this for those times provided a sufficient educational level for admission to a warrant officer school.

When I was a fellow of 19, I went to war as a soldier and as such could have been successfully admitted to the warrant officer school. But I did not want this. I have not written about my education but merely stated that I completed two grades of parish school and was then inducted in the army. This is what I wanted.

My decision was influenced by a trip to my home village not long prior to this. There at home I met two warrant officers from our village who to boot were poor, unsuccessful and ungainly so that looking at them, it was somewhat awkward for me to think that there I was, a 19-year-old youth, who would end up in warrant officer school and would command a platoon and would command experienced soldiers, the greybeards, and I in their eyes would be the same as these warrant officers whom I saw in my village. I rejected this as unseemly.

I went off to be a soldier. Later I completed junior officer school in a training team. This team, I would say, was a very serious institution of learning and trained junior officers more soundly than our regimental schools presently train them.

During the war I gained soldier and junior officer experience and after the February Revolution was elected the chairman of the squadron committee and later a member of the regimental committee.

It cannot be said that during those years I was a politically conscious person. The various completing slogans released at that time among the soldiers not only by the Bolsheviks but also by the Mensheviks and SRs had an important ring and were seized upon by many. Of course, in my heart there was a general sensation or feeling of where I should go. But at that moment during those years of youth, one could easily be led astray. This also could not be excluded. And who knows what would have happened if I had ended up not a soldier but rather an officer, if I had completed warrant officer school, excelled in battle, received other officer ranks at a time the revolution was approaching. Where would I have gone under the influence of various circumstances, where would I have ended up? Possibly, I would have whittled away my life in immigration? Of course, later on, after a year or so, I was already a conscious man, I had already set my path and already knew where I was going and for what I would fight. But then, at the very outset, if my destiny had been different, if I had ended up an officer, who knows what would have happened. How many mutilated fates there were at that time for similar persons from the people like I was ....

For 25 years I sat astride my steed as a junior officer, a platoon commander, a squadron commander, a regimental commander and a divisional and corps commander.

The start was junior officer service in the Tsarist Army. The role of a junior officer in the Tsarist Army was very great. In essence, all training of the soldiers rested on them as well as a good deal of the burden of daily leadership of the soldiers, including their leadership in battle. Among the Tsarist officers there were numerous real zealots who were able to do everything themselves and did it, sparing neither energy nor time. But a majority put the rough work onto the junior officers and relied on them. This determined the status of the junior officers in the Tsarist Army. They were well-trained, they served industriously and represented a major force.

In 1921, I was on the front opposite Antonov. It must be said that this was a rather hard war. In the peak of it we were confronted by around 70,000 bayonets and sabers. Of course, here the Antonov troops had neither medium and particularly heavy artillery, they were short of shells, there were interruptions with the supply of cartridges and they endeavored to avoid major engagements. They clashed with us, retreated, broke up, disappeared and then arose again. We were counting on destroying one or another Antonov brigade or detachment but they simply scattered and then reappeared nearby. The difficulty of the fighting was that among the Antonov troops were very many former frontline veterans including junior officers. And one of these nearly ended my career.

In one of the battles our brigade was decimated and the Antonovs were skillfully getting the best of us. If we had not had some 150 machine guns covering us, things would have really gone bad. But we were covered, we got back on our feet and beat the Antonov troops. Not long before this I had gotten my hands on an extraordinary horse. I had taken it in battle, having shot its owner.

Then, pursuing the Antonov troops with my squadron, I saw that they had turned back toward us. The corresponding command was given and we rushed forward into the attack. I could not hold back my horse. It carried me some 100 paces ahead of my squadron. At first everything went well and the Antonov troops began to retreat. During the pursuit I noticed, it seemed to me, that one of the commanders was retreating toward the edge of the forest along a snow path, as there was already snow. I went after him. He tried to escape...I caught up with him and saw that he was whipping the horse with his right hand and his sword was sheathed. I caught up with him and instead of shooting rushed at him with my sword. He whipped the horse first on the right and then on the left side and when I was waving my sword, the lash was on his left. Giving it a flick, he threw it away and suddenly, without a flourish unsheathed his sword and thrust at me. I was not able to even protect myself, my coat was still done up and he had already thrust, in an instantaneous movement unnoticed completely by me he unsheathed his sword and in a single movement struck me across the chest. I was wearing a heavy fleece coat and across the chest were a strap of my sword, a pistol strap and a binocular strap. He cut through all these straps, through the fabric on the coat and the fleece itself knocking me from the saddle with this blow. Had not my political instructor rushed up who struck him with his sword, things would have gone badly for me.

Later on, when they searched the dead man, they saw his documents and a letter which he had failed to get off to a certain Galina and saw that he was a cavalry junior officer like I had been, also a dragoon, only of enormous height. Later for a fortnight my chest ached from his blow.

That was how things were in the time of the Antonov revolt.

Our troops were under the command then of Tukhachevskiy and Uborevich was his deputy.... [End of Zhukov's comments]

[Simonov's comment] Having heard this, I could not restrain myself and asked how he judged Uborevich and Tukhachevskiy.

[Zhukov's comments] I would place both of them high, although they were different men with different experience.

Tukhachevskiy had experience in front operations while Uborevich during the Civil War was in command of an army and at that time did not rise any farther. Tukhachevskiy was a more widely known figure but I would not have given him preference over Uborevich.

Both in terms of the general nature of this thinking as well as in terms of his military experience, Tukhachevskiy was more erudite on the questions of strategy. He had studied them a great deal, he had reflected on them and had written on them. He had a profound, calm and analytical mind.

Uborevich was more concerned with the questions of operational art and tactics. He was a great expert of both and an unsurpassed indoctrinator of the troops. In this sense he, in my view, was three heads higher than Tukhachevskiy who had a certain haughtiness and a disdain for rough, daily work. In this you could feel his origins and upbringing.

I was most involved with him in 1936 in working out the new Field Manual. It must be said that Voroshilov who was then the people's commissar was a little-competent person in this role. He to the end remained a dilatant in military questions and never was to know them profoundly and seriously. However, he held a high position, he was popular, and had claims to consider himself fully a military questions. But in actual fact a significant portion of the work in the People's Commissariat rested at that time on Tukhachevskiy who was truly a military specialist. He had clashed with Voroshilov and generally hostile relations existed. Voroshilov detested Tukhachevskiy and, as far as I know, when the question arose of suspicions about Tukhachevskiy and subsequently of his arrest, Voroshilov did not raise a finger to save him.

During the working out of the manual, I remember the following episode. With all his calmness, Tukhachevskiy could show firmness and deal a rebuff, if he felt this necessary. Tukhachevskiy, as the chairman of the commission on the manual, reported to Voroshilov, as the people's commissar. I was present at that time. Voroshilov began to express dissatisfaction over one of the points, I do not now recall which, and proposed something which was wide of the mark. Tukhachevskiy, having heard him out, said in his ordinary, calm voice:

"Comrade people's commissar, the commission is unable to accept your corrections."

"Why?" asked Voroshilov.

"Because your corrections are incompetent, comrade people's commissar."

He was able to give this abrupt rebuff precisely in such a calm tone and this, of course, was not to Voroshilov's liking.

I worked with Uborevich for 4 entire years starting in 1932. I served on Budennyy's Cavalry Inspectorate and prior to this was the divisional deputy commander in the Kiev District. Then Uborevich phoned there, to the Kiev District, to Timoshenko, and asked him whether he could recommend someone from the cavalry to instill order in the 4th Cavalry Division. Previously, the 4th Cavalry Division was the best cavalry division in the 1st Horse Army. Then it was shifted to the Leningrad Military District and then to Belorussia, to places where everything had to be built anew and the division had to be engaged in economic construction. The division's commander was unsuccessful, and over the 2-year stay in Belorussia the division was just involved in construction, it abandoned military training and generally was in disgusting shape. Timoshenko recommended to Uborevich that I take over this division. Uborevich in his customary decisive tone called Voroshilov in Moscow and asked:

"Comrade people's commissar, give me Zhukov for the division, Timoshenko has recommended him to me."

Voroshilov replied that I was working in Budennyy's Cavalry Inspectorate. But Uborevich insisted:

"There are many people in the inspectorate, and there you can find someone else, but I need a divisional commander and I request that my demand be carried out." When I was summoned, I certainly was pleased to go to the division and left for the Belorussian District. At that time, I still had not commanded a division, just a brigade.

Initially, my relations with Uborevich did not go smoothly. Approximately 6 months after I had taken over the division, he reprimanded me for some incorrect report. Some inspection in the division had not gone right and as a result the entire district was reprimanded. The reprimand was unjust because it was impossible for a division to get on its feet in 6 months. In 6 months it was impossible to only become acquainted with it and begin taking measures. With all my desire, in 6 months I was unable to do everything that was required to put the division in full order. Hence, the reprimand. And it was a reprimand by default. This was the first reprimand in all my service and, in my view, I repeat, completely unjustified. I got angry and fired off a telegram.

"To District Commander Uborevich. You are an extremely unjust district commander, I do not want to serve under you and ask that I be sent to any other district. Zhukov."

Two days passed after the telegram. Uborevich called and summoned me to the telephone.

"I have received an interesting telegram. Are you dissatisfied with the reprimand?"

I replied:

"How could I be satisfied, comrade commander, when the reprimand is unjust and I have not merited it?"

"Hence, you feel that I am unjust?"

"Yes I do. Otherwise I would not have sent you off a telegram."

"And you have raised the question of being transferred."

"I have raised the question."

"Let us wait a bit on this. In 2 weeks there will be an inspection trip and we will have a talk with you during it. Can you wait on your report until this?"

"I can."

"Then do."

Our talk ended with this.

During the inspection trip Uborevich found the occasion, he called me aside and said: "I have checked through the material under which the reprimand was handed down against you and I can see that it is incorrectly done. Continue serving. We will consider the question closed."

"And will you consider the reprimand lifted?" I asked.

"Certainly, as I have said that it is unjust."

The incident was closed with this.

Subsequently, the division became the best in the district and one of the best in the army. I shaped it up over a period of 2 years.

Now relations with Uborevich were good. I felt that he was working on me. He took a look at me, gave me various assignments, and forced me to report. Then he assigned me at an assembly in the district staff to make a report on the actions of the French Cavalry during the battle on the Po River during World War I.

For me this report was an unusual and difficult undertaking. Particularly as I, the divisional commander, was to give this report in the presence of all the commanders of the district combat arms and all corps commanders. But I prepared for the report and was lost only at first. I hung up all the maps and then stopped by them; I had to start but stood there in silence. But Uborevich was able to help me at that moment and by his question called me into the conversation. Subsequently, everything went normally and he judged my report as good.

I repeat, I felt him working patiently with me.

Generally speaking, he was strict. If in working with him he saw that one of the corps commanders was distracted, he instantaneously, without saying a surplus word, gave him the task:

"Comrade so-and-so! The enemy has come from here, from such-and-such a region, to here, and is at such-andsuch a point. You are somewhere here. What do you propose doing?"

The distracted corps commander began to run his eyes over the map on which a whole series of points had been mentioned all at once. If he had followed continuously, he would have quickly found his place, but even being distracted once for a short time, it immediately became difficult. This, of course, was a lesson for him. After this, during the entire assembly, he did not take his eyes off the map.

Uborevich was a matchless indoctrinator who carefully observed the man and knew them, he was exacting, strict and had a magnificent capacity to explain your mistakes to you. Their obviousness became clear even after three or four sentences. His severity was feared, although he was not either harsh or rough. But he was able to show During his discussion of Uborevich, having mentioned Timoshenko, Zhukov suddenly out of context with what had gone before returned to him and said:

[Zhukov's comment] Timoshenko in certain works is judged completely incorrectly and is depicted as a person without will and fawning before Stalin. This is not the truth. Timoshenko was an old and experienced military man, a tenacious, strong-willed and educated man both in the tactical and operational area. But in any event, as the people's commissar he was infinitely better than Voroshilov and over the brief period when he was in this position, he did succeed somewhat in moving the army to the better. What happened was that after the Kharkov disaster he was no longer entrusted with the command of fronts, although in the role of a front commander he could have been much stronger than certain other commanders, for instance, Yeremenko. But Stalin was angry with him-both after Kharkov and generally-and this told on his fate over the entire war. He was a hard man and he never played up to Stalin. If he had tried this, it would be quite possible that he would have received a front. [End of Zhukov's comment]

In one of our talks, Zhukov and I discussed military memoirs. Judging from his comments on various books and publications, he carefully read virtually everything that had appeared and clearly this question was of interest to him because he himself was continuing to work on his own memoirs about the war.

Let me give several notes related to this.

[Zhukov's comments] I do not know what your opinion is, but it does seem to me that in the memoirs of military leaders is not to the point to give enormous lists of names and an enormous number of combat episodes mentioning various instances of heroism. In those instances when this is offered as personal observations this is not the truth. You, the front commander, yourself did not see this, you were not present here, you did not personally know the man being described, and have no notion of the details of his feat. In certain instances you do not even know the name of the man who committed the feat. In a majority of instances these facts in memoirs are taken from other materials. They do not describe the activities of a front commander and at times impede the creation of an integral picture of what happened as set out from the viewpoint of the person writing the memoirs. It seems to me that the abuse of this is done for the sake of spurious democracy and spurious courting of favor.

In order to show how the people fought, it is not required to take lists of names from the newspapers of those times or from the political reports. When you describe how the entire front fought, how the armies comprising it fought,

how this entire enormous mass of people fought, what losses they suffered, what was achieved and how they conquered— this is the story of the actions of a people in war.

In the course of the war, we made a number of errors and these errors must be described in our memoirs. In any even, I am writing this. In particular, I am writing about those errors which I made as the coordinator of the actions of two fronts in the Lwow-Sandomierz Operation, when we, having more than enough forces to carry out the task, made no headway before Lwow, and I, as the coordinator of the actions of the two fronts, did not employ these forces where they were necessary, and did not maneuver them promptly for a faster and more decisive success than the one which was achieved.

A major drawback of certain memoirs which I have read is the limited viewpoint in describing the combat events by the army commanders and even the front commanders.

At times, the strange impression is created that seemingly an experienced and educated military man, in fighting in the war within his demarcation lines and having adjacent units to the right and to the left, forgets that not only his failures but also his successes are tied to their actions. He forgets that to the right and to the left of him units are fighting from the very same Soviet Army and to these proper due must be paid just as to his own units. He forgets that this is all the same army and not specifically against his army or front but against the Soviet Army as a whole, against all the armies and all the fronts.

And if at a given moment, precisely he is experiencing difficulties, an attack is launched against him, and the Germans are concentrating large forces against him, this is due to the fact that at some other place these forces do not exist, that the Germans somewhere have lessened the tension and are not attacking and because of this at the given moment it is easier for some of his adjacent units to the right or left.

This adjacent unit, in turn, should not forget the reasons why at a given moment it is easier for it. But you, when you write your memoirs, have no right to forget that the success of your endeavor is due to the fact that during this period the Germans were focusing their efforts on another sector and that there it was heavy going for the adjacent units.

It must not be forgotten that you were successful not only because you yourself are so intelligent and good and that your troops fought so well, but also because a good situation arose for your attack, the adjacent units had diverted the main enemy forces to themselves and you had gained an advantage which lay at the basis of your success. But this success of yours is a common one and not merely yours. It is just the same as if a good situation arose for the adjacent unit while it was hard going for you, and so the success of the adjacent unit is not only its but also yours.

This is frequently forgotten in memoirs. They write as though the war was waged just within their demarcation lines and as if one's troops were something completely distinct from all else. In principle one must not tolerate such a narrowness of view, let alone that this narrowness leads to a whole series of distortions in assessing the very course of military operations. [End of Zhukov's comments]

Clearly the circumstance that during the period of the talks, Zhukov was continuing to work on his memoirs was reflected in the nature of certain notes made by me. When a person who has had a great life reviews all of it with someone else, some portion of his reflections on his own life permeates his discussions with the other participants in the talks.

Let me give several notes showing precisely this idea.

[Zhukov's comments] It does happen that one feels that we still do not completely utilize the opportunities which we possess, and that in some other sphere you lack knowledge, training and a systematic education. In life it happens that one is unable to acquire a great deal. For instance, a knowledge of biology and natural sciences which one encounters even in purely military reflections. I have never shaken off the sensation that the range of my knowledge is narrower than what I would like to have and what I felt a need to have in my job. I felt this and still do.

I have never been a self-confident person. My lack of self-confidence has not prevented me from being decisive in my job. When one does a job, when one is responsible for it and makes decisions-here there is no place for doubts of oneself or a lack of confidence. You are completely engrossed in your job and in giving your all to this job and doing everything that you are capable of. But later, when the job is complete, when you reflect on what you have done, when you think not only of the past but also of the future, there is a heightened awareness that you lack something, something is missing, that you had to know a number of things which you did not know and this returning feeling causes you to rethink everything and decide: "Could you have not done better than what you did, if you had possessed all that you lacked?"

I had to master a great deal on the job, without sufficient previously acquired extensive and diverse knowledge. But this also had a positive aspect. In being responsible for something, in endeavoring to proceed in the best manner and at the same time feeling various gaps in one's over-all training, I endeavored to resolve the questions which confronted me as soundly as possible, I

endeavored to get to its root and not allow myself to take the first superficial decision which I came across. There was an increased sense of responsibility for the assigned job and an awareness of the need to approach everything using my mind and my experience, while trying to directly supplement my knowledge with everything that was required for the job.

With all the difficulties of the situation there still was a positive side to this. It might be pointed out that certain of our highly educated military men of the professorial type, the professors who were in a position of the commanders of various fronts of the war did not show up for the best. In their decisions I had occasion to note precisely elements of superficiality. They often proposed superficial solutions to complex problems which did not keep within their professorial erudition. This was the reverse side of the coin as to them something which in fact was difficult and for me, for example, was very difficult to decide seemed simple and going without saying, and in actuality it did turn out this way.

There are in life things which cannot be forgotten. A person is simply incapable of forgetting them but they are recalled differently. There are three different memories. It is possible not to forget evil. This is the first. It is possible not to forget experience. This is the second. It is possible not to forget the past in thinking about the future. This is the third.

In my life I experienced three difficult moments. If one speaks about the third of these, here I am obviously partly to blame as there is no smoke without fire. But this was difficult to go through.

When in 1957 I was removed from the membership of the Central Committee Presidium and from the Central Committee and I returned home after this, I was fully determined not to lose control, not to break, not to lose it and not lose my willpower, however difficult it was.

What helped me? I proceeded as follows. Having gone home, I took a sleeping pill. I slept several hours. I got up. I had something to eat. I took another sleeping pill. Again I fell asleep. I woke up, again took a sleeping pill and again fell asleep.... This continued for 15 days where I slept with brief breaks. In a way I relived everything that had been troubling me in my mind. Everything that I had been thinking, all that I had been internally disputing, what I had gone through awake, all of this I relieved, obviously, in my dreams. I disputed, I proved my point, I grieved—all in my sleep. Later, when these 15 days had passed, I went off fishing.

Only after this did I write the Central Committee and asked permission to go for treatment at a health resort.

This was how I lived through this difficult moment. [End of Zhukov's comments]

\* \* \*

I want to end these notes with what I began.

This is not an attempt to write Zhukov's biography, but precisely notes to it and I would be glad if subsequently at least a portion of what has been said and quoted in them would be of service to future biographers of this in many ways outstanding man.

#### April-May 1968

From the editors. The notes of K.M. Simonov on the biography of Z.K. Zhukov, the publication of which ends in this issue, have evoked a lively response from the readers. This is understandable as certainly they contain evidence and judgments of a legendary military leader, an outstanding military and state figure and his attitude toward the complicated and at times contradictory phenomena of our history.

In the editor's mail there have been letters also from the daughter of Georgiy Konstantinovich, Era Georgiyevna Zhukova. "I have been greatly impressed by this publication," she writes. "I thank you for it." We in turn are grateful to all the authors of letters and we also express profound gratitude to the members of the family of K.M. Simonov, to the leadership of the General Staff of the USSR Armed Forces and the Main Political Directorate of the Soviet Army and Navy for the opportunity provided to publish the given material and in the future on the pages of the journal we plan to describe interesting people and little known historical facts and events.

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**Fortified Areas on USSR Western Frontiers** 18010068f Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 12, Dec 87 (signed to press 24 Nov 87) pp 47-54

[Article, published under the heading "Little Known Pages of Military History," by Col A.G. Khorkov, doctor of historical sciences, "The Fortified Areas on the Western Frontiers of the USSR"]

[Text] In the prewar years, the western frontiers of the Soviet Union were covered by the troops of the Leningrad (LVO), Baltic Special (PribOVO), Western Special (ZapOVO), Kiev Special (KOVO) and Odessa (OdVO) Military Districts.

In May 1941, in accord with the plan worked out by the General Staff for defending the state frontier, the troops of these districts were given the following tasks: to prevent an invasion by both a ground and air enemy; by a stubborn defense of the fortifications along the state frontier line to closely cover the mobilization, concentration and deployment of the troops; by air defense and

air operations to ensure normal operation of the railroads and the concentration of the troops; by all types of reconnaissance to promptly determine the nature of the concentration and the grouping of the enemy troops; by active air operations to seize air superiority and by powerful strikes against the main railroad bridges and junctions as well as against the enemy troop groupings, to disrupt and check its concentration and deployment; to prevent the dropping and landing of airborne forces and diversionary groups on the district territory.(1)

For implementing the designated tasks, each military district and army worked out a plan for covering the state frontier. "In the stubborn defense of the state frontier line" an important role was assigned to the fortified areas (UR).

A fortified area was a strip of terrain equipped with a system of permanent and field fortifications and prepared for extended defense by specially assigned troops in cooperation with the combined-arms units and formations. The corresponding areas and the depth of defense were set for each UR.

The construction of the fortified areas along the western state frontiers of our motherland was carried out in three stages.

In the period of 1929-1938, 13 fortified areas were established: Karelian, Kingisepp, Pskov, Polotsk, Minsk, Mozyr, Korosten, Novgorod- Volynskiy, Letichev, Mogilev-Yampolskiy, Kiev, Rybnitsa and Tiraspol. These had 3,196 defensive structures (including 409 for protected artillery) and these were occupied by 25 machine gun battalions with a total number up to 18,000 men. All the UR were in operation but they no longer met the demands of the times, as they were able to conduct only predominantly frontal machine gun fire, they were of insufficient depth and had an unequipped rear, the structures had little resistance and the interior equipping was ineffective.

In 1938 and 1939, construction was started on another 8 fortified areas: Ostrov, Sebezh, Slutsk, Izyaslav, Shepetovka, Staro-Konstantinov, Ostropol and Kamanets-Podolskiy. In these some 1,028 structures were concreted. However, as a whole, the construction plan for the UR was carried out only by 45.5 percent in 1938 and 59.2 percent in 1939.(2) Here, as was pointed out by the Main Military Engineer Directorate of the Red Army, the concreted "structures did not have combat weapons and internal facilities."(3)

In the autumn of 1939, further construction of the fortified areas was halted. This was caused by the fact that due to the change in the Soviet state frontier, they ended up in the deep rear. The question arose of what one should do with them and what they would be used for in the future.

The documents of those years indicate that the structures which had been concreted in 1938-1939 in the UR on the old frontiers of the LVO, PribOVO, ZapOVO and KOVO were considered to be "essential to be brought up to full combat readiness in order for them to comprise a strongly fortified rear line.(4) Unfortunately, certain chiefs viewed the UR as "obsolete and having lost their operational-tactical significance" and in individual districts this led to the "spontaneous execution of work to mothball the UR."(5)

The chief of the Main Military Engineer Directorate of the Red Army in the "Considerations on Employing the Fortified Areas Along the Old Western and Northwestern Frontier" pointed out that "the existing fortified areas should be readied as a second fortified zone occupied by field troops for defense along a wide front." This required the maintaining of a certain number of troops and special equipment at the UR along the old state frontier. However, in the Leningrad, Western Special and Odessa Military Districts, there were instances when the machine gun platoons carried off the equipment and weapons belonging to the UR being left while the place of the units and subunits was taken by "personnel which did not know the UR and its internal equipment."(6)

In February 1940, the chief of the General Staff in a directive to the military councils of the Kiev and Western Special Military Districts set forth the following: until the erection of the fortified areas along the new state frontier, the existing UR should not be mothballed but maintained in a state of combat readiness. Subsequently, the UR of the Leningrad, Western Special and Kiev Special Military Districts (with the exception of the Karelian, Kamenets-Podolskiy and Mogilev-Yampolskiy) were to be abolished. It was ordered that "all the existing battle structures in the fortified areas be mothballed, having organized their security."(7) First of all, they removed the weapons, ammunition, periscopes, telephones and various equipment. All of this was to be kept in warehouses "in full combat readiness for moving up to the line."(8)

In the aim of preparing for the mothballing of those fortified areas which, in being left in the rear, had lost their operational importance, each UR was ordered to "work out TOE essential for maintaining the mothballed structures of the given UR and depots for storing the equipment removed from them as well as a plan for locating the depots, the positioning and subordination of the service subunits."(9)

The mothballing of the permanent fortifications of the UR was aimed at preserving the articles of internal equipment as well as maintaining the structures themselves in a state ensuring the possibility of quickly making them combat ready.

The fortification structures underwent complete or partial mothballing. Complete mothballing was carried out only on those which "had completely lost their operational-tactical value."(10) With partial mothballing the structures were to be fitted out, however, "many structures were mothballed in an incomplete state."(11)

Under those conditions it was essential first of all to determine to what degree the UR would be fitted out, to ascertain the amount and date for accumulating building materials and weapons at them in the event of being shifted to a state of full combat readiness, and organize their dependable protection. However, often this was not done. The General Staff Commission, having inspected the Minsk UR in September 1940, established that "the equipment removed from the structures and kept at the depots has not been assigned to subunits and is not at full strength. With the repositioning of the machine gun battalions, the abandoned equipment has not been turned over to anyone. A portion of the equipment left in the structures is rusting and being spoiled. Security for the structures and the equipment located at them is virtually absent."

In line with the exacerbation of the international situation in 1940- 1941, construction was resumed on the UR. Some 20 of them (Murmansk, Sortavala, Keksgolm, Vyborg, Khanko, Titovskiy, Shyaulyay, Kaunas, Alitus, Grodno, Osovetskiy, Zambrovskiy, Brest, Vladimir-Volynskiy, Strumilovskiy, Rava-Russkaya, Peremyshl, Kovel, Verkhne-Prutskiy, Nizhne-Prutskiy) began to be built on the new state frontier. In addition, preparatory work was carried out to establish the Danube, Odessa and Chernovtsy areas.

In the LVO, construction was started on fortified areas of the field type with the erecting of rubble-concrete, stone-concrete and wood-earth structures with the reinforcing of these areas on the most important sectors with groups of reinforced concrete structures. In the PribOVO, ZapOVO, KOVO and OdVO, reconnaissance was carried out and the forces of the troop units began construction of fortified zones in the forward defense area and in the spaces between the UR.

An analysis of archival documents indicates that the construction began in 1940 on permanent reinforced concrete structures covered not more than 30 percent of the length of the new western frontiers to a depth of 3-4 km. Large areas of terrain remained open or covered by light field fortifications which were unable to fully ensure the stability of the defenses, particularly in anti-tank terms.

For building the UR they plan to employ a significant amount of personnel, construction equipment and various materials. The employment of construction battalions and civilians made it possible to provide defense construction with a significant amount of manpower.

Supervision over the course of defensive construction in the districts was entrusted to the deputy commanders and as a result of this there was greater responsibility both for the time and the quality of construction. However, the plans on November 1940 had been carried out only by 50 percent for reinforced concrete work.(12) As for field construction of antitank obstacles, the work of digging traps and building the earth-and-timber structures had just commenced. The building of defensive structures had gotten underway only in the KOVO while in the remaining districts only preparatory measures had been carried out. A check on the course of the work in the UR for 1940 showed that "defensive construction is being carried out little, and the percentage of plan fulfillment is low."(13) The people's commissar of defense demanded that every measure be taken so that the construction plan would be completely fulfilled. At the same time, the districts were given the task of

The 1941 plan for defensive construction envisaged the full completion of construction of the defensive centers started in 1940; the UR under construction were to be continued; a start was to be made on building the first echelon strongpoints; defensive centers were to be built in the newly planned UR of the PribOVO, KOVO and OdVO.(14)

working out the requisite measures to prepare for con-

struction in 1941.

The Main Military Engineer Directorate of the Red Army, in preparing the report to the Chairman of the Defense Committee Under the USSR SNK [Council of People's Commissars], stated that "in 1941, in fulfilling the designated plan, all the most important sectors along our frontiers will be covered with reinforced concrete, stone-concrete and wood and stone structures."

For clarifying the location of the strongpoints and defensive centers on these sectors, for surveying the field-type structures and reconnoitering the areas of antitank and antipersonnel obstacles, by orders of the commanders, the districts appointed reconnaissance commissions under the chairmanship of the rifle division commanders.(15) The reconnaissance according to the 1941 construction plan was to be completed in the districts on 15 October 1940. By 1 November 1940, the title lists had been drawn up for 1941 defensive construction. The fortified areas which were planned for construction in 1940-1941 differed from the old ones in the layout of the defensive zones, the design of the permanent structures and a significantly greater amount of gun emplacements for antitank defense. Their depth was also increased. All the structures were to have advanced equipment for chemical defense, ventilating, heating. water and electric supply. The proportional amount of weapons emplacements reached 45 percent. On the forward edge they were to build fortification antitank obstacles and on the approaches to the pillboxes, antipersonnel obstacles.(16) Construction was carried out at a rapid pace. However, under those conditions the completion of the entire range of work could not be

considered realistic as there was neither the time nor the means for this. Moreover, the situation required a maximum shortening of the construction time. Regardless of the fact that the command had taken every measures to accelerate defensive construction, the plans had been carried out far from completely. Moreover, the districts at the same time were carrying out extensive construction of roads, bridges, dugouts for quartering troops and so forth. Moreover, it must be considered that 20 fortified areas were built in the entire zone of the new state frontier and this required a significant outlay of materiel.

As a result of the incomplete construction according to the 1940 plan for a majority of the structures, the opportunities for their combat employment were significantly reduced. Many of the structures built lacked power units and water supply stations. The defensive structures were put into use late, following a simplified plan and at times without sufficient weapons.

In submitting the plan for building the UR in 1941 to the people's commissar of defense, the Military Council of the ZapOVO planned to carry out the following volume of work:

Construction of reinforced concrete structures	1,518 units
Additional field reinforcement	170 units
Building of dragon teeth	130 km
Building of tank traps	100 km
Camouflaging of structures	1,518 units

Due to the fact that analogous work was also planned in the other military districts, by an order of the people's commissar of defense, they established 25 directorates of the chief of construction, 140 construction sites, and constituted 84 construction battalions, 25 separate construction companies and 17 motor vehicle battalions. From April 1941, the construction involved 160 combat engineer battalions of the rifle corps and divisions, including 41 combat engineer battalions from the interior military districts. In the course of construction, the combat engineer battalions of the corps built centers of resistance of the UR while the battalions from the divisions established antitank and antipersonnel obstacles and the rifle battalions were involved in equipping the defensive areas. For successfully carrying out the plan, they additionally constituted: 2 battalions in the PribOVO, 15 companies in the ZapOVO, 20 companies in the KOVO and 4 companies in the OdVO. In addition to these, around 18,000 volunteer civilian workers were employed. In the spring of 1941, almost 136,000 people were involved daily in building the UR in the Baltic, Western and Kiev Special Military Districts.

As the given figures show, many people were involved, but due to the enormous amount of work industry was unable to provide all that was required at the designated date. The organizing of new fortified areas in certain districts "was in complete collapse due to the lack of materials, transport and equipment."(17) In this context one is amazed, in our view, by the excessive optimism in the report of the Main Military Engineer Directorate to the chief of the General Staff, as this affirmed that "materiel and motor transport have been provided for construction, and the lacking motor transport...is to be compensated for by the military councils drawing on the district reserves."(18) As there were virtually no free reserves, by the start of the war construction had not been completed even on the first zone of UR. In the Odessa and Leningrad Military Districts, they had only conducted reconnaissance and the surveying of the structures in the field, and only the directorates of the fortified areas had been constituted.

Along with the extensive construction, there was also a greater need for a larger number of special troops to occupy the UR.(19) In addition to the already existing units, they planned to constitute units and subunits with a total number of 136,744 men. This number of troops corresponded to 75 percent of the total number of UR garrisons required according to the wartime TOE.(20)

In peacetime each UR included: the headquarters of the UR commandant, up to 3 separate machine gun battalions, a separate signals company and a separate combat engineer company. Moreover, in certain UR there were artillery regiments (of 3-battalion strength) and up to 6 platoons of dug-in artillery.(21) With the announcing of mobilization, all the designated units and subunits established new formations: the separate machine gun battalions and a machine gun company; the separate combat engineer company and signals company were deployed in battalions and the platoons of the dug-in artillery into batteries.

For manning the UR and the other arms and services with specialists, it was decided to call up 300,000 of the registered draftees. At the beginning of June 1941, 800,000 men were called up from the reserves for training courses and of this number 38,500 were sent to the UR.(22)

In February-March 1941, the Main Military Council twice discussed the question of the rapid conclusion of construction on the new UR. In order to somehow compensate for the weapons missing in them, they decided to remove a portion of the artillery weapons from the old UR and shift them to the west and southwest sectors, having simultaneously adapted the weapons to the new structures. At the same time, at the disarmed sectors they plan to keep a portion of the weapons, since the old UR were to be employed in wartime.(23)

On 16 June, the VKP(b) [All-Union Communist Party (Bolshevik)] Central Committee and the USSR SNK came out with a special decree "On Accelerating the Bringing of the Fortified Areas to Combat Readiness."(24) This outlined specific measures to accelerate the production and installation of artillery and equipment for the UR. However, the adopted measures could no longer rectify the existing situation.

By the time of the attack of Nazi Germany on the USSR, the plan for building permanent fortification structures in the fortified areas was not more than 25 percent complete. By that time they had succeeded in building around 2,500 reinforced concrete structures (pillboxes), but of these only around 1,000 had received artillery. Machine guns had been mounted in the rest.(25)

None of the western border military districts had succeeded in completely implementing the plans for building new fortified areas. Thus, of the 97 structures built in the Vladimir-Volynskiy UR of the KOVO, only in 5-7 had been covered and camouflaged and the remainder were actually uncamouflaged. In the 82d UR of the OdVO, of the 284 permanent emplacements, 262 were machine gun and only 22 were artillery.(26)

All the built permanent emplacements were in the firstechelon strongpoints and for this reason the depth of the defensive zone of the UR did not exceed 2-3 km. The average density of the structures was low. For example, on 1 June 1941, they had built 165 structures in the Grodno UR which was 80 km long, and only 168 had been concreted in the Brest UR which was 180 km long. In the 82d UR of the OdVO, per kilometer of front there was 0.8 of a structure and along the forward edge running along the line of the Dniester, their density was 0.4 per kilometer of front, and there were sectors up to 8 km wide in which there were no permanent structures at all and fire coordination was lacking between many of them. For this reason, the plans of a stubborn defense by the UR at a time when they still had not been completed or were in the stage of equipping and had poor fire capability were unsound.

A major drawback in the preparation of a number of the UR was the lack of previously worked out cooperation of their units and the field troops. Thus, the 41st Rifle Division, the Rava-Russkaya UR and the border detachment in the event of war were to cover the state frontier along a front up to 50 km. However, during the 18-month prewar period, not a single joint exercise was conducted with the command personnel or the units of the division, the UR and the border detachment in the aims of working out questions of cooperation.(27)

The incomplete combat capability of the structures in all the UR was exacerbated by a great shortage of personnel in their permanent garrisons. By the start of the war, there were only around one-third of the TOE number of command and NCO personnel for wartime and there was less than one-half of the rank-and-file.

Due to their incomplete construction as well as because of a number of other factors, the UR did not meet the purpose which was assigned to them in the plans for covering the state frontier as the enemy on a majority of the sectors was able to rapidly cross them without a pause. Nevertheless, certain fortified areas with the aid of arriving field troops were able to put up stubborn resistance to the enemy and check its advance. Thus, the -

permanent garrison defending the Rava-Russkaya UR (35th and 140th Separate Machine Gun Battalions), the 41st Rifle Division and the 91st Border Detachment met in an organized manner the thrust of three infantry divisions and a portion of the forces of three panzer divisions from the enemy 17th Army and for 5 days repelled their continuous assaults. Over a period of 7 days, the garrison of the Peremyshl UR (52d and 150th Separate Machine Gun Battalions), the 92d Border Detachment and the arriving 99th Rifle Division did not give up their positions. The men of the Brest Garrison put up stubborn resistance to the enemy. A report document of the 293d Infantry Division on the fighting in the Brest UR stated: "The officers were always at the head of the garrison. The officers and soldiers defended themselves to the last minute. It happened that our soldiers in going into destroyed permanent emplacements still came under fire. The demand to surrender transmitted through a translator before the detonating of the permanent emplacements had no effect."(28)

The fortified areas on the old frontier were also not fully employed to repel the enemy offensive. "There was no doubt," wrote MSU I.Kh. Bagramyan, "that if we had been able to maintain the combat readiness of the old UR until the new ones were in service, then the defensive capabilities of the troops would have increased immeasurably...."(29)

Visual confirmation of this would be the stubborn fighting on the line of the old UR in the zone of the Northwestern, Western and Southwestern Fronts. Thus, formations from the 13th Army from 25 to 28 June held the permanent structures of the Minsk UR while the divisions of the 22d Army, in relying on the Sebezh and Polotsk UR, from 4 through 8 July checked the advance of superior enemy forces. The Finnish troops pushing to Leningrad from the north were stopped on the line of the Karelian UR. In the second half of August, the garrison of the Kingisepp UR which was covering the approaches to Leningrad from the west for 10 days fought surrounded, having tied down around two enemy divisions.

In July-September 1941, an important role in repelling the enemy offensive was played by the Kiev UR. On its forward edge on 11-14 July, they repelled the first assault by enemy motorized infantry and tanks endeavoring without a pause to capture Kiev and the crossings over the Dnieper. Later, in relying on this UR, the troops of the 37th Army over a period of 71 days repelled assaults by superior enemy forces. On the Southern Front, by the stubborn defenses of the garrisons of the Mogilev-Yampolskiy, Rybnitsa and Tiraspol UR and by the active operations of the field troops relying on the UR, the offensive by formations of the 11th German and 4th Romanian Armies was halted.

The given examples show that battleworthy UR were a very serious obstacle for the advancing enemy troops. However, the incompleteness of the work commenced in the prewar years, the lateness in the full deployment of the special units and field troops, and their insufficient numerical strength significantly reduced the effective combat employment of the UR in the initial period of the Great Patriotic War.

#### Footnotes

1. TsAMO [Central Archives of the USSR Ministry of Defense], folio 138, inv. 7162, file 10, sheet 1.

2. The basic reason was that industry did not fulfill the volume of deliveries on time. In 1938, only 27 percent of the planned lumber was received, 28 percent of the cement; in 1939, it was 34 percent of the lumber and 53 percent of the cement.

3. TsGASA [Central State Archives of the Soviet Army], folio 22, inv. 32, file 4208, sheets 40-47.

4. Ibid., folio 36967, inv. 1, file 182, sheet 10.

5. Ibid., folio 22, inv. 32, file 4164, sheets 150-151.

6. Ibid., file 4216, sheet 15.

7. With the elimination of the headquarters the fortified areas in organizational terms began to be under the rifle divisions (TsGASA, folio 40442, inv. 1, file 1849, sheet 12).

8. TsGASA, folio 25871, inv. 2, file 22, sheets 24-26.

9. Ibid., folio 22, inv. 32, file 4164, sheet 39.

10. Ibid., file 4196, sheet 43.

11. Ibid., folio 36967, inv. 1, file 182, sheet 14.

12. Ibid., folio 22, inv. 32, file 4208, sheets 80-82.

13. Ibid., folio 36967, inv. 1, file 331, sheets 28-30.

14. Ibid., file 182, sheets 8-12.

15. Ibid., folio 131, inv. 210370, file 5, sheet 4.

16. "Inzhenernyye voyska Sovetskoy Armii 1918-1945" [Engineer Troops of the Soviet Army 1918-1945], Moscow, Voyenizdat, 1985, p 185.

17. TsAMO, folio 326, inv. 5709, file 1, sheets 38-41.

18. TsGASA, folio 22, inv. 32, file 4208, sheet 82.

19. By the Decree of the Main Military Council of 21 May 1941, for ensuring the combat readiness of the fortified areas which had been built and were under construction, the necessity was recognized of organizing during the period from 1 July through 10 October, an additional 110 artillery-machine gun battalions, 6 artillery battalions and 16 separate artillery batteries. 20. TsGASA, folio 36967, inv. 1, file 182, sheet 10; file 331, sheet 15.

21. TsAMO, folio 138, inv. 7162, file 5, sheet 2.

22. "Velikaya Otechestvennaya voyna" [Great Patriotic War], Moscow, Politizdat, 1970, p 52.

23. G.K. Zhukov, "Vospominaniya i razmyshleniya" [Remembrances and Reflections], Moscow, Izd-vo APN, 1970, pp 220-223.

24. "Istoriya KPSS" [History of the CPSU], Moscow, Izd=vo Politicheskoy Literatury, Book 1, Vol 5, 1970, p 144.

25. "Istoriya vtoroy mirovoy voyny 1939-1945" [History of World War II of 1939-1945], Moscow, Voyenizdat, Vol 3, 1974, p 439.

26. TsAMO, folio 326, inv. 5709, file 1, sheets 38-41.

27. TsGASA, folio 37523, inv. 1, file 122, sheet 515.

28. TsAMO, folio 6598, inv. 725168, file 1152, sheet 57.

29. I.Kh. Bagramyan, "Gorod-voin na Dnepre" [The Soldier City of the Dnieper], Moscow, Izd-vo Politiches-koy Literatury, 1965, p 7.

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Tank Repair System in Nazi Army

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[Article, published under the heading "World War II," by Col (Ret) V.A. Syropyatov (posthumous), candidate of military sciences, docent: "The Tank Repair System in the Nazi Army"; the article was written from materials in the foreign press]

[Text] Prior to the start of World War II, the Wehrmacht Command felt that the tank repair system in the German Army should provide sufficiently effective rebuilding of armored equipment under the conditions of a blitzkrieg which was based in turn on the rapid defeat of any enemy's army. A so-called centralized repair system was adopted as the basis. Its essence came down to the following. Under field conditions, the troops would make only minor repairs with their own forces. The tanks which had sustained serious damage would be sent to permanent shops and to plants located in the deep rear.

Such a repair system proved fully effective in the course of the fighting by the Nazi troops in Poland, Western Europe and in the Balkans. Here are three examples. In

1939, after the brief Polish Campaign, all the panzer divisions involved in it were returned to Germany. Here all the damaged plants were quickly repaired at permanent repair shops and tank plants. When military operations were completed in France (1940), a majority of the panzer divisions was also returned to Germany for repair of the damaged equipment at the permanent shops. In the spring of 1941, after carrying out operations in Yugoslavia and Greece, the Wehrmacht panzer divisions were also repaired in the rear and then shifted to the east, closer to the frontiers of the Soviet Union.

When the German panzer units landed in North Africa (February 1941) and began combat together with the Italian troops against the English, it became clear that in the new theater of operations, under the conditions of the significant distance of the troops from the nation's rear, the system for the repair of armored equipment required a fundamental change.

The Nazi Command, in preparing to attack the Soviet Union, gave great attention both to boosting the strength of aviation as well as to the development of the panzer troops. While in 1939, the Wehrmacht had 7 panzer divisions and 4 motorized divisions, by mid-1941, there were already 21 panzer divisions and 14 motorized. By this time the entire Nazi Army had 5,639 tanks and assault guns.(1) On the questions of tank maintenance, the Nazi Command, regardless of the experience of the North African Campaign, continued to hold its former positions. However, soon after the heavy losses on the Soviet-German Front, it was persuaded that the adopted tank repair system did not correspond to the new conditions for conducting combat operations.

"The German tank losses in Russia," wrote the former Wehrmacht Maj Gen B. Muller-Hillebrand later, "were significantly heavier than in the previous campaigns.... The repair service was put under exceptionally difficult conditions.... Regardless of the greatest possible effort, the repair personnel was unable to handle the everincreasing volume of repair work.... The number of tanks out of service reached an unprecedented amount."(2)

In reorganizing the repair system, the Nazi Command proceeded from the view that a large portion of the work under field conditions should be performed by the troop repair subunits. In line with this the numerical strength of the repair subunits was increased and they received improved shops, tractors and advanced equipment. The plants expanded the production of spare parts. Their distribution was systematized. A number of the functions of leadership of the repair units was turned over to the staffs.

In May 1942, the Ministry of Armament decided to reduce tank production and thereby increase spare parts output. But the adopted measures did not ease the situation. "The spare parts problem in the summer of 1942 became so acute," wrote B. Muller-Hillebrand, "that it had a paralyzing effect on the simultaneous thrusts on the Stalingrad and Caucasus axes."(3)

In endeavoring to resolve this problem, the Ministry of Armament in the autumn of the same year carried out three measures. In the first place, a portion of the plants was converted exclusively to spare parts production. Secondly, a so-called contract market was established and this was engaged in ordering the scarce tank spare parts essential for the army. Numerous benefits were provided to the entrepreneurs who accepted to produce spare parts under the condition that they carried out the main military orders. Thirdly, a portion of the machine tool equipment was moved from the large tank plants to the machine shops and to small enterprises where they organized the production of spare units and parts.(4) Moreover, for carrying out the tank repairs previously performed in Germany, they organized permanent repair bases in the rears of the army groups on occupied territory.

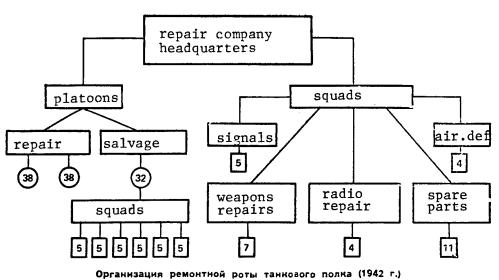
According to the TOE, the repair units and subunits in the panzer troops were to exist on the level of company—regiment—division. The repair company was the basis in the organizational system of the tank repair units. The smallest subunits were the repair group of a tank company.

A repair group (19 men) in a tank company included two repair brigades and was assigned to repair the tanks where they had broken down. In each brigade there was a mobile shop, a tractor and a truck. The personnel of a repair brigade consisted of 8 men (brigade leader, driver, three mechanics, an armorer and two specialists for repairing radio and electrical equipment).(5)

A panzer regiment according to the TOE had a repair company. It evacuated damaged vehicles from the battlefield, it replenished the supplies of the regiment's armored equipment and carried out repairs on those tanks which could not be rebuilt by the tank company repair groups. The size of the repair company depended upon the type and amount of armored equipment used by a tank regiment and varied from 120- 200 men.

The organization of a repair company according to the 1942 TOE is shown in the diagram. Thus, in the company headquarters there were 25 men, 5 staff vehicles, 4 cars and 5 trucks.

In the repair platoons there were 6-8 repair brigades and these included specialists for overhauling the engines and transmissions. Each platoon had 4 shops, a power generating units (a trailer-mounted power plant), a crane, a bus and a motorcycle. According to the TOE it would have 8 junior officers and 30 rank-and-file of various specialties (1 foreman, 24 mechanics, 2 lathe operators, 2 welders, 2 electricians and 2 crane operators, a blacksmith, a carpenter, a painter, a canvas repair specialist and a clerk).(6) Such an organization of a



Organization of a Tank Regiment Repair Company (1942)

repair platoon ensured its complete independence in working under field conditions and the specialization of the repairmen helped to increase labor productivity. The presence in the company of squads to repair the weapons, radio equipment and spare parts (the first squad had 2 trucks, the second had 1 and the third had 6 and 1 car) made it possible for it to provide comprehensive repair of the tanks. The air defense squads (a quadruple mounting of 20-mm antiaircraft cannons) and a signals squad provided an air cover and ensured dependable communications. The salvage platoon (an officer, 6 junior officers and 25 rank-and-file) included 12 semitrack 18-ton tractors, 4 tank carriers and 6 passenger vehicles. The platoon made it possible for the company to work on equipment which had been concentrated in one place and this helped to raise labor productivity. According to the TOE, a repair company had 164 men and 57 different vehicles.(7) The company commander was subordinate to the chief of the regiment's logistic supply. In combat he directed the company by radio, maintaining constant contact with the regimental staff.

A tank division which had in different years of the war 170-200 tanks, 220-300 armored vehicles and armored personnel carriers and 2,000-2,200 motor vehicles, included 3 TOE companies for repairing combat, transport and special vehicles. One of these was also assigned to repair tanks.(8) The organization and establishment of the company for tank repair was analogous to the structure of the tank regiment repair company. The commanders of the repair companies were under the chief of the division's logistic service.

In addition to the TOE (organic) repair facilities in the German Army, there were central repair units and subunits which were not part of the formations and units. These were called non-T/O.(9) The inferior organizational unit in the non-T/O subunits was the tank repair platoon and the superior was the repair company (later the repair battalion). A tank repair platoon usually was attached to a tank battalion operating independently. The size of the platoon varied from 50 to 120 men. It could replace engines and transmission units and also performed complicated welding. The size of the non-T/O repair units in principle did not differ from the size of the TOE companies under the tank regiments. The difference was merely that the former did not have salvage equipment.(10)

The structure established in the summer of 1942 for the repair facilities on the company-regiment-division level made it possible to perform comprehensive routine and medium repairs on the tanks under field conditions and provided an opportunity for the independent work of each subunit and the simultaneous coverage of a large number tanks to be repaired.

In December 1944, the Nazi Army for the first time constituted 8 tank repair battalions. Their strength, production capacity and tasks basically were the same as the non-T/O tank repair companies. Each battalion, in addition to 2 or 3 repair platoons included a tank salvage platoon or company.(11) The non-T/O repair companies and battalions were attached to the armies or army group. Their number was determined by the situation, by the tasks being carried out and by the size of the army (army group).

Each army group had a spare parts dump assigned to supply the tank divisions (regiments) with armored equipment. In the course of the operations the dump organized forward army field dumps.

Since on the Soviet-German Front, the Wehrmacht troops had suffered heavy losses, the German tank plants from 1942 basically operated for producing tanks and

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the production of spare parts for these was sharply reduced. For this reason the mobile repair units were unable to repair all the damaged vehicles. A large number of tanks requiring repair piled up in the army rear. In order to accelerate their return to service, the Nazi Command at the end of 1942 organized three permanent repair bases, one for each army group. The main task of the repair bases was to improve the supply of spare parts, accelerate tank repairs under field conditions and thereby relieve the burden on the German defense industry. Civilian organizations began to be involved in repairing combat vehicles at these bases. However, their work did not satisfy the military command. In 1944, these were reorganized as military organizations.(12)

It must be pointed out that for repairing the tanks the Nazis employed also repair enterprises existing in the occupied countries, for example, the CKD plant in Czechoslovakia as well as the industrial base at the industrialized centers on occupied territory.

Tank repair in the troops depended largely upon the specific situation, upon the tasks being performed and upon the availability of repair facilities. Thus, on a march the repair units and subunits of the formations and units provided technical maintenance echelons for the columns. During long marches, a regiment's repair company, in being echeloned in depth, traveled in two or three groups. Each of these had an opportunity to work for 2 or 3 days at one place. If the necessity arose of rapidly repairing tanks on the march, the repairmen were permitted to bypass any subunit.(13)

On the offensive the repair groups of the tank companies moved behind the second echelon and repaired those vehicles which would require not more than 5 or 6 hours for an overhaul. The repair company of a tank regiment deployed as close as possible to the troops. Usually it was split into two or three groups with approximately equal productive capacity. The first echelon moved behind the battle formations, performing routine repairs, while the second completed the repairs on tanks at the previous point, and the work could last several days. The movement of the echelons depended upon the rate of advance. Tanks which were within a radius of not more than 15 km were evacuated to the position of the repair company. If the vehicles were more distant, these were sent to a collection point designated by the regimental staff, usually to the subsequent position of the repair company. After establishing the amount of work to be done at the new collection point, the basic portion of the repair company was moved there. A portion of the repair equipment was left at the previous site to complete the repairs. At times, a repair platoon was sent to the new area. At the same time, the remaining subunits overhauled the damaged tanks on the route where they had broken down. In fighting at night, the staffs gave great importance to constantly informing the commanders of the repair subunits on the situation and the tasks of the tank regiment (company).(14)

On the defensive, when the tank units were employed to support the infantry, the TOE repair facilities were echeloned in depth and positioned 15-30 km from the front in areas beyond the reach of enemy artillery fire.(15)

Special attention was paid to establishing and maintaining uninterrupted contact of the repair units with the staffs as well as between the repair subunits. This was achieved due to the presence of radios on all levels, from the repair group of a tank company and above. The commander of a repair group could maintain radio contact with the commanders of the tank battalions and the commander of the repair company as well as direct the work of his own repair brigades. The difficulty was that the company radio operator had to constantly monitor all the radio transmissions of the regiment staff (only the radio receiver was constantly connected to the net) in order to determine precisely what transmission applied to the repair company. This is why the repairmen were constantly up on the situation and could take the required measures to promptly evacuate hit (damaged) tanks. In the event of the loss of contact with the regimental staff, the commander of a repair company established contact with the commander of a nearby unit and operated at his own discretion.(16)

Having lost a portion of the repair facilities in the retreat of the troops squeezed by the Soviet Army, the Nazi Command in the spring of 1944 began to echelon the repair companies. A highly mobile company echelon was left not far from the fighting tanks while the remaining portion of personnel and the shops were positioned in the near rear.

The salvage facilities in the Nazi Army were in the TOE of the tank company repair groups, the repair companies of the tank regiments, in the tank repair battalions as well as in the separate salvage companies subordinate to the superior command and were assigned to reinforce the TOE salvage facilities of the tank divisions. For salvaging the tanks which were unable to move under their own power, they employed tank carriers with a load capacity of 12 tons, 22 tons and 60 tons with a lowerable bed. However, due to the absence of a sufficient amount of hard-surfaced roads on the Eastern Front, these were not widely employed.(17)

The supply of the repair units (subunits) with spare parts was considered in the German Army as one of the main conditions for the effective operation of the repair facilities. But demand surpassed the number of produced spare parts. And there were great delays in delivering them to the troops. The plants dispatched the spare parts for the tanks to the supply dumps of the ground troops or directly to the dumps of the army groups. The repair companies received them from the army field dump or from the army group dump. Without a sufficient amount of spare parts, the repairmen were forced to secure their own, in disassembling not only the tanks which were in the category of irretrievable losses but also those waiting for repair.(18) In addition, as the number of tank models increased and as their designs changed continuously, many spare parts were obsolete by the time they were delivered to the field repair units and this also complicated the organizing of repairs.

A difficult problem for the Nazi Command was the training of highly skilled tank repair personnel. Prior to the attack on the Soviet Union the army had not paid sufficient attention to the questions of training personnel for maintaining and repairing the tanks. During the peacetime period, the recruits were sent to a tank company where they gained certain technical knowledge. But in wartime, the inductees were sent for 12 weeks and later for 8 weeks to a training company for reserve training. The tank crews and the personnel of the organic repair subunits, in going through a general course for combat training, trained in specialized courses. However, soon thereafter the Wehrmacht Command was persuaded that the repairmen were unable to master technical skills on the basis of just practical experience gained at the field repair shops. For this reason, in 1943, at the tank schools they began organizing 6-week courses for the technical training of the personnel in the repair and salvage subunits. After their completion the graduates were sent for practical training at the permanent repair shops and then to the field repair subunits. The future repair officers also went through similar training.(19)

With the arrival of new tanks, the organic repair units in turn sent their specialists to the district schools for familiarization with the design and specific features for the repair of these vehicles. During periods of lull on the front the personnel of the tank company repair groups were sent to the regimental repair companies where they studied the methods and procedures for overhauling the new models of tanks.(20)

We should note the conclusions which have been drawn by the former Nazi generals after analyzing the tank repair methods in the course of World War II: 1. Any army can maintain battleworthiness of the panzer troops in conducting large-scale operations only with wellequipped repair facilities, a carefully thought-out organization of tank repair under field conditions and the corresponding training of repair specialists. 2. The maintenance and repair service should be effectively organized before the start of hostilities. 3. The civil engineers and technicians called up into the army who do not have appropriate military training should not be appointed commanders of the repair subunits. 4. The repair units and subunits can operate more effectively under field conditions only in the instance when they are organically incorporated in the tank formations, units and subunit. 5. A majority of the repairs should be carried out in a tank regiment. 6. Tank design should be simple and dependable and the units should be easily accessible for maintenance and repair. 7. The number of different tank models should be minimized. 8. The modernizing of a tank should be commenced only after consultation with experienced repair officers. 9. In proving tank production plans, one must also set correctly the output volume of spare parts for them.(21)

In establishing the tank repair system on the eve of attacking the Soviet Union, the Nazi Command proceeded from a fallible, adventuristic concept of waging a blitzkrieg. As the basis they adopted a somewhat altered centralized repair system. In the course of the war, the main emphasis began to be put on repairing the tanks directly in the panzer troop subunits and units, that is, under field conditions. Thus, in the last quarter of 1943 and in January 1944, 95 percent of the total number of damaged tanks and field guns was repaired under field conditions and only 5 percent in Germany.(22)

All the repair companies, both TOE and non-T/O had approximately the same organization. This made it possible not only to simplify their constituting but also to more easily maneuver them in the course of the operations and to quickly alter or add to the repair units in the event of their loss in one of the organic elements. In the organization and establishment of the repair units it should be noted that all the repair groups of the tank companies, the brigades of the repair companies of the tank regiments, the divisions and the reserve of the superior command had specialists not only to repair the fighting vehicles but also to repair the tank weapons and equipment.

A majority of the repair companies had strong salvage equipment and this made it possible to quickly evacuate the damaged tanks from the battlefield and continuously provide the company with equipment to be repaired under any situation. The availability of radios in each repair subunit increased the effectiveness of their command and guaranteed dependable contact with the superior chiefs.

Up to the end of the war the problem of supplying the repair subunits with spare parts to rebuild the tanks had not been resolved in the Nazi Army. Industrial capacity to produce the spare parts was insufficient for these purposes. The use of industrial enterprises in the occupied countries did not provide the desired results.

#### **Footnotes**

1. "Sovetskaya Voyennaya Entsiklopediya" [Soviet Military Encyclopedia], Moscow, Voyenizdat, Vol 2, 1976, pp 54, 531.

2. "German Tank Maintenance in World War II," U.S. Department of the Army, No 20-202, June 1954, p 2.

3. Ibid., p 22.

4. Ibid.

5. Ibid., p 5.

6. Ibid., pp 6, 44.

7. Ibid., p 14.

8. H. Guderian, "Tanki-vpered!" [Forward Tanks!], translated from the German, Moscow, Voyenizdat, 1957, p 231.

9. According to our concepts, units of the High Command Reserve.

10. "German Tank Maintenance...," p 11.

11. Ibid., p 24.

12. Ibid., p 25.

13. Ibid., p 30.

14. Ibid., pp 31, 32.

15. Ibid., p 36.

16. Ibid., p 36.

17. Ibid., p 24.

18. Ibid.

19. Ibid., p 26.

20. Ibid., p 27.

21. Ibid., pp 38-42.

22. B. Muller-Hillebrand, "Sukhputnaya armiya Germanii 1933-1945" [The German Land Army 1933-1945], Moscow, Voyenizdat, Vol 3, 1976, p 346.

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18010068m Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 12, Dec 87 (signed to press 24 Nov 87) pp 81-82

[Article, published under the heading "Criticism and Bibliography," by Col N.M. Ramanichev, candidate of historical sciences: "The Brain of the Army"; the article is in commemoration of the 60th anniversary of the publishing of the first volume of the work by B.M. Shaposhnikov "Mozg armii" (The Brain of the Army)]

[Text] The end of 1987 marks the 60th anniversary of the publishing date of the first volume of the fundamental work "Mozg armii" [The Brain of the Army](1) written by the prominent Soviet theorist and experienced expert in military affairs, the talented military leader and subsequently MSU Boris Mikhaylovich Shaposhnikov.

Even in the 1920s, Shaposhnikov made a thorough examination of the problems related to the activities of the General Staff, having established theoretically the necessity of modern armed forces having such a superior military leadership body, and he defined its functions, place and role in the system of the party, state and military apparatus. The basic results of this research were set out in the work "Mozg armii" the three books of which were published in 1927-1929.

"Mozg armii" is a military theoretical work based on Marxist-Leninist methodology and containing a profound analysis of historical experience. It is based upon research of the activities of the general staffs in the European nations which participated in World War I and primarily the five-volume work by the Chief of the Austrian General Staff, Conrad von Hotzendorf "From My Service in 1914-1918."

The first book analyzes the history of the establishment and development of the general staffs of Austro-Hungary, Germany, Russia and France, the role of the general staff in the system of state bodies as well as the general questions of policy, economics, war and the army in their relationship. The second examines the activities of the Chief of the Austro-Hungarian General Staff, Conrad von Hotzendorf, and his relations with the empire's statesmen at the start of the 20th Century. The third book reflects the work of the European general staffs in the preparations for and in the course of World War I.

In explaining the reasons which caused him to base the research primarily on the work of Conrad von Hotzendorf, Shaposhnikov has written: "A majority of the general staffs involved in the world war have kept a vow of silence while precisely the vanquished in a burst of anger and self-justification lifted the curtain on what had been done 'behind the monestary wall'."(2)

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The author was working for an objective and independent study. He emphasized: "The theoretical concepts of the various classic writers are in no way the standards and laws for us, and we do not intend to bow blindly to them, but merely use them as a basis for our thoughts, being ready also to criticize them, if historical objectivity requires this."(3)

The question of the necessity of a unified strategic leadership body which brought together all the nation's preparations for defense and which planned leadership of the armed combat had been raised even during the Civil War. However, in the 1920s in the USSR, these functions were entrusted to three different organizations: the RKKA [Worker-Peasant Red Army] Staff, the **RKKA** Main Directorate and the RKKA Inspectorate. This led to parallelism in work, it complicated command and made the centralized military apparatus excessively cumbersome. In line with this in the first book of "Mozg armii" B.M. Shaposhnikov pointed out: "Let us not dispute the name but realize that under one or another name the general staff, as a command body, should exist. To show the validity of this notion comprises one of the tasks of our work."(4) He felt it inadmissible to separate the General Staff from the nation's political life and from its domestic and foreign policy. Only under this condition could the General Staff correctly plan the actions of the Armed Forces in the coming war.

The plan of defense should be flexible and have several variations of action. Each of these, as is emphasized in the work, could be applied in a specific situation. "Without a correct understanding of the economic and political relations both within the state as well as on its foreign paths it is impossible to draw up correct military plans."(5)

In examining the questions of preparing the Armed Forces to rebuff aggressors, greater attention was given to the size of the military budget and which should correspond to the requirements of national defense and to the level of its economy. It was emphasized that the outcome of a protracted and hard war to a decisive degree would depend upon the economic state of the belligerents. This idea was completely and totally confirmed by the entire experience of World War II.

During the Civil War and in the first years after it in the debate on the General Staff, much was said about the requirements placed on its chief. Shaposhnikov also stated his opinion on this. Although 60 years have already passed since the publication of "Mozg armii" and military affairs have moved far forward, many of his statements have not lost their timeliness today. The chief, as is emphasized in the book, should provide over-all leadership over the work of the collective without intervening in details. In strictly official relations he should observe tact, respect the opinions and views of subordinates. The authority of the chief is created not by strictness and inaccessibility but rather by simplicity and cordiality in dealing with subordinates. The boldness of a military leader is expressed not so much in his personal bravery as in the ability to take decisions without fearing responsibility.

The work "Mozg armii" points out that the control process "requires detailed analysis of a decision to be taken and since this is beyond the power of a single chief, without preliminary study of the decision by subordinate organizations it is impossible to guarantee its effectiveness."(6)

This, in turn, required initiative from subordinates and this must be encouraged in every possible way. The chief himself should constantly show "the ability and tact to, on the one hand, get enterprising work going, and, on the other, in sharply rejecting unsuccessful proposals by subordinates, not to thwart their desire for fruitful activity."(7)

B.M. Shaposhnikov felt that "subordinates should show independence in views, make proposals, defend them, but all of this should not have the nature of stubbornness, obstinacy or the imposition of one's opinions and judgments."(8) He warned that a person who intended to dedicate himself to serving on the General Staff "...should not be seduced by the pleasures of life but with an awareness of the enormous responsibility assume the heavy burden on his shoulders, since the path of a staff worker is a heavy feat...and each person entering it should be aware of this."(9)

One of the most important conditions for the activities of the General Staff, in the opinion of the work's author, was effective teamwork in the activities of its directorates and sections. For this there had to be a unity of views of all its co-workers on the various aspects of military affairs. Moreover, the staff officers should constantly improve their professional skill. A good effect could be achieved by having the officers solve individual tactical problems, by conducting military games and field exercises with a free exchange of opinions about them. On the General Staff great attention should be given to political studies and historical research on the wars of the past.

B.M. Shaposhnikov voiced many valuable ideas on the question of the need of unbroken unity between the Army and the people, the party and the state, noting here "...1) A modern army does not live outside of domestic policy; 2) an army is a copy of the state; 3) the political structuring of the army requires special work identical to the domestic policy carried out in the state; 4) the army is not the indoctrinator of society but, conversely, society indoctrinates the army."(10) The last thesis is pertinent under present-day conditions for work in further increasing discipline not only in the Armed Forces but throughout the nation.

Many ideas raised in the work "Mozg armii" have successfully withstood the test of time and were embodied in life by B.M. Shaposhnikov himself, including during his activities in the post of chief of the General Staff as well as by his followers.

The book helped to increase the professional level of the Soviet Army command personnel in the 1920s and 1930s and is also of value under present-day conditions.

### Footnotes

1. B.M. Shaposhnikov, "Mozg armii" [The Brain of the Army], Moscow, Voyennyy Vestnik, Book 1, 1927, p 259.

2. Ibid., p 17.

3. B.M. Shaposhnikov, "Vospominaniya. Voyennonauchnyye trudy" [Memoirs. Military Scientific Works], Moscow, Voyenizdat, 1974, p471.

4. B.M. Shaposhnikov, "Mozg armii," Book 1, p 14.

5. Ibid., p 200.

6. Ibid., p 149.

7. Ibid.

8. Ibid., p 153.

9. Ibid., p 71.

10. Ibid., p 191.

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# **Review of Editorial Mail**

18010068n Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 12, Dec 87 (signed to press 24 Nov 87) pp 85-89

[Unattributed article, published under the heading "Dialogue With Readers": "Review of Editorial Mail"]

[Text] Dear Readers, you have received the last issue of the journal for this year and now you can, having read it and and gone through in your memory the articles in previous issues, assess our work. For us it is particularly important to hear your objective opinion particularly now, on the threshold of the new year, when we are reflecting about what materials we will present to you subsequently, and what questions should be discussed together. Some of our readers have already voiced their opinions on this. We have received recommendation letters, for example, from comrades S.N. Podluzhnyy from the town of Gatchina in Leningrad Oblast, A.I. Antonov from Sovetsk in Tula Oblast, A.M. Davidenko from the settlement of Kapitanovka in Kirovograd Oblast, V.M. Burmistrov from Cheboksary in the Chuvash ASSR, V.N. Zuyev from Vladivostok, Ye.M. Lyakh from Mogilev and others.

Each day the mail brings the editors letters which are full of direct observations, fresh thoughts, proposals, comments voiced in a polite and at times abrupt form, as well as numerous requests to reply to the readers who have turned to us with questions. Often the readers themselves come to visit one or another editor and call up in order to share their considerations and ideas. In discussing the content of the journal and the quality of the articles published on its pages, the tone, of course, is set by the generals and officers who plan to use the published material for improving operational, combat and political training as well as military history work in the troops. In unanimously commenting on the usefulness of the articles and in pointing to the growing popularity of the journal, at the same time they voice critical comments, make proposals, they provide advice on improving the subjects and the style of exposition of the material, and analyze the articles of interest to them thoroughly and from the standpoint of glasnost. We have received concrete proposals from Cols V.I. Kozachenko, A.I. Ignatov and A.Ye. Burkin, Capts 2d Rank V.A. Melnikov and V.G. Kulikov and others. They have insisted on a more profound treatment of the questions of troop control, the organization of cooperation between the combat arms and Armed Services, ideological indoctrination of the men under various conditions, the strengthening of discipline as well as military patriotic war.

The restructuring which has involved the entire nation has not missed such centers of training, indoctrination and scientific research work as the military academies and schools. The aim of the restructuring in the military schools is to improve the training of officer personnel and to increase the contribution of the academies and schools to the development of the Marxist-Leninist teachings concerning war and the army, the defense of socialism, military science, the theory and practice of the training and indoctrination of the personnel, the strengthening of discipline and organization as well as increasing the combat readiness of the troops and naval forces. In the course of the restructuring in individual academies, in the aim of improving the training process the subject and training plans and programs as well as the procedural training aids on the history of wars and military art have been fundamentally reworked, extensive research has been conducted to clarify the "model" of the graduate, the practical focus of instruction has been strengthened (they have determined what skills and abilities will be formed by what methods), more training time has begun to be assigned to practical exercises, the teaching methods have been revised and much has been done to strengthen the unity of the training process, scientific research and troop practices.

The academy instructors have actively shared their experience and ideas on improving the training of students. Thus, a constant reader of the journal and senior instructor on the Chair of the History of Military Art at the Air Force Academy imeni Yu.A. Gagarin, Col N.T. Zavgorodniy has been concerned by the problem the successful solution to which, in our view, will significantly contribute to an improvement in the quality of the military history preparation and the heroic patriotic indoctrination of the officer candidates and students in the military schools. Comrade Zavgorodniy has written about a scientific approach to evaluating the knowledge and abilities of the trainees. He has given data of a questionnaire conducted this year among 17 instructors of the history of military art chairs in three capital military academies and 17 tactics instructors from the higher Air Forces military schools, and has disclosed the methods of monitoring the military history knowledge and abilities of the officers candidates and students. Here the author has shown how a grade encourages independent work by the trainees to improve the level of their military history knowledge, how it develops a permanent interest to add to this knowledge and indoctrinates a high feeling of responsibility for studies in the students and officer candidates. Then N.T. Zavgorodniy mentioned the most characteristic errors in giving grades and has provided recommendations to eliminate these. We have proposed that Col Zavgorodniy set out in detail his viewpoint on this question on the journal's pages.

Officer candidates from graduating years, the instructor of military history at the Sverdlovsk Higher Military Political Tank Artillery School, Lt Col V.A. Runov, has written the editors, frequently come with a request to help them understand the process of the historical development of small unit tactics. Unfortunately, in the existing literature these questions have been dealt with little. In the well known collections "Taktika v boyevykh primerakh" [Tactics in Combat Examples], the problem is examined starting from the company level. The journal from time to time has taken up the subject of interest to the officer candidates, in particular, issue No. 6 of last year published the article by P.D. Alekseyev "On the Terms 'Platoon Defensive Area,' 'Platoon Strongpoint' and 'Platoon Position'," while issue No. 10 contained an article by the same author "A Rifle Company Offensive Against a Deliberate Enemy Defense," while other articles are also being prepared for publication.

We are grateful to the participant of the Great Patriotic War P.K. Nechiporenko from Cherkassy who sent two photographs of the monument erected in the town of Smel in Cherkassy Oblast of fighters for the freedom and independence of our motherland who perished in the Nazi prisons in 1941-1943, to the Leningrader V.M. Lurye who pointed to errors made in individual articles and to our active reader D.I. Lazerenko from Kovylkino in the Mordovian ASSR who proposed providing an exhaustive answer to comrades who requested that we describe the decorations of well known Soviet military leaders and the Order of the Patriotic War. We would like to express gratitude also to V.I. Gavrilenko from Ekibastuz in Kazakhstan who has written that for a number of years he has been collecting materials on the Soviet decoration system, he has a strict accounting of decorations, extensive information on the decorations of Soviet military leaders as well as a card file of Heroes of the Soviet Union and full holders of the Order of Glory. He is willing to share his knowledge with the journal's readers. The file of Comrade Gavrilenko has extensive bibliographic data. With the permission of Viktor Ivanovich [Gavrilenko], we are publishing his address: 638710, Kazakh SSR, Pavlodar Oblast, Ekibastuz, Stroitelnaya Street No. 24, Apartment 25. Comrade Gavrilenko will be happy to answer the questions of all who turn to him.

Often the editors receive letters full of concern and alarmed feelings. Persons, having read a book or seen a film or TV broadcast, hurry to share their thoughts and experiences with us and ask us on the pages of the journal to take up their views on one or another problem. We received such a letter from the village of Krymno in Volyn Oblast from Comrade A.A.Vinnik. The veteran has written that one of the broadcasts of Ukrainian television "Around the Green Lamp" aimed at improving book trade touched him deeply by showing a young man who was the chairman of a primary book lovers organization. The young man complained about the shortage of literature of interest to him and said with indignation that for many years we have not published books by certain authors, while military memoirs can frequently be seen on the store shelves. He disrespectfully called the authors of memoirs "literary generals." This caused Comrade Vinnik to take to his pen.

A man who knew the price of victory and who had learned under difficult frontline conditions to recognize different types of people, A.A. Vinnik stated in his letter: "We were led to victory by highly educated generals who were dedicated to the people and to the motherland." In confirmation of this he described his commander, Hero of the Soviet Union, Gen V.A. Gorishniy, who commanded the 95th Rifle Division (from 1 March 1943, the 72d Guards Rifle Division), from 26 August 1942 until 9 May 1945.

Having stated that V.A. Gorishniy died soon after the war and did not write a book, the reader concluded: "We must hurry so that all participants of the war can talk about it."

Unfortunately, we were unable to view the broadcast described in the letter, but we can add to the words of Comrade A.A. Vinnik that th memoirs written by the people of the frontline generation by the people who were able to hold out under fire force us to reflect not only about the past, not only about the link of the present with what had been, but also how we will live in the future. A majority of our readers read military memoirs with interest. The letters from Comrades R.R. Akhmetyanov from Brezhnev, V.M. Stolyarov from Kharkov, Ye.I. Yakovlev from Moscow and many others all of which cannot be listed show this.

From time to time we receive letters from young persons who desire to devote their life to military history. Each of these has the question of where to go to study in order to become a military historian. We have been asked this by Sergey Kuznetsov from Kaluga, Andrey Perepelkin from Uralsk, the soldier from one of the guards subunits in the Baltic Military District, P.G. Berezin and others. We have decided to answer on the journal's pages all who want to obtain a specialty as a military historian.

There is no special military school which trains just military historians. The Military History Institute of the USSR Ministry of Defense is not an educational institution but rather a scientific research one assigned to work out and investigate the problems of the history of military organizational development and military art. Before becoming an officer specialized in military history, it is essential to complete a military school in any area as this discipline is studied in each of them. Upon completing the school and after serving at least 3-5 years in the troops, an officer is granted the opportunity to enter a military academy where the history of military art is studied.

As is known, the journal publishes the heading "Heroes of the Civil War." The materials of this section have been highly praised by the readers. Gratitude for the interesting articles has been expressed by Comrades L.V. Pechenkin from Sverdlovsk, the Krasyanovs from Novosibirsk, A.N. Zhukov from Moscow, V.I. Bechenkov from Moscow Oblast and many others. Presently, from this heading we are publishing materials on the participants of the Civil War who were awarded two orders of the Red Banner. We propose to publish information on more than 100 persons. These are being printed as they are ready, and as all the documentary data necessary for this are found. This work is very complicated, painstaking and is as yet far from complete as certainly many years have passed since the moment of the award and certain documents are missing. The editors are carrying out a constant search. Periodically the journal publishes articles devoted to well known military leaders, including those who were unjustifiably repressed and subsequently rehabilitated. For example, material is being prepared on Boris Mokeyevich Dumenko, a Hero of the Civil War, who commanded a partisan detachment on the Don, a cavalry brigade, a division and a corps on the Southern and Southeastern Fronts and so forth.

Not a month goes by when our readers do not come to us with a request to provide the addresses of the Military Books by Mail stores. We have sent out an individual reply to each of them. But again letters have come from the Sovetskiy Sovkhoz in Vozvyshenskiy Rayon of North Kazakhstan Oblast from an instructors of the affiliate of the Chistovskiy SPTU-22 [Secondary Vocational-Technical School] V.L. Kozak and Ya.A. Tamershmidt from Comrades M.S. Kadyshev from the settlement of Solyanaya, Tayshetskiy Rayon in Irkutsk,

V.L. Alekhin from Donetsk and others containing the same requests. We have decided to print the list of stores sending out books on military subjects. Here are their addresses:

480091, Alma Ata, Kirov Street 124

- 690000, Vladivostok, Leninskaya Street 18
- 252113, Kiev, Lesi Ukrainki Boulevard 22
- 443099, Kuybyshev, Kuybyshev Street 91
- 191186, Leningrad, Nevskiy Prospect 20
- 290035, Lvov, Belotserkovskaya Street 2A
- 220029, Minsk, Kuybyshev Street 10
- 113114, Moscow, Danilovskaya Quay 4A
- 630076, Novosibirsk, Gogol Street 4
- 270009, Odessa, Perekop Division Street 16/6
- 226011, Riga, Kryshyan Baron Street 11
- 344018, Rostov-na-Donu, Budennovskiy Prospect 76
- 620062, Sverdlovsk, Lenin Street 101
- 700077, Tashkent, Lunacharskoye Highway 61
- 380007, Tbilisi, Lenin Square 4
- 720001, Frunze, Kiev Street 114
- 680038, Khabarovsk, Seryshev Street 42
- 672000, Chita, Lenin Street 111A

Each year the editors receive a significant number of letters from subscribers in which they state that they have not received a certain issue of the journal and request that this be sent to them. We receive such requests most frequently from the participants of the Great Patriotic War who for many years have subscribed to the journal and are fond of it and for whom it is a sort of encounter with their youth, when they, as young people, defended the motherland against the enemy. We have received such letters from Comrades I.M. Bobrikov from Sverdlovsk, A.A. Sychev from Bratsk, V.Ye. Bogdanov from Smolensk Oblast, N.S. Pichuyev from Shilka, P.P. Vasilyev from Smolensk, B.A. Plakhotnik from Cherkassy, V.S. Kotsyuba from Volyn Oblast and many others. It is very difficult to refuse these people and we can understand with what impatience they await each issue of the journal. However, often this must be done, as the editors, unfortunately, do not have their own supply. The distribution of the journal is the concern of the distribution section at the printing plant of the newspaper KRASNAYA ZVEZDA where it is printed. We will give its address: 123826, GSP, Moscow, D-317, Khoroshevskoye Highway 38.

This is the first stage on the way of the journal to the subscriber. But certainly the journal can go astray after dispatch to the recipient. For this reason we advise to turn first in the event of problems to the rayon communications departments.

Individual comrades have voiced concern over the question that the journal's pages are basically filled by Moscow authors. Thus, having shared his ideas on improving the issues and having hoped that more operational-tactical articles be printed, the already mentioned Ye.M. Lyakh in his letter pointed to the abundance of materials in the journal by candidates and doctors of sciences from the institutions of learning in Moscow, while there are few articles from the troop generals and officers. In actuality, our main authors are the very experienced scientists and officers from the superior troop staffs and facilities which are located in the capital. Nevertheless, we share the concern of the reader since we, like him, want to receive more materials from the troops, and for this reason in the military districts and fleets we are holding conferences as well as meetings with the reader aktiv. We are impatiently awaiting articles from the troop units and from the periphery but unfortunately there still are few of them. So write, we are waiting.

In their letters the readers constantly voice a desire to discuss one or another problem of military history on the journal's pages. Having completed one discussion (on strategic operations), we have decided to commence another. The editors are presently working out the subject of discussion. We are seeking advice from scientists and analyzing all proposals. It can be said tentatively that the problem of the initial period of the war will obviously be brought up for discussion.

In concluding our discussion with you, respected readers, we want to tell about meetings with interesting people which we have begun to hold regularly. Visiting the journal's co-workers have been: A.A. Kotenev who returned from Afghanistan, Col V.R. Zhuravlev, a coworker from the USSR TSAMO [Central Archives of the Ministry of Defense], Col O.L. Sarin, the chief of the Press Section of the Main Political Directorate of the Soviet Army and Navy, Maj Gen V.F. Molchanov from the Military History Institute as well as co-workers from the General Staff.

We listened with amazement to Capt 1st Rank V.S. Chuykin who returned from Chernobyl and described the heroic work of the men who entered into a duel against an invisible enemy and the victory won. We were amazed by the scope of the work carried out by our soldiers and officers. Here the fourth reactor had been enclosed in a sarcophagus, they have decontaminated the buildings of the first and second power units and the population points had undergone special decontamination. Valentin Sergeyevich [Chuykin] told about the courage, will power and valor of the men who had undergone a trial of steadfastness, and more than one book could be written about this.

We have already stated that V.S. Chuykin has written an article about the feat in Chernobyl. It was published in the 4th issue of the journal.

The editors also held a meeting with the Twice Hero of the Soviet Union, the USSR pilot-cosmonaut, Col L.D. Kizim, who has made three space flights: in November-December 1980 as the commander of the Soyuz T-3 spacecraft, in February-September 1984 as the commander of the Soyuz T-10 spacecraft and in March-June 1986 as the commander of the Soyuz T-15 spacecraft. For the first time in world practice L.D. Kizim during a single flight together with V.A. Solovyev made six space walks lasting a total of 22 hours 50 minutes, performing here complicated, multi-stage assembly work. Leonid Denisovich [Kizim] described these as well as the feelings which he experienced each time before the launch. He also described the successful and unsuccessful biological experiments in space, the very risky work outside the craft, the Mir Station which resembled a white bird as well as the observing of volcanos. The meeting was so interesting that we would like for you to be able to learn what Leonid Denisovich told us. For this reason we are announcing that Izdatelstvo Molodaya Gvardiya is preparing to publish the book by L.D. Kizim "S dumoy o Zemle" [With Thought About the Earth]. In this the cosmonaut shares his remembrances of the space flights. Excerpts from the book can be read in the 1st and 2d issues of the journal Aviatsiya i Kosmonavtika of this year.

Giving information on the two colloquiums held in August of this year in the capital of Greece: the 12th on Military History and the 1st on Naval History, was the editor-in-chief of the journal who participated in these. Arriving in Athens were over 200 scholars from 30 nations of the world. Around 40 papers were heard in the course of the sessions. Military historians from the socialist countries took an active part in the work of the colloquiums. In their speeches they disclosed the influence of the national liberation struggle of peoples on the development of the revolutionary movement in the Balkans. The paper by the Soviet representative, Doctor of Historical Sciences Col A.G. Khorkov "The National Liberation Revolution in Greece (1821-1829) and Russia" took up the military political situation of this period, the driving forces of the revolution and the brief course of military operations and showed the enormous importance of Russian aid in the successful development of the revolution and the winning of independence by Greece.

The information on the course and results of the colloquiums made it possible for the journal's co-workers to

more clearly and profoundly analyze the urgent problems of military history, the ideological struggle over military history questions as well as their own practical tasks in further improving their elucidation.

The 70th anniversary of the Soviet Armed Forces is approaching. In this context the editors intend to widen the articles devoted to this significant event. And from you, our readers, we are awaiting new letters with questions, opinions and comments on published materials.

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