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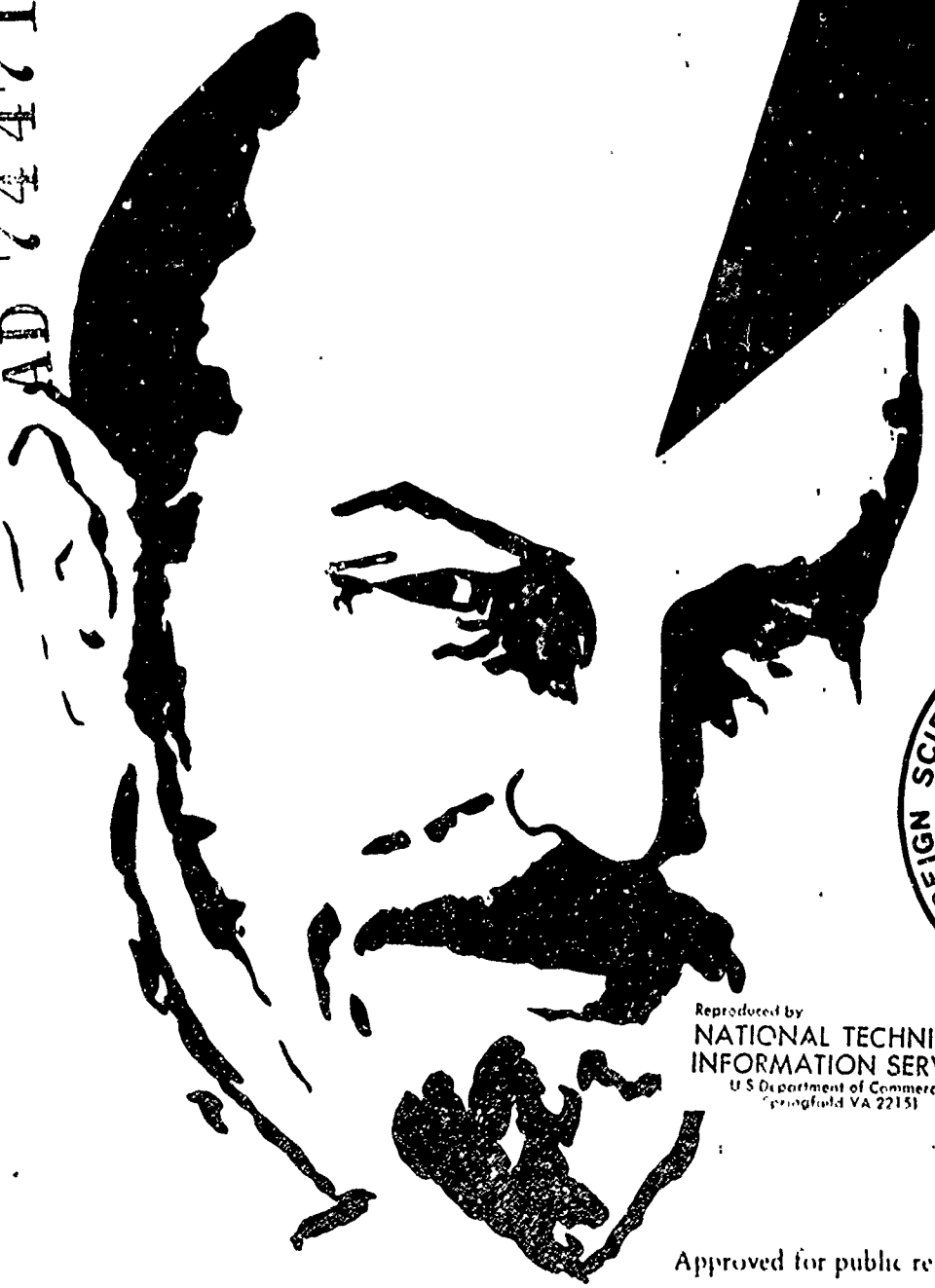
REAR and SUPPLY of the SOVIET ARMED FORCES



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NOTICE

The following definitions apply for the transliterated organizational entities included in the text:

chast'	[voinskaya chast'] - Administrative, line, and supply unit (yedinitsa) of the [branches] of troops, which has a number and banner, e.g., a regiment, separate battalion (batal'on, division) and troop organizations equal to them.
ob"yedineniye	[operativnoye ob"yedineniye] - Large-scale unification of various soyedineniye of the branches of troops, which is nonpermanent in composition and is intended to conduct operations in a war.
podrazdeleniye	Troop unit of permanent organization and homogeneous composition in each branch of troops, which unit forms a larger podrazdeleniye or a chast'.
soyedineniye	[soyedineniye voyskovoye] -- Combination (soyedineniye) of several chast' of one or various branches of troops into a permanent organization (division, brigade, or corps), headed by a command and a staff and including chast' and podrazdeleniye of auxiliary troops and services necessary for combat operations.
Source:	Russian-English Dictionary of Operational, Tactical and General Military Terms, 1958

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NEW GOALS AHEAD (pp. 2-8)

General of the Army S. Maryakhin

Exercises according to the plans of the new training year have unfolded in the army and navy. In conjunction with this, the editors of the magazine asked the deputy minister of defense and chief of rear services of the USSR Armed Forces, General of the Army S. S. Maryakhin, to reply to several questions, to describe the training of rear personnel, and how the tasks are to be resolved.

Question: The specialists of rear podrazdeleniye and installations have begun their training in an organized manner just as the men of military chast' and ships. In speaking of this, it would be proper to draw up some of the results of the previous period. Would you tell us, please, Comrade General of the Army, even if briefly, of the results achieved by rear personnel during the past training year?

Yes, 1971 was a year of great and intensive training. It came into being in our country and for the entire world communist movement as the year of the 24th CPSU Congress. The decisions of the congress were warmly approved in the hearts of all Soviet people, by all personnel of our wonderful armed forces. Together with all Soviet people, the men of the army and navy took these decisions as the great program of building communism, as the untiring concern by the party to raise the well-being of the workers, to further strengthen the economic and defensive might of our socialist homeland.

In building the new society, the Communist Party and the Soviet government, and all of our people, have always considered and will consider the developing international situation. The 24th CPSU Congress made a deep analysis of the contemporary international situation, noted its features, and evaluated the deployment of forces throughout the world and the degree of danger posed by imperialism.

In emphasizing the complexity of the international situation, the congress pointed out that tension and the threat of war still hang over the world. Therefore, the party is giving unweakening attention to strengthening the country's defensive capability and to raising the combat might of the USSR Armed Forces. In his Accounting Report to the Central Committee of the 24th CPSU Congress, the Secretary General of the Central Committee, L. I. Brezhnev, stated: "All that has been created by the people must be dependably protected. To strengthen the Soviet government means to strengthen its armed forces and to raise the defensive capability of our homeland in every way. While we still live in a troubled world, this task remains one of the most important."

Everyday life gives us convincing examples of that great concern which the Communist Party of the Soviet Union and its Central Committee gives to the strengthening of the army and navy and to providing them with improved means of armed combat. Powerful missles, submarines and surface ships, supersonic aircraft, the world's most improved helicopters, tanks, artillery and small arms, large capacity and high roadability vehicles and other varied equipment are the things that we have because of the untiring concern of the party and government, the historically unparalleled work of the working class, the kolkhoz peasantry, our scientists, engineers, and technicians, and of all Soviet people.

In responding to this concern of the party, the state, and of all Soviet people, the personnel of our armed forces are giving all of their effort, knowledge, and ability to the matter of raising combat readiness and military craftsmanship. Reporting on this to the 24th CPSU Congress, the USSR Minister of Defense, Marshal of the Soviet Union A. A. Grechko stated that the army and navy personnel are vigilantly performing their combat service on land, in the air, and on the sea, are reliably protecting the borders of the Soviet Union, and are in full and constant readiness to carry out any order of the party and homeland.

The Soviet people can rightly be proud of their armed forces whose combat might increases constantly. This was convincingly demonstrated during the military parade held on Red Square in Moscow in honor of the 54th anniversary of the Great October Socialist Revolution.

The rear specialists work selflessly along with the men of the combat podrazdeleniye. They make a great contribution into the matter of strengthening the combat readiness of chast' and ships. Socialist competition initiated under the slogan "The Year of the 24th CPSU Congress, A Year of Outstanding Training and Service" in the troops as well as in the rear podrazdeleniye, chast', and installations was an extremely effective means to mobilize rear personnel to solve the tasks of combat, political, and special training. Review results indicated that the obligations assumed in socialist competition in honor of the party congress were converted into concrete and new deeds.

For example, remarkable work and training successes were achieved by the highway battalion commanded by communist Lieutenant Colonel V. Ivanov.

A number of podrazdeleniye in this battalion became outstanding and many class rated specialists and rated sportsmen were developed. Several thousands of rubles were saved as a result of the skillfully laid on work of equipment maintenance and preservation of material goods. This collective has many other good deeds on its record.

During the past training year, particular attention in the training of rear personnel of all levels was given to field and naval skills. It is only in the field, at the airfield, or on the sea, under conditions closely approximating a combat situation, do the troops acquire the necessary skills of action in real combat. Here, as nowhere else, is the cohesiveness of rear podrazdeleniye, chast', and of all control agencies checked out. It is frequently said that the field is a kind of laboratory in which is tested all that is new, that which has appeared in the methodology of combat and special training, and where the theoretical knowledge acquired by the personnel in classrooms, in the motor pool, and in the training camp are consolidated.

The Yug military exercises held during the summer of last year were a serious test of the combat maturity of rear podrazdeleniye. As we know, taking part in the exercises were soyedineniye and chast' of the Ground Forces, aviation, air defense podrazdeleniye, and naval ships. The exercises took place against a background of great patriotic upsurge caused by the decisions of the 24th CPSU Congress. The course and results of the exercises were widely publicized in our press. All those who took part in them were able to be convinced at first hand of the selflessness and craftsmanship of the overwhelming majority of soldiers, sergeants, and officers of all specialties.

The rear specialists performed a significant volume of work in actual troop support during the exercises. The range of their activities was broad: the movement of troops and freight by all types of transport over long distances, the building of roads and bridges, the supplying of troops with fuel, provisions, and other material goods, the laying of pipelines, and the execution of treatment and prophylactic measures. All of this demanded a purposeful, creative, and intensive effort on the part of rear podrazdeleniye personnel.

Outstanding field skills and the ability to act under conditions close to actual combat were shown at these exercises by the vehicle personnel under the command of Lieutenant Colonel A. Sorokin. They successfully coped with all of the missions facing them, transported important cargo for the troops over long distances, and demonstrated good training and high travel skills.

As always, the communists and Komsomol members were always in front, at the most responsible sectors. They clearly understood that success in modern and fluid combat is greatly dependent on the uninterrupted support of chast' and ships with necessary materiel; this is why they acted with initiative, persistance, and caught up the others with their own examples.

In summarizing the exercise totals, the work of the rear services received a positive evaluation and, of course, great merit in this belongs to the commanders, political officers, and party and Komsomol organizations which were able to rally all personnel of rear chast' and installations and to mobilize them to successfully implement the assigned tasks.

The modern potentials of rear chast' and podrazdeleniye of all types of armed forces and branches of troops were clearly and fully revealed during the course of exercises and naval cruises performed this year. The rear demonstrated the capability to resolve complex tasks in any situation. Thus, during one of the exercises in the Group of Soviet Forces in Germany, the company commanded by Senior Lieutenant V. Agakin was given the mission to build a highway bridge across a wide and deep river. The operating conditions were complex, but the bridge was built long before the prescribed period. All company personnel acted efficiently, smoothly, and showed high military craftsmanship, physical tempering, and endurance.

Many remarkable examples can be given from the actions of rear podrazdeleniye in their support of warships, aviation chast', and air defense troops chast'. For example, high naval skills and selflessness on distant cruises were shown by the crew of a tanker commanded by Captain Third Rank G. Trikov. Even during stormy weather, the sailors exceeded the norms in transferring fuel and water to the ships. They are always the victors in the struggle against the elements. Such examples convince us that true craftsmen work in the rear podrazdeleniye, chast', and installations.

A few words about the results of training officers — the rear services supervisors. It must be mentioned that their good military, political, and special training significantly supports the successful implementation of assigned missions by their subordinate podrazdeleniye, chast', and installations.

The results of the past training year, and particularly the exercises held during that period in all types of armed forces, indicate that the main mass of officers have a solid training and ably control their podrazdeleniye. The training process is well organized in the majority of rear chast' and installations, the existing material base aids in a proficient handling of all matters of combat, special, and technical training. The training of rear specialists right at work sites is widely used at the troop level. Studies, assemblies, and staff training is conducted at a high methods level under conditions close to an actual combat situation. Cases of indulgence and simplification in the training process are encountered less and less.

Many young officers are now entering the army and navy. It must be said that the military academies and schools of the rear services are graduating highly qualified specialists and their numbers increase from year to year. The graduates of the academies and schools are doing much

to improve training of subordinates and in improving the methods and means of training them.

There was a noticeable improvement in the past training year in the operational-rear training of rear headquarters officers. There was an improvement in their operational outlook, standards, ability to guide the rear, and to plan and organize its activities under the complex conditions of modern combat operations. Wider use has been made of the means of automated rear control. In general, the 1971 training year, the year of the 24th CPSU Congress, was a very fruitful one. The missions assigned the rear in the field of combat, political, and special training were carried out. Positive results were obtained by many rear chast', podrazdeleniye, and installations of the Group of Soviet Forces in Germany, the Red Banner Belorussian and Odessa, and the Carpathian and Transbykal Military Districts, the Red Banner Black Sea Fleet, and other districts and fleets. The rear chast' and installations of central subordination which are controlled by General G. Ponomarev, officers V. Osipov, V. Gladkiy, and others concluded the training year with high indexes.

As determined by the USSR Minister of Defense, the past training year significantly moved us forward and was an important stage in the combat training for the army and navy and in raising their combat readiness. Difficult and important goals in combat improvement were taken. But we cannot be content with the achieved. In front of us are newer and even more complex goals which we must successfully overcome. All of us must work hard, we must, with great persistance, master the art of military effort, the ability make efficient use of the mighty weapons and powerful equipment, and learn how to be victorious in modern battle.

Question: In your opinion, on what features should attention be directed in the training of rear personnel during the forthcoming training year?

Before giving an answer, it would be appropriate to dwell on those basic questions which we have to work out.

The combat, political, and special training program is quite a full one but, obviously, it is fulfillable. Commanders and staffs at all rear levels must creatively solve the problems of combat readiness, must concentrate their attention on the more important and perspective directions upon which the maintenance of rear podrazdeleniye, chast', and installations in constant readiness to carry out uninterrupted material, technical, and medical troop support under all conditions of a combat situation is greatly dependent.

At the present time, it is necessary to continue improving the scientific methods of rear control on the basis of new technical facilities. The rear staffs and services must learn how to quickly plan rear support for the troops and efficiently control podrazdeleniye during the course of highly maneuverable operations. This will require the wide application

of electronic computers, formalized documents, and a fuller application of the methods of scientific organization of labor.

Personnel of the military transportation services will have to continue their efforts to reduce the time to load military troop trains, to increase the rate of transporting troops and freight by railroad; military road personnel will have to learn how to quickly restore roads and to develop conditions for the rapid movement over them by truck columns. Vehicle personnel will have to further improve their travel skills, raise their endurance in carrying out shipments over long distances. It is necessary to reduce the time that motor transport stands under loading and unloading operations through the broad introduction of centralized shipment of freight and the use of means to mechanize loading-unloading operations.

Important matters are also to be solved by personnel of the fuel supply service. They must seek more efficient methods for fueling combat and other vehicles while on the march and during the course of highly fluid combat operations. Pipeline podrazdeleniye personnel must learn how to rapidly lay pipelines under complex conditions and to operate them at maximum loads.

The military medical service specialists will continue to work on the practical methods to handle medical support for podrazdeleniye, chast', and ships under complex conditions, to provide prompt assistance to the sick and wounded, and to conduct preventative treatment work to reduce overall morbidity and work loss among military personnel.

Personnel of the food supply, clothing supply, and military veterinary services should direct primary attention, respectively, on the quality of personnel messing, particularly under field conditions, on promptly providing soldiers with prescribed articles of clothing and improving their appearance, and to strengthen supervision over the quality of meat products made available for troop subsistence.

The supplying of rear chast' and podrazdeleniye with special new equipment will demand that all personnel apply maximum effort for its assimilation so that it could be subsequently used skillfully in any situation. Only under the conditions that personnel master the equipment, know how to use it without any delays, and use it with maximum efficiency can we speak of the high degree of readiness by rear podrazdeleniye and chast' to carry out their assigned missions. In this manner, the high level of technical training of personnel becomes a most important factor in the combat readiness of the rear.

One of the tasks which has as its goal the further improvement in craftsmanship on the part of rear personnel is that of educating them with affection for their specialty, raising their responsibility for their assigned work, and to develop initiative and ingenuity. It is necessary that each and every soldier, sailor, sergeant, and petty officer with a

rear services specialty be adept in the firing of small arms and be versed with equipment, know how to make use of the means of protection against enemy weapons of mass destruction, know how to dig in quickly and camouflage himself and equipment well, and know how to act boldly in the complex conditions of a combat situation. In other words, every rear specialist, be he an enlisted man, a sergeant, or an officer, must not only be very competent in his specialty but must also be an outstanding fighting man who knows how to wage battle and conquer. In this is the merit for success.

A matter which always had and still has great significance in gaining victory over a strong enemy is the ideological tempering of personnel, the development in each Soviet soldier of a Marxist-Leninist outlook, and high moral-political, psychological, and combat qualities. Ideological and political maturity is the foundation upon which to acquire all other qualities necessary to the true soldier. Currently, the thorough studying and propagandizing of materials and decisions of the 24th CPSU Congress, of the CPSU Central Committee Plenum held in October, and the sessions of the USSR Supreme Soviet assume extreme importance in the ideological education of the military personnel and in strengthening the moral spirit of the army and navy. This work has now become widespread in all rear podrazdeleniye, chast', and installations. The main point is to achieve a high level and actuality of propaganda and in successfully implementing all of the plans set forth by the party. Ideological-educational work must be uninterruptedly performed with all categories of rear services personnel. One of the reasons for this is that in some podrazdeleniye there still are cases of violations of military discipline by individual servicemen, deviations from the requirements of military regulations and the military oath. These are indicative of weaknesses in organizational and ideological-educational work and a lag from the continuously growing requirements set forth by life itself. In order to properly build the progress of teaching and educating subordinates, the officers themselves must be well-trained, not only in a political and military-technical sense, but must also have good knowledge of the field of pedagogy and psychology.

The prompt and uninterrupted rear support of troops and the able control of rear podrazdeleniye is determined to a considerable degree by the level of theoretical knowledge and practical experience of our commanders and chiefs. For this reason, officers of the rear agencies must constantly work to improve their special knowledge, to improve their ability to carry out their functional obligations, and especially in organizing the support of podrazdeleniye in all types of combat and in the handling of unit administration. They must be fully knowledgeable of regulations, instructions, and guiding documents which regulate the training, life and everyday living of the troops.

Independent work with manuals, instructions, and guides must have a large place in the training of officers. The need to thoroughly study the tenets of regulations is constantly dictated by the ever-increasing demands on the organization of material, technical, and medical support

for podrazdeleniye, chast', and ships. A firm knowledge of the manuals and regulations helps to more quickly select the optimum decision, to efficiently organize support, to control the rear in combat, to carry out protection, defense, and security, and to more proficiently teach and educate the personnel.

In speaking of the training of rear officers, we should emphasize the importance to the officers of constantly improving their economic knowledge. The resolution of the CPSU Central Committee "On Improving the Economic Education of Workers" obligates us to do much. Only a constant and purposeful assimilation of economic knowledge and scientific organization of labor will make it possible in the future for all specialists to more successfully carry out the complex and responsible tasks for comprehensive support of chast' and ships.

We should consider as a characteristic feature in the training of junior rear specialists during the forthcoming training year that of educating them in the practical implementation of their obligations and service norms. Obviously, the working out of norms during exercises and field training will help to improve the quality of combat and special skills and will facilitate an increase in the number of outstanding personnel and class-rated specialists.

I would like to emphasize that although the work of the rear specialists is modest, it is very important. Under modern conditions, military effort has become a collective one. Its results depend on the activity of each at his own sector. At times, the success of the entire matter depends on one individual. Just imagine if a driver did not deliver his freight by the right time, the medical instructor did not properly bandage a wounded man, or a doctor did not make the right diagnosis — this means that an entire combat podrazdeleniye would be without fuel or ammunition, and instead of help, harm would be done to the sick or wounded. Therefore, the slogan for all fighting men must be: maximum ability and knowledge to the common matter. Let me mention one other feature. Often the junior rear specialist must operate detached from his podrazdeleniye, from his service comrades, that is, make independent decisions and select one version of action or another. The correctness of his decision greatly depends on how well he is trained, hardened, and how great is his feeling of responsibility for his assigned work. Consequently, it is the duty of each commander, each political officer, and of all rear officers to carry out their obligations from their very soul and in full scope, to demonstrate diligence in their service, persistence in training, creativity in work, and to be principled in their relations with their subordinates.

We must, in consideration of the requirements set by the Central Committee of our party, also improve the organization of socialist competition as one of the most powerful levers in achieving successes in combat, political, and special training by personnel of the rear podrazdeleniye, chast', and installations. Socialist competition currently in progress in honor of the 50th anniversary of the formation of the USSR must have its sphere of activity expanded to all facets of troop combat training and life.

Question: What are the ways to ensure a more successful resolution of tasks facing the rear personnel in the forthcoming training year?

Based on multiyear experience and our entire work practice, military pedagogical science has developed an entire system of methods and means of troop training. One of the basic requirements for training, as we know, is that each senior instructs his subordinates and is fully responsible for their training. In following this principle, we must always strive for specificity, that is, to build the training process on specific tasks applicable to specific conditions.

For example, when preparing to hold exercises with soldiers, sergeants, or officers, this goal must be set for oneself: to teach some specific skill or action, to work out some specific norm. You should always go from the simple to the complex, from the assimilation of theoretical, so-called "book" tenets, to systematic training and practical work at the sites or with the equipment. In so doing, consideration must be given to the individual psychological, physical, and mental capabilities, and leanings of the subordinates, to use them ably and with great pedagogical tact, and to strive for the greatest effect. Only a creative approach to matters of teaching will give the best results.

A mandatory condition to achieve high results in the training of subordinates and, probably, the basic means by which to improve the quality of their learning is that of systematically raising the methods skills of the study leaders — officers and sergeants. The most serious attention should be given to this facet of the matter. Instructor-methods studies must be regularly organized and held with them. The direct superiors are called upon to do this as they are the ones who should teach their subordinates in the matter of mastering the teaching processes.

The concept that each superior should teach his subordinates must also be set forth in materials on matters of combat, political, and special training published on the pages of our magazine. In this conjunction, it is my opinion that the article by General N. Romanenko published in the October issue of the magazine is worthy of attention. There should be more frequent publication of materials concerning our leading commanders — masters in the art of teaching and educating subordinates. It would be useful if our senior comrades from among the staff officers and generals, the chiefs of services and their deputies, would appear from time to time in the pages of our magazine on a number of subjects on methodological work in order to assist study leaders.

Let us pause briefly on such a matter as the organization of studies. Successful teaching requires high discipline and organization of the personnel, a firm prescribed order in each podrazdeleniye, chast', and installation, discipline during studies and exercises whenever any training measures are carried out. The efficient organization of the training process, just as high combat readiness, is unthinkable without

firm military discipline, orderliness, and strictness. The posture must be reached that each training day and each hour of study would be held with maximum benefit, a decisive struggle must be carried out in the chast' against a shifting of exercises or studies, against simplification and indulgence in the training process.

The exercise or study plan and order, after it has been approved by the senior officer, must become the law of life for the podrazdeleniye and training carried out day or night and in any weather. Only under this condition can we achieve a high degree in the teaching of our personnel, that is, to successfully carry out the assigned tasks.

I would particularly like to emphasize the importance in raising the field and naval skills of rear personnel even though I have already spoken on this matter. But since we have gotten into the subject on the ways to resolve the tasks facing it, I will have to mention it once again.

Where, other than during field exercises and training, is it best to work out matters of combat training in complex? Conditions can be developed in the field which are close to those which may originate in actual battle. Actions in the field are a thorough and comprehensive test for all podrazdeleniye, a test of the moral and physical qualities of the soldiers, sergeants, and officers. A precise determination can be made in the field as to the capabilities of the podrazdeleniye, on how well the personnel have assimilated the equipment, on what practical specialty skills the men have acquired during the teaching process.

In this connection, we should mention one other important requirement of the USSR Minister of Defense: the work of teaching and educating the troops must be conducted with maximum consideration of all that is new, that which is put forth by military theory and practice so that the entire training process would correspond to the actual requirements of modern warfare.

We will only be able to achieve best results in the training of rear personnel when primary attention will be concentrated on field skills, on purposeful training and execution of tactical and tactical-special exercises.

In emphasizing the importance of field training as the highest form of education, we, obviously, should not negate the significance of class studies, studies with training equipment and rear installations — at warehouses, in shops, medical stations, messhalls, and so forth.

It would be appropriate at this point to also touch on matters of further improvement of the training-material base. It should facilitate a thorough assimilation by the rear specialists of the program and should develop in them the proper practical skills. Each military chast' and installation, each podrazdeleniye has every possibility to equip good classes, training fields, vehicle proving grounds, and so forth. All that

is required is only the purposefulness and management of commanders and chiefs, the creative thoughts of efficiency experts, and the initiative of the personnel. The training base in the majority of chast' in our armed forces is well equipped, its condition responds to prescribed requirements. As an example, much has been done in an interesting and instructive manner in this regard at the military cooks' school in the Group of Soviet Forces in Germany where the chief is Engineer-Captain B. Marenov; yes, and much of the same has also been done in other of our podrazdeleniye. But we cannot rest on our achievements, we must constantly improve the training base and improve it as new tasks arise.

An important condition in the successful solution of tasks facing the rear is the further improvement in the work of the control agencies and the headquarters of rear chast' as their role in the organization of rear podrazdeleniye and installation training and the supervision of combat and political training is extremely great. They are called upon to summarize and to take up all of the latest achievements in military pedagogy, to help set training on a scientific basis everywhere, and to make wide use of modern computers and programmed teaching aids. The necessary supervision has to be organized over the course of training, ensure that issued orders and instructions have been carried out, and to more carefully conceive the planning of the training process.

A very business-like discussion on all of these matters was held by the communists at a recently-held meeting of the party aktiv of the Ministry of Defense headquarters and rear directorates. They drew up the totals of the work which had been done and set concrete measures to carry out the tasks set by the Minister of Defense for the rear agencies.

The merit of success in carrying out all of the forthcoming tasks is a purposeful party-political activity in the rear podrazdeleniye, chast', and installations. It must be directed to improve the entire system of rear specialists training, to educate them in a spirit of high discipline, vigilance, undeviating execution of the requirements of the military oath and military regulations, and unwavering loyalty to the Communist Party, the Soviet government, to the people, and to the socialist homeland.

We can only successfully resolve the complex and responsible tasks set for the new training year if we raise the level of scientific supervision of the training process under conditions of a further improvement in the work style of the commanders, chiefs of staff, reliance on the party and Komsomol organizations, and an uninterrupted purposeful party-political activity.

THE 24TH CPSU CONGRESS ON THE FEATURES OF THE MODERN STAGE IN THE ECONOMIC DEVELOPMENT OF THE COUNTRY AND THE TASKS OF THE PARTY'S ECONOMIC POLICY[1]

Professor, doctor of economic sciences,
Major General A. Korniyenko

The 24th CPSU Congress defined the short-range economic development of the USSR. The Accounting Report of the CPSU Central Committee to the 24th CPSU Congress states: "Supporting the foundation for the future growth of our economy, implementing technical modernization of production, placing huge sums into science and education, we nevertheless must concentrate more and more effort and means to resolve tasks which are associated with raising the well-being of the Soviet people." Making a comprehensive characteristic of the distribution of world powers and thoroughly analyzing the country's economic development, the 24th CPSU Congress approved a program of activity and struggle by the Soviet people, the results of which will have an outstanding significance for the building of communism and a further decisive change in the relationship of forces in the world arena in favor of socialism.

Each historical segment of time in the development of Soviet society is characterized by its own features. These features are essentially caused by eternal laws in the maturing of the communist method of production, in the development of productive forces, in the relationships of world powers and in the struggle of the two systems. In developing the national economy plan for 1971-1975, our party based itself on a thorough analysis of all conditions in the development of the USSR in the near future and in the more distant future.

In connection with the discussions of fundamental problems of the party's economic policy for the forthcoming period, the 24th Congress gave attention to certain features in the current stage of development of our national economy. They were the following.

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1. The article is recommended for use in preparing for studies on a number of subjects in the Marxist-Leninist training system.

As a result of the development of productive forces, a change occurs in the skeletal-muscular structure of social production which, by the well-known comments of Karl Marx, consists of a system of working machines and machinery and sources of motor power and energy. A powerful electrical energy base has been brought up to all social production in all branches of the national economy. There has been an unheard of increase in the mass of raw materials, fuel, and semifinished products brought into the production process. The growth of fixed and circulating capital in the national economy ensured a significant increase in the country's gross social product. During the past five-year period, the fixed capital of national economy increased by 1.5 times and at the present time amounts to nearly 740 billion rubles.

A new powerful upsurge in the national economy was expressed in the growth scale of social production. L. I. Brezhnev stated at the 24th CPSU Congress that the most important feature in the current stage of development of our national economy is "its completely new scales. A huge economic might has been established whose basis is the multibranch industry and major socialist agriculture, advanced science, and proficient cadres of workers, specialists, and administrative supervisors. It is an economy which in one day produces nearly two billion tons of social products, that is, ten times more than was produced daily by the end of the 1930's." We will give you some figures for illustration. Just the absolute increment in billions of rubles during 1966-1970 was the following (in compared costs): by national income — 77 billion rubles (141 percent of 1965); by industrial production — 125 billion rubles (150 percent of 1965); agricultural production — 14 billion rubles (121 percent of 1965, average annual production for five years); by volume of capital investments (for five years) — 104 billion rubles (142 percent of 1965); by retail trade turnaround — 50.2 billion rubles (148 percent of 1965).

The unheard of growth in the scale of social production is indicated by the comparative data as to the volume of industrial production at the beginning of the First and Ninth Five-Year Plans.

	1928	1970
Coal (Millions of Tons)	35.5	624
Petroleum (Millions of Tons)	11.6	353
Gas (Billions of Cubic Meters)	0.3	200
Electric Energy (Billions of Kilowatt-Hours)	5	740
Steel (Millions of Tons)	4.3	116
Cement (Millions of Tons)	1.8	95.2
Machine Building and Metal Processing Production (1928 = 1)	1	511
Chemical Industry Production (1928 = 1)	1	394

But the increase in the growth scales of the national economy is not merely its numerical characteristic. Concealed within it are outstanding qualitative shifts in social production.

Intensifying under the influence of scientific-technical progress, the social division of labor gives rise to a double tendency. On the one hand, there is the further fractioning of the complex operations which require special knowledge and special skills and experience. On the other hand, mastering special skills and professional training becomes impossible without a high level of education and culture on the part of the worker. Modern industry has placed under the specialization of people a new and broad material base for education and culture. A new type of worker is formed who is subordinated to the conscious effect of mass flows of raw materials, fuel, and other items of labor with the use of mass weapons of labor which are operated on the principles of automation of all technological processes. Under these conditions, all of the objective moments in the labor process lead to a growth of its productivity and social wealth.

Hidden in this point is the objective material foundation of the formula for the main task of the Ninth Five-Year Plan — to ensure a significant rise in the material and cultural living standard of the people on the basis of high growth rates in the development of socialist production, in raising its efficiency and scientific-technical progress, and accelerating the growth of productive labor.

The significant rise in the living standards of the people has been caused by the growth in social production. Nevertheless, raising the living standard level of the workers is a condition for the further growth of production and an increase in social wealth. Such is one of the features of the modern stage in the economic development of the country.

Another trait of its development is the progressive change in the branch structure of the national economy. A well-developed industrial structure of the national economy in the USSR has been created and provides the country a leading place in world development.

This is how the structure of the USSR national income looks: industry and construction — 59.8 percent, agriculture — 24.2 percent, transportation and communications — 5.7 percent, and trade and other branches — 10.3 percent. The Soviet Union stands forth as a powerful industrial world power. In its industry, first place by ratio of gross production are the branches which determine the technical progress in the entire national economy (electric power, metallurgy, chemical, petrochemical, radioelectronics, and other branches). Their share is 33 percent of the total industrial production.

There is an improvement in the branch structure of agriculture which is expressed primarily as the ratio between grain production and animal husbandry production. By the end of the Ninth Five-Year Plan, the gross harvesting of grain should exceed 200 million tons and the production of meat should reach approximately 16 million tons. A feature of the time as pointed out by L. I. Brezhnev at the 24th CPSU Congress is

that "a mandatory condition in the successful development of agriculture is the ever-wider use of the country's overall economic potential. This is why the party has so acutely set the task to accelerate the development of the industrial branches producing the means of production for agriculture as well as the equipment and machinery necessary to process the agricultural products, transport it, store it, and sell it."

Agriculture is gradually reaching the same level as other branches of the national economy.

We cannot overlook the defensive aspects in the development of agriculture. During the Great Patriotic War, agriculture provided the armed forces with 40 million tons of food supplies and forage. The requirements of a modern war exceed all known indexes of the past wars. At the same time, the significance of the problem is not merely the numerical side of the matter. Of no less importance is that of ensuring the survivability of agriculture (storage of food supplies, forage, and so forth) and the capability for routine production under war conditions. The 24th CPSU Congress defined the complex of close and distant tasks which, when resolved, will make it possible for agriculture to reach that level of requirements which is demanded of it by communist building and the defense of the country.

An important characteristic trait in the USSR's economic development on the modern stage are the major changes in the employment structure of the country's population and in the structure of its work force. These include the following: an unchanging increase in the number of employed persons (90.2 million in 1970); a further increase in the ratio of qualified labor; serious shifts in the geography of employment (raising the ratio of those employed in the eastern areas of the country, movement of the working force to the east); and shifts in the distribution of those employed in the fields of national economy, culture, and public services to the people.

These and other changes in the employment structure in the USSR are indicative of the important processes taking place in social production, the effects of which will be even more pronounced as time goes on. The first of these processes is the unchanging increase in the ratio of qualified labor. It indicates the placement of a firm foundation under the growth of social labor productivity. Professional maturity, education, and culture of the employed population of the USSR will facilitate a continuous increase in the mass of public wealth. The material base to raise the living standard of the people will begin to increase at an ever-accelerating rate. The quantity and quality of goods and services will begin, in an increasing degree, to satisfy the ever-growing material and spiritual needs of the people.

The second process is that of strengthening the role of services. It is caused by the increased technical level of social production and an increased scope of preparatory operations and jobs which absorbs a large

mass of embodied and live labor and requires an increase in the number of employed persons. A large part of public services abut material production (the production of means of production for public services). Nevertheless, today's worker, engineer, and administrative supervisor cannot work productively without well-established public services. In short, consolidation of the attained level of labor productivity and its uninterrupted growth depends on the functioning of public services. The third process is the drop in the age of employed persons and an increase in the 18 to 28 and older work group. This, from all points of view, is a favorable process heralding a qualitative growth in the work force since the overwhelming majority of the given age group covers youth with middle and higher education.

The current economic development of the USSR is characterized by an increased scale of capital construction. It will increase during the Ninth Five-Year Plan by 42 percent as compared with the Eighth Five-Year Plan which was distinguished by a great expanse in capital construction. We will make mention that in 1975 the ratio of new production funds will be 46 percent in industry and 60 percent in agriculture. The entire technical and production base of the national economy is becoming significantly modernized. This, then, sets a powerful foundation for a further growth in production and social wealth for the 1970's and subsequent years. Here, in its full scope, you can see the farsightedness of the party's policy which is based on the undeviating growth in the country's economic potential.

An important direction in the economic policy approved by the party at the 24th CPSU Congress is that of the deployment of productive forces. During the years of Soviet rule, more than 50,000 major industrial enterprises were built, restored, and put into operation in the USSR. The Directives of the 24th CPSU Congress defined the following principles in the deployment of production and population for the Ninth Five-Year Plan: implementing a course to hold back the growth of major cities; accelerating the assimilation of the natural resources in the eastern areas of the USSR and building up their economic potential; and building up the economic potential of the union republics and a large-scale development of the country's economic regions.

In the past 50 years, more than 100 new towns have sprung up in the USSR. At the present time in the USSR, there are more than 5,500 city-size settlements (including 1,935 cities). Concentrated in them are 136 million persons, that is, more than half the country's population. The number of major towns has increased. The time has ripened to deploy enterprises into medium and small towns. Starting in the past five-year period, more than half of the new enterprises were built in towns with a population of 100,000 people. The Directives of the 24th CPSU Congress for the five-year plan of developing the USSR national economy for 1971-1975 set the following course: "Unwaveringly follow the course to hold back the growth of major cities; as a general rule, cease the placement in these cities of new industrial enterprises except those which are associated with public services and city administration."

Of no less importance is the task to build up the economic potential in the eastern regions of the USSR.

The 24th CPSU Congress instructed: "To be considered as an important task is the deployment of productive forces and improving the territorial proportions in the national economy and a further acceleration in assimilating the natural resources and building up the economic potential of the country's eastern regions." The plan provides for the implementation of this task. Thus, as an example, coal mining in Kuzbass, Karaganda, and Ekibastuz is planned to be brought up to 228 million tons in 1975 and up to 300 million tons in 1980; petroleum extraction in Western Siberia — to 125 million tons in 1975 and 230-260 million tons in 1980. All of the union republics will also make a new and great step forward in building up the economic potential.

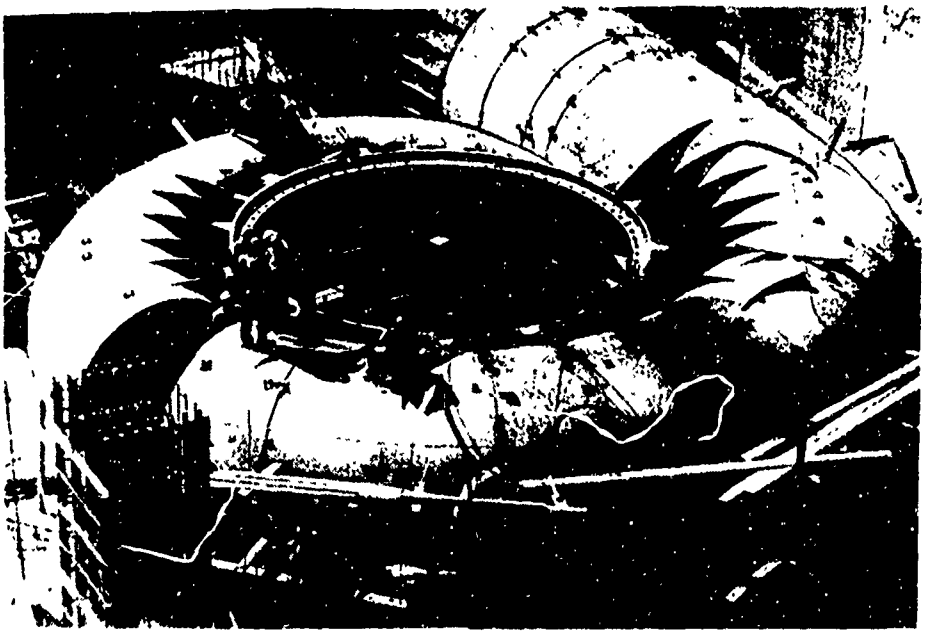
In the modern period, the Communist Party is giving special attention to accelerating the development of the infrastructure branches (transportation and communications). A serious economic growth is now unthinkable without efficiently operating transportation and communications. The economic significance of transportation is strengthened from the point of view of economizing public time on a nationwide scale; the shorter the time to transport productive and other freight, the more goods there will be in the country and the more inexpensive their costs. On the other side, communications has become not only an element of control but also an element of technological progress in a number of industrial branches. Transportation and communications will make a significant step forward in the forthcoming five-year period.

An outstanding trait in the modern economic development of the USSR is that of raising the level of all economic work and economic services in the national economy moving unwaveringly in step with improvements in the control system. In socialist administration, in which the conscientious worker is subjective, economic work is a factor which accelerates the country's economic development.

The party has currently taken a decisive course for the economic education of workers. History knows of no examples of such mass attraction of workers to economic education. The need for this could only have been born in a country where the economic education of the people ensures a growth in public wealth for the wellbeing of society as a whole and for each individual.

An objective prerequisite for universal economic education of the people was the achieved level of production when economic knowledge, a strict economic approach to production, became a mandatory element of the latter. The party sets as the task to be not the school-level or scholastic economic education of the people, but the formation of an active and realistic attitude of each worker to his labor and to the labor of others and to assess its results in the light of economic criteria. The revolutionary tenet of Karl Marx that the educator must be educated receives a

more mature and specific expression in the decree of the CPSU Central Committee "On Improving the Economic Education of Workers."



Tadzhik SSR. Nurekskaya GES. Preparations are underway to test the hydrounit.

In conjunction with this, the tasks facing the armed forces rear become even more complex. Its function becomes immeasurably more complex and varied. The many rear services now serve the entire circulatory and nervous system of the military organism. Economic training and the development of skills for economic analysis among all rear services specialists is today's priority task.

Such are some of the more substantive features in the economic development of the USSR on the modern stage which express the movement process of Soviet society toward communism. It is also indicative of the expanding and strengthening economic base for the country's defense. L. I. Brezhnev had this to say at the 24th CPSU Congress: "The Ninth Five-Year Plan must become an important stage in the further advancement of Soviet society along the path to communism, in building its material-technical base, and in strengthening the country's economic and defensive might."

The 24th CPSU Congress also directed its attention to the fact that the growth rates and ratios of individual branches lag behind modern requirements. During a 30-year period (1940-1970), the volume of industrial production increased 11 times while the gross production of agriculture increased only two times, freight turnover increased seven times, and retail commodity turnover increased six times.

The party has taken the course to develop and improve the base complexes of mutually related branches. The most important of these for the country's economy and its defense are the following: fuel and power, metallurgy, machine building, chemical, and electrotechnical. During the 1971-1975 period, the substantive composition of gross social products will seriously improve and acquire a greater development by means of those elements which determine further improvement and growth in the material-technical base of social production and in raising the living standard of the people and expanding the economic base of the country's defensive posture. There will be an improvement in the country's electric power balance, fuel balance, metal balance, food supply balance, and in items of everyday use. The overall economic base of the country's defensive posture will significantly expand and be strengthened even more.

The party sees its main task to be that of unwaveringly and persistently raising the living standard of the Soviet people. Major interrelated measures are implemented in this field: an increase in the production of means of production for group "B" branches and an acceleration in their growth rate; an increase in the production of light and food industry products; and an expansion in the volume of services for the population (transportation, communications, public services, and so forth). By the end of the Ninth Five-Year Plan, industry will produce 830 million pairs of leather shoes and more than 11 billion square meters of cloth. This can also be said for all of the important types of production which determine the living standards of the people. The party is concerned to see that the wardrobes of the Soviet people would become brighter, more attractive and richer, and the tables more laden, more appetizing, beneficial, and varied. All of the necessary material conditions are being developed so that our people would be healthier, happier, provided for, and more peaceful today and tomorrow.

In its policy, the CPSU gives considerable attention to the problem of the internal reserves of national economy whose significance increases for more than one reason. First of all, there is scientific-technical progress which gives birth to new branches and new production and requires the availability of material reserves necessary for maneuvering and for elimination of any developing disproportions. Secondly, there is the further improvement in national economy planning and improvement in inter-branch links and balances which are unthinkable at today's level without general state reserves. Thirdly, there are the interests of the country's defensive posture which also requires the availability of important material reserves. The greater the reserves, the greater the guarantee against any surprises.

The party has set forth a program before the people to rapidly build up the country's economic potential. It is dictated primarily by internal laws of Soviet society development, the development of the country's productive forces, and a further strengthening and growth in socialist production relationships. At the same time, the party also keeps in mind that the outcome in the struggle between the two world

forces is predetermined by the correlation of their economic might on which all other relationships are based. Therefore, the question is set with all directness and clarity to raise the economic efficiency of production and productive labor as the universal and common task of the people. The more economically strong and wealthier our country, the firmer is the guarantee of peace on earth and the firmer the material base of peace.

Today the world system of socialism has shouldered the full weight of responsibility for the fate of the world and social progress and is filled with the desire to implement its historic mission to the very end. The main role in resolving this task belongs to the USSR. In it lies the international and historical duty of our great nation. In his Accounting Report of the CPSU Central Committee to the 24th CPSU Congress, L. I. Brezhnev stated: "We have everything necessary — an honest policy of peace, military might, and the cohesiveness of the Soviet people — to ensure the inviolability of our borders against any incursions and to protect the conquests of socialism." The policy of the CPSU was and is the firm basis for success and victory by the Soviet people.

ECONOMIC EDUCATION FOR THE MILITARY CADRES (pp 15-19)

Captain 1st Rank A. Pozharov,
candidate of economic sciences

In the early dawn of Soviet rule, V. I. Lenin underscored the extreme significance of economic education and indoctrination for the builders of the new society, the proper combination of labor enthusiasm, born in the revolution, with the knowledge of how to organize labor. In his work, "The Regular Tasks of the Soviet Rule," he wrote: "To learn how to work, this is the task that Soviet rule must place in its full scope before the people."

Learn how to work — this is an eternally new task, a task which is vital today and vital tomorrow. It becomes filled with new contents at every stage of our development. The smoothing out of national accounting and control, the organization of socialist competition, the organization of shock worker and the Stakhanovite movement, and the movement for a communist attitude toward labor — these are but some of the characteristic traits of the Leninist school of economic education and indoctrination of the Soviet people.

Now, under conditions of high tempos in scientific-technical progress, of qualitative changes in the economy and nature of production, the task to significantly raise the level of all administrative activity and to change the approach to the solution of economic problems has risen to its full height. Whereas quantitative ratings were of prime consideration earlier, today they must be augmented more and more by indexes of production quality and the economy of the entire undertaking. At what price should this goal be reached — this is what has currently acquired primary significance. Therefore, it is demanded of each supervisor that he have the ability to make soundly based decisions and to evaluate work results from a position of economic efficiency.

The decree by the CPSU Central Committee, "To Improve the Economic Education of the Workers," states that economic training has become an important condition to raise the scientific level of administration, the growth of initiative, and the activities of workers in controlling

production to implement the program of expanding the national economy as planned by the 24th CPSU Congress. This document sets forth the system of measures to ensure a fundamental improvement in the economic education of enterprise managers, engineers, technicians, specialists in all branches of the national economy, and the broad masses of workers and farm hands.

A series of questions arise in conjunction with this: to what measure are economic criteria applicable to military matters, what are their roles, and what is the significance of economic education to military cadres for a further strengthening in the country's defensive capability?

The Soviet Armed Forces is a component part of our people, living one life with it. Therefore, all of the important processes occurring in society, the tasks which it must resolve, are also reflected in the armed forces. As an example, take the national approach to the improved use of production reserves and the strengthening of the economic effort in national economy. It has found a lively response among the men of the army and navy who have unfurled the movement for a thrifty attitude toward weapons and equipment, for an economic consumption of material and monetary goods, electric power, motor resources, and so forth. This movement provides a great economic effect and facilitates the successful execution of combat training missions with the least expenditures. Manifested in it is a high political consciousness by the soldier-civilian, a deep understanding of the mutual relationships between the tasks of the country's defense and the tasks of the building of communism.

But the matter is not merely that of economy in the narrow sense of the word. There exists an objective need to apply economic criteria in all spheres of activity to strengthen the country's defensive capability. There is a universal need for military-economic analysis and a comparison of combat results against the price at which it is achieved. The bureaucratic approach to problem solving on the principle of "at any cost" is alien to man in a socialist society regardless of where he would work — in a mine, on a construction site, in a kolkhoz field, or in the army.

Huge material and fiscal means are in the hands of commanders and specialists of the army and navy rear. The proper utilization of these means, their storage, distribution, transportation, planning, and accounting operations requires the cadres to have firm economic knowledge.

The need to raise attention to economic matters is an inevitable consequence of those transformations which are taking place in the armed forces on the basis of the scientific-technical revolution. The saturation of the troops with varied complex and costly equipment has led, most important, to a strengthening in the mutual relationships and mutual effects of administrative and military building, has brought forth specific changes in the methods of economic supporting of the country's defensive capability.

Under modern conditions, specific means must be allocated to maintain a country's defensive posture on a level required by the international

situation; there must be an expanded defense industry and implementation of scientific research and development in the interests of the armed forces. The important meaning of economic criteria in these and other fields of activity are quite obvious. Major matters of military building are examined on the basis of what will be the cost of one specific decision or another and what will be the economic consequences of this decision.

In the second place, as a result of these mentioned changes in the material needs of the armed forces, their own administration has become more complex and the role of the rear services has increased. The acceptance of incoming combat equipment and military property, control over their quality and cost, their transportation, storage, and distribution, and making it all available to the end consumer is all, to a considerable degree, an economic function and presupposes the availability of economists of various specialties and profiles in the appropriate organs of the armed forces.

Thirdly, the economic facets of military consumption and the daily activity of chast' and podrazdeleniye have assumed important significance. In planning combat training, the commander and chief, naturally, essentially set their work on the fact that all training tasks must be carried out fully, proficiently, and on time. But this does not mean in any way that the economic questions in organizing combat training can be ignored. The words of L. I. Brezhnev: "... to give a sound evaluation to his work can only be done after this has been determined: at what cost was it achieved," belongs in equal measure to the officer as to any supervisor. The commander must know how to select the most efficient and economic version in carrying out a combat training mission and how to direct the economic activity in the chast'.

In this manner, the circle of economic questions is quite varied in the sphere of national defense. It encompasses the relationships of administrative and military building, the functions of the rear services, and the "purely" military activity of commanders of all ranks. A thorough consideration of this matter is an objective requirement of the time.

There are favorable conditions in the socialist society for comprehensive consideration of economic factors in military building. Comprehending the need to maintain a high defensive capability and the specific resources allocated for this goal, the community is interested in its effective utilization. However, the advantages of socialism are not gained by themselves. There must be a systematically directed activity at all levels which is associated with strengthening the defensive posture: in research work, in the development and production of weapons and military equipment, in the material-technical support of the army and navy, and in the troop combat training process.

Now you will hardly find a military chast' whose commander and all officers, in assessing its successes and their own work, would not pose this question for themselves: could not the assigned tasks be done

even better and with fewer expenses? The struggle for economy has become an important component part of competition among personnel of chast', podrazdeleniye, and installations. However, it is not yet fully differentiated, not all levels in the area of defense are encompassed, and it is not always sufficiently effective. One of the causes is the lack, in a number of cases, of sound quantitative criteria of efficiency and economy or ineptness in using the economic measure. We cannot condone this today.

Successes have been reached in the past few years in the development of economic science. Measures have been implemented in the country in the field of economic education of the cadres. Thus, the number of students in higher educational institutions and technicums studying in the economic specialties increased from 179.000 in 1950-1951, to 479,200 in 1960-1961, and to 1,127,500 in the 1969-1970 school year. The training of economists is conducted in 33 institutes, nearly 200 economic departments in 40 specialties, and in 900 secondary training institutions in 50 specialties.

Some of these specialists take their service in the armed forces. However, highly qualified cadres of military economists of various specialties are needed to widely expand scientific research on military-economic matters and to improve economic activity in the army and navy. The military-economic organs and their activity will, undoubtedly, in time assume their proper place in our military organization.

In conjunction with this, serious tasks face the Order of Lenin Military Academy of Rear and Transportation, the Yaroslavl Military School imeni General of the Army A. V. Khrulev, the Vol'sk Higher Military School for Rear imeni Lenin Red Banner Komsomol, and other training institutions readying military economists of varied profiles.

However, the matter is not merely that of training specialists-economists. Economic training is now viewed as a mandatory and important facet in the qualifications of each worker. Even now, life persistently demands that commanders and chiefs be knowledgeable in different military-economic matters of both a general theoretical and applied nature. They themselves have already felt the need for knowledge of economic laws and the specifics of their effect in the field of defense, the basics of military-economic analysis, in the ability to approach routine tasks with economic criteria so as to raise the efficient use of money, material goods, and of all work. This also is of great significance in the economic education of soldiers and in raising their activity in the savings effort.

At the present time, the economic education of officer candidates in the majority of higher military training institutions is essentially that of studying political economy. Economic matters are touched in some subjects of military and special disciplines in association with learning weapons and combat equipment and the rules for their maintenance, operation, and repair. This is clearly insufficient today. There must be a

considerable expansion in the scope of theoretical and applied knowledge and an improvement in providing economic education with consideration for the profile of the cadres to be trained.

First of all, we would like to describe the fuller use of potentials in improving military-economic education and indoctrination which are associated with the teaching of political economy and military disciplines.

Political economy has many problems which are linked with military matters as economics is the material basis of a country's defensive might.

On the basis of strengthening the interrelationships of war and economy, the military problematics of economic science is expanding. It cannot be abstracted from military production but clarifies its place and role in social reproduction, in the specifics of military item production, in the social-economic consequences of war and militarism, and reveals the specific features of economic laws in wartime. The development and illumination of these problems during the process of teaching political economy facilitates a fuller and more specific and corresponding profile to the specialist being trained, a knowledge of the laws and categories of this science, and the ability to give consideration to them in practical activity. Moreover, the solution to these problems has a general basic significance to study matters which are on the border between economic and military science and forms the general theoretical and methodological basis for the military-economic science.

In turn, economic problems are not alien to military science. It has long been engaged with economic problems associated with unit administration and rear services. As military matters and methods of material and technical troop support develop, there is an ever-widening circle of economic problems and administrative tasks become more complex and are matters with which the military must be engaged. At the present time, the matters of armed action against the enemy's economy and the protection of one's own economy are assuming great significance. The efficient solution to these associated tasks presupposes a thorough study of the economics of military science.

All of this causes the need to teach economic disciplines and strengthen attention to military problematics; in the teaching of military discipline — to the economic problems of military building and military activity. One and the other are important roads to raise the military-economic intelligence of officer cadres in military academies and schools. Thus, the chair of political economy and military economics in the Military Political Academy imeni V. I. Lenin prepared a training aid "Military Economic Problems in the Political Economy Course" which was widely acknowledged and used in the military training institutions of the rear. The know-how indicates that this work is successfully conducted there where a good working relationship has been established between the chairs of general sciences and military and special disciplines and where attention is given to raising the military knowledge of political economy instructors and the economic training of military disciplines teachers.

However, many of the military economic problems cannot be viewed as political economy or as military science. They go beyond the frameworks of these sciences and their subjects. Those specific economic relationships which are associated with the production, distribution, and consumption of military products during peacetime and wartime are studied by a new science — military economics. Only it can encompass the entire combination of military-economic relationships. It would be incorrect and infeasible to break them up and artificially include them in peripheral sciences.

In connection with this, in our estimation, this new educational discipline must be studied in all higher training institutions and primarily in rear institutions. This concept had already been proposed in the early 1950's. Recently, suggestions are under discussion to teach a theoretical course of military economics, armed forces economics, and the economics and finances of unit administration. Similar suggestions have already been expressed in the magazine Rear and Supply of the Soviet Armed Forces.

An analysis of these statements is indicative that there exist specific differences of opinion relative to the scope, content, and structure of the proposed training disciplines. This can probably be explained by the insufficient development of this matter and by the fact that the authors of different suggestions base themselves on the features of various training institutions. It is quite understandable that the scope of military-economic knowledge necessary for the commander, engineer, and rear officer are not identical; consequently, it would be desirable to have different training courses in the different institutions of higher learning. But it is necessary everywhere to the same degree. Life and the experience of teaching will indicate the optimum decision in each specific case.

In its decree, the CPSU Central Committee instructed the ministries and departments, with a consideration of the features of branches and production, to determine the approximate volume of economic knowledge for each category of worker and to develop approximate training plans and programs for economic education within the system of raising the qualification of supervisory cadres, specialists, workers, employees, and kolkhoz workers. In our estimation, similar work should also be done in all military cadre training levels, including the rear cadres. In so doing, it appears feasible to provide, in a number of higher institutions of learning, not only for the study of military economics, but also specific economics with consideration for the features of each institution of higher learning. Worthy of attention is the question of raising the qualifications of the professorial-tutorial staff and the training of military economics instructors.

Another vital problem is that of strengthening military economic propaganda among the troops and the economic indoctrination of personnel. More attention is currently given to clarifying the party's economic policy. A number of military economic subjects are studied in the officer

Marxist-Leninist training groups and in the Marxism-Leninism evening universities. Much attention to them is given in the work of the lecture groups and agitation and propaganda collectives. However, the scope and content of this work does not yet fully respond to the requirements of the 24th CPSU Congress. It would be expedient to strengthen it, expand the problematics of economic propaganda, and differentiate it by applicability to specific troop tasks and various categories of military personnel.

Propagandizing the materials and decisions of the 24th CPSU Congress must be in the foundation of this work. It is very important to clearly and coherently show the defensive significance of the Ninth Five-Year Plan which, as noted in the Directives of the 24th CPSU Congress, will be an important stage in the further advancement of Soviet society along the path to communism, in the building of its material-technical base, and in strengthening the country's economic and defensive might. Each Soviet fighting man must have a clear conception of his place in the struggle by the Soviet people to implement this grandiose program.

Now, in our estimation, it is important to expand the thematics of oral and written comments pertaining to military economics. Along with showing the interrelationship of modern war and economics, economic foundations of military might and military building, and the economic problems of modern warfare, a thorough critical analysis is necessary of the military-economic conceptions and measures of economic preparation for war as carried out by the United States and other imperialist countries and military blocs, and the questions of the organization and activity of the rear services of imperialist armies in local wars and major exercises.

A comparatively new topic, military-economic analysis, assumes particular attention. Its discussion requires good knowledge in matters of military science, economics, and the techniques and application of mathematical methods. Here one must have good mastery of the language of prices, figures and formulas, and find accessible ways and forms to make known to each officer the idea and method of an economic approach to the solution of daily tasks. Regardless of how difficult this task may be, it must be resolved as it is something that life demands so insistently.

A large role in the economic education of troops is played by the proper establishment of economic activity at the troop level and a matter in which the rear officers must take a most active part. It would be desirable that this subject would be proclaimed more frequently in propaganda speeches, in discussions by agitators, in reports and speeches made at party and Komsomol meetings and conferences, and in orders issued by commanders and chiefs. A condition for the clarity and comprehension of such comments is the specificity, efficiency, and direct association with the life and routine tasks of chast', ships, and rear installations and enterprises. The best propagandists can be the production leaders, the developers of leading know-how, and personnel outstanding in combat and

political training. It is now important to universally establish an atmosphere in which an economic approach to any matter would be a mandatory requirement and rule for commanders, political organs, and party, Komsomol and trade union organizations.

The instructions of the 24th CPSU Congress to raise the level of all administrative work and of the priority significance of economic education of all cadres and the broad masses of workers have a direct relationship to the armed forces. Their unwavering implementation with a consideration of the specifics of military matters is a most important condition for the effective solution of tasks to further raise the combat readiness of the army and navy.

BETTER, MORE, CHEAPER (pp 20-21)

Engineer Colonel P. Kurashov,
chief of a wood processing enterprise

Our wood processing enterprise manufactures barracks and office furniture which is made available to the troops. The manufacturing process improves year after year. But particularly large work to further improve the technological processes, to reduce the unit cost of manufactured products and improving its quality, and the introduction of scientific organization of labor and raising production standards was performed by the collective during the first year of the Ninth Five-Year Plan by actively participating in the All-Union public inspection on the use of production reserves and economic conditions.

During the first nine months of 1971, improved technology, assimilation of new equipment, mechanization of arduous manual labor, and raising production efficiency made it possible to produce products above plan by 60,300 rubles and to raise labor productivity by 3.4 percent as compared with 1970.

Much has been done by the enterprise's workers to introduce the latest technical and scientific achievements into the wood processing industry. High temperature chambers for lumber drying, which were tested and introduced into production, made it possible to accelerate this process by 1.5-2 times. The economic effect from the use of these chambers was more than 14,000 rubles per year.

Improvements in working conditions, the growth in labor productivity, and cleaning of the ambient air was facilitated by the introduction of finishing items with a heated NTs-218 lacquer with its delivery to the finishing areas by pipelines from a central warehouse. This provides an income of 8,500 rubles per year and the requirement for lacquer solvents was reduced by 8.5 tons.

For the first time in the furniture and wood processing industry of our country, our enterprise used an experimental-test FR-6 joining and

scribing unit designed by one of the institutes. Six units of technical equipment and eight qualified workers were made available from just the introduction of two such units.

We have mastered the series production of new design armchairs with a paneled back. This reduced the requirement for short-supply hard sheet lumber by 1,000 cubic meters per year with the result that 34,000 rubles of income were obtained.

We were able to reduce the need for pine lumber by 2,500 cubic meters per year by modernizing the engineering patterning of lumber on the basis of latest achievements in this field which has improved the design of manufactured items. This is quite a bit. It suffices to say that 45-50 cars are required to transport this amount of wood.

The workers are striving to make maximum use of lumber. Various items of consumer goods in an amount of 40,000 rubles were produced in recent years from production waste; in short, nearly 800 cubic meters of pine lumber and 100 cubic meters of hard woods were saved for the national economy.

Shock worker of communist labor, senior control craftsman S. Zherebkin receives ready products at the painting and finishing sector.

Our collective has no less important tasks to solve in the future. The enterprise is in a state of reconstruction. Labor productivity will

increase one and a half times by increasing the technical level of production and by a more efficient use of machine tool equipment.

The assimilation of new item production is planned. Thus, the currently manufactured chairs are solid and reliable in use but do not answer modern aesthetic requirements; it was decided to replace them with newer ones which have a more improved architectural form. In addition, the new chairs contain less material which, according to preliminary accounting, should provide a savings of 150,000 rubles per year through a significant reduction in the use of hard woods. Preparations for its manufacture are currently going on. Many improvements will also be made into other items. Soon the troops and headquarters will receive new models of barracks and other furniture made by our workers.

Implementing the decisions of the 24th CPSU Congress, the collective is directing its efforts to find new potentials in the growth of production efficiency.

The management, party committee, and the trade union and Komsomol organizations are doing much work to develop creative initiative and activity on the part of the workers brought in to supervise production. This is facilitated by a well-organized socialist competition between shops, departments, work brigades, and sectors and by the prompt and regular summation of its totals. The movement for a communist attitude toward labor has also become a widespread matter. The collective has 270 shock workers of communist labor. Among them are such highly qualified craftsmen as cabinet makers A. Maksimov, N. Kuratov, A. Mishin, V. Sborshchikov, V. Denisenkova, M. Shirokova, and K. Ivanova, machine tool operators I. Kozin, M. Kalinova, M. Gorelik, N. Nikolayeva, and others.

Engaging in the universal movement to successfully implement the Ninth Five-Year Plan, the enterprise's workers have taken on the obligation to complete the plan's first year ahead of time — they carried out their work. The successful implementation of obligations for the second year will be facilitated by further improvement to the organization of competition and by the economic education of the entire collective.

AT WINTER EXERCISES IN THE TRANSPOLAR (pp 22-25)

Colonel D. Gromov

The personnel were roused for the exercise at night. The phones rang in the offices of the chast' duty officer and the podrazdeleniye duty officer. In counted minutes, everything came alive, went into action. The soldiers and sergeants ran to the combat vehicles in the motor pool and to the warehouses by specific route groups. The transport vehicle drivers drove their trucks to the warehouses where loading teams awaited them. Ammunition, barrels with fuel, oil, and lubricants, boxes with food supplies, and bundles of clothing were loaded into the trucks by machinery.

All work was done according to strict accounting and soon the military post was deserted. The combat vehicles and trucks with supplies of material goods were brought to the appointed area ahead of time. Personnel of the rear podrazdeleniye and services acted smoothly. But we would particularly like to mention the chief of fuel supply, Captain N. Veselov. He had thought out in advance, to the slightest detail, the actions his subordinates would take on the alert and on how the fuel supplies would be taken out. The captain systematically holds training with the specialists of his service and with the loading teams and makes able use of all means of mechanization. All of the fuel, oil, and lubricants under the control of Veselov are containerized and kept on scaffolding set up in the warehouse; this made it possible to expand the loading front and to reduce the time of loading operations nearly in half. The officer constantly holds training with the vehicle drivers and they are aware of how and where to bring the vehicles and how to load them quickly.

The fuel supply service specialists also acted with efficiency during the exercise. Thus, the fuel supplies were close to exhaustion in one of the podrazdeleniye. The supplies had to be promptly replenished so that the podrazdeleniye could continue its attack. Implementation of this task was assigned to Private V. Kalneneks, the driver of the ATs-5-375 fuel truck. Under poor road conditions and in the polar night, he found the podrazdeleniye, quickly set up the technical facilities and, earlier than required by the norms, refueled the equipment. The driver acted in this way because

he was very competent in the arrangement of mechanisms and equipment on his vehicle and was well-trained to operate under field conditions. For his successful actions during the exercise, driver Kalneneks was commended by the command — he was given a short leave.

We began our talk about this exercise, held at the end of last winter, because it was particularly characteristic for the Transpolar where the climate forces the personnel frequently and in August to don their overcoats and for the podrazdeleniye to have tents and stoves at which to warm up.

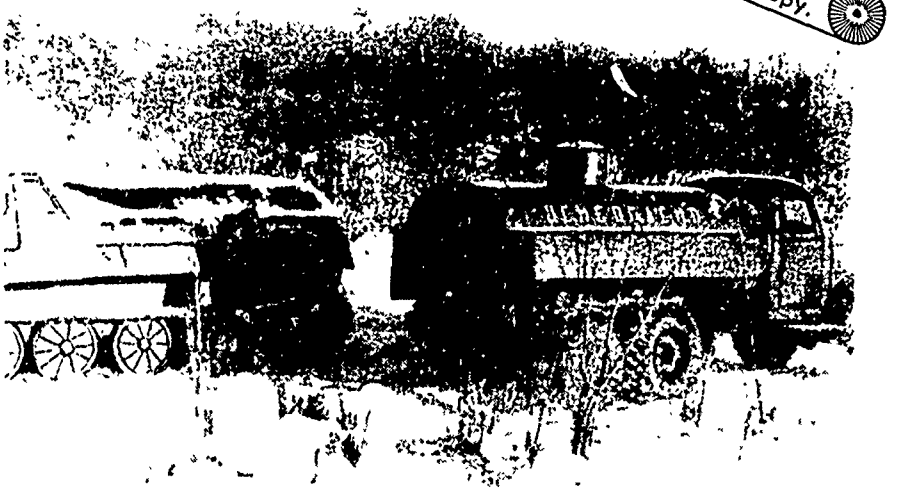
The climatic and physical geographic conditions of the Transpolar introduce many features into troop activity and the work of rear podrazdeleniye. These are the hard-to-cross mountain-tundra and swampy terrain thickly strewn over with boulders and fragments of rock, the duration of the snow cover when there are snowstorms not only during the winter but also in the spring. At times, the strong winter creates a solid white blanket which sharply reduces visibility. Also, snowfalls and snowstorms arise frequently and sometimes unexpectedly.

Knowing these conditions of the Transpolar, the commanders, political officers, and supply service officers are concerned that the personnel would be provided with clothing and footwear to give protection against the cold, wind, and moisture and that the soldiers would have the opportunity to get warm and to rest.

By the way, warming-up points were organized during the exercise which we are describing. These were set up along the main axes of troop movement and had the goal to create conditions in which the troops could rest. The following were available at these points: hot tea and dry ration items, a certain supply of warm clothing and footwear, skis and their accessories, dark glasses, and current newspapers and magazines. Even if for a short time, the tired soldiers, either individually or as part of the podrazdeleniye (based on the specifics of the tasks being performed and the amount of time available), could enter these areas to warm up in the heated tents, receive medical attention if necessary, and continue to carry out their assigned missions.

The work of the warming-up points was ably organized by Major V. Ovchinnikov and by the troops assigned to him. Resting in these areas, the personnel of the combat podrazdeleniye warmly thanked their rear specialists for their concern.

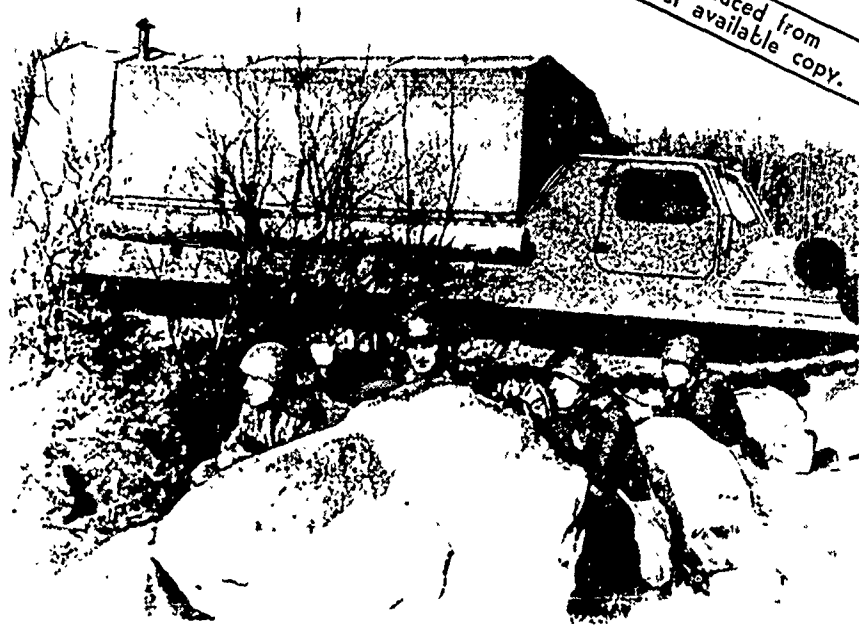
The exercise was prolonged and intensive, the rear podrazdeleniye coped with their assigned missions. The food supply service specialists acted skillfully and with ingenuity. Hot meals were prepared and delivered to the podrazdeleniye strictly within the time set by the commander. The pauses between the "battles" were used as the time at which to take meals. The commanders of the battalion supply platoons showed good organizational capabilities.



. . . . supply service specialists worked selflessly during the tactical exercise. During "battle" and under difficult northern conditions, they promptly refueled podrazdeleniye equipment. In the photo: a caterpillar prime mover is fueled.

It must be mentioned that the role of these junior rear specialists is a great one. They currently carry out many complex and responsible tacks on which the success of the battalion's actions depends: they implement the delivery of ammunition, fuel, and food supplies, provide warm clothing, and so forth. The complexity and variety of tasks require that they not only have outstanding special knowledge but also good tactical training. Without knowing the nature of modern battle and the requirements placed on rear support, even of such a small podrazdeleniye as a battalion, they would not be able to promptly support the personnel and equipment with all of the required materiel.

As an example, we have Master Sergeant reenlisted service I. Savik the supply platoon commander. According to the developing situation at one of the exercises, he provided support to many specialists: combat engineers, signalmen, and scouts operating in various areas. This created specific difficulties. But Savik successfully coped with the missions facing him. He carefully planned all of the work and calculated it by time, maintained uninterrupted communications with his commander and the podrazdeleniye. Platoon personnel carried out orders and instructions of senior officers precisely and on time. In all of the actions of the platoon personnel, one could sense that they were led by a demanding individual, a capable organizer, and an individual possessing the necessary tactical and special knowledge. Master Sergeant Savik orients himself well in a situation and makes decisions quickly.



training military medical personnel in the field. An input was given of an attack by enemy ground troops. Lieutenant medical service L. Snitsarenko (second from left) supervises the defense of the regimental medical station.

Other supply platoon commanders also acted proficiently during the exercises. As a rule, their actions were more precise and efficient where there was the proper supervision given by battalion commanders and where tasks to supply platoons on rear support were given not only when it was necessary to feed the soldiers, but constantly, at every change in the situation.

It is therefore very important that the battalion commanders would always understand that the success of company combat operations depends on the activity of the supply platoons and that they would teach the personnel how to act in a true combat manner under field conditions.

Senior Lieutenant medical service Yu. Orekhov, the chast' doctor, showed himself to be a good specialist during the exercise. Possessing the requisite organizational skills, he ably conducted the training of subordinates and was constantly concerned with the equipping of regimental and battalion medical stations. These were set up on caterpillar snow-and-swamp tractor-transporters. The doctors took the experience of the Great Patriotic War into consideration. And this indicated that the percentage of frostbite to wounded in the Transpolar was significantly greater than in other theaters of military operations. The highly mobile battalion medical stations now make it possible to quickly provide assistance to the wounded.

The subordinates of officer Orekhov demonstrated high field skills while operating in a "center of mass casualty." When the "enemy" delivered a "nuclear strike" against one of the battalions, the chast' medical station arrived promptly and deployed at the edge of this center. Rescue operations were quickly set up and medical assistance organized.

Many other rear personnel also worked selflessly. In analyzing the actions of each specialist and of each rear podrazdeleniye as a whole, and summarizing the know-how of the winter-held exercise, the conclusions may be made that success will be ensured when fruitful combat, political, and special training is constantly conducted in the rear podrazdeleniye and services. The task now is to further conduct troop training and education with a maximum consideration of all that is new, all that is brought forth in military theory and practice, so that the entire process of combat training would correspond to the actual demands of modern battle.

During the exercises which we have described, the rear personnel gave all of their effort to fulfill the assigned missions. A large role was played by the communists and the party and Komsomol organizations in mobilizing the personnel to give irreproachable support to the podrazdeleniye. Life itself has often confirmed that not only is ammunition, food, and warm clothing necessary in the difficult conditions of combat operations, but also the heartfelt words of the communists. Many of the rear personnel, seeing how the older members, party members, and Komsomol members work during the exercises, followed their example.

We would also like to pause on a few other matters. In the northern regions, the deployment and actions of rear podrazdeleniye take place primarily along existing roads. This, naturally, causes the lines of communications to stretch out, which hampers control, especially during delivery and evacuation. For this reason, in our estimation, there should be a few more radio sets available which could be supplied to motor vehicle columns delivering material goods along separate directions. Some commanders are now doing this by redistributing their internal resources when such possibilities exist and carry out these matters quite well.

A number of articles published in the military press concerning organization of material support for the troops have already indicated that in the Transpolar good use has been made of kitchens mounted on tractor trucks. Such vehicles would be quite applicable for fuel delivery as well. But to do this, thought should be given to the matter of mounting four-ton containers on them and to equip them mechanically for rapid fueling of combat vehicles.

Another matter. In the north, felt boots should be an inseparable part of the equipping of each soldier. The prolonged winter demands that they be used for a period of many months. But there is also damp weather in the fall and spring. Quite obviously, thought should be given to improve the felt boots so that they could also be worn during thaws. Experience tells us that they should not be made with the tops above the knees, as

this hinders the soldier's movement, not only when on skis, but also when afoot and even more so when he is in a tank, combat vehicle, or armored personnel carrier. The samples of felt boots delivered to the Transpolar areas made with a microporous sole have recommended themselves well. It seems that further improvements must be made in the clothing and footwear for soldiers serving in the northern regions.

Rear personnel train during the winter in training fields and proving grounds along with the men of the combat podrazdeleniye. Their common efforts are directed to further raise the field skills and combat readiness of the troops in the forthcoming training year. An indication that this task will be successfully carried out is the new uplift in socialist competition which has started up in the chast' and podrazdeleniye on the call of the motorized rifle regiment personnel of the Guards Motorized Rifle Proletarian, Moscow-Minsk Order of Lenin, Twice Red Banner Orders of Suvorov and Kutuzov Division of the Baltic Military District.

ROLE AND ACTIVENESS OF PARTY MEETINGS INCREASE (pp 26-29)

Colonel V. Bol'shakov, deputy chief of the political department of the Rear Staff and Directorate of the Ministry of Defense

In carrying out the decisions of the 24th CPSU Congress, the party organizations of the rear directorates and installations of the USSR Ministry of Defense have noticeably raised the level of intraparty activity. Its content has become richer and its forms more varied. Party influence has strengthened on improving the workstyle of the apparatus, on the proficient decision of assigned tasks, and in raising the combat readiness of rear agencies. More attention is now given to studying the Lenin theoretical inheritance, matters of party building, and adherence to Lenin norms of party life. Education and training of the party aktiv and supervision over trade union and Komsomol organizations has improved.

In the solution of all of these problems, an extremely important role belongs to the party meetings as a school of political education of communists. As the higher organ of party organization, the meeting defines the basic directions in the activity of communists, expresses their collective know-how, will, and thought, and has a decisive effect on observance and development of intraparty democracy and strengthening party discipline. A free and business-like discussion of matters of party work during meetings is a firm foundation upon which to develop a unity of views and actions by communists.

The increasing role and prestige of party meetings in rear directorates and installations and their ideological influence on the masses was facilitated by the decree of the CPSU Central Committee "On the practice of holding party meetings in the Yaroslavl' city party organization." Meetings were now better prepared, held in a more organized manner and regularly, and held within the time periods as specified by the Bylaws of the CPSU. The activity of the communists has also raised significantly. All of this strengthens party influence on the life and activity of rear personnel and facilitates a more successful solution on their part of rear troop support.

Discussions are systematically held during party meetings and sessions of the party bureau on the most important problems emanating from the decisions of the 24th CPSU Congress and the decrees of the CPSU Central Committee and the Soviet government, on problems of ideological and organizational work, on improving the workstyle of the communists, on raising their influence on the combat, political, and special training of personnel, and in strengthening discipline and organization. More often now, the orders of the day include matters on military-scientific and research work, on the struggle for economy and thriftiness, on intraparty life, on raising the ideological-theoretical level of the communists, and on ensuring that they observe the requirements of the CPSU Bylaws.

With the publication of the CPSU Central Committee decree "On further improving the organization of socialist competition" and "On improving the economic education of workers," a study of these most important documents and work on implementing them started up in the party, trade union, and Komsomol organizations. Tasks emanating from these decrees were discussed at party and trade union meetings and at seminars of Komsomol organization secretaries. As an example, the open party meeting in the party organization where A. Losev is the secretary was very interesting and businesslike. The report made by V. Bukreyev and talks by communists thoroughly analyzed the status of socialist competition and on the work for its further expansion. It was noted that in some enterprises, the individual obligations have a general nature, there is no due struggle among the communists to raise service qualifications, and mutual assistance is not always organized. Much was also said about the need to give indoctrination in a communist attitude towards labor, a feeling of responsibility for the implementation of plans and assumed obligations, and to raise economic knowledge with the aim of resolving production tasks to the optimum degree.

The tasks of the communists emanating from the listed decrees were also discussed in other party organizations. In the interests of better implementation of planned tasks and to raise labor productivity, they, jointly with executive personnel, planned specific measures to further expand socialist competition and to improve the economic education of personnel.

A party meeting, held in one of the directorates, was quite interesting and came under the slogan "On initiative and a feeling of the new in the work of the communists in light of the demands of the 24th CPSU Congress." The workstyle of the communists in the directorate and when on temporary duty with the troops was analyzed in detail in the report given by the secretary of the party organization D. Pirogov and in the talks given by communists V. Tyurin, P. Kirillov, M. Shapovalov, V. Nikonov, and others. Particular attention was given to coordination of actions with subordinate institutions, on propagandizing leading know-how, on the development of methods aids, and on what are important things in supporting high combat readiness. Shortcomings were noted in the matter of educating personnel, in the conditions of discipline, and in economic

effort. The communists plan specific measures to improve their activity and service as a whole.

It should be mentioned that after this meeting, there was a noticeable increase in the activity and militance of the lower party organizations, demandingness toward the communists strengthened, and more creativity and initiative in work began to be manifested. Individual communists told the party collectives how they are raising their political, military, and special knowledge and are fulfilling their functional obligations. The communists are now giving more attention to the matter of introducing scientific organization of labor, all that is new, and all that helps to improve the work of the collectives into the apparatus and into the troops.

The content of party meetings has now improved noticeably. The characteristic feature has now become the inclusion of more vital matters into the daily routine and the circle of speakers has increased. Among them, as an example, are the chiefs of directorates and installations, their deputies, party organization secretaries, party committee and party bureau members, and rank and file communists. More communists now desire to express their thoughts at meetings and to introduce suggestions on how to improve party work. An analysis of the meetings shows that in the primary party organizations, between accounting reports, up to 80-90 percent of all communists who are on record give talks.

In their turn, the party committees and the party bureau raised their demandingness to communists who manifested passiveness in meetings and took stricter measures against those who are absent from meetings without due cause. The questions of implementing the decisions of the accounting-elective party meetings and suggestions of communists are periodically discussed in the party organizations. This work has become particularly active during the accountings and elections taking place in the party organs. A usual form of practical activity has become that of informing the communists on the implementation of decisions made in previous meetings.

In the party organizations where the secretaries are D. Slipak, V. Medvedev, G. Mukhortov, and M. Larionov, the secretaries, or rank and file communists on their instructions, make an analysis prior to the meetings of what has been done to implement previously approved decisions and what still remains to be done and then present their reports at the meetings. In the decisions on these matters, not only is a note made that it has been "taken under advisement," but necessary recommendations are also given and the attention of appropriate members or party organization secretaries is directed toward poorly implemented individual realization of previous decisions. This raises the responsibility of the communists, of the rank and file members, of the leaders, and also of the party bureaus for their precise and undeviating implementation. Better records are now kept of critical comments, which, in its turn, facilitates control over elimination of shortcomings.

More and more communists now give talks at party meetings and sessions of the party committees on how they perform their service and party

obligations. For example, considerable attention is given to this matter in the party organization where V. Nevskiy is the secretary. This year, many communists reported during party meetings on how they are carrying out their service obligations, party assignments, and special tasks during their visits to the troops.

The political department of the Rear Staff and Directorate of the Ministry of Defense, in supervising the party organizations, has concentrated its activity on a firm implementation of the requirements set forth by the 24th CPSU Congress. As a result, there has been an improvement in intraparty work, control has been strengthened over party meetings, and more assistance is given to readying the meetings. The political department has set up a permanent record of the times when party meetings are held and the matters discussed at them. This makes it possible to do advance planning as to which workers of the political department should be sent to the party organizations to render assistance in readying the meetings and in participating in them; in controlling the regularity with which they are held; in analyzing the daily routine and, when necessary, to recommend matters which should come under discussion in the near future.

The political department is now summarizing the positive know-how of party organizations in readying party meetings in a more purposeful manner. For this purpose, a study was made of the practice of holding meetings in a number of party organizations. The results of the study were discussed in detail in light of the requirements of the 24th CPSU Congress at a seminar of party organization secretaries. Communists of the political department spoke on this matter to the party aktiv of directorates and institutions. In analyzing the party meetings, particular attention is given to their content, that is, to the questions which are reviewed by the communists, to the level of criticism and self-criticism, and to the specificity and actuality of approved decisions.

We also follow this practice in which one of the staff workers informs those present at service conferences in the political department as to the analysis which he has performed. For example, in the party organization where V. Protas is the secretary, political department staff worker N. Petrov took part in preparing and holding the party meeting. At a regular conference of political workers and secretaries of directorate and installation party organizations, he provided information as to the previous meeting, after which the chief of the political department set specific tasks before the conference members to further raise the ideological level, quality, and actuality of party meetings.

During preparations for the party accounting and election meetings, the political department heard out several political officers of the directorates and installations. Taking part in holding the meetings, our comrades always inform the communists as to the activities of the political department, the problems being solved, and of the state of affairs in the party organizations. The members of the political department's party commission always give talks to the communists concerning the analyses of

their work on acceptances into the party and reviews of personal matters. The political department follows the practice of exchanging thoughts between staff workers on participation in party meetings and a record is kept of critical comments and suggestions made at these meetings by the communists.

A record of party meetings, expressed comments, and an analysis of routine matters is also done in those party organizations where party committees have been set up.

Work experience indicates that where proper attention is given to improving the practical work of preparing for and conducting meetings, there is where you find a noticeable increase in the mobilizing and organizing role of the party organizations, their influence on all facets of life and activity of the communists.

Recently, matters have been discussed in a number of party organizations of the rear staff and directorates of the Ministry of Defense during meetings and at sessions of the party committees and party bureaus associated with improving the intraparty work in conjunction with the decisions of the 24th CPSU Congress. The summaries, as well as an analysis of the initially-held accounting-election meetings, indicate that the communists are critically evaluating the results of their work, properly understand the tasks set before them, and are actively struggling for their implementation.

Nevertheless, shortcomings do exist. For example, in some party organizations the daily routine is too general, not specific, problems are not precisely formulated, with the result that comprehensive discussions cannot be carried out. In some places, the circle of lecturers, especially from among rank and file communists, is expanded with great timidity. In individual party organizations, such as the one where A. Maurus is the secretary, the periods for holding meetings as provided for by the Party Bylaws are violated. Some decisions approved by meetings are too general, declarative, nonspecific, and do not obligate anyone to anything. The communists are not always and everywhere regularly informed as to the fulfillment of approved decisions, and at times there is no thorough analysis of the state of affairs or the reason why measures have not been carried out (party organization secretary V. Tarasov). The necessary conditions have not been established in all of the party organizations for honest discussions and revelation of shortcomings, and here and there one notices facts of one-sided criticism directed primarily against communists of subordinate services, chast', and installations.

Now the party organizations of the rear staff and directorates of the Ministry of Defense are continuing with great enthusiasm the work to further implement the decisions of the 24th CPSU Congress. In summarizing the results of accounts and elections, they are striving with a common effort to introduce the novel and the positive into party work, to eliminate shortcomings, and to do everything so that each meeting of communists would be an important landmark in the life of the party collective, an organ of collective supervision, and a school of political education of the communists.

MEETING WITH PARTY AND KOMSOMOL VETERANS (pp 28-29)

T. Svechkin

Komsomol members of the rear staff, directorates, and installations of the USSR Ministry of Defense were recently visited by party and Komsomol delegates to the 3rd RKSM Congress of Komsomol members in 1918: poet A. A. Zharov and an active participant in the October battles and organizer of the Communist Union of Youth of the Red Press A. I. Litveyko. Also attending the meeting were Ye. F. Aleksanyan, a staff worker in the USSR Central Order of Lenin Museum of Revolution, and A. I. Petrov, scientific staff worker at the Institute of Marxism-Leninism of the CPSU Central Committee. Komsomol banners of those who took part in the first revolutionary battles in Moscow and on the labor front of the First Five-Year Plan, were brought from the Museum of the Revolution and set up on the club's stage. The Institute of Marxism-Leninism sent to this evening a restored sound recording of one of the speeches given by V. I. Lenin to Red Army personnel in 1920.

The quiet hall listened with great inspiration to the voice of the great leader, removed by decades, but close and dear to the heart of every Soviet individual. In those trying years, V. I. Lenin spoke of Soviet rule and the Red Army, of those tasks without whose solution there would be no existence for the young Soviet state. In solving these tasks, the party relied on its true assistant, the Komsomol. Because of its loyalty to the ideals of communism and to party matters, the Komsomol has earned the deep respect and love of all of our people. The guests were then given an opportunity to speak. Comrades Zharov and Litveyko shared their recollections of the meeting with Lenin during the 3rd Komsomol Congress. In those years when the young Soviet republic was in a ring of fronts, when civil war had erupted everywhere, V. I. Lenin called upon the young generation of the just-born land of soviets to study communism.

Those attending the evening listened with great interest to the story by comrade Petrov of the searches and finds of little-known pages in the biography and activity of V. I. Lenin.

The Komsomol members and the youth, together with comrade Aleksanyan, took an interesting journey into the revolutionary past of Moscow. She described derivation of the street names in Moscow linked to the names of Komsomol members — hues of the revolution and the civil war. All listened with great interest to her story about the history of the Komsomol banners kept in the Museum of the Revolution.

At the conclusion of the evening, the youth warmly thanked the party and Komsomol veterans for their very interesting talks.

EXCERPTS FROM BOOKS

From the Book "History of the Communist Party of the Soviet Union" (p 30)

At the beginning of December 1941, the Soviet troops at Moscow shifted to the counteroffensive and inflicted a major defeat on the Germans. Simultaneously, powerful blows were delivered against the enemy at Rostov and Tikhvin. A general offensive by the Red Army began. By the end of February 1942, it had moved westward by more than 400 kilometers in some areas, and liberated Moscow and Tula oblasts and many rayons of Kalinin, Leningrad, Orlov, and Smolensk oblasts.

The German defeat at Moscow and the successful Red Army offensive during the winter of 1941-1942 was of great military-political and international significance. These victories attested to the inexhaustible strength and might of the Soviet state and its army. The rout of the fascist troops at Moscow was the most decisive military-political event of the first year of the Great Patriotic War, began its fundamental shift, and was the first major defeat suffered by the Hitlerites in World War II. The fascist plan for a "lightning war" was completely disrupted and the myth of the German army's invincibility was destroyed. The Hitlerite concept as to the instability of the Soviet social and state structure and of the Soviet rear turned out to be false.

From the Book "The Rear of the Soviet Army" (p 43)

During just November-December of 1941, 2,258 troop trains arrived around Moscow. The total volume of military shipments to support the fronts participating in the battle of Moscow was 333,500 railroad cars, of which nearly 80 percent were operational shipments. Along individual sectors (Ryazan'-Ryazhsk, and others) 60 trains per day came in for unloading by the end of November. In a short period of time, 39 divisions, 42 brigades and other soyedineniye and chast', as well as a large quantity of arms, equipment, and materiel were transported to Moscow.

In order to accelerate troop train movement to Moscow, additional troop detraining areas and stations were set up, forced unloading of

secondary freight was carried out, trains were passed through "live" blocking signals, and a number of other measures were implemented. This helped to improve the work of the railroads. In January 1942, 1,057 railroad cars with arms and ammunition, 3,753 cars with fuel, 773 cars with provisions and forage, and 62 cars with other supply freight were delivered to the Western Front by railroad.

From the Book "The Great Patriotic War of the Soviet Union, 1941-1945. A Brief History." (p 52)

The successes of the Red Army achieved during the 1941-1942 winter campaign became possible primarily because the Lenin party inspired the Soviet soldiers and all Soviet people to great universal deeds, to mass heroism. The military-organizational and military-ideological work of the Communist Party in the army and navy was of utmost significance. The troops were able to implement the strategic and operational decisions of the command because the party welded and cemented the ranks of the army, inspired the troops to perform deeds, and strengthened their faith in the heroic strength of the people and in victory over the enemy.

THE ENTIRE NATION FORGED THE VICTORY (pp 30-38)

Lieutenant General (Retired) K. Telegin*

Moscow. An ancient Russian city, the capital of our homeland, the symbol of unity and cohesiveness of the Soviet people. This is a city of high culture, a major industrial center, and an important transportation terminal. Here, the great Lenin lived and worked in the Kremlin.

In the fall of 1941, a deadly danger hung over the city, a city dear to the heart of each Soviet individual. The bandit hordes of fascist Germany were streaming toward Moscow. They wanted to pillage and destroy our national riches and cultural valuables, decimate the Soviet people, and bury the city under water. There where Moscow stands today, said Hitler, there will be a sea which will always hide the capital of the Russian people from the civilized world. But fate would not let these mad plans come to pass. The Red Army and the Soviet people did not let the fascist barbarians bespoil the treasures. Moscow stood firm. Moscow won.

Thirty years have gone by since the great victory at Moscow. This was one of the most gigantic engagements the world had ever seen. Two million armed people, tens of thousands of guns and mortars, and thousands of tanks and aircraft took part in this great and fierce hand-to-hand battle. Here two opposing ideologies, social and state systems, clashed head on. The young, maturing, and ever-strengthening force of Marxist-Leninist ideology, the socialist system, relying on objective laws of social development, held firm and was victorious. The flaccid capitalist system, with all of its superstructure, was defeated, the adventuristic ideology and policy of imperialism's shock force in the form of German fascism was defeated.

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* K. F. Telegin was a member of the Military Council of the Moscow Military District and the Moscow Zone of Defense during the battle of Moscow.

In the heroic annals of the Great Patriotic War, the victory at Moscow is one of the brightest pages. It was here, for the first time in World War II, that the colossal military machine of Hitlerism not only spun its wheels and was stopped, but also suffered a major defeat. It was at Moscow that the adventuristic strategy of "a lightning war" was buried and the myth of the "invincibility" of the fascist Wehrmacht was destroyed; the plans of Hitlerite Germany to achieve world supremacy were crushed.

This victory clearly demonstrated to the entire world the strength and might of the socialist state, the high patriotic feeling, the great bravery and firmness, the unity and cohesiveness of all Soviet people under the victorious banners of Lenin, and the complete faith in the policies and practical activities of the Communist Party.

The victory at Moscow greatly raised the international prestige of the Soviet Union and its armed forces, gave wings to the belief in the rapid liberation of peoples enslaved by fascism, and inspired them to take active part in the struggle. It had a decisive effect on strengthening the anti-fascist coalition, facilitated the upsurge of national-liberation movement and had a shocking effect on the aggressive circles of Japan and Turkey who were awaiting a convenient time in which to attack our country.

The defeat of the fascist troops at Moscow strengthened in the Soviet people their unwavering faith in the inevitability of Hitlerite Germany's defeat, and brought forth a great upsurge in their combat and labor activity. The Soviet people were once again convinced in the might of their beloved army, of its capability to defeat a strong enemy. The people were once again assured in the organizational genius of the Communist Party, its bravery, and its decisiveness to bring its people to victory through the most trying tests.

There is a popular saying: All that is great and heroic can best be seen at a distance.... Through the prism of past years, we have truly comprehended the greatness of the deed performed, of its universally historical significance for the fate of our homeland and for socialism.

Beginning the "last and decisive" attack against Moscow, Hitler confidently stated this is his order of 2 October 1941: "Finally, the prerequisites have been set for the last mighty blow which, prior to the beginning of winter, should bring about the enemy's destruction.... Today begins the last great and decisive engagement of this year."

Yes, the enemy did apply pressure of great strength. With heavy blows of his battering rams, he was able to break deep into the rear of the fronts covering the capital. There were very few field troops in front of his break-through units, the reserves of the Supreme Headquarters were in the deep rear, and to the enemy it seemed that his goal was close at hand. Hitler and his handymen began to beat the victory drums, nauseatingly shouting to the whole world that the Red Army was broken and would never be able to restore its strength. And on 12 October, Goebbels left space

in all the newspapers in which to place the sensational communiques of the triumphant entry of the "invincible army" into Moscow.

Days and weeks went by, but the desired dream was just as far as it was at the beginning of the treacherous attack. The plans of a "lightning" war and an uninterrupted move toward Moscow shook in all their seams. The triumphant march into Moscow did not take place.

By their very nature, the adventurists just could not know that Moscow is not a simple geographical point but is the heart of the people, its honor and pride, that they would fight for it with unbelievable fierceness, that Moscow could only be taken by ripping the heart out of the population itself.

Standing in the enemy's path and heroically fighting against him were not only military chast' and soyedineniye, but also the entire population of the city, the entire multimillion country, ready to fight the fascist horde to the death.

We recall the battles at the approaches to the Mozhaysk defensive line. Here, just as at other sectors, the Soviet troops, with unparalleled bravery and firmness, defended each pound of native soil. The enemy was overwhelming with his strength and equipment, subjected our positions to destructive fire onslaughts from the ground and the air, launched vicious attacks, and carried out flanking movements. The Soviet troops withstood the test; not only did they withstand it, but they became even more tempered in their deadly hatred toward the enemy, their desire to hold and defend their capital.

In the name of the homeland, the party told the soldiers: "Stand to the death," and they stood, as this was done by a battalion of officer candidates from the Podol'sk Infantry School under its commander, Captain Chernysh and Commissar Kurochkin on the Maloyaroslavets line. They died like heroes; but the enemy, delayed at this sector, paid dearly. Standing to the death at Borodino, the field of Russian glory, was the Far Eastern division of V. I. Polosukhin, together with the officer candidates of the military-political school imeni Lenin and other chast'. The men of Panfilov fought bravely at Volokolamsk. Together with the officer candidates of the school imeni RSFSR Supreme Soviet and other podrazdeleniye, they delivered telling blows against the enemy.

The enemy was worn down, drained of blood, and drained of strength; and while still 80-100 kilometers short of Moscow, was forced to come to a halt. This was the great importance of victory. The country and our troops gained time to prepare for the last decisive battle at Moscow.

Nevertheless, November also was stern and threatening. The danger grew anew. The enemy captured Kalinin, besieged Tula, and approached Serpukhovo and Tarus. Day and night the airborne predators carried out their criminal flights, counting on demoralizing the defenders and

disorganizing the delivery of reserves and materiel to the fighting troops. But his hopes were built on sand. On the call of the Moscow party organization, all of working Moscow rose to defend the beloved city. For most on the battle and labor front were the communists. In a matter of days, more than 50,000 Muscovites took up arms and occupied defensive positions on the near approaches. In a short period of time, through the heroic effort of the inhabitants, the city was encircled with powerful defensive structures and Moscow itself was transformed into an unapproachable fortress and arsenal of the front, supplying the defenders with everything necessary to destroy the enemy.

A 1941 poster (Defend Beloved Moscow).

I do not know if there is a measure which can be used to measure the strength of fire of the patriotic feeling and love toward the homeland and to the beloved capital which enflamed the Muscovites during these trying days and which found its expression selfless labor for the front. Some 450,000 workers, of which 75 percent were women, went out with shovels, pickaxes, and wheelbarrows to build the defensive structures. Under penetrating autumn winds, rain, and wet snow, under the bombs and bullets of enemy aviation, they worked without rest, without counting time, and overfulfilled the construction and earth-moving activities by 2-3 times. It seemed that some unseen titanic force dug the deep furrows of trenches, antitank ditches, escarpments and counterescarpments, covered the earth with imperceptible mounds of reinforced pillboxes, earth and timber bunkers, and dugouts, barricaded the arterial roads with steel hedgehogs, concrete piles, and timber falls and barricades.

Manufacturing shells in a Moscow plant.

The party called them to this deed. It told them: "You must rupture the plans of the Hitlerites at all costs ... we must increase the work tempo. Each suburban Moscow town, each village, each station, each area of the city, each street and every house must be transformed into a defensive fortress, we must be ready to meet the enemy in fierce battle, in street battle." And the Muscovites replied: "We are your sons and daughters, Moscow! We are yours forever! We built you during the years of the five-year plans, we will now defend you. Thousands of us Muscovites have gone out to do defensive work. We are not afraid of heavy labor, we will spare neither strength nor health. We will work from dawn to dawn."

And so they worked. And in this way they made a weighty contribution to victory.

Much, but not all, has been said about the great labor upsurge performed by the Muscovites during those days and months of stern testing. Under enemy bombs, on the platforms of evacuated plants, the working class of Moscow, our heroic women, youth, children, coming to replace those who had gone off to the front, the old guard of the working class, the pensioneers, produced mortars, rifles, submachine guns, antitank guns, and guns on the equipment left behind. They gave as many submachine guns to the defenders as did all of the specialized enterprises of the People's Commissariat of Arms. Many of the enterprises and cottage workshops provided the troops of the front with means with which to destroy the enemy, accouterments and uniforms, and repaired combat equipment.

The working class of Moscow and the Moscow area, together with the heroic railroad men, assumed the burden of immense significance, that of evacuating in a short period of time the most important enterprises together with their qualified cadres and families to the east — this comprised more than half a million children, women, and old people. The deeds of our glorious railroad workers is that they transported a great number of troops and materials necessary to sustain them from the deep rear to the front.

During just the most critical days of November, 353 troop trains were unloaded in the area of the Moscow defensive zone. All of this in spite of the fact that during the five months of the war, the enemy carried out 5,939 air sorties over the roads of the front and the Moscow railroad center. They were people with the stout hearts of patriots and iron will. This is what N. I. Kalinin said of them: "Our railroad workers performed a gigantic job. They moved mountains of equipment, materials, grain, and millions of people saved from the fascist barbarians over thousands of kilometers from the west to the east. The country will not forget this and highly values the railroad transport workers for the work they have done."

Yes, the entire country defended Moscow, they fought on all fronts of the Great Patriotic War for Moscow, beginning with the largest ob"yedineniye and soyedineniye and ending with the smallest podrazdeleniye and garrisons. I recall an inspirational page in the annals of the war — the calls between Gangut and Moscow. Besieged on all sides, the heroic garrison of Khanko peninsula (Gangut) in the gulf of Finland sent a letter to the defenders of Moscow which "Pravda" published on 2 November 1941. This letter cannot be read without emotion. We decided to write an answer to the heroes of Gangut. "Pravda" also published this answer. In it, in part, we said: "Know ye, dear friends and brothers, that the fascist beast will never break us. We vow to our motherland, we vow to all the people, that we will fight the enemy day and night and will spare neither our strength nor our life itself. We vow to hold Moscow."

A party meeting in the Nth chast' during the battles for Moscow.

No matter how difficult it was in those days, on 7 November, the day of the 24th anniversary of the Great October, a military parade was held on Red Square in Moscow according to tradition. On that windy day of the early

winter, its participants — infantrymen, cavalrymen, artillerymen, and tankmen — dressed in good quality warm clothing and armed detachments of workers went directly from Red Square to the front, they went to those areas of the battle where the enemy was applying particular pressure. The parade had a great political and military significance. It inspired the soldiers to perform military deeds and inculcated all with a firm conviction of victory. Day after day the defenders of Moscow strengthened their resistance to the enemy and made ready to defeat him.

The second half of November began. Hitler rained thunder and lightning against those around him for these unforeseen delays, threatened to level Moscow to the ground, to drown it together with its inhabitants. He demanded that at all costs the insubordinate city be taken before winter, he inflamed the base instincts of rape and pillage among his soldiers. He had this to say to them: "In two years of war, all capitals on the continent bowed before you, you marched through the streets of the best cities. There is just Moscow left for you. Force it to bow, show it the strength of your weapons, walk through its squares. Moscow is the end of the war. Moscow is your rest. Forward." Fooled by fascist propaganda, feeling the closeness of rich takes, assigned to posts in the best buildings in Moscow, and carrying their parade uniforms in the unit trains, the Hitlerite troops made their last desperate effort.

At one time Boris Polevoy made a good comment, saying that in defending their homeland, our people followed the example of their favorite hero-warrior of Russian epos — Il'ya Muromets. The harder the enemy pressed, the mightier and heavier became his hand; the greater the number of enemies approaching him, the faster did his strength build up. So it was in this battle... The comprehension of the danger and the magnitude of the tasks filled the fighting men with the strength of heroes and, with unbelievable steadfastness, they met the awful blow of the armored hordes, fell back a bit, but stood firm.

Approaching to within 25-30 kilometers of Moscow from the north and northwest and to Kashir from the south, the enemy began to celebrate. On 2 December, the commanding general of the "Center" army group, von Bock, wrote in his orders that the defensive strength of the Russians was near complete exhaustion, that there were no more reserves, and called upon the soldiers: "Forward, to Moscow." The chief of the general staff of ground troops, General Calder, wrote in the diary that the battle had reached its culminating point and Moscow was now practically in the pocket; Goebbels again kept space open in the newspapers for the sensational news on the fall of the Russian capital. In their letters home, the Hitlerite soldiers wrote of the valuable presents that they would bring to their relatives.

But how far were these daydreams from reality. The adventurists frequently dreamed of Moscow, but they did not see the heart and soul of the Soviet person, they did not understand the great organizational and mobilizational force of the Lenin Communist Party, its organic and unbroken link with the people. The achieved successes blinded the fascists, turned

their heads, and the victorious drumbeats of battle intoxicated them and clouded intelligent thinking. They did not see and did not know that in these very days of the end of November and the beginning of December, a strength was flowing into the troops standing on the Moscow defensive line and into the ob"yedineniye of the front which not only dependably closed the gates to Moscow, but would also deliver a destructive blow.

To replace the fallen and tired, to fill the ranks of the wonderful defenders came tens of rifle divisions and brigades, and tank, artillery, guards mortar, and Pacific sailor soyedineniye and chast'. The Supreme Headquarters committed three new armies of the reserve into battle. The 20th, 24th, and 60th armies were formed on the defensive lines of the Moscow zone; together with the Moscow workers' militia, this was a 200,000 man, well-trained and armed and winter-equipped striking force. One really had to be blind in order not to see such a powerful force concentrating under one's very nose and to continue screaming to the entire world as to the complete destruction of the Soviet army and the depletion of its reserves.

Looking back on those stern days, we cannot but bow before the great bravery and energy of our Communist Party, of the Soviet government, and of the Supreme Field Headquarters of the Supreme Commander-in-Chief, before the great deeds of all the Soviet people who did such magnificent work to foil the mighty combat reserves, to supply them with combat equipment, winter clothing, provisions, and to deliver all of this at the very moment when the battle reached its point of culmination.

On 5-7 December, the mighty roll of artillery salvos, the thunderous Russian "hurrah," and the din of red-starred dive bombers and bombers shook the front of the "Center" army group to its very foundation. This unawaited and unexpected destructive force hit the enemy. This is how the might of this blow was described by Fortheimer, a soldier in a German infantry regiment, in a letter to his wife which he did not have time to mail: "Dear Wife: This is hell. The Russians do not want to leave Moscow. They have begun an attack. Each hour brings terrible news for us. I beg you, stop writing to me about silk and rubber boots which I am supposed to bring you from Moscow. Understand me, I will be lost, I will die, this I feel."

There was a rude awakening from insouciance, from the sweet dreams of "world domination," from the halo of "invincibility" and a comprehension that the illusion had crashed and of the horrible consequences of military defeat. As they say, fright makes your eyes get larger. Rumors began to fly of the "uncounted forces of the Russians" moving on the ground and in the air from whom "dispersed and surrounded, we retreated in 4-5 vehicles in a row" (Corporal Schahner) and with it the cry of despair: "Save yourself who can. The broken and disorganized army retreats, the people are confused" (non-commissioned officer Platuff). Even the fascist newspaper "Berliner Bersentseitung" was forced to comment on this meeting with the well-armed and equipped Siberian rifle divisions, with their "terrifying Russian hand-to-hand combat." Such was the prelude to the finale of the Hitlerite venture.

1. Guarding the Moscow sky; an antiaircraft gun ready for battle.

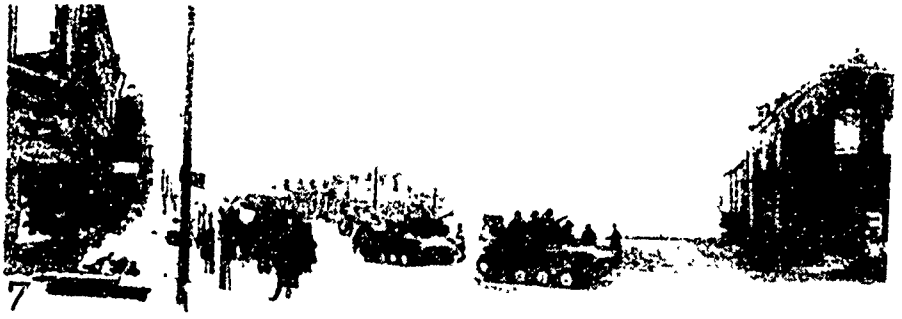
2. In the underground subway station of "Ploshchad' Mayakovskogo" during an air alert.

3. Defensive structures in the Moscow suburbs.

4. Reserve troops pass through Moscow on their way to the front.

5. Member of the Military Council of the Moscow Military District and the Moscow Defensive Zone, division commissar K. F. Telegin presents state awards to fliers.

6. At the sewing factory. Workers are sewing clothing for Red Army soldiers.



7. Soviet troops enter liberated Volokolamsk.

Our major victorious offensive began at Moscow and it informed mankind that there is no force in the world which could break the bravery, willpower, and decisiveness of the Soviet people to retain their honor, freedom, and independence.

The counteroffensive at Moscow set the prerequisites for the shift to the offensive along the entire Soviet-German front (January-April 1942) with the result that the enemy was thrown back 100-350 kilometers, up to 50 of his divisions were destroyed, and the Hitlerite troops lost more than

400,000 soldiers and officers and huge quantities of combat equipment. The overall area of the liberated regions was 150,000 square kilometers. In order to save his troops from catastrophe, Hitler had to direct 800,000 men of march replacements to the Soviet-German front, shifting 39 divisions and six brigades from the west.

The victory at Moscow concluded the first and most difficult stage in the struggle of the Soviet people against fascist Germany. The collapse of two offensives against Moscow was a major event of international significance. The dawn of our forthcoming victory rose at Moscow. Our wonderful army matured and tempered, its cadres became more experienced. Its technical outfitting increased because of the heroic work of the people. The end began to the existing enemy superiority in tanks, aircraft, and artillery pieces.

During the winter of 1941-1942, the Soviet Armed Forces inflicted the first major defeat to Germany which indicated that an important turning point occurred not only in the Great Patriotic War, but in the entire Second World War.

Much, very much blood still had to be spilled. The reserves of grief were still great in the bins of the war. The Soviet soldiers and all of the people knew that the path had only begun at Moscow, but they also knew that in grief, in torment, and in the tears of millions of the orphaned and homeless our forthcoming victory was born, forged, and tempered. And it was for this great goal, for freedom and happiness that pain was not painful and torment was not fearful. Death itself turned into the immortality of victory.

It was with these thoughts that the Soviet troops went into battle to finalize the destruction of the fascists at Moscow. It was with these thoughts that the heroic workers of the interior worked to supply the defenders with everything necessary. It was with these thoughts that the underground and national avengers — the partisans — waged their heroic struggle in the enemy rear.

And, in these festive holidays of the 30th anniversary of our victory at Moscow, let the words spoken by the party on the day the counter-offensive began resound with new force:

"The homeland is proud of its wonderful sons — the soldiers, commanders, and political officers who fought bravely at the approaches to Moscow. The homeland is proud of the bravery and steadfastness of the Moscow workers who, with their heroic effort in industry and in the building of defensive lines, helped the Red Army time and again by supplying it with weapons and ammunition and strengthening the rear and inspiration." Through their heroism and bravery, through their deeds, the capital's defenders and workers raised the name of Moscow into the ranks of hero-cities.

"The great glory will pass from generation to generation of those who during the year of stern testing defended the Soviet homeland with weapons

in hand," wrote Pravda on 8 June 1942, "as well as of those who forged its weapons, who built the tanks and aircraft, who puddled steel for artillery shells, and who, with their labor deeds, were worthy of the military valor of fighting men. Our children and grandchildren will remember with reverence the labor heroes of our times as heroes of the great national liberation war."

TOGETHER WITH THE COMBAT PODRAZDELENIYE (pp 39-41)

Colonel V. Aleshinskiy

The further one delves into the history of the Battle of Moscow, the brighter becomes the picture of the great deeds performed by our troops in this battle. Let time erase some of the details, but the important events remain forever in the minds of the people. They will not forget the military deeds of rifle chast' soldiers, tankmen, fliers, and those who supported them with everything necessary for the successful waging of combat operations.

When the Battle of Moscow began, I was chief of the quartermaster service in one of the battalions of the 44th separate rifle brigade which was part of the First Shock Army and was responsible for provisions-forage and train-clothing supply.

Our brigade was formed in the city of Krasnoyarsk. It was formed from the residents of Krasnoyarsk, Minusin bakers, Altay hunters, Transbykal prospectors, and frontline personnel from military hospitals. Its main golden fund was the officer candidates from the Kemerov, Tomsk, and Omsk military schools. The Siberians stood out with their good physical hardening and the majority of them were Komsomol members and communists.

It should also be mentioned that there was a strong party layer among the rear services workers. But no one had any experience in organizing the rear support of combat operations which made itself known during the initial stages. In the complex and rapidly changing situation, we had to learn from our own experience and acquired skills during the course of battles.

The flow of troop trains to Moscow took place at very high rates for those times. The trains took only five days to go from Krasnoyarsk to station Khot'kovo on the Yaroslavl' railroad line. In order to conceal the arrival of reserves, troop train unloading and marches to assembly areas were made only at night.

Upon reaching the assembly areas, many tasks fell on the rear services of the brigades. It was necessary to provide the troops with weapons, ammunition, set up their messing, and to maintain constant combat readiness among the podrazdeleniye.

At that time, the brigade replacement center, which included warehouses for all types of supply, a motor transport company, and a medical company, was the main rear podrazdeleniye in the brigades. The battalion rear included a supply and service platoon which had 20 two-horse carts, three single-kettle field kitchens, a medical station, an ordnance shop, and a clothing repair shop. All battalion supplies had to be kept on wheels. However, this was not always the case in reality. There was a shortage of carts and some were used to keep hay and oats supplies. In addition, interruptions in food supply delivery required the maintenance of higher stocks of basic types of products and biscuits. Therefore, all of the battalion's supplies were brought in only during 1.5-2 runs. A way out was soon found. The initiative and resourcefulness of the supply and service platoon commander, Master Sergeant Kaplyuchenko, came to our assistance; he borrowed some of the two-horse carts on sleigh runners from local kolkhozes. By this time, a deep snow had fallen around Moscow, freezes started, and the sleighs helped us out considerably. This tripled cargo capacity, ensured noiseless movement, and significantly raised the speed and maneuverability of the rear column. But then new difficulties arose — the horses were not shod for winter. We quickly had to organize horseshoeing because they could not move without winter shoes.

There were no supply and service podrazdeleniye in the separate companies of the battalion and in the 82-mm motor battery. This also, in its turn, complicated the execution of assigned tasks because their ammunition supplies were in the general rear column.

During the formative period, the personnel, in addition to regular clothing, were fully supplied with warm items. Each soldier had warm underclothing and long drawers, sleeveless sweaters, cotton breeches, felt boots, and flannel and fur mittens. During the course of our offensive, when the panic-stricken fleeing fascists burned and destroyed all villages and hamlets in their path, the soldiers at times had no place where they could get warm. It was then that they spoke praisingly of the rear workers and clothing service specialists who provided them with everything necessary. The frost around Moscow made itself known. But the Siberians said that for them, who were hardened during even colder frosts, with this clothing the Moscow cold posed no fear to them. And truly, they ably withstood all of the difficulties and inclemencies of combat field life and earned deep respect and praise.

I recall an instance when a train of supplies being delivered by horse driver Romanenko, a former kolkhoz worker from the Minusin area, broke its sleigh "hitch" — a rope of 30-40 mm in thickness used to secure the shafts to the sleigh. Without pausing to think for too long, he took off his mittens and with his hands began to warm and loosen the icy knot

so as again to tie to shafts to the sleigh. After five minutes, steam rose from his hands. He himself began to perspire from his work and unbuttoned his overcoat and sweater. The frost did not bother him and the emergency situation was soon corrected.

The battalion performed a long march by foot and the people were tired. But upon approaching the line of the front and receiving lacking weapons and ammunition, all seemed to straighten up and take on a new spirit. Prior to battle, our rear podrazdeleniye were inspected by the battalion commander and commissar. They were interested in the availability of supplies, the quality of food preparation, and then assigned missions to the rear for the period of the offensive.

On 1 December 1941, our battalion, as part of the 44th rifle brigade, engaged the enemy in battle south of Yakhroma. At that time, the rear was located in the resort village at station Turist some three kilometers from the forward edge. The enemy frequently and stubbornly attacked our podrazdeleniye. Individual groups of enemy submachine gunners penetrated into our battalion's rear on that day. The men of the supply and service platoon boldly entered into combat against the enemy. Particularly outstanding in the battles were the brothers Karmanov, Siberian hunters and horse drivers, and a former gold prospector Portnyagin. Their precise fire always reached the target. The enemy groups were routed and partially destroyed.

On the morning of 6 December, the battalion dislodged the enemy from his occupied positions and began to pursue. Hundreds of enemy vehicles and tanks left behind on the roads hindered the forward movement of the rear. However, the battalion's rear column kept pace with the advancing podrazdeleniye and promptly brought up ammunition and food. During the offensive, difficulties arose in replacing ammunition and food supplies. Part of the transport facilities had to be sent for these supplies to the brigade warehouses in the rear. Much time was spent on these round trips over roads occupied by troops of the second echelon of the army and the front. In order to prevent interruptions in the delivery of material supplies, we held a conference of our rather small rear collective. During this meeting we clarified the tasks facing us, computed our supplies, and distributed and specified obligations. I was ordered to handle the delivery of material goods while the rear column was to be headed by the assistant battalion commander for administrative measures, Quartermaster-Technician 1st Rank Gnatyshin. Under conditions of a constantly changing combat situation and roadlessness, he successfully handled the battalion rear, did not let it lag behind the combat podrazdeleniye, and promptly resupplied the companies with ammunition. The battalion rear was usually formed in one or two columns. The medical station was at the front, followed by the carts with ammunition, the field kitchens, and other podrazdeleniye. March discipline was strictly adhered to. Security patrols were sent out to the front and to the flanks. All issued commands were precisely repeated down the column.

Repairing tanks at an enterprise in Moscow.

During the battles and on the march, it was not easy to separate the products in the cold, to keep fires going in the kitchen fireboxes while on the move, and promptly deliver food to the forward edge. The soldiers understood this well and showed respect for the cooks. Cook V. Kolovskiy, a former restaurant director, was particularly admired. He made good use of the short stops to process the products, place them in the kettles, and always tried to feed the soldiers not only appetizingly, but also on time. After preparing dinner, he would drive up with his kitchen as close as he could to the forward edge and would set it up in a gulley or behind some structure. The nearby soldiers received their food, as a general rule, in mess tins. The rest sent runners to the kitchen, one or two from each podrazdeleniye, with thermoses and pails. At the same time, bread or biscuits, as well as sausage, suet or canned goods were issued through the podrazdeleniye first sergeants so that the men could eat during daytime during the lulls.

The work of the battalion medical station, which was headed by military feldsher Polegen'kiy, was also complicated. The two nurses and three orderlies tried to give the wounded preliminary pre-doctor assistance as quickly as possible and send them off on sleighs to the brigade medical station. The medical station personnel performed their duties irreproachably.

When permitted by the combat situation, we organized bathing of the soldiers for which we made use of a small wooden bathhouse which had still remained intact. There was a large kettle in it in which water was boiled. The men had to undress and dress in a small, cold dressingroom. It was not very warm in the bathhouse itself. But nevertheless, all battalion

personnel were able to take baths in two days. This removed fatigue and gave the men boldness and strength for new marches and battles.

In the battles around Moscow, our battalion's rear operated together with the combat podrazdeleniye, unterruptedly supplied the troops with all necessary material goods. It was here that we rear personnel also received our first baptism of fire. We underwent many difficulties in the initial battles, not everything turned out the way it was desired or demanded. But all had one desire, one inspiration — to carry out our duties in the best way possible and to help the troops of the combat podrazdeleniye to more quickly destroy the enemy.

ROAD AND BRIDGE REHABILITATION (pp 41-43)

Colonel V. Aleksandrov

In September 1941, the highway maintenance regiment under the command of Major Ye. Kiselev, where I was serving at that time as an engineer in the right-of-way battalion, moved in two echelons from the Moscow railroad terminal and, detraining at station N, soon assembled in a forest 18 kilometers to the north of Kalinin. We awaited the order to begin work.

The situation was bad: the enemy was advancing toward the capital and the front was approaching Moscow.

Streams of transport and troops moved day and night unendingly along the road and many of them quickly became inoperable. Bottlenecks developed as a result and the speed of travel sharply reduced. Some roads became cut at times by enemy troops which had broken through and we had to look for detours, occasionally over little-used dirt roads which we had to ready for heavy traffic. For example, our regiment received this kind of mission when the German-fascist invaders, capturing Novgorod and Chudovo, cut the military highway connecting Moscow and Leningrad. A detour had to be created in a short period of time following the line of Kalinin, Bezhetsk, Ustyuzhna, Tikhvin, and further on to Leningrad.

The battalions began their work without awaiting reconnaissance data. It was necessary to repair and build a large number of small wooden bridges, make detours around swampy areas, and maintain the roads in a serviceable state. It was not easy to do this under conditions of a continuous movement of transport. It was even more so because, in essence, there was no roadbuilding equipment and all work had to be done manually. At times even the simplest tools were lacking and assistance had to be sought from local timber industry and other organizations which, it should be mentioned, eagerly helped us.

The highway soldiers worked many hours without rest. But no matter how hard the work was, no one complained of fatigue. We were all governed by one thought: to execute the assigned mission more quickly — to ensure

the continuous movement to the front of everything that would build up the strength of our troops.

Soon, according to the developing situation, the regiment was placed under the command of the Kalinin Front to service the Uglich, Koy, Sonkovo, Bezhetsk, Maksatikha, and Vyshniy Volochek road. The intensive work went on day after day. Part of the road was dirt with some particularly difficult sectors. These could be crossed only with the help of tractors or prime movers. The constant movement did not permit prompt repairs to chuckholes, with the result that in some places travel speed dropped to 5-7 kilometers per hour. At times, hundreds of vehicles stood without moving.

Using homemade wooden presses, we smoothed and planed the ruts and manually filled chuckholes. We repaired small wooden bridges and built new ones. However, this did not fully solve the problems. The intensive movement and rains caused their own destructive work and some sectors, as before, were poorly passable. Then, on the suggestion of Military Technician 1st Rank I. Yelant'yev, column routes began to be laid across the virgin land at a certain distance from the hard two-cross sectors so that when the stable freezes began, traffic could be shifted over to them.

Finally, on the night of 6 November, the freeze froze up the wet ground and transports quickly moved along the column routes and speed rose to 30 kilometers per hour. This made it possible to bring the main road into order and to prepare it for winter operations. Areas subject to snowdrifts were found and woven fences and snow walls were raised to provide protection against drifts, branches were laid out, and so forth.

The enemy continued to press on. True, he was not the same as in October; he had shifted from a run to a walk, then started to crawl, and in some areas was merely marking time in place. It was sensed that he was choking on his own blood. Not only were these days of extreme tension, testing, and deadly danger, but also days of joyous hope. Forces were already moving along the roads of the front which fate had selected as the forces which would begin our great victory. Divisions with powerful combat equipment, troop trains carrying ammunition and food moved forward. And so the day arrived when the destruction of the fascist hordes at Moscow began. The troops moved forward. At this time, our regiment was assigned to the chief of the newly organized military highway No 9 under Lieutenant Colonel Yeremenko, deployed in the direction of Kalinin, Torzhok, Kuvshinovo.

Rolling back from the blows by our troops, the enemy destroyed in his wake bridges, crossings, mined roads, and blockaded the roads. The offensive by the Soviet troops developed rapidly. Our battalions were unable to keep up with the cleaning and equipping of new routes. I recall how at the end of December, the regiment moved out into the Bezborodovo area. Here, hundreds of vehicles had accumulated at the ice crossing across the Moscow Sea on both sides. They stood in 2-3 rows awaiting their turn. The poorly experienced traffic controllers of road komendatura VAD-9 could not cope with the developed "bottlenecks." The regiment's commandant

service podrazdeleniye, entering into the work, quickly brought about organization and order. The crossing began to work rhythmically, promptly. Had we stood by idly, the enemy air attacks which he soon initiated would have caused great harm.

It must be said that this crossing did not provide two-way traffic and was unable to rapidly pass all of the arriving vehicles. So one way or another the transports had to lose time. Not less than two additional crossings had to be built. This was the mission assigned to the regiment's podrazdeleniye. The people started to work. The ice was not yet thick enough to pass heavy vehicles and, in addition, the level of the Moscow Sea continued to drop everyday because of the water let off to the Ivan'kovo dam. Bending, the ice would settle and large cracks would appear. Therefore, the planned route had to be strengthened with a wooden roadway laid on two steel cables whose ends were held by manual winches. The cables took up part of the vehicle load and made it possible for heavy vehicles to pass. As the ice would settle the cables were gradually leveled by the winches.

Work went on around the clock and under conditions of intensive enemy air action. Immediately after the first two crossings were set up, the regiment began to build two more — across the Volga. But the ice crossings could only last until spring. Therefore, it was necessary to turn to the rehabilitation of high water bridges.

By this time, on the directives of the Supreme Field Headquarters, the regiment was reformed into two separate battalions: highway construction and highway maintenance. The highway construction battalion, in which I continued to serve, was soon given the task to restore the high water bridge across the Volga at Kalinin. This was the only bridge across this major water obstacle in the area. The dam across the river at Ivan'kovo did not have a roadway for transport vehicles. The importance was quite clear, to quickly restore the bridge prior to ice breakup so that the front-line troops could be promptly supplied.

In three sorties, the Hitlerites were able to destroy only the right cantilever of the central span which dropped the suspended part. The explosive charges set at the shore support pillars and near one of the channel pillars (about two tons of explosive) did not activate. The offensive by our troops was so rapid that the invaders did not have time to detect malfunctions and to blow up other parts of the bridge.

The ice breakup time was approaching; consequently, we had to refrain from the proposed major restoration plan of the designers (hoisting the suspended part from the bottom of the river) and take other measures developed by the technical element of the battalion headed by Military Engineer 2nd Rank L. Zubkov. This was a more simple decision making it possible to perform work using locally available materials and, most important, to complete construction in a shorter period of time. Instead of using the destroyed cantilever, it was decided to build two beam spans from I-beams available in Kalinin and place them on crib-work supports.

The people worked day after day without pause. At night they worked by the light of bonfires. The fascist aviation often tried to hinder us. The ice broke up from bomb explosions. The aircraft made sortie after sortie against the bridge, but the dependable antiaircraft cover did not give them the opportunity to aim their deadly loads. The bombers left and once again work boiled up. The span beams were assembled. Divers cleaned off the river bottom preparing places for the supports. At the same time, preparations for the crib-work was going on. The majority of the work was done manually. There was much that we were lacking at that time. But despite all of the difficulties, the battalion completed its mission on time.

Soon the movement of transport vehicles was shifted from the ice crossings to the restored bridge. The battalion received a new mission: to support the westward offensive of our troops. Blizzards and snowfalls were very heavy and the roads were soon drifted over with snow. We cut blocks out of the solid snow and used them to make protective walls, we also set up lattice and panel fences. Supply roads were cleaned off with wooden snowplows of the "angle" type and by using attachable equipment, which we had received by that time, for the ChTZ-S-60 tractor.

The cold and snowy winter of 1941-1942 foretold of severe ice and flood conditions on the rivers. Measures had to be taken to let the ice flow under the restored bridges. I was assigned supervision of this work at one of the bridges. Explosive experts worked for three days without replacement. The water level rose higher and higher. The ice moved closer to the bridge, threatening to tear down the span structures. Explosion followed explosion, and the ice moved closer and closer. Again and again the bold people moved out on the ice and again the sounds of explosions. Finally, the pressure eased; the bridge, the fruit of the great effort of the builders, withstood the test.

Many other bridges and roads were built by the battalion personnel along the long and difficult road to victory, much effort was contributed by them and many lives were given to ease the road for those who fed the front with everything necessary, who moved along these roads to destroy the enemy.

troops nearly everyday to clarify the actual situation and at times to even head motor transport columns delivering fuel to the soyedineniye. These were difficult trips. At times much time had to be spent to seek out a soyedineniye or chast'. The depot, petroleum bases, columns of vehicles with fuel, and even individual vehicles were subjected to air attack. For example, the area of Rzhev where our army was waging defensive battles, and even the city itself, was bombed by enemy aircraft groups 8-10 times a day.

Quite often the fascists dropped diversionists into our rear and we had to seek them out and destroy them. But, despite all of the colossal difficulties, the service's personnel coped with the assigned missions.

By the end of November 1941, our army, waging heavy defensive battles, was simultaneously completing the preparations for the counteroffensive. Chast' and soyedineniye were concentrating and replenishing, new combat equipment was arriving. As the equipage of our army increased, the ratio of fueling increased nearly two-fold. Up to 5-6 fuel units were accumulated to support the counteroffensive at Moscow. The volume of work continued to rise but we were no longer tyros. By that time, we had become battle-hardened soldiers able to solve many tasks in the most complex situation.

It would be difficult to overestimate the work performed by the service in setting up these supplies. All that was allocated to the army by the front supply agencies were received on time and taken out; all stocks available on hand in the army's zone of operations were recorded and placed in readiness. A large part of these supplies was concentrated in the chast', soyedineniye, and at the army depot, which subsequently created favorable conditions to support the troops during the offensive. Nevertheless, despite these significant supplies, they were all depleted during the offensive by the end of the first half of December. But the continuing battles demanded greater and greater amounts of fuel.

Work efficiency and smoothness was demanded from the service under conditions of the continuous offensive. Delays in fuel delivery for one or two days could lead to great losses in personnel and equipment and to a disruption in the offensive.

Fuel was valued at its weight in gold. Not only tons, but each barrel was considered. Everyday, the army fuel supply section chief, Military Engineer 3rd Rank Ye. Kalaytan, reported to the commanding general as to the fuel and lubricants on hand and their priority delivery. Estimating the developing situation, the commanding general, through his deputy for rear and occasionally personally to the fuel supply section chief, would issue instructions on the amounts and periods of fuel delivery.

In order to bring the supplies closer to the troops during the offensive period, an element of the army field depot was moved up forward. It worked both on wheels and on the ground.

FUEL FOR TANKS AND TRUCKS (pp 43-45)

Engineer Colonel (Retired) F. Brodov

During the battles which developed at the approaches to Moscow and at Moscow, I was the senior engineer in the fuel supply section of the 31st army. Our section was essentially staffed by officers called up from the reserve. Consequently, many difficulties had to be overcome in solving matters associated with supplying the troops with fuel and in training the service's personnel.

Supplying fuel to the large amount of equipment during the withdrawal of our troops was extremely complicated. Planned deliveries from the front's bases was often disrupted because of loss of rolling stock from strikes which the enemy delivered against our lines of communications. There was a lack of fuel trucks and there were but a few petroleum bases in the army zone from which fuel could be obtained. In addition, their assortment of petroleum products was not very large.

The personnel of the army fuel depot worked intensively. If we take into consideration that their work took place under frequent redislocation caused by the combat situation developing within the zone of operations of the army, then it will be quite clear how difficult it was to organize supply.

We encountered difficulties in dislocating supplies caused not only by frequent burying of heavy metal tanks, but also for the need to conceal them in the new areas. At that time, we had neither cranes nor earth-moving equipment.

At times it was necessary to use the motor transport of stubbornly defending soyedineniye and chast' for the removal of fuel and lubricants from the field depots.

Complications also arose because of the frequent breakdown in communications between the supply section and the warehouses and even with the supported chast'. Therefore, the section's officers had to visit the

There where it was possible, this element would deploy directly alongside the railroad to receive fuel from the so-called railroad "freight relays."

For purposes of concealment, all work of fuel delivery and issuance was done essentially during the dark hours with simultaneous measures taken to conceal the tanks. Still, we were not always able to do this because neither the fuel dump nor the army field base had any earth-moving equipment and it was virtually impossible to bury hundreds of cubic meters of containers. Once, because of this, we were unable to conceal an element of the depot and enemy aviation destroyed more than 50 tons of fuel. At that time, this was a very significant loss to us. Subsequently, we took all measures to ensure a more rapid concealment of containers under all conditions. All worked without stopping to carry out this task.

With the beginning of the cold, the process of draining oil from railroad tank cars became more complicated. We did not have special heating facilities. We had to try all kinds of tricks. We used homemade kettles and at times even used completely impermissible methods — we heated the railroad tank cars containing the solidified oil with bonfires started between the rails.

Doing everything possible to supply the troops with fuel, we simultaneously performed measures for its economy. We set a fuel consumption limit for each soyedineniye and chast' and strictly controlled its implementation. We more carefully planned the shipments made by motor vehicles to exclude incomplete loading of vehicles, reduce empty runs, and practiced the delivery of materials, including fuel, on rigid vehicle couplings.

Tank cars carrying fuel move to Moscow. 1941-1942.

In order to increase the gasoline stocks, at different times we had to use mixtures of ligroin and kerosene with gasoline and even a mixture of diesel fuel and gasoline. Of course, this mixing reduced fuel quality but then, there was no other way out. The proper recording of stored and issued fuel was set up.

Having a limited amount of transport facilities, we still began to shift over to centralized delivery which, subsequently, completely justified itself and became widespread. For this, the army's fuel supply section formed a supply delivery platoon and installed KP-2 containers on trucks.

The heavy freezes, snowfalls, and enemy air attacks extremely hindered the delivery of fuel to the troops. I recall how once a column of 26 vehicles was machine-gunned and bombed by enemy aircraft. Two trucks were aflame and several containers had been holed. One of the sergeants, whose surname I unfortunately cannot remember, was the first to engage the fire in hand-to-hand combat. He put out the flames and used his trenchcoat to plug the holes so that the fire would not spread to the other vehicles. He was heavily burned and was sent to the hospital. He received the "For Valor" medal for this deed. Such incidents were frequently encountered on the roads. And not just on the roads. For example, during an enemy air attack on the depot, Sergeant Batalov, engaged in fuel pumping, did not leave his post but continued to work so as to save the fuel from a tank car standing out in the open. When it caught fire, he and his comrades who had run up to help put out the fire. All of this was done under the fire of enemy aircraft.

The frontline roads were very difficult ones during December and January of 1941. At times, the trucks with their fuel could not reach the soyedineniye and had to stand along the roads. It was necessary to get tractors from the highway builders, and occasionally from the kolkhozes, to tow the trucks over particularly difficult sectors. As a rule, every 3-4 trucks moving on to the troops was accompanied by an officer. During the entire offensive period, officers were attached to specific soyedineniye and were responsible for the delivery of fuel, for its supply, and checked how it was delivered to the chast' and how it was expended and recorded.

A representative from the army fuel supply section was constantly at the army field supply dump. He set the sequence of delivery and solved urgent matters associated with supplying fuel to the troops.

In spite of all of the measures taken, there were still interruptions. Occasionally, with the cognizance of the front fuel supply section, it was necessary to turn to the center, to the Fuel Supply Directorate, with the request that fuel be delivered by centralized motor transport from Moscow. At one time I had occasion to visit the capital. I was received by Military Engineer 2nd Rank V. Nikitin, a section chief in the Fuel Supply Directorate. He listened to me attentively, asked some questions on the state of affairs in the army and in a very critical period, provided us with great assistance by directing 50 fuel trucks with fuel from Moscow directly to the army.

The counteroffensive begun in December 1941 at Moscow expanded successfully. Destroying the German-fascist troops, our army, jointly with other ob"yedineniye of the front, liberated towns and villages from the Hitlerite invaders. These victories did not come easily. Many officers, sergeants, and soldiers, including those of the fuel supply service, did not return from the battlefield.

On the 30th anniversary of the victory at Moscow, we bow our heads to our fallen comrades.

PROVISIONS WERE DELIVERED UNINTERRUPTEDLY (pp 46-47)

Colonel (Retired) I. Belozerov

During the difficult time for our capital, the headquarters of the Moscow Military District, in which I, as Quartermaster 3rd Rank, held the position of chief of the planning subsection of the food supply section, was dislocated to point G. I was assigned to the operations group of the Military Council to solve tasks of supplying troops with materiel. The group maintained constant communications with the central directorates of the People's Commissariat of Defense and performed tasks of a varied nature. Disregarding time, the workers of the operations group did everything so that the defending troops and the newly formed troops would have everything necessary for the successful waging of combat operations.

Together with other rear specialists, I was concerned with supplying the chast' with provisions, equipment, and food supply service facilities, support the newly created chast' and soyedineniye of all branches of troops, and to demand lacking provisions and equipment. Despite the great volume of work, requisitions were always promptly compiled. This was a very responsible matter. It was necessary to know the actual requirement of any one particular chast'. For this, constant communications were maintained with the various sections of the district headquarters which informed us as to the number of new chast' and soyedineniye.

At times, supply difficulties also arose. Thus, in conjunction with the partial evacuation of food supplies, there was occasionally a shortage of groats and fresh meat. A difficult situation arose in providing forage for the great number of artillery, riding, and pack horses. Local resources were insufficient for this and the delivery transports were engaged in operational shipments. Difficulties were also encountered in organizing troop messing. A large detachment of cooks had to be trained in a short period of time in how to prepare food under field conditions and delivered promptly to the forward edge.

The Military Council of the Western Front held a special conference of rear workers during which the practical measures were mentioned on

prompt support of chast' with provisions, forage, and regular delivery of hot meals and tea to the troops at the forward edge. The commanders, political organs, and rear officers of all ranks and stations put much effort into solving these important problems. In addition to field kitchens, the troops began to use hearth kitchens mounted on sleds. Light hand sleighs, thermoses, buckets with covers and double bottoms, and heated containers were used to bring up and deliver food. At risk of life, the cooks and carriers delivered hot meals and tea to the forward edge and at times were forced to engage the enemy in combat. They were inspired by the example of those cooks who had often distinguished themselves in battle. By that time, many knew from the newspapers of the heroic deeds of cook Ivan Sereda who during the August battles, while delivering food to the podrazdeleniye, came face to face with an enemy tank and destroyed it and also saw to it that the troops were fed on time. He was awarded the high title of Hero of the Soviet Union.

Many of Moscow's industrial enterprises helped to solve the tasks associated with providing the troops with provisions. They produced various food products and organized the production of technical means for the troops. For example, the confectionery factory, Rot Front, provided a great amount of concentrates necessary for the army while the plant Krasnyy Proletariy, and others, organized the production of field kitchens. In this manner, the developed difficulties were eliminated by joint efforts.

At that time, the food supply depot of the Moscow Military District was one of the main supply bases. It was supervised by untiring workers who knew their work well — Quartermaster 2nd Rank I. Artemov and Technician Quartermaster 1st Rank A. Lisenkov. In these strenuous days for the capital, this depot's collective worked day and night performing a considerable volume of work daily to provide uninterrupted food support for the podrazdeleniye, chast', and soyedineniye. Frequently, those of us who would give the next assignment to the depot to issue food products to the troops would have doubts as to whether or not it would be carried out since the work volume exceeded all norms. But the supervisors and all personnel always came out of the difficulties with honor.

In addition to unloading and issuing food supplies, they were also often engaged in making up special rations for airborne and other special troops. This work required particular efficiency and specific skills. The sets usually included crackers, tea, biscuits, canned goods, various concentrates, and sugar. The prepared rations were loaded on motor transport and then delivered by aircraft to the required area. Another complicating factor was that the greater part of the rations had to be packed into a special paradrop or double container in such a way that upon landing, the items would remain whole.

The Moscow suburban towns played a no less important role in supplying the capital's workers and its defenders. Once I had to visit Tula on orders. The goal of the trip was to redistribute and partially evacuate the provisions stores. In a short period of time, with the assistance of party and military organs, the available provisions stores were redistributed and part loaded up for delivery to Moscow.

This incident also comes to mind. During inspection of the chast' of the near-front areas of Tula, it was discovered that some of them were not fully supplied with groats and flour. Together with the workers of local party and Soviet organs, we sought out food products in the nearby villages, whose inhabitants had been partially evacuated, and fully supplied the troops.

The war... It lasted for several years. My service took me from Moscow to Berlin and Prague and to see the happy days of victory. The workers of the food supply service also made their contribution to victory. For example, this is how the men of the combat podrazdeleniye assessed the work of the supply and service personnel: "... gruel in war is a great matter. A well-fed, well-clothed, and well-shod soldier is stronger and bolder. This is why we express our thanks to you for your concern."

THE TROOPS WERE PLENTIFULLY PROVIDED WITH CLOTHES DURING THE WAR (pp 47-48)

Engineer Colonel A. Bernikov

The emotional days of October 1941 are unforgettable. A great battle was underway against the German-fascist troops at the approaches to Moscow. Moscow was girdled by defensive structures; on its outskirts were antitank posts and barbed wire entanglement. The deserted evening streets of the town were frequently illuminated by rays from projectors picking out solitary German aircraft from the dark of night which had broken through the solid ring of antiaircraft defenses. Fragments of antiaircraft shells feathered against the asphalt.

In those difficult days for the homeland, intensive work was going on in the directorates of People's Commissariat of Defense, engaged in supplying the troops, and in the Technical Committee of the Main Quartermaster Directorate where I served. The Soviet Supreme High Command was engaged in concentrating new reserve armies. They had to be supplied in the shortest time possible with everything necessary for offensive battles in the severe winter.

Many officers of the central apparat were given the assignment to participate in forming reserve ob"yedineniye. I, in particular, was assigned to take part in forming the 60th Reserve Army in one of the areas east of Moscow.

It was not an easy matter to dress the personnel in new uniforms including warm articles. But the supply and service personnel, together with the command, persistently overcame all difficulties. In this work, great knowledge, initiative, and ingenuity were required of all officers of the quartermaster section. The men possessed these qualities. As an example, we have section chief Quartermaster 1st Rank A. Olenev. He was an officer well advanced in years, educated, and possessed of a great memory. The chief of the army clothing subsection, Quartermaster 2nd Rank S. Smirnov, was also distinguished by great work efficiency and a pedantic approach to the recording of material goods. It was these qualities of his

which subsequently, when he was assigned to care for the storage of clothing reserves for the front in our army's warehouse, stood him in great stead.

Thus, troop train after troop train of replacements were sent off to Moscow which, as we learned later, were practically not committed to battle. This was brought about by the desire to retain the greatest amount of fresh strength possible for the shift to the counteroffensive. We thoroughly understood the significance and responsibility of the work being performed and each one of us gave of his all, worked without sparing his own strength.

Readying clothing to be sent off to the front.

Work in the army clothing subsection during this period was carried out in approximately the following manner. Two officers, including the subsection chief, were constantly engaged in operational activity: they compiled dozens of requisitions, telegrams, and ciphered messages daily, and maintained contact with the military commissariats and the chast' under formation. In addition, I also had to carry out individual assignments.

I recall this incident. Winter began early in that memorable year. By the end of November, the frosts reached 25-30 degrees. Naturally, soldiers could not be sent off to the front without providing them with warm clothing and felt boots. Such errors were looked upon at that time as grave mistakes.

And then the unforeseen happened. Late at night, it was discovered that somewhere along the way five carloads of felt boots had gone astray; these were designated for a division whose last troop train was to depart for the Moscow area at 0800 hours in the morning. At 0300 hours, I arrived at the station of town N and turned for help to the military transportation service representative, quickly making him cognizant of the situation. Comprehending the seriousness of the situation and the full responsibility for the movement of the required clothing, he quickly made contact through the selector with a number of stations and ordered that an immediate search be started for the lost transport. Soon the felt boots were found. The military transportation service officers got into the act. They took an extreme measure: they began to move our freight at express speed outside of schedules. Finally it arrived at its appointed place. There was hardly

any time left before the move of the last troop train. Time would be hopelessly lost if we tried to unload the cars and deliver the goods to the troop train. And then this decision matured — to deliver the cars directly across the city by spurlines and couple them to the train departing for Moscow. This is what was done.

We specialists of the clothing supply service constantly felt the support in our work of party, Soviet, and other public organizations at each point, in each area where we had to serve. Without this assistance, it would have been impossible to carry out our assigned missions within the strictly prescribed times.

A huge quantity of clothing was required f r the chast' being formed. The people provided us with the necessary material means. It should be mentioned that a great influence on readying the reserves came from the patriotic movement which had started up in the country to collect warm articles.

Work on unit forming was coming to an end. The 60th Reserve Army, transformed later into the 3rd Shock Army, arrived in the area of combat operations.

The Soviet troops at Moscow shifted to the counteroffensive on 6 December 1941. A great role in this was played by the strategic reserves created in the zone of interior. It is most pleasing to realize that in readying them, a modest contribution was also made by the workers of the clothing supply service.

In recalling the events of the great battles at Moscow, you more clearly and thoroughly comprehend this magnificant performance by our people in which, just as in the course of the entire war, the advantages of the Soviet society and state structure and the socialist economic system capably utilized by the Communist Party to combat the enemy was manifested with such extraordinary strength.

CONCERN FOR THE WOUNDED (pp 48-50)

Colonel Medical Service (Retired) N. Letunov

The thunder of the artillery cannonade on an early frosty December morning in 1941 gave note of the start of the counteroffensive by our troops at Moscow. At that time, I was in charge of the medical section of the 31st Army. Consequently, in my brief recollections of those days, I would first of all like to describe the work of the medical personnel. Our army was advancing on the Kalinin axis. The extended lines of attacking soldiers moved across the virgin snow. They also had to cross the smooth ice sheet of the Volga. The open area was under heavy fire. Soon we had our first wounded. Medical instructors and medical orderlies sped to them. Under enemy fire they gave first aid to the casualties and brought them from the field of battle.

An intensive struggle for the life of the people went on in the medical podrazdeleniye of the soyedineniye. Complicated operations were performed, wide use was made of donated blood and blood plasma, pain killers and sulfamide preparations, and antitetanus and antigangrene sera. Those with abdominal and chest wounds were generally brought to the operating tables during the first hours after wounding. Because the soldiers were well dressed and shod, and the search and evacuation of wounded was made promptly, no cases of frostbite were noted among them, even though it was extremely cold.

It was noted that with the beginning of the offensive, there was a sharp decrease in the flow of sick to the treatment installations. But then there was an increase in the number of people who had been wounded twice and even three times in one battle. All of this was explained by the high moral upsurge which had gripped the troops. The sick and lightly wounded either did not leave their podrazdeleniye or, receiving treatment at the medical stations, again moved out to the front line. It was also characteristic that after a rapid recovery, the troops nearly always asked to be returned to their chast'. The convalescent helped the medical personnel serve the heavily wounded, heat the areas, and maintain cleanliness and order in them.

The army ambulance company promptly evacuated wounded from the medical battalions to mobile field hospitals. They were well provided with reequipped and heated ambulances.

The incoming wounded brought in good news with them of the successful offensive by our chast'. This had a better effect on the people than any medicines, inspired the medical personnel to perform selfless labor.

The threat of the Soviet troops reaching the enemy rear forced him to leave Kalinin in panic. Our medical personnel moved into the liberated city on the heels of the advance chast'; they had to find places in which to set up the medical institutions of the army's hospital base.

The city's appearance was pitiful: burned shells of buildings with yawning window and doorway spaces, destroyed bridges and enterprises, overturned streetcars, and in the squares — rows of crosses above the fascist graves...

The medical personnel turned selflessly to their work. The destroyed buildings were hurriedly adapted for hospital space. The difficulties were compounded because the majority of medical personnel were women. However, the convalescent and the lightly wounded came to their aid. Much work had to be done by the combat engineers to demine the buildings.

The situation in the city was restored rapidly with an active part in this work taken by local party and Soviet organs. Electricity came on, the sewage system, water system, and so forth began to work normally. Life soon flowed into its own channel. Restoration of movement along the Kalinin-Moscow railroad line made it possible to evacuate the sick and wounded to the rear on hospital trains.

The Soviet troops continued to chase the enemy westward. The medical installations moved on with the troops. Due merit must be given to the military highway personnel. Despite the heavy snowfalls and other difficulties, they maintained the main roads in a trafficable state. Matters were far worse in areas where there were no roads but the hospitals still had to be deployed. Water and firewood had to be brought up and intra-hospital movement of wounded had to be done. In some places where the field hospitals were set up, there was even a lack of animal transport. Consequently, carts from the horse ambulance company had to be assigned to them.

As far as the army medical section is concerned, it would deploy by echelon during the offensive; its operations group was constantly at the army's field directorate. This made it possible to be in the course of events and to quickly take the best decisions depending on the developing situation.

During the course of the operation, the troops were uninterruptedly supplied with medical gear. In this, a great merit belongs primarily to the army medical warehouse workers, to the forward relay section, and to the pharmacies of the soyedineniye and hospitals.

Food supply for the medical installations was also laid on well. It suffices to say that as a general rule, the field bakeries were located near the hospitals.

A good word should be said about the actions of the motor vehicle personnel. The ambulances were always on the move. Their drivers did not know any rest. At any time of day, in any weather, they would drive out there where their help was needed.

Of course, not everything went smoothly. Frequently there was a lack of building materials, window glass, heating devices, and lamps and kerosene. Locally available means and the initiative and ingenuity of the people always found a way out. The army command and political section and the food supply and clothing supply sections were constantly concerned with the work of the hospitals, helped them in organizational work, and provided them with everything necessary. Concern for the wounded was the concern of all. This was concern for victory over the enemy.

Thirty years have gone by since the Battle for Moscow but memory sacredly holds the events of those days. Comrades in arms are also recalled with whom we had to undergo the difficulties of field and combat life and taste the joy of victories. Some were with the troops on the forward positions, others were at the operating tables, and still others were by the hospital beds. However, all were engaged in one great effort — to save and treat the wounded. Each day was a day of danger, of heavy effort. Many saw the death of heroes. Others took the place of those who fell from the ranks. How many heroic yet stern and emotional things took place in our daily lives.

Now I would like to express my most sincere and warm words of thanks to such wonderful people as surgeon D. Petrov, hospital chief G. Men'shikh, doctors A. Baldina and A. Gusarova, feldsher T. Vorob'yev, nurses and medical instructors E. Kruchinina, Ye. Morozova, M. Mamchich, A. Sergeyeva, V. Sokolova, P. Tsvetkova, Ye. Il'ina, O. Volkova, M. Kasatkina, P. Kozlova, and to many others. Through their efforts, hundreds and thousands of wounded were restored to health. Their names will always remain in the memories of those whose health and wellbeing were restored.

ANTIEPIDEMIC WORK WAS WAGED INCESSANTLY (pp 50-52)

Candidate of medical sciences,
Colonel Medical Service (Retired) T. Pozyvay

In the fall of 1941, our troops, while waging stubborn defensive battles against the enemy armies threatening Moscow, were readying themselves hard for the counteroffensive. Tens of thousands of replacements arrived at the front. The workers of the various rear services worked hard to provide the troops with material goods, to develop the necessary supplies and reserves for the forthcoming battles.

The military medical service was also strengthening. I recall the work of hospitals and antiepidemic installations of the Western Front where at that time I was the chief epidemiologist. At that time, many outstanding specialists of the antiepidemic service of the public health agencies came to us. Even though the majority of them had no combat experience, it must be mentioned to their benefit that they became acclimated with the military situation quite rapidly and soon showed themselves in the best light. The epidemiologists and hygienists worked in close contact with the rear service workers of the front, armies, soyedineniye, and chast' commanders. The successful preservation of personnel health would have been unthinkable without this.

During the battles at Moscow, there were cases of infectious diseases of typhus and dysentery among some of the chast' of the front. We tried to prevent these diseases from spreading. We had a permanently operating military control point on the district railroad line. The personnel on all incoming troop trains were subjected to complete sanitary processing. The doctors worked their way through the railroad cars and all sick persons found were immediately sent to isolation wards. In addition, the doctors checked the food quality, the sanitary state of field kitchens and food supplies in the troop trains, and so forth. All personnel arriving to the reserve regiments of the front or directly to the active troops were examined by the doctors and feldshers of the chast'.

Broad measures were taken to prevent infectious diseases. Particular attention was given to the sanitary processing of troops. The acute need

for this also developed because in many chast', upon departing for the east, the regularity of troop bathing was disrupted. This was particularly true for those who broke out of enemy encirclement and were placed in new formations.

A large number of people passed through the washing and disinfection points which worked around the clock. However, it became quite clear during the first few days that the existing facilities were insufficient. The need arose to organize field bathhouses (in dugouts, huts, tents) and transportable field delousers which could be made with the forces and means of each chast'. This task was resolved in a short period of time. Varied dry heat delousing units of simplified construction were quickly developed which were built and put into use on a large scale. They completely justified themselves in use.

During October-November 1941, the field mechanized laundries, which had been placed under medical control, were operating at full capacity. It must be admitted that at first we unwillingly accepted them from the clothing service. But later, when the need arose for mass processing of people to prevent typhoid fever, we were convinced at firsthand at how timely and purposeful these measures were.

During the defensive battles at Moscow, the entire complex system of antiepidemic protection was put into use. Careful observation over the epidemic state of the population along the entire territory of the front was implemented with the participation of local public health agencies. Sanitary-hygienic and bacteriological analyses were continuously performed, water and food supplies were checked, and the sick and persons who had been in contact with them were examined. Everywhere, beginning with the regimental medical stations and ending with the front hospitals, isolation wards were set up for infected patients. Because of the measures taken, the troops of the front, in an epidemic respect, were in a good state.

The decisive days arrived. At the beginning of 1941, the Western Front shifted to the counteroffensive. The know-how acquired during the defensive battles at Moscow helped the military epidemiologists, infectionists, and hygienists to quickly orient themselves and revamp their work with consideration of the new conditions.

Medical-epidemiological reconnaissance was an important matter during troop movement across areas liberated from the enemy. This work was performed by all levels of the medical service. Even during the defensive period we received information as to typhoid fever in the area temporarily occupied by the Germans. But that which we actually encountered exceeded all of our suppositions. In the infectious disease-free areas which we had passed two-three months ago there were now a great number of centers of typhoid fever. The further west our troops moved, the greater number of such centers did we encounter. It was quite clear that the Germans had brought in this disease to the Moscow area. Many of the units operating here had arrived from Poland, Rumania, Hungary, and Yugoslavia, areas not

unfavorable for typhoid fever. Thus, for example, after liberating Kaluga, it was learned that the source of propagation of this disease among the city's inhabitants was the German hospital which treated German soldiers and officers sick with typhoid fever.

Of course, it was impossible to avoid contact with the population which greeted the beloved Red Army with such great joy. Therefore, we tried to take efforts to keep the military service personnel from at least entering those houses which were centers of infection. In the event that any sick persons were found, they were immediately hospitalized, the podrazdeleniye in which they served underwent sanitary processing, and individuals who were in contact with the sick were placed under observation.

An important measure to prevent the propagation of typhoid fever among the troops is their complete sanitary processing. The chast' commanders and doctors tried to make use of the slightest opportunity for this. Since it was rather difficult to establish washing-disinfection stations of the washing-disinfection companies in artillery and mortar fire zones, wide use was made of delousing units and bathhouses set up in huts and dugouts. Small washing and disinfection stations were set up in gullies, on the reverse slopes of elevations, and so forth. The work frequently had to be done at night. We cannot avoid mentioning that the political officers of soyedineniye and chast' gave the most serious attention to this matter.

The medical personnel also worked hand in glove with the quartermaster service.

I cannot avoid mentioning a few words about Serkova, the epidemiologist of the Fifth Army. In the past, she was director of the Antiepidemic Administration of the People's Commissariat of Health of the Belorussian SSR and because of her great experience, will, and persistence achieved good results in organizing antiepidemic work on the front. Army epidemiologists G. Sinay and N. Zagorskiy, the directors of the infectious diseases hospitals G. Tribulev and B. Ugryumov, the chief of the epidemiological section of the 49th Army Polyakov, and others all worked well.

The struggle against typhoid fever could only be successful through the implementation of complex measures among the troops and population. Therefore, our chast' helped to restore local hospitals and treated civilians in the infectious diseases hospitals of the front. Sanitary processing with the delousing of clothing of individuals who had been in contact with typhoid fever patients was widely practiced. As a result, there were not too many cases in the troops of people ill with typhoid and typhus fever and with dysentery and the epidemic state of the front during the destruction of the Germans at Moscow was favorable.

The struggle against infectious diseases was also conducted in the partisan detachments operating within the rear area of the German troops and within the zone of our offensive. As an example of the great bravery

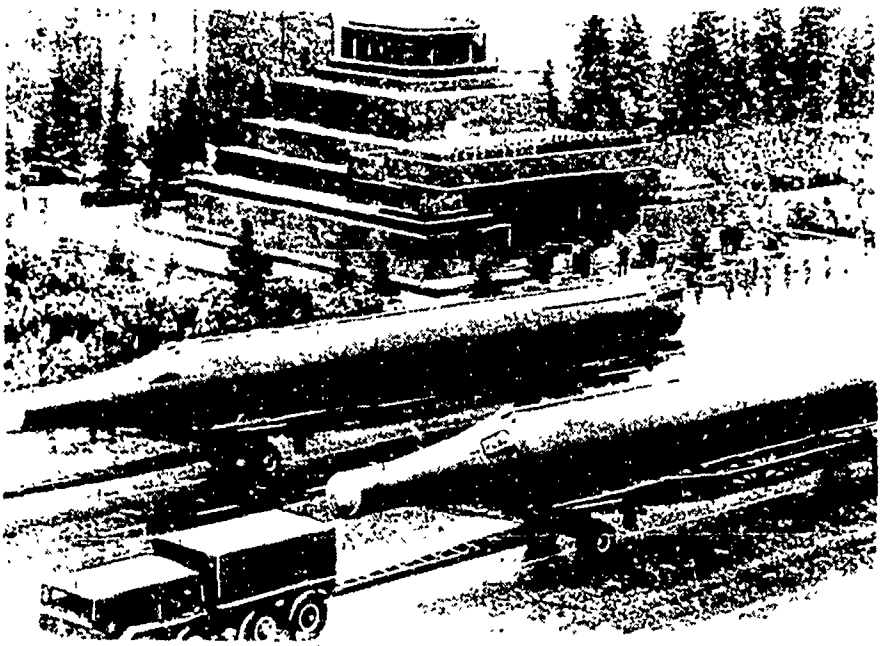
and high patriotism, we can use the work of a group of medical specialists in a partisan hospital located in one of the villages south of Vyaz'ma. Under enemy fire and at times lacking even the barest essentials, they treated the sick and wounded. The partisan hospital was directed by the Moscow doctor, Bakhrev, and the infectious diseases department was supervised by a military doctor, Kutuzov.

Some epidemiologists died while carrying out special assignments. In the middle of March 1942, the epidemiologist of the 33rd Army, Military Doctor 2nd Rank professor M. Kapusto, flew into the enemy rear. There, under extremely difficult conditions, he conducted antiepidemic measures in the struggle against typhoid fever in a group of our troops operating under the command of General M. Yefremov. M. Kapusto died at his battle post at the end of April. Army epidemiologist Likhtman was lost earlier during the Smolensk battles and, somewhat later, the head of the epidemiology department of the 49th Army, D. Tegov, was lost when his chast', cut off by the enemy, was trying to break through in order to link up with other chast'. We revere the memory of our military compatriots-epidemiologists who honorably carried out their patriotic duty to the homeland.

By the beginning of April 1942, the Hitlerite troops were thrown back from Moscow to a distance of 150-300 kilometers. The struggle against typhoid fever in the liberated area became the number one task for the epidemiologists. We shifted from a sanitary epidemiological reconnaissance to a systematic sanitary epidemiological observation over a great multitude of settlements. The field hospitals were also included in this work. Sanitary processing in the chast' became a regular matter. We adhered to the system of a three-time bathing per month.

Infectious morbidity among the front's troops, which had increased when they first moved into the liberated area, quickly began to decline. Assanation of the areas of chast' dislocation was also facilitated by the antiepidemic work conducted among the local population.

Thus, during the period of defensive battles at Moscow and during our counteroffensive, the medical service helped to preserve the health and life of many, many Soviet soldiers.



/ November 1971. Rocket launchers pass in parade review along Red Square.

WITH CONSIDERATION OF MODERN WARFARE REQUIREMENTS (pp 53-57)

Colonel G. Usol'tsev

Modern highly maneuverable and fluid battle with frequent changes in the situation presents serious demands on the organization of personnel messing. Bravery, steadfastness, and the ability to operate under complex conditions are mandatory qualities without which the food supply service specialists cannot successfully resolve their assignments in a combat situation. In order to feed the troops promptly and well in battle, considerable effort must be exerted, initiative and ingenuity must be displayed, good organization and efficient actions must be manifested, and there must be a feeling of personal responsibility for the assigned work.

The best school in which to develop these valuable qualities lies in the tactical and tactical-special exercises. It is under conditions approximating combat that the craftsmanship of specialists and cohesiveness of podrazdeleniye is honed and the readiness to operate in modern combat is checked. This is why in our district the personnel of the food supply service worked so hard on their field skills.

Prior to moving out into the field, an organizational plan is compiled within the chast' concerning food supply and messing which defines the supplying groups, the composition of the food and clothing supply points (PKhD) and their equipage with technical facilities, the food supply norms, the coordination among supply platoon commanders and combat podrazdeleniye commanders on the organization of messing, and so forth.

Prior to the exercises, particular attention is given to equipping vehicles with removable heated booths (bodies) which help to preserve the products against freezing in the winter, against rain and dust in the summer, and provide conveniences for the work of cooks out in the field, to make boxes (containers) for bread, meat, and fresh potatoes and vegetables, and provide for better means by which to preserve these products. The vehicles used to transport field kitchens are provided with tents, means to increase roadability, and necessary tools and spare parts. The truck bodies are washed and, if necessary, are disinfected. In addition to the food

supply chief, the readiness of the transport vehicles to take on food supplies is also checked by the chast' doctor who makes the appropriate notation in the medical log of each vehicle.

We also do not forget about the means for water delivery and storage. They are provided with means of insulation for winter. For example, coverlets are sewn for the TsV-3 and TsV-4 tank trucks.

In many chast', trivets with special burners, used to brown, steam, and fry food products and perform other heat processing, were built for the PKhD which did not include PP-1 hotplates in their T/O.

Practical exercises are held with the cooks on the eve of training on matters of setting up the field kitchens and readying the work places, packing food supplies into vehicles, and setting up frame tents, and their knowledge is checked on their ability to process food products and prepare meals under field conditions and on how to operate gas jet burners.

Speaking of the gas jet burners. Their proficient use helps to make work easier and most important, it helps in preparing food more quickly. Unfortunately, their value is still underestimated: they do not know their arrangement nor rules of operation. Occasionally this leads to incidents of a type which happened, for example, in the chast' where Senior Lieutenant V. Vereta is the food supply chief. The field kitchens' fuel systems had not been checked for a long time and cooks were not taught how to use the gas burners. Consequently, they were unable to fire them up during the exercises and much time was lost in order to convert their fuel kitchens to solid fuel. As a result, meals were prepared after considerable delays.

In organizing messing under field conditions, we give great attention to compiling special apportionment of provisions. This is developed with a consideration of three-time preparation of hot meals, the physical load on the people, and the nature of proposed troop activities. Provisions are selected in such a way that under any conditions, meals could be prepared from them in a short period of time. This is very important if we take into consideration that there are no conveniences in the field such as those which exist in permanent messhalls. At the same time, we must also remember the additional difficulties which are brought about by inclement weather.

Experience shows that during an exercise, the first courses are prepared not only from fresh products, but also from packaged [briketirovannyy] and canned cabbage soup, borshch, and barley soups with dried potatoes and the second courses are prepared from quick-cooking products. Cooked macaroni or mush is served for breakfast and supper. As a general rule, fresh products and meat are used in the assembly areas and meat and fish are replaced by canned meats and fish during the offensive and when on the march.

The prompt supplying of personnel with hot meals during an offensive greatly depends on how the food supplies are set up in the mobile stocks. Practice confirms that it is desirable for the supply platoon to have 1-2

daily rations of concentrated products with intermediate messing and one for independent meal preparation in mess tins. This is what we follow. The rations are usually made up from provisions for breakfast, intermediate messing, and for supper. For intermediate messing we issue bread and canned meat and vegetable products, as well as provisions obtained through the chast' commander's fund, and we also apportion them into packages for one, two, or three persons.

The use of quick-cooking cereals (groats, millet) from which good mush can be cooked in 15-20 minutes has recommended itself well for exercises. Also convenient to use are the field daily rations — selections of packaged meals including the daily ration of prescribed provisions with the exception of bread, sugar, and tea.

The availability of fresh, concentrated, and canned provisions carried by the supply platoon transport facilities makes it possible to prepare meals under all conditions. The troops highly assess its taste qualities.

As far as the readying of field mechanized bakeries for the exercises is concerned, tactical-drill exercises are held in advance with the personnel during which the bakers improve their skills in setting up and closing down the bread plant, stowing equipment, inventory, and raw products in trucks, and also carry out test bread baking.

In addition to baking fresh bread, we also build up a stock of slow-hardening bread. To do this, the regular bread, while still warm, is packed into cardboard boxes. These boxes are closed and all edges are sealed with paper tape. In order to keep the bread from becoming moldy, mustard powder is evenly sprinkled over the bottom of the boxes and the top covered over with filtering paper. The boxes are then placed in racks and kept for a period of 4-6 hours so that the bread would go through self-sterilization resulting from its high internal temperature. The bread is then sent off to the podrazdeleniye where it is stored in the usual manner.

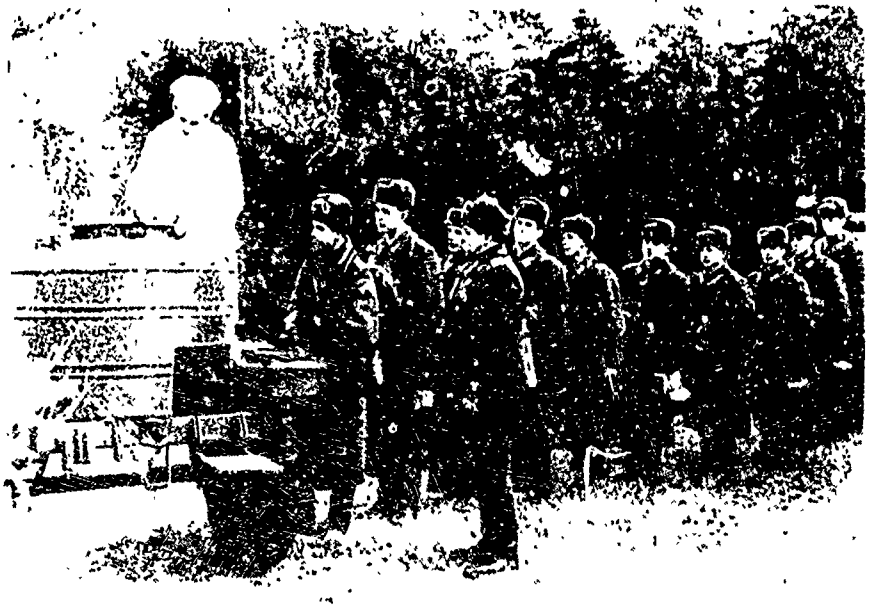
If we are to speak on organizing personnel messing under field conditions, we have also accumulated a considerable know-how in this matter as well. We will provide several examples.

The personnel of the supply platoon, commanded by Master Sergeant reenlisted service I. Lubenets, operate efficiently and capably in all exercises. The soldiers quickly set up the tents and field kitchens. In selecting the location at which to deploy the PKhD, consideration is given to tactical and sanitary-hygienic requirements and measures for protection against enemy means of mass destruction are followed. Good use is made of natural cover in setting up the field kitchens: gulleys, depressions, forests, and heavy brush, and rules of camouflage are strictly followed. Radiation and chemical reconnaissance is performed in the PKhD deployment area and the quality of water sources is checked. The cooks and drivers of this platoon are well acquainted with the order and rules for performing sanitary processing and decontamination of vehicles, kitchens, and equipment. Under any and all conditions, they deliver hot meals to the

podrazdeleniye three times a day and when the situation does not permit this, they promptly issue intermediate messing provisions directly to the personnel.

Personnel of the supply platoon, commanded by Master Sergeant reenlisted service N. Gladyshev, also demonstrate firm skills in organizing personnel messing. The cooks ably prepare hot meals while on the move and use halts to put provisions into the cooking kettles, check the work of the jet burners, and supervise meal preparation. The stowage of provisions in trucks is also well thought out in the platoon, which makes it possible to issue them quickly during short halts.

The successful work of supply platoons during exercises is greatly dependent on how they are supervised by the podrazdeleniye commanders. Many positive examples of this can be given. During the exercise period, many podrazdeleniye commanders promptly set the dislocation missions for their supply platoons, precisely define the routes of movement, the march sequence, the arrival times and points, the time and order in which meals are to be issued, and so forth. For example, this is the way tank battalion commander Lieutenant Colonel B. Soskov operates. Consequently, the personnel in this battalion are always promptly provided with hot meals, the kitchens do not lag behind combat podrazdeleniye and promptly arrive at the designated area.



The field kitchen arrived in the exercise area. In the photo: supper is issued to the troops.

It is known that in modern battle, individual soldiers, small groups, and small podrazdeleniye have to operate independently away from the basic food and clothing supply points. The organization of meals for them requires

special attention. This is well understood by the specialists of the food supply service commanded by officer A. Fedotov.

When moving out on exercises, the small MVK-50 and MK-10 field kitchens, small-size gas hotplates, trivets, concentrates and canned products, as well as food products not requiring prolonged initial and heat processing in an amount of 2-3 daily rations are issued in this chast' to separately operating podrazdeleniye.

Since these podrazdeleniye do not always have the possibility to prepare meals in single apportionment, several versions of provisions apportionment are planned for them and the necessary selection of food supplies is issued accordingly. Depending on the situation, the commanders of such podrazdeleniye make their own decisions on matters of meals.

Enlisted mess cook Private I. Rzhavichev issues food during field exercises to traffic controllers Privates P. Kudryavtsev and V. Zelin (left).

However, there still are cases in which troops in the small podrazdeleniye occasionally do not receive hot meals and are limited only to dry rations. This, of course, is improper. We must teach ourselves to so set our work that the troops would always and everywhere be provided with hot meals.

In modern warfare, there is always the danger of contamination to provisions and prepared food. Preparations for this must be made in advance, which means that we must learn how to take protective measures against enemy means of mass destruction. And this is followed in the troops when moving out on exercises.

In order to provide meals for personnel in "zones of radioactive contamination" the necessary supplies of tinned and concentrated products can be set up in protective packing which are storable and convenient for culinary processing.

In order to protect provisions against contamination, it is recommended that these be transported in specialized vehicles (bread buses, trailer-vans, refrigerators) and wide use is made of the KP-125, PAK-170, and PAK-200 field kitchens for food preparation in dangerous zones since these kitchens provide all of the necessary conditions to prepare meals in any situation.

We give much attention to teaching the food supply service specialists in the skills of organizing messing for podrazdeleniye which are in zones of radioactive contamination.

For example, during one of the exercises, the personnel of the supply platoon commanded by Senior Sergeant reenlisted service V. Ilyukhin had to cross a "contaminated" sector. On command, the troops donned their individual means of protection and covered the kitchens and food supplies in the trucks with canvas, straw, wingnut, and other materials at hand. The column crossed the dangerous sector at a higher speed. After this, the cooks performed a partial decontamination of the equipment: they washed it off 2-3 times with soap and water, with detergent solutions using brushes (rags), and then washed it off with clean water with subsequent radiometric control. The provisions were also subjected to radiometric control and processing.

When organizing messing in zones with "increased radiation," it is necessary to adhere strictly to the sanitary-hygienic rules of meal preparation. It is also important to reach the stage in which mess tins, cups, and spoons carried by the soldiers and sergeants would be wrapped in paper as a means of protecting them against radioactive dust.

In organizing the protection of personnel against enemy means of mass destruction, we also strive to adhere to the rules during meal preparation and meal taking according to the specific conditions dependent on the local radiation level. Thus, for example, with an input of "radiation level up to 0.5 roentgen per hour" we prepare meals and issue the food in the normal manner and ensure that measures are taken to prevent contact with radioactive dust. When the radiation levels are up to five roentgen per hour, we teach the rear specialists to prepare meals in tents covered over with dirt and in areas where the radiation level is higher than five roentgen per hour, we teach them to prepare meals only in extreme cases and then only in special shelters equipped with filtering ventilation systems.

Of no little significance in modern battle is the high mobility of the supply platoons and their ability to follow right on the heels of the combat formations. This is what we try to work out during each tactical walk.

Here is a characteristic example. During one of the exercises, an extremely difficult situation developed. The roads were covered with deep snow. Wheeled transport were barely able to make their way even along column routes and not to speak of open land. On the decision of the tank battalion commander, the supply platoon was temporarily placed into tracked armored personnel carriers: the KP-2-49 kitchens removed from the truck trailers were placed on two of the personnel carriers and the mobile provisions stores and inventory were carried on the third. This made it possible for them to keep up with the podrazdeleniye. The tank personnel received hot food three times a day.

We comprehend that this is not the solution to the problem but only a way out of a difficult situation. However, such cases are not solitary ones. They indicate that it would be desirable to provide the tank podrazdeleniye with field kitchens mounted on transport facilities of higher roadability.

At the same time, we would like to bring up several questions in the article which, in our estimation, require a practical decision. In particular, we feel that there is good reason to have 1-2 daily rations of concentrated food products in the mobile provisions stores of a motorized rifle or tank battalion be replaced by a special ration with intermediate messing. It seems to us that this ration should consist of food products for breakfast, intermediate messing, and dinner.

Life itself pushes forth the need to expand the table of provisions replacements for field conditions because with a two-time feeding there is a reduced requirement for such products as suet, vegetables, and cereal grain. It would be desirable to replace the latter with products usable for intermediate feeding and which do not require heat processing.

Further. In filling out the provisions for podrazdeleniye, problems arise in the apportionment of loose products. It would be desirable to provide the troops with more packed products.

This article touched upon only a few problems on whose decision the success of organizing field messing of personnel during their operation in a situation approximating that of modern warfare is greatly dependent.

THE CONCERNS OF PRECRUISE PREPARATION (pp 58-61)

Captain Lieutenant 3rd Rank Z. Zhabko

The strength of a modern warship lies not only in its first-class equipment and armament, but also in the constantly high readiness of its personnel to make rapid and skillful use of this equipment and armament. This readiness is ensured by high moral-political qualities of Soviet sailors, by their unlimited loyalty to the homeland, the Communist Party, and the Soviet people, and by their outstanding knowledge of the equipment and good practical skills in its operation and combat employment.

The successful work of the personnel is greatly dependent on the work of the supply service. At the present time, when Soviet ships are performing long training cruises in the expanses of the World Ocean, the role of rear support has increased even more. As we know, the ship's captain directs this arduous and worrisome activity. Though responsible for the combat readiness and the proper employment of armament and technical facilities, he is also called upon to have a paternal concern for the living conditions of the crew and in fully satisfying his subordinates with all types of subsistance. An experienced commander is always aware of the course of administrative matters. All officers and petty officers follow his example. Guided by the requirements of regulations on the need to show concern for subordinates, they demonstrate a daily attention to the material and common services requests of the people. The party and Komsomol organization of each ship also considers its important obligation to be that of facilitating success in the solution of administrative matters.

However, all of this does not lessen the particular role of the assistant ship captain for supply. It is he who is responsible for the overall state of shipboard administration and to organize the prompt supplying of personnel with all prescribed types of material goods. Regardless of where the cruising takes place, the assistant ship captain for supply is called upon to efficiently organize the implementation of all tasks assigned to him. In this connection, I would like to share some of my experience in this work as assistant ship captain for supply. I do this because now that I am studying at the Military Academy of Rear and Transportation, I am

combining theoretical knowledge with practical matters and have understood even more clearly the need to summarize the know-how of this difficult and worrisome work aboard ship.

Upon receiving the order to ready the ship to put out to sea, our commander, as always, assigned missions to the department commanders and chiefs of service. I compiled my work plan after this. In it I included those measures which had priority for implementation, namely: repairing the provisions lockers, providing them with racks, and readying additional space for stores. To do this, we set up a nonstaff repair team aboard our ship under the supervision of the boatswain. This group included 5-6 individuals with the specialties of welders, carpenters, metalsmiths, and cabinetmakers. With the permission of the flag engineer-machinist, and using the personnel of the shore repair shop, we put the electrical equipment of the galley, the meatgrinder, the covers of the foodcooking kettles, the breadbaking forms, and other equipment into order.

Together with the commissary man, we calculated the requirements in provisions, clothing, boatswain's stores. The preparations plan and calculations were coordinated with the chiefs of the supplying agencies. In the event some of the items were not available in the warehouses, we purchased them from the post exchange stores. This occasionally concerned such items as writing paper, hair clippers, and cutting boards. At times, measures had to be taken to make certain articles in the shore shops or aboard ship. The absence of some items, materials, or products when out at sea can lead to undesirable consequences. Thus, once, we forgot to include grease pencils in our requisition which are necessary for the combat information center to keep up with the situation. As a result, this work had to be carried out with ordinary pencils, with the result that the work, naturally, suffered.

Or take this case. At one time prior to putting out to sea, a careful check was not made on the time periods for preparing yeast (not all groups were given to the laboratory for analysis). When out at sea, it was found that their breadbaking properties did not conform to the requirements. Consequently, we were unable to bake fresh bread and for a certain time were forced to issue crackers and long-storage bread to the personnel. This, naturally, affected the meals and the attitude of the crew as a consequence. Later, we did not permit similar mistakes to occur, as all understood that there could be no trivialities in matters of supply.

Usually, we try to provide for a reserve of material goods in the event that a need for redistribution or additional issue is required out at sea. Once, when the ship arrived at the designated area, we were ordered to provide fresh products to a vessel which had been cruising for a long time. We were able to do this without any detriment to ourselves since we did have a supplementary supply.

In short, a plan thought out and calculated in all details is the foundation of the administrative work for the assistant ship captain for supply in readying the ship for a cruise.

In addition, before taking on the stores, we compile a chart for their more rational placement in provisions lockers, in auxiliary areas, and if possible, even in the living quarters. This made our work easier out at sea and also made it possible to promptly expend the products without letting them spoil.

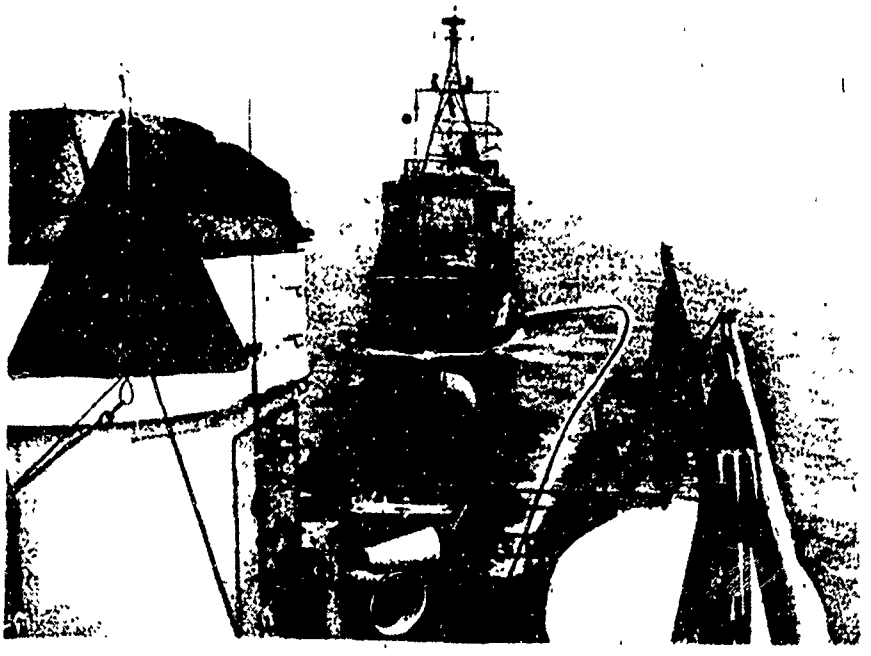
In order to facilitate work, we also set up a control card for the delivery of provisions, clothing, and boatswain's stores to the ship. The card was usually made from cardboard and the recording done in pencil so that after the delivery of material goods corrections could be made. The card carried the following columns: designation of material; required delivery; delivered by a specific date; balance required for delivery; and comments. This made possible a daily check on the state of the vessel's support, have all of the necessary information and calculations on hand to report to the commander, and also the ability to make a sound decision as to where more forces and means should be sent.

We gave particular attention to the placement of provisions. The vessel does not have sufficient special space for this. Therefore, it was necessary to observe that ratio of fresh, canned, and dry products which would permit the organization of sensible crew messing during a lengthy cruise and to achieve good product preservation. We stowed the products in the following order. The dry provisions lockers were used for cereal grains, dried fruit, tea, sugar, organic acids, yeast in airtight packaging, dry and tinned milk products, and spices in polyethylene packaging. Canned meat, fish, vegetables, and fruit, juices, extracts, brined vegetables in small allotments, part of the fresh potatoes, onions, beets, and carrots were placed in the wet provisions lockers. In the initial stages, spoilage of juices was observed because of high temperature and humidity. Tomato and orange juice and apricot compotes kept in glass containers preserved well. In subsequent cruises we took them without any fear. We used one of the cabins, furnished with racks, for the storage of flour, macaroni products, and crackers. In the southern latitudes, potatoes and vegetables were stored in bins set up on the upper deck and superstructures. Potatoes, separated into 20-25 kilogram groups and kept in wooden crates covered over with canvas for protection against deposits and the sun's rays, kept rather well against spoilage.

Taking into consideration the fact that millet becomes spoiled during lengthy storage, we were able to reach agreement with the supplying agency for an equal exchange of it for other grains. Fresh as well as salted fish does not stand up to prolonged periods of storage; consequently, we were permitted to exchange part of it for canned fish in its own juice and smoked fish.

But we did not get by without mistakes. Once, when preparing to put out to sea, we received salted fish in 100 liter barrels, but it was not possible to issue it quickly in one or two servings. This led to a drop in the taste quality of the product. The next time, with the permission of the supply agency chief, we had salted fish brought in in

packages of 25 kilograms. This time, there was no spoilage. Later, we began to have all products delivered which were from the latest periods of production and of high quality and in general tried to receive perishables not more than 1-2 days prior to putting out to sea.



During exercises at sea. The tanker ties up to a warship.

An increase in provisions storage life was achieved by selecting products stable for storage and compact for stowage. We frequently unpacked them to provide more space. Thus, for example, canned meat and fish were stored on racks and not in boxes. Up to 50 percent of the fresh meat and fish, received in blocks, was stored in the refrigeration locker after removal from the cardboard packaging.

In preparing for one of the cruises, during one of the shakedown cruises by the vessel, demonstrative-control breadbaking and meal cooking was performed under the supervision of a specialist from the fleet's food supply section. We were convinced of the good skills acquired by the baker, in the good quality of the flour and yeast, and in the proper working order of the technological equipment. Later, we sent the baker off on a 12-day assignment to the garrison bakery where he acquired the practice of baking bread in the accelerated method with the use of organic acids.

Well-planned and organized personnel messing has an extremely great role in a long cruise. After being out at sea for a long time, the sailors present higher requirements on food quality. In order to better take their desires into consideration, a culinary council was formed aboard the ship under the supervision of the political officer and which included the chief of the medical service, the assistant ship captain for supply, the cook-instructor, the commissary man, and the secretaries of the divisional

Komsomol organizations. The council took an active part in compiling product apportionments.

Because sailing in the southern latitudes frequently brings about the need to allay thirst, we set up the preparation of bread kvass made from rye biscuits. The small pieces of bread remaining after completion of meals were turned in to the breadcutting area and then dried. The prepared biscuits were put into a wooden barrel, which had been made available from the storage of vegetables and preliminarily steamed out, and then filled with boiling water and permitted to work for a full day. This bread liqueur was then passed through a sieve. The dissolved yeast and sugar syrup was poured into the bread liqueur and permitted to stand for 5-7 hours to ferment. When the kvass began to foam, it was filtered through gauze cloth folded into several layers, and the barrel then closed and placed in a cool area. The kvass was ready for use after one day. Approximately 10-11 kilograms of crackers, 3-4 kilograms of sugar, and 100-120 grams of yeast were used up to make 100 liters of kvass.

Much attention had to be given to dishware. A check was maintained to see that it was always in sufficient quantity and that it always was in good condition. Concern was also given to the establishment of porcelain and glassware stocks for the wardroom. With the permission of the supplying agency, 40-liter aluminum pots were obtained which were used for the preparation of dough. In order to raise the responsibility of the cooks and baker for the knowledge and performance of their obligations, we made them take tests prior to putting out to sea on the rules of working with the technological equipment in the galley. Prior to the delivery of perishable products, the amount of coolant and the work of the refrigeration chamber was inspected jointly with the chief of the engineering department.

As we know, an important measure in preparing for a cruise is that of additionally providing the officers, petty officers, and sailors with clothing supply. For these goals, the uniform, special clothing, and bed linen stocks were brought up to the established norms. Before the articles were accepted, all unnecessary articles were removed from the lockers. Fur and cotton articles were turned in for dry cleaning. The common services areas also received additional equipment and were supplied with furnishings and repair materials.

A lighter type of uniform was received for sailing in the southern latitudes and tailoring was performed beforehand. Jumpers and white trousers were issued to the sailors for use as the walking-out uniform when they would go ashore. The personnel always had a good appearance.

Bath-laundry service and linen laundering is also of considerable significance on distant cruises. For these goals we always obtained the necessary amounts of soap and detergent ahead of time. Some of the toilet soap was replaced with soap usable with sea water. We always had a trained barber aboard ship and there were several non-staff barbers in the divisions.

We set up reserve supplies of repair materials from turned-in property to be used in the repair of clothing and shoes; nails, glue, thread, buttons, and hooks were obtained from the warehouse of the supplying agency. Boatswain's property was obtained in accordance with the developed requirements. We were primarily concerned with such materials as grey PKhV enamel, zinc (lead) white, lead (iron) oxide, solvents, rags, oakum, coarse bleach, doubled cloth, batiste, and so forth.

A few words about the ship's small stores. Careful attention must also be given for its selection of product assortment and quality. Experience taught us this. On our first cruise, we took along several boxes of the Prima cigarettes. Because of the increased humidity, these cigarettes became spoiled after a certain time. Later, we learned that cigarettes in cellophane packaging, for example Neva, Oktyabr', and Shipka, preserve the best. During a cruise, there is a great demand by the sailors for slips, wafer towels, and for self-holding cotton socks. We always had these items on hand. Among items of provisions, it is useful to carry juices in 300-500 gram assortments and liquid cheese in cubes, pens, mailing envelopes, paper, and so forth in office supplies. If the plans call for entry into foreign ports, we always took souvenirs as well as photo materials along with us. It follows from what has been said that the success of a distant cruise is greatly dependent on careful preparations made for it at the base. The saying, "Success at sea is forged ashore," is not an idle one. This old rule always justifies itself when it is remembered and strictly followed.

TRADE-AMENITIES TO GARRISONS IMPROVE (pp 62-65)

N. Svetikov, director of the production-technical department of the Trade Directorate, Red Banner Kiev Military District

In recent years, much work has been done in the Soviet Union to improve amenities services to the population. However, as L. I. Brezhnev stated at the 24th CPSU Congress, "we must seriously improve the work of all branches of public services — public catering, tailoring of clothes, all types of repairs, and organizing relaxation for the workers. These are not simply branches called upon to carry out a plan, but services which have a direct concern with people, with the great variety of their tastes, and with human attitude. Obviously, such work cannot be generalized in percentages of plan fulfillment and income."

The public services demands of the Soviet people are continuously growing. To more fully satisfy them, the Ninth Five-Year Plan calls for an increase of not less than two-fold in the volume of paid services available to the population. This task is also an important one for the military trade agencies, including those in our Red Banner Kiev Military District. It must be said that it is being fulfilled successfully. We have had important changes in just the past few years.

Until just very recently, common services enterprises were located in small and poorly adapted buildings, had a low capacity, and had equipment not especially designated for its purposes. Now, instead of workshops, there is a predominance of class-type ateliers engaged in personalized tailoring. The number of tailors in them numbers more than 50 persons. There has been a significant increase in the ratio of young tailors who have a professional-technical education. The ateliers are provided with new and highly productive universal and special sewing machines, presses, and so forth. Work conditions have also improved since the enterprises themselves have been moved, in the majority of cases, to new buildings which respond to modern requirements. The economic brigade method of sewing is being introduced universally.

The strengthening of the enterprises, their increased technical outfitting, and the introduction of progressive work methods ensured in the past five-year plan an increase of 28 percent in productive labor and a 30 percent increase in the volume of common services. The time required to fill an order dropped on an average from 30 to 21 days and sewing quality improved.

In achieving improved work, the collectives of the ateliers strive to seek out new production possibilities and potentials in every way possible. There are many example of this. As an example, let us take the sewing of uniforms for school graduates. This is a true test for all of the workers. At times it is not an easy test to pass. Last year, we had various organizational shortcomings.

Thought was given to this matter at the industrial combine where I. D'yakov is the director. The enterprise managers and the party bureau conferred with production leaders. Many individuals spoke on how work organization had to be improved, on raising the responsibility of craftsmen for the prompt and proficient sewing of uniforms for young officers. Summarizing all of the useful suggestions, preparations were started in the combine long before the start of sewing. Appropriate schedules were set up which reflected all of the agreed upon obligations. Permanent work supervision was introduced. Intrashop quality commissions were set up on community beginnings. These commissions checked on how technical conditions were adhered to during the sewing process. Such practice makes it possible to correct all defects in the articles during the time they are being processed and at the same time is a good school for the expert tailors.

Moreover, by orders of the garrison commander, a permanently operating commission for community control over the quality of sewing officer uniforms was set up. Its members always are present in the ateliers when the finished items are turned over.

Competitive reviews on uniforms for school graduates are held in the combine. The garrison's military personnel are always present. Their positive comments indicate that good work is done in the ateliers. The enterprise's collective took part in an inspection review for best layout and tailoring of military clothing. In the garrison Officers Club, blouses, trousers, overcoats, and so forth were exhibited for broad inspection. Those who attended filled out special questionnaires and expressed their comments on further work improvement; positive comments were made on the best craftsmen.

The inspection reviews have great educational significance. They raise the responsibility of craftsmen in the matter of uniform sewing. During such inspection reviews, the pattern makers and tailors learn leading work methods and copy the know-how of the best. All of this has a positive effect on the state of affairs. For example, the sewing of military uniforms for school graduates is now performed at a rate of 80 percent receiving an outstanding rating and 20 percent receiving a good rating.

The enterprise's collective constantly serves the population of remote and small podrazdeleniye. A schedule has been drawn up for the travel of pattern makers and the days, times, and locations are designated for taking orders, fitting, and issuing finished articles. A vehicle equipped to carry the finished articles has been made available. Orders are taken on the first trip, measurements and fittings are made in the second visit, and the finished articles are delivered on the third visit. Orders are filled promptly. This is very convenient for the people. Furthermore, readymade samples are delivered to remote garrisons of what can be purchased or what can be ordered.

There is also much that is positive in the work of the ateliers which has been supervised for 25 years by T. Vekhalevskiy. Experienced pattern makers N. Gayvronskiy and V. Vinokurov work there and they also are veterans of this enterprise. There is also a brigade of communist labor supervised by A. Bubyr'. The articles sewn by this brigade receive a rating of only outstanding. Particularly renowned are craftsmen L. Snezhko, P. Rud', L. Yakimenko, A. Dolgopolova, and V. Suvorova.

There are also excellent military uniform sewing craftsmen in the brigade supervised by A. Sevast'yanova.

There are many enterprises in the district which have established themselves as quality makers of military uniforms. Essentially, their successes are based on a constant improvement in work organization. It is because of this that the sewing of uniforms can be increased although the production areas remain the same, the same equipment is used, and there is the same number of workers. Also of significance is the high standard of service, the attention given to the purchasers, and the fulfillment of orders within the required time.

However, matters stand a little worse in the making of shoes and in shoe repair. Here we have encountered many difficulties. These have been caused primarily by the small production capacity of the shops and the limited number of orders. This hinders the supplying of materials to the workshops and holds back the use of mechanization, staffing with qualified craftsmen, and providing for their profitable work.

The bottlenecks are overcome in various ways: by specialization of workers and by setting up receiving points in small podrazdeleniye where the presence of craftsmen is not profitable.

As a means of an economic consumption of leather materials, centralized patterning according to prescribed boot sizes is being introduced at the individual shoemaking ateliers in the Kiev industrial combine. Boot patterns, in a full set of pairs, are packaged, marked, and sent off to the post exchanges for small shops. The secondary pieces of leather are used to make slippers and sport shoes which are patterned and mass produced and sold through post exchange stores. A great savings in money and materials is attained through centralized patterning.

The quality of produced items is of great importance in raising the economic effectiveness of footwear production and service standards. In order to raise it, wide use is made in the footwear enterprises of new modern materials. For example, rubber glue is used for the gluing of soles and a light wear-resistant porous rubber is often employed. The leather soles of men's and women's shoes are strengthened with taps. Soles and welts are sewn with kaprone threads.

As a result of the measures taken, the individual making of military footwear becomes more profitable.

One of the more important tasks is the further expansion in public services to the military personnel and their family members, particularly to those in remote and small-sized garrisons. Its solution is not a simple matter if we take into consideration the number of orders for services associated, let us say, with the renting out of musical instruments, the repair of television sets, refrigerators, washing machines, and other complex equipment is insignificant in the military posts.

Under such conditions, there is no need to have a permanent enterprise with a full working day since they do not justify themselves. We followed another path; on the request of the district command, the Ukrainian SSR Ministry of Public Services obligated the local public services organizations to provide full-scale assistance to the chast' in servicing remote and small garrisons.

As practice has shown, the travel by public services specialists from local combines on specialized vehicles to our military posts has fully justified itself. For example, a good know-how has already been accumulated in the post exchange directed by M. Andrushchenko. A good services bureau was set up in the garrison on agreement with the city public services combine. The city public services workers constantly accept orders and, according to an established schedule, call in the appropriate specialists. The office satisfies the requests of the military post inhabitants in the rental of domestic utilities and the repair of various housekeeping equipment.

Public services are organized in a similar manner for the people in another one of our garrisons. They regularly take in orders for dry cleaning, photography, and repair of knitted goods and housekeeping equipment. The public services specialists make house calls as indicated in the orders.

The practice of public services to small podrazdeleniye during the holding of fairs has justified itself. A broad assortment of commodities is exhibited and orders are taken at the same time for the sewing of uniforms, civilian clothing, footwear, and photography shops, barber shops, watch repair shops, assembly of chest ribbons, and so forth are in operation.

There is a constant search for the best form of public services for military personnel and members of their families which would be responsive to the requirements of time and economically advantageous. All that is new

and advanced is widely disseminated. At times, however, not everything depends on our trade workers. In conjunction with this, we would like to express a few suggestions and comments.

We are suffering from a shortage of universal equipment to ensure the damp processing of articles and items of clothing, specialized machines for the attachment of cuffs, and small-scale mechanization facilities. Because of this, article quality is reduced and the finishing time extended.

The post exchanges still do not have specialized small-tonnage vehicles of the UAZ class to service remote and small garrisons. Use has to be made of large capacity trucks which is not economically advantageous.

In spite of the individual unresolved problems, favorable conditions, on the whole, have been established in recent years in our district to further improve public services to the military personnel and members of their families. The military trade workers are applying all of their effort to more effectively utilize the existing forces and means at their command to carry out this task.

HIS PROFESSION — BOOKKEEPER (pp 64-66)

Captain S. Kosovich

Captain Quartermaster Service
P. Koval'chenko

Bookkeeper. Neither a rare nor a simple profession. For many who are not aware of its fine points, it means primarily accounting, invoices, receipts... It also is a great economic effort, the accurate filling-in of documents, records, accounts, and much other. The chief bookkeeper of the chast', Petr Semenovich Koval'chenko, supervises this work, taking into consideration all of the work features of the collective. He is well aware of the state of affairs at the construction site. A confirmation of this can be a conversation of which I was a witness.

Once, after a conference of officers, during which the engineer-machinist was raked over the coals, the latter approached the bookkeeper:

"All of this is because of you, Petr Semenovich, that the figures came out this way and that you do not see that money is needed for the repair of certain machinery, everything is found in paragraphs..."

"No, why so," responded the chief bookkeeper, "I can see, money is available, but now about the machinery which you have mentioned..." Then he began to list which ones were received when by the chast', what their operating life is, when and where they were repaired, who works them, and how they are maintained.

To those standing nearby, he sounded not like a bookkeeper but like an outstanding mechanic. The engineer also was quiet. The bookkeeper then summarized the conversation and made it so respectful and to the point that it was pleasing to all those who had taken part in it.

Petr Semenovich entered the accounting service more than 20 years ago. A year after completing the bookkeeper's course, the time came for him to enter the army. The training podrazdeleniye, a sergeant's rank, the assignment of squad leader. But the young sergeant spent all of his free time in the bookkeeping office. He would help draw up a certificate, make the necessary calculations, or make the appropriate entry in the record books.

An experienced administrative officer, Captain Konstantin Ivanovich Mel'nikov, observed the sergeant's aptitude for accounting work. On his recommendation, Petr Koval'chenko was sent to take the course for finance workers. Upon completing them, he was promoted to a lieutenant in the quartermaster service and was appointed to the battalion's bookkeeping section.

Now, with 20 years of experience, the finance technical school, and the engineer-economic institute behind him, and when party maturity has been achieved by the Komsomol leader, Petr Semenovich, with a smile on his lips, recalls the first years of his independent work. But even without those romantic and entertaining years, he is convinced that he would not be the chief bookkeeper of the chast' today and he would not be a true guardian of the state treasury.

Upon his arrival in the chast' he began to study fiscal matters. They both heartened and saddened him. He was heartened by the fact that the chast' was rhythmically fulfilling the state construction and installation plan but was saddened by the errors occurring in bookkeeping work which had a negative effect on the overall state of affairs. As an example, the chast' had received much building materials, spare parts for mechanisms, and so forth. But, as a rule, the goods were delivered late. Instead of 3-4 days, they were delivered from the loading station to the station of designation only after 9-10 days. In spite of this, documents were not presented to the railroad demanding payment for freight delays.

Communist Koval'chenko could not live with such matters. Several visits made to the railroad division supervisory personnel did not give any results. The bookkeeper then decided to use the rubles as a lever. Demands were sent to the railroad to pay for the delays -- initially for 2,000 rubles, then for 3,000 rubles, and then for 2,000 rubles again. This helped. The freight began to arrive on time. Time went by and Koval'chenko

matured in the quiet professional skills. He was later appointed chief bookkeeper and was accepted into the party. Petr Semenovich understood that now a large responsibility was placed upon him and he had to justify this high faith with good work.

The chast' was performing right-of-way construction operations. Materials were arriving daily for ballasting the railroad line being built. The chief bookkeeper noticed that in unloading the cars, there was less ballast than that indicated in the consignor weigh bills. But payment had to be made according to these documents. It turned out that the chast' was paying for what it was not receiving. The chief bookkeeper insisted that an authoritative commission be set up to study the question. The commission found carelessness on the part of the supplier. This was made known to the control and party organs and the consignor was paid only for the actual ballast received.

Petr Semenovich also had to deal with various types of swindlers who liked to stick their hand into the state pocket. The building materials warehouse was supervised by Master Sergeant P. Once, he brought in an account to be signed in which it was indicated that two boilers had been issued for a station structure under construction. But the chief bookkeeper was well aware that only one boiler was to be installed and mentioned this. The warehouse chief became confused. This put the chief bookkeeper on guard. He began to look more attentively into the activities of the master sergeant. A little later the master sergeant brought a receipt on the purchase of tools from a store. A check revealed that the purchased instruments were not in the warehouse. Other machinations on the part of the warehouse chief were also detected. Investigative organs took up the matter of the master sergeant and his confederates in the administrative store.

Petr Semenovich Koval'chenko was elected a member of the primary party organization bureau and a member of the commission on rationalization and inventions. This experienced economist spoke to the personnel on materials of the 24th CPSU Congress, capably and proficiently explained the requirements of the Letter of the CPSU Central Committee, the USSR Council of Ministers, the All-Union Central Council of Trade Unions, and the Komsomol Central Committee "On Improving the Utilization of Production Reserves and Strengthening the Savings State in the National Economy," and also renders assistance to young workers in accounting work.

When the chast', for its successful fulfillment of the second quarter's plan of the first year of the Ninth Five-Year Plan, was awarded the Challenge Red Banner of the USSR Council of Ministers and the All-Union Central Council of Trade Unions for the second time in a row, Captain Quartermaster Service Petr Semenovich Koval'chenko, just as all others who were in the enlisted men's club for this festive occasion, had a feeling of great pride for the high rating given to the collective's military effort and knowing that he had made his contribution into the success achieved by the troops.

A SHIELD AGAINST LOSSES (pp 66-68)

Captain 3rd Rank E. Kal'yanov

The chast', ships, and podrazdeleniye possess great potentials to economize in material goods and money. This has been confirmed by the know-how of economic work aboard ships and in chast' of the Red Banner Northern Fleet. Let us use the crew of one of the trawlers as an example. This is a friendly collective, always concerned about the good name of its vessel.

At one time, the crew took first place in competition on tactical and fire training in the Navy and was awarded a Certificate by the Commander in Chief of the Navy. The certificate given by the commanding admiral of the Red Banner Northern Fleet states that for successes achieved in combat and political training during socialist competition, by resolution of the Military Council, the vessel was listed in the Honor Book of the Red Banner Northern Fleet. The vessel was awarded a Certificate for first place in fleet competition for the engineering specialty.

This crew is distinguished by a thrifty attitude toward equipment and toward the use of material goods. The vessel's sailors do much to save national wealth. I will give two figures, they are wellknown aboard the vessel, 2,573 and 2,654 rubles. The first is the sum saved by the crew during 1969 and the second is the amount saved in 1970. These indexes were exceeded in 1971. The trawler's crew also lists one other sum of savings which significantly exceeds the previously mentioned figure. It was not achieved by easy work. The seamen performed routine repair of the main engines, auxiliary mechanisms, systems, and electrical equipment. They performed this work with their own efforts. Moreover, it was done in a minimum period of time.

Is 2,654 rubles a lot or a little? Taken by itself, the sum is not such a large one. But, if each military collective can save such an amount throughout a year, then hundreds of thousands of rubles of state means will be saved.

V. I. Lenin wrote: "Communism begins there where there is selfless and hard work, the concern of rank and file workers to increase productive labor, to preserve each pound of bread, coal, iron, and other products..." The trawler's sailors strive to fulfill this Lenin behest with honor.

Yes, the struggle for economy can truly never be overestimated. All possible paths for this are used aboard the trawler. Uniforms and special clothing are carefully worn and fuel is economized. The above-mentioned figures did not include the cost of means saved by the sailors by extending the operating life of equipment and by economizing the vessel's motor resources in carrying out combat training tasks. This is another and special matter.

The sailor's ration has become a higher caloric ration and consequently, the bread requirement was reduced.

"However, we do not throw the leftover bread overboard," says Warrant Officer Leonid Latyshev, "but collect it."

It is appropriate to mention that the issue of bread to the sailors is not limited. As much bread is placed in each bread basket as is used on the average.

But bread is not all that is saved. At times, one has to wonder as to the economic attitude shown by the sailors. Take this fact as an example. As we know, coveralls are used by people who are in constant contact with fuel and oil. Special clothing is also issued to the trawler's motor machinists. When the wear-life of this clothing was being set, it was obviously considered that it would be worn everyday. But there is no need for the motor machinists to do this. They operate the equipment from a remote control post, where it is always clean, and do not come in contact with the equipment. Naturally, from time to time they do have to put on the coveralls; for example, when performing repairs or various preventative inspections. But this is just during specific days. In short, the special clothing can easily last beyond the anticipated period. Maybe it will have to be laundered an extra time. But is this really so difficult?

Not a single savings potential is overlooked on the vessel. Take the catching of fish as an example. Some other commander or administrative officer would not bother with it: just an additional worry. But then, why should it be overlooked? It does not hinder combat training nor does it disrupt routine shipboard life since this "commercial fishing" is done during nonexercise or nonwatch free time.

By the way, fishing is a favorite pastime for many crews. The competitions that are set up. The enthusiasm that is aroused. Who will catch more fish? Also, this "pastime" provides the vessel with 500-600 kilograms of fish annually which is used in the planned subsistence for the personnel.

At first glance, it may appear that the struggle for firm military discipline and for a punctual adherence to the requirements of regulations,

instructions, and manuals and the struggle to improve combat craftsmanship has nothing in common with thriftiness and economy. He who thinks thusly is deeply mistaken. I will provide some examples as confirmation of this.

Because of thoughtlessness and carelessness, one of the vessel's sailors removed the wrong can of paint from the paint locker. Painting was done at night, and on the morning it was found that the paint was of the wrong color. The result — material was expended and effort and time went for naught.

Another case. In readying the trawl line for laying, instructions were not carried out and it became inoperative. Repairs had to be performed and there was an unprovided for waste of material.

It is not by happenstance that there where service is precisely organized, military discipline is strong, and combat craftsmanship higher, there is where the economic indexes are better.

The crew saved dozens of tons of fuel. But this would hardly have been possible if outstanding specialists-motor machinists were not serving aboard the vessel. The motor machinists section commanders persistently teach their subordinates in how to properly operate the equipment, carefully point out how much fuel and oil the engine is to consume in one operating state or another. The amount of fuel and lubricants saved would have been noticeably less if the damage controlmen would have a careless attitude. For example, the fuel tank is under their supervision. It is not an easy matter to clean out the tank every week and to remove the sediments and water residue. But then, this guarantees that the fuel in the tank will not become polluted.

There is one other source of savings on which the attention of each sailor is concentrated — the careful use of equipment and extending the interrepair periods of its operation. For example, the compressors were operated one and a half times longer than provided for by the norms and, in addition, their condition was good.

The motor resources, set by certain mechanisms, must be carefully followed. The operating hours are selected and that is all — send the unit off to repair. But commanders do not use the motor resources identically. This trawler's commander, Captain 3rd Rank A. Rumyantsev, always tries to carry out one combat training task or another in a minimum number of running hours. Obviously, this does not mean that there should be a simplification in training but rather of the very careful preparation of personnel to carry out the task at sea while still at the base, of maximally filling each minute of sailing with training, and of a strict accounting of training time. It has become traditional aboard the vessel not only to carry out the task the first time it is attempted, but also to expend less motor resources for its execution than called for.

Officer Rumyantsev knows how to take the economic factors of combat training into account. After carrying out its task, the trawler returns to its base on one engine. This provides a saving in motor resources.

Another example. Following repair and according to the combat training plan, the trawler was to carry out another task only after some time had gone by. But the vessel was not tied up alongside a pier but frequently roamed the sea. A good and thoughtful commander knows how to live for more than just today. Each time the trawler would put out to sea, its crew would work out all elements of forthcoming tasks without awaiting the special cruises designated for this. And sometimes 5-6 such cruises are necessary to work out some of the tasks.

Economy is greater there where combat skills are greater, where discipline is stricter, and where organization and performance are higher. All of this depends primarily on the commander. The trawler's commander does not face his tasks alone. He has many assistants. These are the communists and the Komsomol aktiv. The question on the state of economic work aboard the vessel is often discussed at party and Komsomol meetings. In addition, in summarizing the totals of socialist competition, the commander always analyzes the state of affairs in economy. During one of the meetings, when discussions were underway as to what obligations in savings should be taken by the crew, Warrant Officer I. Sorokin said this to the sailors:

"The ship is your home. So now let's see what kind of owners we are."

This was probably the way the question had to be put in order to get some of the sailors to review their own outlook on savings and thriftiness and to set a shield against losses.

When at home, hardly anyone forgets to turn out the lights at night or to turn off an electrical device when there is no need to work it. But this sometimes is forgotten aboard ship. Lights shine all night long in the passageways, the fans turn, and the electric hotplates keep burning. When at home, no one would take an expensive item apart just for curiosity. But this happens aboard ship. By the way, it should be mentioned that such cases are rare.

The crew, figuratively speaking, announced a regular war against carelessness, irresponsibility, and mismanagement. The communists held many discussions on this subject.

The concern for preservation of equipment and a thrifty attitude toward material goods has become a tradition aboard this vessel which is handed down from one group to another. The personal example of veteran servicemen plays a great role in supporting this tradition.

They say that the chief boatswain is judged by the vessel's appearance. If this is so, then it would seem that the trawler is fortunate; Warrant Officer Sorokin knows his work well.

It is not a simple matter to maintain a vessel in exemplary state. It has to be painted, cleaned, and scraped. What kind of a savings in paint

can be made if the boatswain's stores warehouse issues it in very limited quantities. But then, a good administrator can make a savings in paint. This can be done by maintaining cleanliness everywhere, not only at one's own battle station, but throughout the vessel and the painted surfaces should be washed more often. In short, everything has to be viewed through an owner's eye.

Concern for a thrifty attitude toward national wealth has become a routine matter for each sailor. During the competition held under the slogan of "the year of the 24th CPSU Congress, a year of outstanding service and training," the trawler's personnel made a good contribution into the Northern Fleet's savings fund. The march for economy continues.

Much higher indexes will undoubtedly be achieved in the new training year. The vessel's commander and communists are successfully resolving the tasks emanating from the decree of the CPSU Central Committee "to further improve the organization of socialist competition." In generalizing the accumulated know-how, they perform a great work to further raise the vitality of competition. The growth in activity and the struggle for savings and thriftiness will be facilitated to a significant degree by the currently initiated propaganda for economic knowledge which has been initiated aboard the ship and the assimilation of which is becoming a component part of socialist competition.

TO PREVENT FROSTBITE (pp 69-71)

Candidate of medical sciences
Lieutenant Colonel Medical Service Ye. Makhov,
Major Medical Service V. Avernyushkin

The cold time of the year has arrived and so has the real danger of frostbite. The widespread belief that this can happen only at low temperatures is incorrect. Conversely, frostbite can occur even at temperatures above zero. The cause of this is high humidity and wind.

The peripheral parts of the body — wrists, feet, ears, and nose — are the ones predominantly subjected to frostbite. According to statistical data, frostbite of the lower extremities is most often observed because they, more than the upper extremities, come in contact with snow, ice, and the cold soil.

Four basic types of frostbite are distinguished: that occurring from the effect of dry cold; that occurring at a temperature above zero; "contact" frostbite; and the chilblain syndrome.

It should be remembered that the action of cold can be increased from such factors as increased humidity, a sharp change in weather, wind, mechanical difficulties in blood circulation, for example, as a result of depression of tissues by tight footwear and clothing, tightly tied mittens, poorly fitted ski fastenings; reduced resistance of the tissues, for example, during varied trophic disturbances; general breakdown in the organism, loss of strength, and avitaminosis. The moral condition of the individuals is also of significance in the development of frostbite.

How can we guard against frostbite? All measures preventing frostbite can be divided into two basic groups. The first concerns military service personnel. Each must be sure that his organism is strengthened and hardened. Physically healthy soldiers are not afraid of frost. Less hardened soldiers, when out in the cold, must be particularly attentive since they are more susceptible to frostbite. Care should also be taken by those military servicemen who have been previously frostbitten.

Primary attention must be given to the legs. It is recommended that shoes not be laced too tightly, that the drawstrings of winter underwear not be tied too tightly, and that a third pair of foot-cloths be worn. Care must be taken during ski exercises to ensure that the fittings are not too tight. A person should turn in as quickly as possible into the medical station in the event of sweatiness, grippe, ingrown toenails, corns, roughness of the legs, and in case of cracks and inflamation in the skin.

All possible measures for protection against cold are used on the march, when halted, in laying over for the night, and in dugouts. Even at the slightest opportunity, it is useful to remove, even if for only a few minutes, boots and foot-cloths and to rub the feet from the toes toward the body.

When exposed for a long time to the cold, the hands (wrists and fingers) start to turn blue and should be rubbed. Prolonged and immovable, and especially an uncomfortable, position of the body may also lead to frostbite. It is therefore recommended that the body position be changed frequently and energetically.

Every effort should be made by those wearing metal helmets to prevent contact between skin and metal. When working in combat equipment or with weapons out in the cold, gloves or mittens should be worn. Military servicemen transported in open trucks should sit with their backs to the direction of movement.

The old recommendation — rub the face with grease — is not expedient because grease poorly protects the skin against the action of cold and during its decomposition contaminates and irritates the skin. The benefit from hot meals and tea during cold is quite obvious. Sugar and fat burning up quickly in the organism heat it. This cannot be said about alcoholic beverages. Alcohol does not protect the individual against frostbite and freezing but, conversely, calls its rapid initiation.

It is important that each serviceman would check on the proper fitting and repair of his clothing, especially footwear. Tight footwear is very dangerous. It disrupts blood circulation in the legs. Footwear also should not be too loose because it brings about blistering and frostbite. Leather footwear is considered to be properly fitted when, with the inner sole inserted (felt, broadcloth) and with two foot-cloths (summer and winter), the individual does not feel any tightness on the foot during standing or walking. The same careful approach must also be made to the selection of felt boots and other footwear.

Not all know how to properly take care of footwear. It must be carefully kept up: promptly repaired, rubbed with grease or bootpaste. At the first opportunity, damp or wet footwear should be dried off in especially equipped drying areas. Under field conditions, footwear can be dried by a bonfire. But to keep from damaging it, it should be brought up to the fire slowly and gradually. Damp foot-cloths are changed, dried, or the feet wrapped with the other ends.

A second and no less important group of preventative measures is of primary concern to podrazdeleniye commanders and first sergeants and to rear specialists. These include such organizational measures as the fitting, repair, and drying of shoes, equipment, and accouterments, providing the personnel with hot meals and tea, establishing conditions where military personnel on guard, during exercises, or in maintaining equipment can get warm. The officers are called upon to achieve a proper work state and rest state when work is performed out in the cold and to ensure that individuals are not carried in open vehicles during a strong wind, during rain or snow, and to keep them from working on equipment out in the cold without mittens.

During the monthly medical examinations of personnel, the medical workers must detect those individuals who are suffering from various skin diseases and certain other diseases and promptly treat them, while during winter tactical exercises, such individuals should be kept under constant supervision. It is the duty of medical personnel to systematically explain to the troops, especially prior to winter exercises, the basic measures to prevent frostbite and also to provide the troops with individual first aid bandage packages.

In conclusion, some advice on giving aid to those suffering from cold. It should be first of all kept in mind that in case of frostbite to fingers, ears, and the nose, there is a feeling of slight pain and pricking after the initial feeling of cold. If a careful look is taken, it can be noticed how the skin, which initially is red in the damaged areas, gradually pales and finally becomes white. By this time, the casualty no longer feels any sensation of pain or sense of touch at the frozen area and usually has a feeling similar to when your leg "goes to sleep." The greater the duration of this state, the heavier the frostbite consequences. If an arm or leg which has become white from cold is immediately warmed up, then there are usually no serious consequences. A frostbitten arm or leg swells up only slightly and retains its normal appearance after 3-4 days. It is quite a different matter if the whiteness prevails for hours or even days. Then after heating, blisters appear on the skin of the frozen extremity and a deadening begins to occur in places. Under prolonged action of dampness, the signs of frostbite may be different. In these cases, swelling and pain is observed. Occasionally there is no swelling and only persistent pains in the leg indicate a danger of frostbite.

If there is pain and if the skin turns white or bluish, if the boots begin to feel tight because the foot has swollen or there is a sense of numbness in the legs, immediate medical assistance must be sought.

If signs of frostbite appear, the injured area must be rubbed by hand and there must be a forced movement of fingers and feet. Wherever possible, the casualty should be brought into an enclosed area. During walking on skis, if there is a weakened sensitivity on the part of the feet (fingers), it is recommended that the skis be removed and an energetic run taken and the skin gently rubbed in a direction from the fingers toward the body.

This should be done until such time as the leg or arm warms up and the skin turns pink. If the leg has swollen and has become red-hot, it should not be rubbed to avoid skin damage. The boots should be removed, the legs wrapped, raised as high as possible, and a medical worker called. Frostbitten arms or legs should not be brought close to fire, put in hot water, or rubbed with snow. The blisters on frostbitten areas should not be broken but should be protected in every way possible by using the bandages from the individual kits.

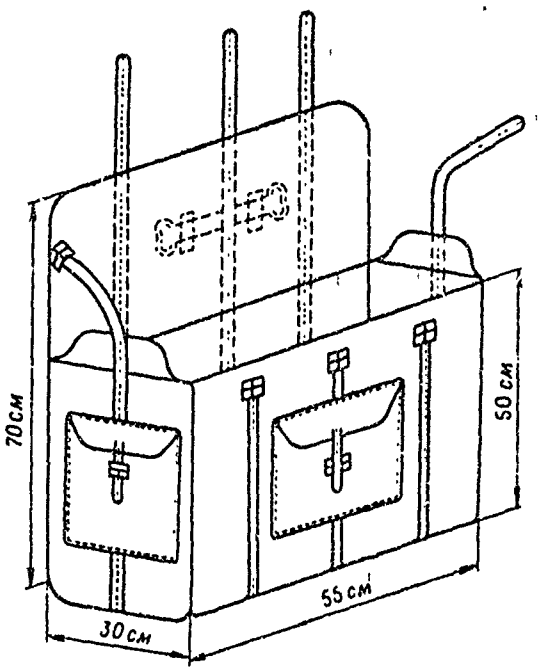
Regaining health from freezing is a prolonged matter. It is best of all to prevent frostbite. An efficient and undeviating adherence to their rules of prevention will facilitate the preservation of health and a strengthening in the combat efficiency of the troops.

PACK FOR BED LINENS (p 71)

Major V. Abramov

Soldiers and sergeants appointed to guard detail duty to accompany military freight trains carry various items of gear and equipment with them. The most cumbersome of the items are bed linens.

The officers of the military transportation line agencies on our railroad have suggested the use of a pack made from dermatine or other solid material (see drawing) as a convenient means to carry a set of bed linens (a 155 x 52 x 4 centimeter perlon mattress, a 50 x 25 x 12 centimeter perlon pillow, two sheets, pillowcase, and blanket). The district's clothing branch accepted this suggestion for introduction into the troops. The pack is usually made in the chast' clothing shop from written-off materials.



ON THE EFFICIENT USE OF MOTOR TRANSPORT (pp 72-76)

Captain Yu. Lopukhov

The Directives of the 24th CPSU Congress on the Ninth Five-Year Plan give great attention to a further development in transportation and an increase in its work effectiveness.

Motor transport, which has become an indivisible component part in the activity of all branches of the national economy, has an important place in the unified transportation system of the country.

In 1970, it carried more than 14.2 billion tons of freight. This is nearly four times more than that carried by all other means of transportation. During this time, its services were used by 26.3 billion persons, that is, nearly 90 percent of all passengers carried in the USSR during a year.

Implementing the plans set by the party, the motor vehicle industry will significantly increase its capacity during the five-year plan and the nation's motor pool will be replenished with vehicles of large and small cargo capacity and specialized rolling stock. However, it is unthinkable to ensure the ever-increasing volume of shipments without a more fuller utilization of the internal potentials of transportation. The task is set to raise the use efficiency of transport facilities and to accelerate the growth rate of productive labor.

As we know, centralization of shipments and concentration of the motor pool into major motor vehicle managements lies in the foundation for raising the work efficiency of motor transport. The prerequisites for centralization and concentration are the increasing production of mass and lot goods intended for delivery on relatively short as well as economically advantageous long distances.

The centralization of shipments primarily achieves a specialization of transportation-dispatcher and loading-unloading operations, a reduction in labor consumption for the initial-terminal operations of the transportation process, and so forth, and, in the final count, a more rational use of

vehicles. For example, calculations made by specialists have indicated that the centralized delivery in freight from 1,960 railroad stations and 135 ports of the Russian Federation will provide a reduction in the required motor pool by 177,000 units and will free nearly 300,000 loaders and dispatchers.

Practical experience confirms the high efficiency of centralized shipments. For example, the development of this type of freight delivery from 37 major Belorussian railroad stations, as attested to by data in the periodic press, has permitted a decrease of 65 percent in the daily vehicle requirement and has increased the productive labor of drivers by 4.5 times. As a result of similar measures taken in Leningrad, more than 1,000 vehicles were made available, nearly 1,500 freight workers were freed, and driver labor productivity increased by 1.8 times.

The organization of centralized delivery is becoming more and more prevalent in the troops. This type of delivery is introduced within garrisons and is also reflected in the plans of military districts and fleets. The nomenclature of freight which is delivered by the centralized method is quite broad. This includes fuel and provisions, mail and films, shipments associated with everyday services for the personnel of chast' and their families, and so forth. Centralized delivery will permit a perceptible reduction in the number of vehicles making a run, will raise the efficiency factor of the run and cargo capacity of the rolling stock, will significantly reduce the time to fill out documentation, will make documentation much simpler, and will also reduce the number of personnel engaged in shipment operations. As one of the forms of reducing the production cost of shipments and improving service to chast', it has objective conditions and potentials for development and improvement.

The organization of centralized delivery and its further improvement requires the concentration of shipping facilities, that is, the establishment of major motor transport managements. The productivity of vehicles in managements which have 100 or more vehicles is 80-90 percent greater than in those which have 10-25 vehicles. Experience shows that the consolidated motor vehicle managements should have not less than 200 vehicles. In the subsequent process of concentration, based on local conditions, it may lead to the development of even larger motor vehicle pools. It stands to reason that even the positive know-how of the national economy cannot be mechanically shifted to the activity of military motor vehicle podrazdeleniye and chast'. But its study, the introduction of all that is useful for purposes of a more effective use of motor transport is obviously necessary.

The main generalizing index of motor transport effectiveness is the production cost per unit of shipping work. It includes the costs associated with operating expenses (freight shipping expenses) and the expenditures on capital investments in the building of motor transport enterprises. In major motor vehicle managements which have a listing of 1,000 vehicles, the specific capital investment during construction is less than half of that for enterprises of 100 vehicles.

An important direction to raise the work effectiveness of the entire transportation system in the country is that of shifting a significant volume of short-run hauling from railroads to motor transport. This shift is feasible for implementation at wagonload shipments of distances up to 200 kilometers, in small lot shipments of up to 400 kilometers, and shipments of perishable freight and valuable commodities over distances of up to 1,000 kilometers. This is facilitated by the fact that in the USSR good motor roads parallel 40 percent of the extent of railroad lines. The need to shift short-run shipments to motor transport is explained by the higher speed of freight delivery than for other types of transport. For example, motor transport can deliver freight over a 200-kilometer distance five times more quickly as compared with direct railroad shipment (without the participation of other types of transport).

It should be kept in mind that the unit cost of motor vehicle haulage will sharply reduce if highway motor trains of large capacity are used. In this case, it will approximate the cost level for railroads. Therefore, motor transport can be rationally used for long distances as well. Truck trains will help to raise labor productivity and reduce the unit cost of shipment. Thus, in freight delivery made by truck trains consisting of MAZ-200 truck and trailer with a capacity of 13 tons, the labor productivity of the driver will increase by 50-60 percent and the unit cost of shipment will drop by 35-37 percent as compared for a single four-ton ZIL-164 truck. In using truck trains of even greater capacity, the unit cost of shipment will drop even more and there will be a significant increase in productive labor as well.

An important matter in raising the effectiveness of motor transport is that of optimizing the structure of the motor vehicle pool. At the present time, large capacity trucks (eight tons and more) form but six percent of the nation's motor pool, whereas calculations show that a 31 percent level is required; this forces a significant part of the mass shipments to be made by trucks and truck trains of average cargo capacity which comprise 90 percent of the motor pool instead of the required 45 percent. This leads to the fact that the unit cost of one ton-kilometer performed by a truck of insufficient cargo capacity is 3-4 kopecks higher on the average.

Significant losses are also created as a result of the shortage in small cargo capacity trucks (less than two tons). They are only in 4.7 percent instead of the required 24 percent. This is why a considerable part of small lot shipments have to be made by medium-sized trucks, that is, in this case by those of increased cargo capacity which means an excess expenditure of fuel, tires, and metal. Therefore, the Directives of the 24th CPSU Congress on the Ninth Five-Year Plan indicate that it is necessary to improve the structure of the truck motor pool, raise the specific ratio of large capacity trucks and truck trains, increase the number of small-tonnage trucks, and also increase the number of specialized vehicles to carry consumer goods.

To no small degree, this also pertains to the motor transport in military chast'. Many types of freight require the use of large cargo

vehicles as a means to economize facilities and time for their delivery. Along with this, the administrative activity of a chast' often requires the shipment of small lot freight. In our estimation, the great assortment and volume of such freight brings up the need to observe specific proportions in providing chast' with vehicles of small and large capacity. A more thoughtful decision on this matter would expand the possibilities of army motor transport and would raise the economy of its work.

With the centralization of shipments and the development of public carrier motor transport in the USSR, a greater need is noticed to increase the production of specialized vehicles. Up to now, the greater majority of vehicles in the motor pools were high-side trucks, but under conditions of centralized shipment, the assimilation of mass freight flows requires an expansion in the use of specialized vehicles such as dump trucks, tank trucks, cement carriers, refrigerator trucks, and so forth.

Expanding the production of specialized vehicles, bodies, trailers, and semitrailers during the current five-year plan will facilitate a further increase in the efficiency of motor transport and an expansion of its capabilities.

Rather large reserves to raise the effective use of motor transport are found in the organization of the transportation process itself. The problems of shipment rationalization are essentially these: the elimination of oncoming and repeat shipments; optimum location of the motor vehicle managements with respect to cargo dispatching and cargo receiving points which will permit a reduction in empty vehicle runs; an increase in the use factor of cargo capacity, an increase in vehicle speed and the continuity of its work on a line as well as reducing vehicle standing time during loading and unloading operations.

In comparison with other types of transport, a great time expenditure for transloading operations is characteristic in the technology of motor transport freight hauling. The cause of this is the relatively low distance of freight hauling. For motor vehicle transport, it is 17 kilometers on the average as opposed to 500 kilometers by river transport and 800 kilometers by railroad.

The time a vehicle spends in the loading (unloading) points is very great in many instances and is 40-50 percent of the total time the vehicle is on the line. The main method to reduce vehicle standing time during loading operations is the mechanization of loading-unloading operations. Data published in the periodic press indicate that if loading-unloading operations for motor transport were to be mechanized, then the number of persons engaged in such work could be reduced, by 1980, to 2.4 million people.

There is no need to speak of the significance of reducing vehicle standing time for loading and unloading operations for the motor transport military chast'. A fuller mechanization of loading-unloading operations

at warehouses would not only provide an economic expenditure of material and labor resources but would also significantly expand the capabilities of army motor transport.

A radical reduction in labor and material expenditures and the introduction of full mechanization into loading-unloading operations in the shipment of containerized and unit freight could be achieved through mass use of packages, pallets, cassettes, and containers. In the past 10 years, the 2.5-5.0 ton capacity container pool in the USSR increased by more than 3.5 times. In 1975, it is planned to raise the volume of freight carried in containers to 105 million tons (in 1970, 58 million tons were carried in containers). It is planned to not only increase the volume of freight, but also to significantly change the overall pool of universal containers by improving their construction and expanding the nomenclature. During the five-year plan, the production of large-cargo containers of various ton-sizes will increase by 5-10 times.

There is expected to be a considerable development in the shipping of freight in special containers which will be made in 9-10 types but with such consideration that they can carry up to 300 different types of freight. By the end of 1975, the pool of such containers should be not less than 700,000 units. However, taking into consideration that each (net) ton of freight hauled in containers cuts transport costs by 15-18 rubles and container costs, which on the average are more than 30 rubles per ton, even greater rates in the development of container shipments can be expected.

Of course, the production alone of containers cannot solve this problem. It is necessary to resolve an entire complex of problems associated with standardized documentation, defining the order of transmitting and making up the freight, adapting the transport facilities to haul containers, the organization of container points, and so forth.

The packaging of unit-tare freight plays an important role in the mechanization of loading-unloading operations. The broad introduction of packaged freight shipments is facilitated by the 1 January 1971 unified regulatory system. The standard sets unified demands on the organization and technology of freight shipments by various types of transport. All of these measures will permit a 1.5-2-time reduction in transport costs, will create the conditions for full-scale mechanization and automation of loading-unloading operations, will raise productive labor by 4-5 times, and will reduce the time of freight delivery and losses in transported products.

The volume of hauled liquid freight is continuously increasing in the USSR. Nearly all of the work to deliver liquid fuel from storage farms and from other types of transport directly to the consumer are essentially carried out by tank trucks or by regular trucks hauling it in barrels and special containers. The army motor transport service also has to carry out considerable work in transporting liquid fuel.

The use of tank trucks to carry liquid freight will make it possible to mechanize loading and unloading; the fuel carried in this manner is

sufficiently well protected against external effects; the need for packaging is obviated; and the operating life of the container is virtually the same as the operating life of the vehicle itself.

However, along with this, the tank trucks have certain shortcomings which reduce the effectiveness of their employment. These include the great amount of metal used, the labor consumption in their manufacture, a considerable weight of the construction, and reduced cargo capacity of the vehicle. In addition, it cannot be used to transport cargo other than liquid, which reduces the use factor of the run. One way in which to raise the effectiveness of liquid cargo transportation by motor vehicle is to use stake-side trucks carrying soft folding containers. At the present time, our industry is engaged in the series production of soft containers. Liquid freight may be transported in them at an ambient temperature of from -30° C to +50° C under all road conditions. The weight of the soft container is insignificant.

After the pallet containing the soft container has been removed from the bed or fuel has been removed, other types of material goods may be loaded into the truck body. The empty container can then be transported in a folded form along with other freight. This makes it possible to sharply increase the use factor of the run by carrying dry cargo in the reverse direction and, consequently, to reduce the unit cost of shipments by reducing empty runs.

The use of stake-side trucks with soft containers instead of tank trucks, even without raising the use factor of the run, provides a saving of from 15 to 30 kopecks for each ton-kilometers of work (depending on the type of vehicle). By increasing the use factor of the run to 0.9, savings increase to 30-50 kopecks for every 10 ton-kilometers.

One of the advantages of a stake-side truck carrying a soft container is its relative lower weight and cost. For example, by replacing the ATs-4-164A tank truck with a ZIL-164A stake-side truck with an MR-4 soft container, the weight of the vehicle in an equipped state drops by 725 kilograms and the cost by 190 rubles. By replacing the tank truck with a ZIL-157 stake-side truck with the same container, the weight is reduced by 380 kilograms and the cost by 890 rubles.

In this manner, the economic effect from the introduction of soft containers into motor vehicle transport is achieved, first, by reducing the amount of rolling stock required, by raising the use factor of the run and the cargo capacity of the vehicle and, second, by reducing the cost of transportation facilities and expenditures for their technical maintenance.

Increasing the number of all-purpose vehicles in the motor pool will make the planning of transportation operations that much easier. The same soft container can be used to transport liquid cargo on various vehicles. The availability of several soft containers on each stake-side truck will make it possible to transport various types of liquid fuel without the need for intermediate cleaning of the containers.

As a shortcoming of this method, it should be mentioned that the entire nomenclature of liquid cargo cannot be carried in soft containers. This pertains primarily to certain liquid cargo which requires that a certain temperature level be maintained and which differs from the temperature of the ambient air. The service life of soft containers is less than that of metal tanks mounted on trucks and, in normal operation, is five years. But even a lesser service life but insignificantly raises the unit cost of transportation (by reducing the service life of a soft container from five to one year, the unit cost of transportation increases only by 1.7-1.9 kopecks per 10 ton-kilometers).

Increasing the effectiveness of motor transport employment and expanding the volume of transportation is an important task of national economic significance. Its solution will provide a great economy in public labor computed on a state scale in millions of rubles. Therefore, the Directives of the 24th CPSU Congress emphasize the need to raise the effectiveness of transportation operations and a further improvement in the use of transport facilities. The construction of new motor vehicle plants and the expansion of existing ones will significantly strengthen the material-technical base of motor transport and will improve its capabilities to transport freight.

FROM THE KNOW-HOW OF WINTER AIRFIELD MAINTENANCE (pp 77-80)

Engineer Lieutenant Colonel V. Bekesov

The work of the airfield maintenance podrazdeleniye specialists is not an easy one. They have to maintain the airfield in constant readiness for flights. This requires maximum effort by the personnel, especially in winter.

This task becomes more complex in the Transpolar, where, as it is jokingly said, "there are 12 months of winter and the rest is summer." Frequent snowfalls, winds up to 20-25 meters per second, sharp temperature drops, and increased humidity forming sheet ice on artificial surfaces are the basic weather conditions in the Transpolar. The polar night further worsens this complicated situation.

To struggle against the snow elements, the airfield personnel have mighty snow removal equipment: heating machines, rotory snowplows, combination sprinkling and washing machines, motor graders, and bulldozers. All of this equipment works under a great load and can become inoperative if necessary measures are not taken.

Much attention is therefore given to readying the equipment and the people who will operate and maintain it. The time for this is limited -- a matter of two, a maximum of three months (the interval between winters).

In this short period of time, the drivers of heating machines and rotory snowplows have to be assembled for training and equipment repair and readiness must be performed.

In so doing, particular attention must be given to keeping the snow removal equipment in constant use readiness -- the heating machines, KPM-64, and rotory snowplows. This equipment is operated very intensively during the winter. So it is important that the necessary spare parts and assemblies would always be at hand.

Even with completely readied equipment, its use must must be thoughtfully, and I would say creatively, approached. The weather conditions, and

and the derived working conditions for personnel of airfield maintenance podrazdeleniye in the Transpolar, as compared to other areas of the USSR, difeer sharply. This is why the people constantly seek and perfect their work organization.

It is not an easy matter to maintain an airfield in constant operating readiness when there is continuous snowfall and sharply changing weather conditions. Particular attention must be given to maintenance of end and side safety strips, the smoothness of contiguously cleaned surfaces and particularly there where the taxiways abut the takeoff and landing strip, and, particularly, to the cleanliness of artificial surfaces. This is why it was necessary to set up 24-hour duty on the part of special teams, headed by the duty commandant, in the airfield maintenance podrazdeleniye.

Each duty team has 2-4 KPM drivers, two rotory snowplow drivers, 3-4 TM-59 drivers, a motor grader operator, and 1-2 tractor drivers. The duty commandant is appointed from among the podrazdeleniye officers as well as platoon commanders, and experienced reenlisted personnel.

The duty team has a special place for itself. This is important so as not to disrupt the normal rest for the remainder of the personnel in cases of night snow removal work.

In turning over the shift, the duty commandant must indicate in his report the work performed on airfield maintenance, the weather situation and forecast for the next 24 hours, the availability of operable equipment, inoperable equipment, and unfinished work. This makes it possible for the new commandant to immediately grasp the situation. Duty transfer takes place right at the work site under the supervision of the podrazdeleniye commander-airfield commandant who clarifies and sets the incoming duty detail its task. The duty commandant issues tasks to the personnel of the duty team.

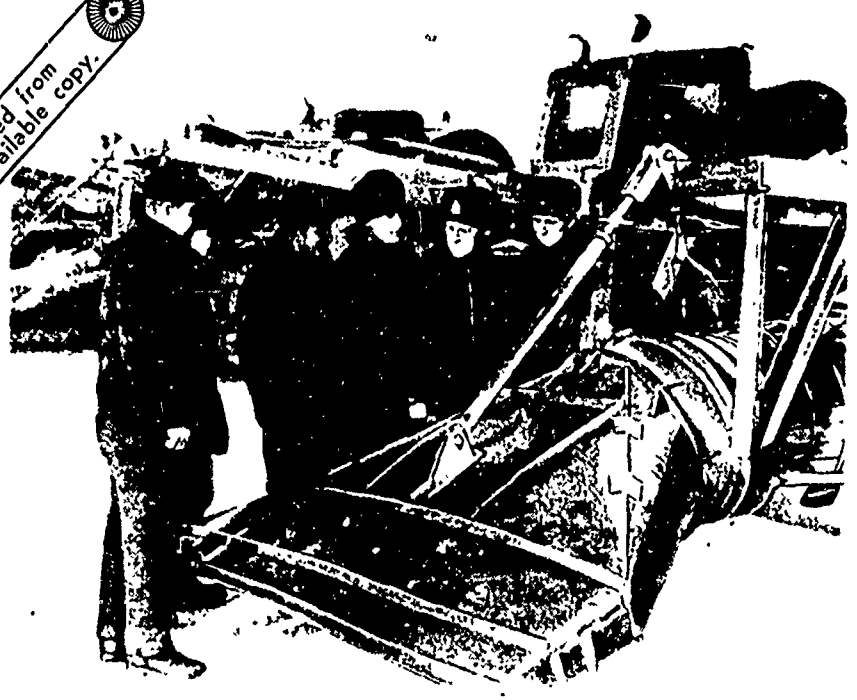
Nonstaff repair brigades are created in each airfield maintenance podrazdeleniye for the winter period. Their task is to carry out repairs and planned technical maintenance of snow removal equipment quickly. The brigades are headed by reenlisted personnel.

When repairing artificial surfaces, the method of filling cracks with asphalt-bitunimous mastic produced right on the spot is effective. The diluted mass is poured into the preliminarily readied cracks (cleaned and worked with a solution of gasoline and crude oil). The filled area is them tamped and smoothed. This method provides a quick and reliable method to fill cracks in the winter.

The cleanliness of artificial surfaces greatly depends on the quality of brushes of the sprinkling-washing vehicles. Experience shows that capron brushes do not justify themselves consequently we have used wire brushes for a long time. The most convenient wire cable to use has a diameter of 4.9-6.22 mm. Their flexible and thin nap is dependable and

convenient in operation and use. Brush winding and wire cable cutting is mechanized.

Timely information on weather changes is very important in keeping the airfield in constant operational readiness for winter, especially in the transitional period. It has become a rule in the leading collectives to keep close contact with the weather station.



Deputy platoon commander Junior Sergeant reenlisted service L. Tsyba (second from right) ably teaches subordinates how to operate special machines. In the photo: a regular exercise is held with TM-59 heating machines.

Knowing in advance that a snow storm is approaching the airfield or that a sharp temperature drop is expected, the airfield maintenance company commander can take the necessary decisions in advance to organize airfield work. It is also often important to know wind direction.

Continuous patrolling by sprinkling-washing machines is organized during heavy snowfalls to avoid accumulation of snow on artificial surfaces which cannot be moved by the the patrolling vehicles to the edge of artificial surfaced landing strip. If patrolling tempo is reduced, then it will be necessary to assign rotory snowplows to the landing strips to remove snowdrifts which inevitably leads to the build up of raised tracks

from the rotor's wheels. As a result, it does not subject itself to blow away and drying during the work of heating machines but requires melting and considerable work by the heat machines in one place. All of this extends the time of airfield readiness and has a detrimental effect on the concrete surface and quickly deteriorates it.

Snow removal from a takeoff-landing strip by special vehicles.

The personnel maintain side and end safety strips in a proper condition. They must be constantly levelled after snow removal by hitched metal or wooden presses (metal presses are convenient made from old metal pipes of large diameter -- 400-500 mm -- filled with ballast). A smooth and rolled surface provides good conditions for the blowing and carrying of snow during heavy winds, eliminates drifts and buildup, and ensures safe roll out of aircraft. This also is facilitated by a close coordination of snow dumping areas and cleaned surface.

Considerable significance is given by the airfield maintenance podrazdeleniye to mastering related specialties, particularly of drivers. At times the situation develops in which the engines of airfield equipment drone on for days. Assistance is then given by drivers of other vehicles who have mastered related specialties.

Personnel of the airfield maintenance podrazdeleniye commanded by Captain V. Shilin maintain the airfield in a proficient state. Despite the complex and severe conditions, the airfield maintained by the soldiers has often held, and currently holds, first place in the competition annually held by the Commander-in-Chief of the Navy for best maintained airfield.

For several years the podrazdeleniye has kept the title of outstanding. Here, 70 percent of the men have mastered 2-3 related specialties. A significant contribution into these successes was made by communists podrazdeleniye first sergeant I. Kravchuk and platoon commanders reenlisted service N. Sapronov and I. Govorun. Master Sergeant Kravchuk is a good chief. Knowing how intensively the people have to work at the airfield, he strives to create good everyday living conditions for them and ably organizes their liesure. Master Sergeants reenlisted service N. Sapronov and N. Govorun are intelligent specialists and proficient teachers and

educaters of their subordinates. The platoons they command are outstanding.

The leaders of outstanding squads, Senior Seamen A. Kunin and I. Strelkov work selflessly and transmit their know-how to subordinates. Each has mastered three related specialties. Driver Seaman R. Alukayev, commended by the Commander-in-Chief of the Navy for his outstanding service, maintains his KPM is exemplary condition.

Other soldiers, particularly the Komsomol members, take an example from the Communists. These are snow removal equipment drivers Seamen I. Mal't ev, T. Laanemets, V. Starodubov, R. Saaksyan, and others. Thus, in the difficult Transpolar conditions the airfield soldiers honorably perform their mission of maintaining the airfields and readying them for flights. The men began the new training year in an organized manner. The slogan, "Year of the 24th CPSU Congress -- a year of outstanding service and training," is widespread in the podrazdeleniye and is being implemented everywhere. All of this has no little significance for the fruitful training of the pilots.

REPAIRING FUEL SUPPLY SERVICE TECHNICAL MEANS (pp 80-82)

Engineer Colonel V. Machulin

The wide introduction of new forms of equipment into the troops has caused a sharp increase in the need for various kinds of fuel, lubricants, oil, and special liquids. This has led to considerable changes in the technical outfitting of the fuel supply service which is expressed in improvement of existing means of storage, transportation, pumping, and refueling, and in the introduction of new means.

As a result, the prompt accumulation of stocks and uninterrupted fuel support of the troops is now in direct relationship to the readiness of the technical means. This is why the question of raising dependabilit endurance, and accident-free operation is so important and places such a great responsibility on all fuel supply service specialists.

As we know, routine maintenance of fuel supply equipment is done directly at the troop level, in warehouses, while intermediate and major repairs are performed at the district repair shop.

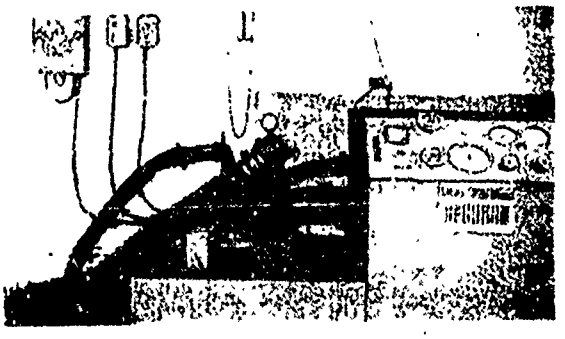
We repair our pumping, measuring, heating, fuel storage, and lubricant and oil storage items as well as intermediate repair of tank trucks and refueling trucks in a shop which receives several dozen different types of technical means and equipment.

In addition, this shop has traveling teams to repair containers, barrels, technological equipment, and pipelines in the podrazdeleniye and at warehouses. They also provide assistance in setting up and equipping fueling points, mass fuel issue points, and mechanization of loading-unloading activities. This type of organization helps to exclude the movement of repair stocks and significantly reduces repair time.

These brigades also perform a great volume of plant production work of the shop, especially in the repair of transportable containers, barrels, jerry cans. and other items. Each brigade has a mobile repair shop with necessary equipment for welding and metalwork, materials, and spare parts.

One of these teams has a Udar-300 unit used to repair aluminum items in the field.

In order to raise the production capabilities and to improve work conditions when repairing pumping facilities, gasoline pumps, measuring instruments, steam boilers, drive pumps, and to mechanize means of transportation and refueling, considerable attention has been given in the past few years to improving the equipment of the repair shop. The production building containing the blacksmith and welding shops, the pumping, transportation, and fuel pumping facilities assembly shop, the paint shop, the rubberized cloth container shop, and the drive pump testing sector has been enlarged. In addition, the instrument repair shop, gasoline pump repair shop, and wash station have been modernized.



Efficiency experts of the repair shop prepared a number of workstands and various devices to significantly raise productive labor. In the photo: a universal stand to test pump drives developed by M. Kuzemskiy.

A large role in improving the technological processes of repair and in raising labor productivity and improving working conditions is played by the shop's efficiency experts. We would like to mention the oldest repair foreman, honored efficiency expert of the UkSSR Mar'yan Luk'yanovich Kuzemskiy. He has worked in the shop since 1948. During this time, he has developed and introduced many valuable inventions and efficiency expert suggestions directed not only toward improving the shop, but also to raise the technical readiness of the fuel supply service. He is the author of a universal stand for milling and testing all types of drive pumps, a repair workbench, calibration and testing of gasoline pumps, and a semiautomatic washing area for steel barrels. In this area you can simultaneously wash five barrels in 20-30 minutes. Productive labor increased 3-4 times. On his suggestion, a press-form was built to stamp doors for the side boxes of tank trucks and refueling trucks. All of these developments by Kuzemskiy have been introduced into the shop and provide a considerable economic effect and also improve work technology and conditions.

His work as a production innovator and efficiency expert can be seen well in this example: this year, the shop began to assimilate the repair

of mechanized fueling means and fuel transportation. A tank truck with a tank of aluminum alloy whose main connecting pipe had broken was brought in for repair. It seemed that this defect could be easily fixed by welding. However, the welding bead would crack. Various additives were used, preliminary heating and subsequent slow cooling were used, but the results were as before. Kuzemskiy suggested that a cofferdam insert be placed at the point of welding to compensate for temperature expansion and settling of the metal. His suggestion resolved the problem. Many valuable suggestions were also introduced and implemented by other specialists in our shop.

The shop's production base was developed and outfitted by the efforts in creative thought of the collective so that now we can organize the repair of the service's technical means in different technological ways.

As we know, the repair of each type of technical facility has its own individual features. This has been taken into consideration at the shop and technical diagrams have been developed and finalized with the necessary equipment and test stands to repair drive pumps, gasoline pumps, steel barrels, and pumping facilities. For example, drive pumps are repaired according to a diagram which includes this work sequence: washing (neutralization), disassembly, inspection for defects. This is followed by repair and restoration of the item. Assembly work is followed by test stand finishing and testing and concluded with industrial cleansing and painting.

Unfortunately, the large listing of technical facilities coming in for repair and, consequently, the considerable need in spare parts and group sets complicates the establishment of a flow line for their repair. Therefore, repair is done by the individual method which, obviously, reduces productive labor. Moreover, many of the spare parts, for example, the impeller wheel of the SVN-80 pump, the housing of the KGP-18 gasoline pump counter, the threaded plugs for the MPG armature, and many others have to be made under conditions which are not adapted for mass production. But, despite these difficulties, the shop's personnel successfully cope with the restoration of technical means.

A great contribution in solving this task is made by production leaders. Among them is welder V. Pitta. He has worked more than 20 years in the shop. For his labor successes, he has been awarded the Order of the Labor Red Banner. Welder Z. Koshel'kov has also received a state award — the Emblem of Honor. He has worked in the shop more than 18 years. He fulfills his production tasks by 115-120 percent.

The young Komsomol member repairmen try not to lag behind the shop veterans. For example, metalsmith Ya. Prichina has been working for only three years, but in this time he has successfully assimilated the specialties of a metalsmith and lathe operator and has become a member of the Komsomol organization bureau. He performs his production plan by 110-115 percent.

Socialist competition is widespread among the repair shop's personnel. The obligations of the repairmen are directed toward a prompt and proficient

performance of production tasks, assimilation of methods and means to repair technical facilities, to increase the quality of repair work, to assimilate related specialties, to raise productive labor, and to observe safety rules and production standards. Obligation summaries are totaled monthly.

Captain technical service A. Smotrov, the chast' fuel supply chief, instructs the fuel warehouse chief, Junior Sergeant reenlisted service G. Bargan, prior to technical maintenance of the TK-4[illegible] gasoline pump.

The shop's collective also has its unresolved problems, but, in spite of this, the repairmen help to maintain a high readiness factor for the technical equipment and give great assistance to the chast' and depots in perfecting fueling points, in technological arrangements, in introducing means of mechanization into loading-unloading operations, and in raising the combat readiness of the service as a whole.

THE MIGHTY HANDS OF MACHINES (pp 83-86)

Major V. Obukhov,
deputy military construction detachment commander
for political matters

The decree of the CPSU Central Committee, "To further improve the organization of socialist competition," contains these words: "The director of the USSR VDNKh is to develop and implement measures to demonstrate the achievements of innovators and best collectives in the struggle to successfully implement the tasks of the Ninth Five-Year Plan and the leading know-how in the organization of socialist competition." I recalled these words when, together with a group of our military builders, I visited the VDNKh.

We were greeted at the exhibit with this placard: "Become acquainted with the reserves of scientific-technical progress."

"Yes," sighed one of the young soldiers, "the call is a good one for the national economy, but we have our own army concerns and problems."

"It is too early to make such conclusions," interrupted Valeriy Li. "You all know our efficiency expert, Sergeant Aleksandr Potapov, the author of several original devices for the production of loading-unloading operations at building sites. Now his concepts were born here, in the pavilions of the VDNKh which he had never visited."

"Where should we best begin our inspection?" asked military builder Private Aleksandr Proshin. "There is not too much time and we would like to visit everything."

"Let us begin with the main pavilion," I suggested. All agreed eagerly.

We enter a spacious building. On one of the walls is a huge electrified panel representing a map of the country's industrial locations. The lights change periodically. Yellow lights come on, red lights come on,

all indicating industrial giants which have already been built or which will be built in the Ninth Five-Year Plan.

Here and there are cameras. The slides of the newsreels describe the achievements of Soviet science and technology, describe the remarkable creators of leading experience. Everywhere are machines. Machines for industry and for transportation, for coal mines and for the kolkhoz fields, and for the construction of apartment buildings and rest areas for the workers. The colored reproductions of excavators, graders, and bulldozers are replaced by gigantic cranes mounted on ZIL and MAZ chassis, and other machines. The lecturer's voice can be heard:

"We advise that you visit without fail the loading and unloading equipment pavilion, become acquainted with the new items, with the leading know-how of mechanization of the more difficult processes."

Mikhail Tkachenko immediately suggests that we follow this advice.

We are now in the loading-unloading equipment pavilion. During its existence, the exhibit has never had such accumulation of various machines equipped with powerful steel "hands." These "hands" are able, in the twinkling of an eye, to grab, raise, and transfer hundreds of kilograms of freight. These remarkable machines are equipped with modern devices. The majority of devices carry the sign of quality.

There are people of various ages and professions at the exhibit. All of them have been led here by the desire to become acquainted with the latest achievements of domestic machine building, to be personally convinced of the great advantages, of the great economic effect which is derived from broad mechanization of arduous work and from automated control.

In front of us is one of the exhibits of the intrabranch thematic exhibition "Full-scale mechanization and automation of transportation, loading—unloading, and warehouse operations," the D-392 scraper designed for soil removal, excavation work, earth transportation with subsequent leveling of the poured-off layer, planing, and other earth-moving operations. It can also work preliminarily broken ground of the III and IV category which do not have rocky deposits.

It is a semitrailer for the single-axle prime mover BelAZ-531. The bucket is forced and unloaded by moving out the rear wall. The operating organs are electrohydraulically controlled. The wheels of this large unit have air brakes.

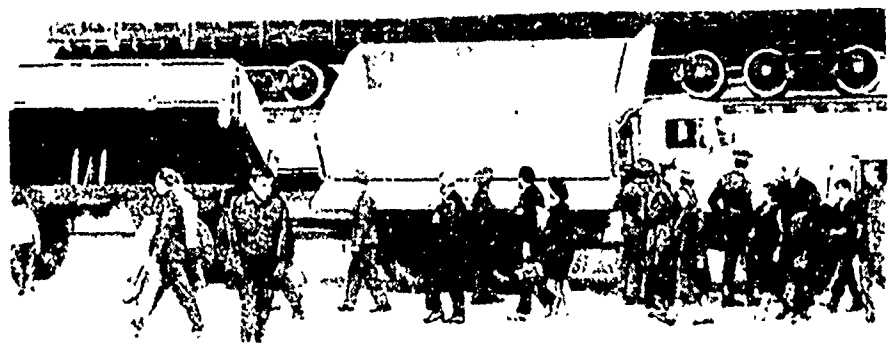
The soldiers were interested in the technical characteristics of the scraper. The bucket's geometric capacity is 15 cubic meters and 18 cubic meters with a "cap." The cutting width is 2,850 millimeters and the cutting depth is 350 millimeters. The thickness of the poured-off layer is 150-500 millimeters. One of the military builders was interested in the vehicle's speed. The scraper can travel at a rate of up to 55 kilometers per hour. Relative to the scraper (on a plane), the prime mover can turn

90 degrees. The D-392 is manufactured by the Chelyabinsk Order of Lenin imeni Kolyushchenko road machinery plant.

"Tell me, please, what other new loaders do we have in the country?" Soldiers are an inquisitive people. Yesterday he may have worked in a plant, in a factory, or at a sovkhoz or kolkhoz, so his interest in the development of domestic machine building is quite logical.

The excursion guide explains:

"For example, a D-660 single-bucket frontal loader has been developed; it is intended for various earthmoving and loading-unloading operations in quarries, at construction sites, at slag and schist yards, and fuel dumps. The loading equipment is mounted on a K-702 tractor of the Leningrad Kirovskiy plant. The tractor's ball bearing hinged frame and hydromechanical transmission ensure good maneuverability, constant wheel traction against the ground, and automatic changing of tractive force within specific limits depending on load. A portal is mounted on the tractor's forward frame to which a boom with replaceable equipment can be attached."

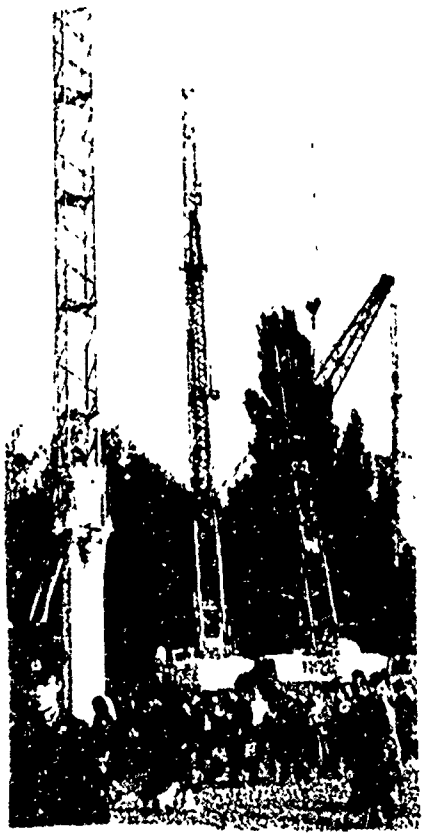


The U-35 — U-32 dump truck train of 24 tons total capacity. The economic effect from the introduction of one truck train is 3,100 rubles per year.

This loader can work with the following replaceable equipment: buckets of larger or smaller capacity, double-jaw bucket, cargo hook, and fork grips. The bucket can hoist four tons and its capacity is two cubic meters.

The soldiers continued to become acquainted with the interbranch thematic exhibit. Without hurrying, they examine one piece of machinery after the other. There is no limit to their soldierly pride in the developments of domestic equipment. In the pavilion the soldiers become acquainted with the descriptions of various technological processes. Opening up one of the leaflets, Junior Sergeant Valeri Li reads about a singular loader-excavator, the PE-0.8, developed by our industry. The

PE-0.8 is the most productive suspension-type universal hydraulic loader and excavator of its class. When operating with a clam bucket, it can load various mineral fertilizers, sand, gravel, rock, earth, and peat compost; by using claws, it can load silage, straw, reeds, and hemp. Various containerized cargo is moved with the hook. The excavator blade is used to dig trenches and holes in soil of up to category III. The set also includes bulldozer blades used in planing and other earthmoving operations. The autonomous hydraulic system and improved kinematic diagrams make it possible to combine a loader and excavator in one machine without additional design changes. The equipment can be mounted on the MTZ-5 LS, MTZ-5 MS, and MTZ-50 tractors. The loading hydraulic system is placed on the tractor by the driver and one worker with not more than four hours spent on this work; dismantling takes three hours. It takes two hours to reequip the loader into the excavator version.



Truck cranes at the VDNKh.

The soldiers were very interested in the twin-version technology of loading and unloading the AN-12 aircraft. In the first version, a track is laid along the aircraft's cargo cabin along which a cart is moved powered by a cable from the aircraft's electric winch. Its extreme position, at the threshold of the cargo hatch, is limited by an automatic stop.

The aircraft is loaded by having a forklift truck place pallets of freight on this cart. The cart is drawn into the AN-12 by the winch to its appointed place at which paired beam-booms have been placed in advance. The beams move mechanically on their tracks along the cargo cabin by means of cables from two aircraft electric winches. They perform the loading work inside the aircraft.

The electromechanical drive for these crane-booms makes it possible to use them in a second version to load freight into the aircraft directly from trucks.

The soldiers learned much that was useful and valuable in becoming acquainted with other items which our industry produces in great quantities.

Here is the family of standardized forest tractors of the Onega Order of Oktyabr'skaya Revolyutsii tractor plant. Should the soldiers not be proud of it? On the base of essentially one machine, they designed a TDT-55 universal hauling tractor, a LKhT-55 maneuverable forest tractor, and a rotating hydromanipulator on a TB-1 tractor. An entire series of special devices are essentially concentrated at the tractor operator's workplace: power steering, power seats, electrical windshield wipers, and a full-view cabin in which any window can be opened. All of this creates favorable work conditions. Cold weather starting of the engine is facilitated by a prestart engine and fuel heater.

The MShTS-3A installation truck to hoist two workers. In the photo: a group of military builders inspect the vehicle.

A modified forestry tractor, a timber-hauling tractor with hydraulic manipulators, and an amphibious tractor were developed by the Onega machine builders on the base of TDT-55 tractor.

The additional hydraulic powered rear suspension system, dump truck body, independent front and dependent rear power takeoff systems are features of the LKhT-55 tractor. Using special attachable and hitched equipment, the tractor can perform any forestry work over stump-covered ground to combat forest fires and vermin.

Tests showed the great advantages of this tractor as compared with the nonspecialized machines used in forestry: ease and convenience of handling, normal sanitation-hygienic work conditions in the cabin, high degree of vehicle loading throughout the year, and good performance in all operations. In comparison with the TDT-40M tractor, the LKhT-55 tractor has 2.4 times greater productivity. The annual economic effect with this tractor is 3,407 rubles.

Electric forklift trucks EP-201A and EP-5011 provide great work facility and a high economic effect. The first can hoist two tons and the second one can hoist five tons. They are intended for loading-unloading operations, piling and transporting of freight at airfields, at river and seaports, in shipholds, at enclosed and open warehouses, in shops, and in industrial enterprise yards which have solid and even road surfacing. This excursion by the military builders comes to an end. We must hurry back to the chast' so that tomorrow, with renewed effort, we can begin to fulfill our intensive production tasks.

The walking-out day of the soldiers at the USSR VDNKh was useful and, most important, it was interesting. The men became acquainted with the leading know-how in many branches of our national economy. It is quite logical that they will long remember the interbranch thematic exhibit "Full-scale mechanization and automation of transport, loading-unloading, and warehouse operations."

A VERSION FOR CLOSER PACKING OF MOTOR VEHICLES INTO GONDOLA CARS (p 87)

Lieutenant Colonel V. Shishov
Captain B. Khalatyan

For several years now, the officers of our military commandant's office have used the method of closer inclined loading of vehicles into gondola cars. This provides a considerable economy in rolling stock, and, consequently, a savings in the money spent on transportation.

As we know, the sides and back of truck bodies are often increased to increase body capacity. When transporting such vehicles in an inclined position, the built up rear often breaks because of a backward shifting of the vehicle during loading as well as during travel. In order to avoid breakage and to create favorable conditions for closer vehicle loading, we usually recommend to motor vehicle podrazdeleniye commanders to make the built up rear removable. It is made from 2-3 boards 30 mm thick and from 2 blocks 900 x 40 x 40 mm in size bolted to the boards (Figure 1).

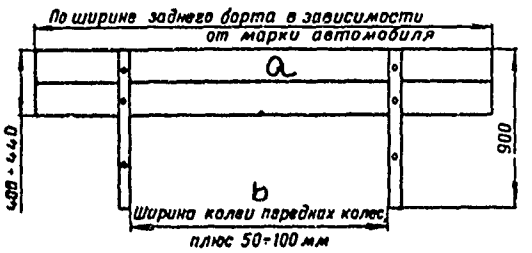


Figure 1. Removable truck rear gate: a - width of rear gate depending on vehicle type; b - width of front wheel track, +50 ÷ 100 mm.

When loading, the removable tail gates of the first two vehicles are laid into the body of the horizontally parked vehicle (in the gondola car) and nailed to the bed with 120-150 mm long nails. The end doors of

the gondola car are opened and the vehicle is parked in the extreme forward position with an overhang on the bumper of not more than 400 mm (Figure 2).

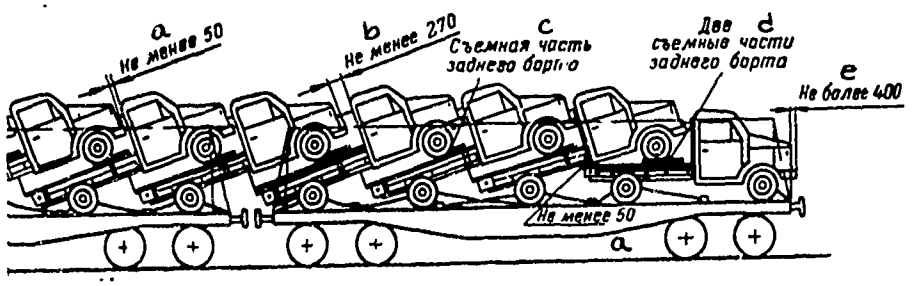


Figure 2. Closer packing and fastening of GAZ-51 vehicles into gondola cars: a - not less than 50; b - not less than 270, c - removable tail gate; d - two tail gates; e - not more than 400.

The second vehicle is loaded inclined so that its front wheels would be braced against the tail gates nailed down to the bed of the first vehicle. As a result, the vehicle's front axle is slightly raised which makes it possible (more than usually) to move it forward a little more and without reducing the 50 mm clearance between the body of the horizontally parked vehicle and the cardan shaft of the second onloaded vehicle. The lateral blocks, beyond their direct use, simultaneously act as side guides for the front wheels (see Figure 1). The tail gate of each subsequent vehicle is placed under its front axle. In this way it is possible to put the vehicles as close together as possible and load more of them into the gondola cars.

In loading on GAZ-51 (GAZ-51A, GAZ-63) trucks, four are put into the first gondola car and five into the rest. This is 26 percent more on the average than set by the norms. By this method, ZIL-164 (ZIL-150, GAZ-52) trucks are loaded as follows: first gondola car -- 3, second -- 5, third -- 4, fourth -- 5, and so on. In this, 13 percent more can be loaded onto a string of several gondola cars than called for by the norm. The economic effect is quite obvious. The vehicles are fastened down according to the requirements of the Technical conditions for freight loading and securing.

It should be mentioned that this version of closer vehicle placement is particularly convenient for crane loading. The driving on of vehicles under their own power is not to be excluded, with use made of short cross-over ramps even though it is somewhat difficult to remove the ramps from under the vehicles.

VOYENIZDAT LITERATURE FOR 1972 (pp 88-90)

Colonel I. Litvinov

The Order of Labor Red Banner Military Publishing House of the USSR Ministry of Defense is planning to publish a large amount of varied literature in 1972. The military readers will receive interesting and useful books.

Among the military-theoretical works planned for publication are those devoted to the Lenin theme. In the book by A. Komarov, A. Skachkov, and N. Filippov, "The Lenin Norms -- The Law of Life for Army Party Organizations," the norms of party life and principles of party leadership developed by V. I. Lenin and expanded by the CPSU Central Committee are expounded. The authors analyze the work experience of political organs and and party organizations of the army and navy and their activity in educating the Communists. In it, the party activists will find instructive examples on organizing daily ideological work.

Publication is planned for the book "V. I. Lenin on Educating Soviet Soldiers." It sets forth the views of Lenin on the basic directions of forming high morale-political and combat qualities, on the principles and methods of education, among Soviet soldiers.

The book "Ethics of the Soviet Officer" shows the history in the formation of military ethics and the role of V. I. Lenin in developing Soviet military ethical theory.

Also of great interest is the book "F. Engels and Military History." Compiled from materials of the scientific conference, it illuminates the very rich inheritance of one of the founders of scientific communism, an outstanding milita theoretician of the proletariat, and a great expert in military art.

A. Adgamov, I. Anureyev, Ye. Salimov, and other comrades devoted their work to scientific leadership in the Soviet Armed Forces. Laying the principles of the Lenin work style and the requirements of the 24th CPSU Congress into its foundation, they investigate a wide circle of questions on the scientific approach to the achievement of high combat

readiness of chast' and podrazdeleniye and the organization of combat and political training. A considerable place is given to mathematical methods and means of automation in troop control.

The Soviet people, and primarily the military, manifest a deep interest in studying the history of the Great Patriotic War. The historical-theoretical work, "Strategy of Victory," being readied for publication describes the high military leadership art of Soviet military leaders and the superiority of Soviet military science over the military science of fascist Germany. It will be a very valuable contribution to the development of this most important subject.

A good support for commanders, political officers, and party and Komsomol organizations in the work of preparing for the 50th anniversary of the formation of the USSR will be the book "Friendship of Peoples -- A Source of Might of the Soviet Armed Forces."

There is a broad list of books and brochures on matters of party-political work and military education. These are the books: "The Deputy Company Commander for Political Matters," "Fundamentals of Legal Knowledge," the brochure "Teaching Vigilence," and the collection of works "Field Training of Troops and Political Work." The "Handbook for the Podrazdeleniye Political Officer," the "Handbook for the Army and Navy Propagandist and Agitator," and the "Party Activist Companion" are instructive and filled with valuable information.

Officers and junior specialists of the rear will undoubtedly be interested in books on matters of political and military education such as "An Important Factor of Combat Readiness" (from the experience of moral-political and psychological training of troops), "Bacteriological Weapons and Protection Against Them," "Factor of Time in Modern Battle," "Discipline -- the Merit of Victory," "Cybernetics in Battle," and others. The particular value and actualness of these books is that the authors, from scientific positions and in popular form, try to show why there is increased significance for modern battle in discipline, combat readiness, vigilance, moral firmness, psychological tempering and why, at the present time, it is very important to know how to become quickly oriented in a situation, how to efficiently estimate it and make the truest decision, and demands on people have changed in conjunction with the fundamental conversions in military matters.

Officers and political officers will glean much that is useful from the training aids "Military Pedagogy" and "Military Psychology" being readied for publication.

The book "Fundamentals of Soviet Military Law" clarifies the essence of military law and its place in the system of socialist right, the USSR Law on universal military obligation, the legal bases in the organization and activity of the Soviet Armed Forces. The book also details the legal bases of unit administration and pensions for military service personnel and their family members.

The publication of several major literary works is planned which uncover the agressive policy of imperialism. Those who are readying a new world war, directed primarily against the Soviet Union and other socialist countries, those who commit atrocities striving to enslave the peoples of Indochina are revealed in the books: "The Armies of NATO Countries," "The Aggressive Blocs of Imperialism," "The Second World War. Myth and Reality," "How World War II Began," "American Militarism in Wars," "The Mouths of Americans," and "Diary of an American Soldier."

The Military Publishing House (Voyenizdat) has a large plan to publish works on tactics, combat training, and military equipment. Regulations of the Armed Forces will be republished.

At the present time, the task of mastering scientific methods of troop and rear services control is extremely vital. Those who work in the field of control automation will be interested in reading the book "Idea, Algorith, Decision." It reviews the military aspect of solving the "problems of the century" -- the application of computers for control and decision making.

Commanders and chiefs assimilating the fundamentals of scientific troop control and especially all of those who serve aboard vessels of the auxiliary fleet will find help in perfecting the methods and style of work control in the materials of the book "The Science of Control and the Navy." The compilers of the book "Technical Support of Tank and Motorized Rifle Podrazdeleniye in Modern Battle" describe the basic tenets of organizing the technical maintenance of equipment, their repair and evacuation, and on supplying the podrazdeleniye with armored and motor tractor property.

The brochure "Commander's Work Map" will provide officers and officer candidates with information on the order of readying maps for use, practical recommendations on handling the work, and on the use of acronyms and conventional symbols.

There is a broad plan to publish literature on missile equipment, aviation and cosmonautics, naval matters, radioelectronics, civil defense, sport, and training, methods, and reference materials, dictionaries and training literature on foreign languages; also being readied for publication are many albums, visual aids, posters, and other items of representative art.

It is planned to publish more than 70 works of fiction describing the bravery and nobleness of Soviet Army and Navy personnel, the peaceful life and combat training of chast' and podrazdeleniye. The authors of prose and poetry are well known young Soviet writers, poets, dramatists.

Because it is impossible in a short survey to describe all of the interesting works of military literature being prepared for publication in 1972, we will list only a few.

Using little known documents and recollections, G. Maryagin wrote a fiction story on the leader defending the young Soviet Republic -- V. I. Lenin. The main events in the tale take place in 1917-1918. The Lenin theme also sounds in the story by A. Vasil'yev, "There is Such a Party." The trilogy covers the nation's life from 1905 through 1925. It has many pages from the heroic history of the Communist Party: the revolution of 1905, the first world war, the February Revolution and the Great October. One of the main heroes in this deeply patriotic book is the legendary leader of the civil war -- Mikhail Vasil'yevich Frunze.

The bravery and skill of the Soviet military leader is the theme of the work by G. Berezko, "Night of the Military Leader." The author draws and complex and interesting figure. The tale is true and optimistic. It glorifies the triumphant deed, the beauty of the soul of the Soviet man, his unlimited heroism.

The subject of the novel by I. Sotnikov, "Light -- Light to Everything," is internationalism, spiritual generosity, the greatness of the military work of the Soviet soldier fulfilling his mission of liberation during the Great Patriotic War with honor and glory.

The tenor of the novel, "On the Steep Road," by Ya. Bash is the friendship of the Soviet peoples, the unity of the front and rear. The novel was placed into a single tome which includes the novel "Hope" and the story "Professor Buyko" which belongs to the pen of this Ukrainian writer.

The new story by A. Rybakov, "The Unknown Soldier," tells of the young soldier road-builders. The writer tells of the events of our day and praises the deeds of the fathers, the defenders of the homeland's freedom.

"The Blue Berets" is the title A. Kuleshov gave his novel. This book on the life and combat training of the airborne troopers and of the education of the young soldier who traversed the difficult and complicated path of maturity. In the course of developing the novel's events, important matters are touched in the multifaceted life of the airborne troops, their service and everyday life.

"The Heart Hears Everything" is a poetic compilation of works by N. Novosel'nova. It contains the best works on brother-soldiers with whom the difficult and victorious roads of the front were covered; the warm, lyrical stanzas on pure and true love, on friendship. The biography of the author is quite remarkable. A medical instructor by profession, she often distinguished herself in battle. She lost her hearing from a contusion. But she did not turn away from life and army interests, she works hard on new writings about Soviet soldiers, praises their bravery and humanity.

The publication plan includes military writings of foreign writers primarily those from the socialist countries.

The Voyenizdat's publication program for 1972 is varied and replete. We can only advise the creative collective to give more attention to such a wide circle of readers as officers and junior specialists of rear chast', podrazdeleniye, installations, and services. The books planned for publication do not fully satisfy the demand for them. The same may also be said on training literature, books on modern equipment and its operation. The plan does not have any major literary works, memoires, documentary tales, stories of frontline personnel, and sketches of rear personnel work during war and peacetime. We can hope that the plans of Voyenizdat for the near future will also take into consideration the requests of rear specialists.

It would be useful to expand the subject matter of books reflecting the rapid scientific-technical progress and the growth in the military-engineering and military-economic education of army and navy cadres.

BRIEF COMMUNIQUES (pp 91-92)

The Lenin Lesson -- in the V. I. Lenin Museum

The Komsomol members of the podrazdeleniye commanded by Major V. Kakovkin prepared with great effort for the Lenin lesson. Its subject and slogan was the comment made by L. I. Brezhnev in the Accounting Report of the Central Committee to the 24th CPSU Congress: "All that is created by the people must be reliably defended."

The lesson was held in the Baku branch of the Central V. I. Lenin Museum and began with the showing of a documentary film. The soldiers saw revolutionary Petrograd during the first days of Soviet rule and threatened Moscow in 1941, the enthusiasts of the first five-year plans, and man's flight into space. These films were accompanied by a recording of V. I. Lenin's comments to the Red Army men going off to the front. All those in the hall received the words of the revolutionary leader as personally directed to them.

Then Ivan Nikolayevich Bonzo came into the hall, a former worker in Petrograd, a CPSU member since 1917, and a compatriot of the revolutionist S. M. Kirov. The soldiers, without any command, rose and applauded the veteran.

The report, "We stand in defense of the homeland," was made by the deputy commander for political matters Captain Ye. Zemskov. Private First Class G. Pavlenko asked for time, he is outstanding in combat and political training. He spoke on his service experience.

The talk given by another outstanding soldier, Private N. Panferov, was also interesting. Using examples from the life of the podrazdeleniye, he showed how important it is for the armed defenders of the homeland to be well versed in the use of military equipment and armament and called upon his comrades to spare no effort to raise field skills. The talks by other soldiers were also interesting.

Komsomol leader Junior Sergeant Abbasov and Privates Pershin and Moiseyev reported on how the Komsomol organizations made ready to conclude the first stage of the Lenin test. At the end of the Lenin lesson, an order was read from the commander commending the Komsomol members who made high marks in combat and political training.

Meeting With Participants of the Battle for Moscow

The men of the motor vehicle podrazdeleniye were visited by a former participant in the 1941 battles at Moscow -- reserve officer V. Panchenko. He shared his recollections on the battles for the cities of Dmitrov, Yakhrom, and for Permilovsk height; he described the unparalleled heroism of the Soviet soldiers who defended the homeland's capital -- Moscow.

The frontline soldier instructed the men to persistently master arms and equipment, the skills applicable for modern warfare conditions, to strengthen discipline in everyway possible and to raise combat readiness. Major A. Frolov, who then spoke, assured the guest in the name of the soldiers that the motor vehicle personnel would multiply the combat glory of their fathers with outstanding training and work.

The Guideon

The military scientific conference held in the Red Banner Black Sea Fleet was devoted to summarizing the know-how of rear services support for high combat readiness of the ships. The detailed activity of leading podrazdeleniye and installations of the rear and of auxiliary fleet vessels was placed into the work basis of the conference and into its conclusions and recommendations. It was mentioned that high indexes in combat, political, and special training during the past year were attained by podrazdeleniye led by officers M. Lyakhovich and V. Kalmykov and by auxiliary vessels commanded by officers A. Rudnichenko and Ya. Turovskiy. They were announced as outstanding. The guideon competitions in the new training year also show an example in performing tasks and in perfecting professional mastery.

Leading Know-How Into Practice

A technical conference was held in the Red Banner Caspian Flotilla on the subject "Methods to mechanize loading-unloading operations in rear warehouses." The conference members visited the food supply depot where the chief is Major Quartermaster Service V. Baydenko. Here, there is 85% mechanization of potato loading and unloading in the cooled vegetable warehouse; this facilitates and expedites work.

The officers saw much that was also instructive at another depot. Under the supervision of Engineer Captain 2nd Rank N. Volozhin, the rear specialists assembled a movable belt transporter on a vehicle trailer which makes it possible to load (unload) freight at any point and to increase productive labor by three times. There is a mechanized line at the depot, using two fixed cranes, rail carts, and containers, to move small-size but heavy freight. As a result, the productivity of loading operations doubled.

The conference members shared their experiences on warehouse mechanization and worked out recommendations to introduce new skills and methods into practice. By order of the flotilla commander-in-chief, an inspection review was announced for best organization of supply storage and mechanization loading-unloading operations at rear warehouses, at shore bases, on auxiliary vessels and floats and boats bases handling freight.

The Successes of the Ingenious

A weighty contribution into perfecting the methods and skills of material, technical, and medical support of ships and chast' is made by the innovators and inventers of the Twice Red Banner Baltic Fleet. The ones rated as the best were Lieutenant Colonels Medical Service G. Saakov and G. Segal', Engineer Captain-Lieutenant V. Ivanov. For example, officer Saakov has more than 50 rationalizer suggestions and one invention. He was awarded the honorary title of "honored RSFSR rationalizer." Rationalizers Engineer Captain D. Utkin, Master Sergeant reenlisted service B. Popenko, V. Alekseyev, and others of the fleet's rear specialists work fruitfully.

Awards to Competition Winners

Competing under the slogan "The year of the 24th CPSU Congress, a year of outstanding service and training," the personnel of the rear podrazdeleniye commanded by officer S. Leshchev achieved high indexes in work and training. Here, there are 80 percent outstanding in combat and political training and 78 percent class specialists, each soldier has mastered one or two related specialties. As a result, all tasks are efficiently fulfilled in supporting the troops with fuel. The rationalizers work hard to further mechanize the production processes and all that is new and leading in the receipt, storage, and issue of fuel is introduced.

For the high indexes achieved in combat, political, and special training and firm military and labor discipline, the podrazdeleniye was awarded the Challenge Red Banner of the Military Council of the Order of Lenin Moscow Air Defense District.

In Assistance to Rationalizers

The officer of one of the military chast' of the Red Banner Transcaucasian Military District, V. Abramov, readied a "Short Reference-Catalong on Inventions and Rationalizer Suggestions for the Military Transportation Service." It systematically sets forth the materials published in various publications of the USSR Ministry of Defense during the period 1954 through 1970. The reference-catalog considerably eases the search for technical information on rationalizer suggestions which have been worked out and provides for better reference in selecting the direction for an invention. The reference book has been duplicated and disseminated to the VOSO organs of the district.

For You, Army Tourists

A new army tourist base went into operation in September 1971, Yantarnyy Bereg, in the Twice Red Banner Baltic Fleet. It is located on a picturesque shore of the Baltic Sea, 10 kilometers from the resort town of Svetlogorsk and 45 kilometers from Kaliningrad. There is a large lake, filled with fish, not far from the tourist base.

The tourists are provided with one auto-pedestrian route through the resort cities of the Kalinigrad coastal waters and the Kursk spit for 5-6 days. There are one and two-day radial routes with visits to Svetlogorsk and other cities and villages located along the coast of the Baltic Sea.

The tourist base works throughout the year. During the summer period it can accept up to 210 persons and 60-100 persons in the winter. It operates as a tourist pension from October through March. Trip tickets to the tourist base can be acquired at the tourism offices of military districts, fleets, groups of forces, and the Department of Tourism of the USSR Ministry of Defense.

The Purchasers Were Satisfied

The Trade Directorate of the Ural Military District organized and held a trade fair. Its work was preceded by good training of the post exchanges participating in it. The military purchasers were notified in advance of the place and time it was to be held.

Those who visited the fair were quite satisfied with its operation. The assortment of goods was broad -- more than a thousand samples in a total amount of more than 2 million rubles.

During the work of the fair, there was an exchange of know-how among the post exchanges on the sales and advertising of commodities and many trade agreements were signed. Upon the completion of the district trade fair, all of the post exchanges took part in the interdistrict fair held in Sverdlovsk.

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