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The report contains information on the Soviet military and civil defense establishments, leadership, doctrine, policy, planning, political affairs, organization, and equipment.
TRANSLATIONS ON USSR MILITARY AFFAIRS

No. 1375

CONTENTS

<table>
<thead>
<tr>
<th>Civil Defense Training and Related Activities</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(VOYENNYYE ZNANIYA, Jun 78)</td>
<td>1</td>
</tr>
<tr>
<td>In the Estonian SSR, by P. Vasikov</td>
<td></td>
</tr>
<tr>
<td>In Kaluzhskaya Oblast, by P. Firsov</td>
<td></td>
</tr>
<tr>
<td>Material for Radio Broadcasts</td>
<td></td>
</tr>
<tr>
<td>In Kalininskaya Oblast, by D. Solov'yev</td>
<td></td>
</tr>
<tr>
<td>In Kemerovskaya Oblast, by V. Gudimov</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wartime Control of Air Armies at Front Level Described</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(G. Pshenyanik; VOYENNO-ISTORICHESKIY ZHURNAL, Jun 78)</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wartime Command and Control of Baltic Fleet Forces Described</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A. Kosov; VOYENNO-ISTORICHESKIY ZHURNAL, Jun 78)</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Russian Army General Staff Field Operations Described</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A. Kavtaradze; VOYENNO-ISTORICHESKIY ZHURNAL, Jun 78)</td>
<td>38</td>
</tr>
</tbody>
</table>
CIVIL DEFENSE TRAINING AND RELATED ACTIVITIES

In the Estonian SSR

Moscow VOYENNYYE ZNANIYA in Russian No 6, Jun 78 signed to press 18 May 78 pp 13-14

[Article by P. Vasikov, division chief, Central Committee, Communist Party of Estonia: "Success Is Based on a Comprehensive Approach"]

[Text] Statements by V. I. Lenin on the importance of the moral factor and its role in war as well as statements at the 25th CPSU Congress on a comprehensive approach to indoctrination provide us with a key for the conduct of moral-political and psychological training of the civilian population within the civil defense system. And I must state that party, Soviet and public organizations in the Estonian SSR have amassed a certain amount of experience in organizational and propaganda work in this respect.

Matters pertaining to improving civil defense are frequently discussed at meetings of party activists in the rayons and cities, primary party organizations, board meetings and at practical scientific conferences of ministries and agencies, and at meetings of rayon and city Soviets.

An instructive seminar was held with party activists in Leninskiy Rayon in the city of Tallin, entitled "On Forms and Methods of Moral-Political and Psychological Training of Unit Personnel in the Course of Combined Enterprise Exercises." The state of moral-political and psychological training in the units was examined at a meeting of the bureau of the Narva City Party Committee. Some aspects of this problem were analyzed at a practical scientific conference organized by the party committee of the Estonslanets Association.

Under the direction of party agencies, public organizations began devoting greater attention to problems of civil defense. In 1977, for example, the Central Committee of Estonian Komsomol, the republic trade union council, the Central Committee of DOSAAF and the republic Znaniye Society issued a decree aimed at instilling excellent moral-political and psychological qualities and at efficient, high-quality accomplishment of tasks in the area of further improving civil defense.
There has developed in this republic a well-constructed system of civil defense training for secretaries of primary party organizations and deputy unit commanders for political affairs. Every year newly elected secretaries of party organizations and deputy commanders for political affairs receive training at civil defense courses in this republic. Training of the civil defense political edifice has been set up in practically all party organizations of rayons and cities. Its forms include permanent seminars, meetings, instruction sessions, lectures, reports, etc.

Political instruction, Marxist-Leninist education of Communists and party-unaffiliated, explanation of the resolutions of the 25th CPSU Congress, the decrees of CPSU Central Committee plenums, the behests of V. I. Lenin, and the provisions of the new USSR Constitution on defense of the socialist homeland constitute the basis of party organization work on forming excellent moral-political qualities in the civilian population.

The Estonslanets, Estkolkhozstroy, and Baltika associations, the Tallin Machine Building Plant, and the Dvigatel' Plant are well-known for their production successes, for example. The work forces of these enterprises are distinguished by a high degree of organization. Naturally the units established there possess excellent training performance capability and solid moral-political and psychological conditioning. This has been achieved primarily due to purposeful ideological-indoctrination work on the part of party and public organizations. Political instruction classes and political information sessions are held on a regular basis, lectures are given, and radio, television and the periodical press are used. Civil defense days, weeks and months have become tradition. All this promotes Communist indoctrination of the toilers and enhances their readiness for self-sacrificing actions to rescue the civilian population and the nation's resources in case of an aggressor attack.

Civil defense publicity plays an important role in the overall complex of indoctrinational work. One specific feature of its organization lies in the fact that we do not limit ourselves to dissemination of specific knowledge but actively prepare people for the potential trials of contemporary war. Party, Soviet, trade union and Komsomol agencies, establishments and organizations of the republic's Ministry of Culture, the State Committee of the Estonian SSR Council of Ministers on Television and Radio Broadcasting, the State Committee for Publishing Houses, Printing Plants and the Book Trade, the Cinematography Committee, DOSAAF, the Red Cross and the Znaniye Society participate in the information dissemination effort. All means of oral, printed and graphic dissemination, television, radio broadcasting and film are subordinated to a single goal -- to strengthen in each and every citizen consciousness of his sacred duty to defend the socialist homeland.

People's universities of military-patriotic indoctrination have been established in this republic's rayons and cities, devoting considerable attention to problems of moral-political and psychological training. The finest of these include the Patriot People's University in the city of Kokhtla-Yarve,
the Za Rodinu in Narva, the one in Kalininskiy Rayon in the city of Tallin, in the city of Sillamyae, in Kingiseppskiy and Paydeskiy rayons.

Morskoy and Leninskiy rayons in the city of Tallin have demonstrated a fine example of organization of civil defense propaganda. Under the supervision of party rayon committees, they have successfully conducted civil defense publicity months, during which hundreds of excellent lectures were presented, as well as specific-topic evening activities and quiz games, film festivals, and exhibits.

Incidentally, every year EDASI, the Tartu city newspaper, holds quiz game competitions, as do the republic newspaper MOLODEZH' ESTONII, and the State Committee of the Estonian SSR Council of Ministers on Television and Radio Broadcasting. These measures always evoke considerable interest on the part of the population. For example, approximately 16,000 persons and more than 200 enterprise work forces and staffs of educational institutions took part in one of the competitions organized by the newspaper MOLODEZH' ESTONII. The editors received more than 1,500 letters, a great many albums, photographs and drawings on civil defense themes.

Posters and leaflets put out in this republic's rayons and cities tell of leading performers and enthusiasts in civil defense. Their knowhow and experience is reported in republic newspapers, and at seminars of economic, party and Soviet activists. Posters on leading performers in civil defense, put out by city committees jointly with civil defense headquarters of the cities of Tartu and Kokhtla-Yarve, were highly praised in 1977.

A unity of ideological and psychological influence on unit personnel and the public at large is important for strengthening moral-political and psychological qualities. Such a unity is secured in this republic most effectively and with the finest quality during the period of special training of the civilian population and civil defense units as well as the conduct of training drills, combined and special tactical civil defense exercises, and the Orlenok and Zarnitsa military games.

A combined enterprise exercise, for example, was held at the Tallin Lembitu Tailored Garment Factory in a complex, highly realistic situation.

The exercise was preceded by lengthy preparations. All workers and employees met performance standards, practice drills were held, and simulation devices were tested out.

Considerable assistance in preparing for the exercise was rendered by a seminar of party-economic activists on the topic: "Excellent moral-political and psychological qualities of unit personnel, workers and employees -- a guarantee of successful accomplishment of civil defense tasks." Enterprise civil defense chief L. Veskimyae, party bureau secretary M. Kikho, as well as civil defense unit commanders, speaking during the discussion following the report submitted by Col R. Luks, Estonian SSR Civil Defense Headquarters Deputy Chief, used concrete examples to demonstrate how moral-political and psychological qualities are indoctrinated in civil defense unit personnel, workers and employees.
Just prior to the exercise, factory civil defense chief of staff A. Myari conducted practice drills at the training center for civil defense unit personnel. They simulated bursting of a pipeline, fires, physical destruction, placed piles of rubble and other obstacles, negotiation of which involved certain risk and required mental and physical exertion. Seeking to achieve psychological firmness in his people, the director time and again introduced elements of the unexpected and would pull an individual out of action if he was not prepared to perform the mission. Excellent results were obtained, although the initial attempts of many were unsuccessful, with hesitant, unsure actions, and some even displayed confusion. When the exercise began, the people performed with precision and smoothness in the complex situation.

Development of excellent moral-political and psychological qualities is also promoted by republic competitions of nonmilitary units. In particular, a highly realistic situation was created at communications personnel competitions. Such scenario elements as explosions which "disabled" personnel, antennas, power, transmitters and receivers were introduced at the points where mobile gear was deployed. Communications personnel had to work in protective gear, which made things more difficult. Receiving and transmitting were conducted under conditions of heavy radio interference and shifting from one frequency to another. Thus physical and mental stresses were continuously applied to personnel. However, the communications personnel successfully accomplished their assigned tasks, met the specified performance standards, and displayed thereby excellent moral-political and psychological toughness.

The above examples confirm that wherever thorough preparations are made for training classes, exercises and practice drills, they are effective and excellent opportunities are present for forming moral-political and psychological qualities in personnel. On the other hand, relaxation of demands immediately arouses doubts: "So it is not as important as they say it is." And the higher the position of the leader who relaxes demands, the more profound the reverse reaction.

We must state that excellent moral and political qualities in workers and employees increase the discipline, organization and unity of work forces and help them successfully meet their socialist pledges pertaining to implementing the resolutions of the 25th CPSU Congress.

In order to synthesize amassed know-how and to adopt it into practical training and indoctrination of the civilian population, in December of last year the Central Committee of the Communist Party of Estonia made a decision to hold a scientific-practical conference on problems of moral-political and psychological training within the republic's civil defense system. Participants in the conference included division chiefs of the Central Committee of the Communist Party of Estonia and the republic Council of Ministers, first secretaries, propaganda and agitation division chiefs of party rayon and city committees, chairmen of rayon and city Soviets, and activists of ministries, government agencies, enterprises, kolkhozes, sovkhozes, state establishments, public organizations, and the mass media.
A report entitled "Directions of Further Increasing the Effectiveness of Measures in Organizing Moral-Political and Psychological Training of Unit Personnel and the Civilian Population" was given by the civil defense chief of staff — Doctor of Military Sciences Maj Gen V. Vare, Deputy Chief of Civil Defense of the Estonian SSR. Addresses by Candidate of Economic Sciences L. Ananich, First Secretary of the Kokhtla-Yarve City Committee of the Communist Party of Estonia, E. Innos, General Manager of the Talleks Association, N. Korotkov, party committee secretary at the Estonian GRES, plus others were listened to attentively.

On the whole an interesting and useful discussion took place at the conference. Extensive discussion of matters of moral-political and psychological training of units and the civilian population, exchange of views and information, a visit to the civil defense exhibit, and viewing of the film entitled "Components of Staunchness" enriched the conferees with theoretical knowledge. The conference constituted an incentive in the campaign for high-quality and efficient execution of civil defense measures in the new training year and demonstrated the prospects for further improvement of the entire complex of matters pertaining to increasing civil defense combat readiness.

Of course much still remains to be done. And we are concentrating our efforts in this matter in two areas. First of all we are endeavoring to improve the quality of the entire training process by adopting scientific advances, perfecting teaching methods, and improving monitoring and verification of execution. Second, we are seeking to increase the effectiveness of political-indoctrination work and civil defense publicity, improvement in work toward adopting a comprehensive approach to indoctrination and extensive utilization in military-patriotic work of the pedagogic principles of indoctrination and the fundamentals of military education science and psychology.

Skillfully utilizing and practically adopting all tested forms and methods of forming excellent moral and political and psychological qualities, and seeking new forms and methods, we shall be able sharply to improve the quality of preparation and training of the civilian population for protection against modern weapons.

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In Kaluzhskaya Oblast

Moscow VOYENNYEE ZNANIYA in Russian No 6, Jun 78 signed to press 18 May 78 pp 16-17

[Article by Maj P. Firsov, civil defense chief of staff, Kaluzhskaya Oblast: "Following a Uniform Plan"]

[Text] In recent years combined exercises at industrial and agricultural enterprises in this oblast have been conducted independently for the most part. Each frequently dealt only with its own specific problems. At best
a small group of enterprise officials would travel to the village to coordinate a few matters pertaining to the civil defense plan. The result of course was that they ignored a very important complex of problems which are resolved only through joint efforts.

Just before the beginning of the current training year we tested out the combined exercise method at an oblast teaching-methods gathering for administrative and command personnel. A demonstration combined enterprise exercise, including the participation of one industrial plant, two kolkhozes and a village Soviet, was held toward this end.

Of importance is the fact that several work forces with their managers, party, Komsomol and trade union organizations were involved together in carrying out civil defense measures. The village Soviet was fully mobilized. Experience was gained in party-political work among the civilian population and the personnel of nonmilitary units, which was conducted under the supervision of plant and rural party organizations on the basis of a coordinated plan.

During the preparatory period the civil defense chiefs of the plant, kolkhozes and village Soviet reached agreement on the scope and sequence of missions to be performed jointly. And there were many such tasks. They included preparations for location and housing of the evacuated civilian population and civil defense units of the industrial plant; deployment of command posts and evacuation management posts; construction of simple protective structures for the evacuated and local population; procedure of dispersal and supply of necessities to the evacuated urban populace, etc. Such coordination helped specify in the calendar timetable and joint exercise plan concrete measures and actions for trainees at all enterprises. Preparation of command personnel, work forces, the civilian population and nonmilitary civil defense units was conducted accordingly.

For example, the village Soviet and kolkhoz assigned the industrial plant's civil defense headquarters staff facilities for a command post and helped equip it for operating in a difficult radiation situation. At the same time the kolkhoz and village Soviet prepared protected command posts for themselves. There was well-organized communications between all command posts, as well as between command posts, evacuation officials and nonmilitary units (the attached diagram shows one variant of such an arrangement).

The evacuee reception station was directed by village Soviet deputy A. Nemchenko. He was assisted by other deputies: Ye. Proskurina, N. Kozlova, A. Popov, and P. Platonova, who skillfully handled the job of dispersal and housing of evacuees in village homes. It is interesting to note that many deputies, on the instructions of the chairman of the village Soviet, worked directly with the village people, teaching them methods of sealing their homes, setting up basements and cellars as simple shelters, and teaching them how to make cotton-gauze bindings and cloth dust masks. Homes which had been prepared well for protection were demonstrated at the exercise as a standard
to emulate. We shall note that the village people did this not only for
themselves but also for those city evacuees who would be housed with them.

Deputy A. Ryaskina (chief accountant at the kolkhoz) directed the operations
of trade and public food service enterprises, which provided the arriving
city dwellers with food and other necessities. Under her supervision, store
and restaurant personnel were taught techniques and methods of protecting
foodstuffs against radioactive contamination.

"Anna Ivanovna was constantly on the move, working with enthusiasm," said
village Soviet secretary L. Lennikova, civil defense chief of staff, describ-
ing her actions at the exercise.

There were many such enthusiasts. Take retiree A. Klak, for example. Not
long ago, upon retirement, she turned over a group of her highly-productive
cows to young milkmaid T. Gudkova. But during the exercise this kolkhoz
veteran could not sit around at home idle: she went out to the livestock
unit to help Tamara put protective masks, stockings and blankets on the
animals and to help seal the cow barns.

Animal specialist and breeder V. Aristarkhova headed a radiation-chemical
monitoring post, and animal specialist T. Tarasova — a livestock protection
team. Together with veterinarian L. Nikiforov, she demonstrated the
procedure of treating the animals in a specially-equipped area.

We must also mention the zeal and efficiency of storekeeper A. Grabkova.
She swiftly issued gas masks and other gear to the kolkhoz farmers and
civil defense unit personnel. She had everything laid out on the shelves,
measured and fit in advance, with cards indicating to what person a given
item belongs. Therefore it required little time to issue the equipment.

The workers, employees, engineers and technicians of the industrial enter-
prise diligently performed their duty. A particularly fine job was done by
the men and commanders of the composite detachment which went out into the
suburban dispersal area. The detachment was commanded by deputy chief en-
gineer V. Soppa. The detachments performed swiftly and with precision
engineer activities pertaining to sheltering its personnel and equipment,
competing with the kolkhoz composite civil defense team, together with which
it would be executing a march and performing "rescue operations" at the en-
terprise.

Among enterprise unit commanders we should also mention L. Kazarin. He was
distinguished by a high degree of efficiency and the ability to do everything
well and with precision. It is not surprising that the men of this unit
confidently accomplished their assigned tasks at the exercise. Among the
rescue personnel, excellent practical skills and ingenuity were displayed by
A. Ignatov, a highly-skilled millwright, efficiency innovator, and shock
worker of Communist labor. For more than 20 years now he has skillfully
combined shock-work labor in production with performance of difficult civil
defense duties. An equally fine performer is medical aid team member A. Kuznetsova, a senior technician-designer and mother of two. The command expressed thanks for her skilled performance at the exercise.

The people did well at the exercise, and this is a direct result of political work among the public and civil defense unit personnel, work which was purposefully performed by the party organizations of the work forces.

An analysis of the obtained experience indicates that preparation for and holding of such exercises possesses a number of organizational features. First and foremost they include careful coordination of plans and their material support at all stages of the exercise.

The village Soviet plays a special role. It is fully responsible for receiving and housing the evacuated population as well as the conduct of other civil defense measures in its area. It is true that the executive committee of the Soviet has a limited number of staff personnel. Many Soviets do not even have deputy chairmen. Therefore in most cases secretaries of village Soviets are appointed civil defense chiefs of staff, and staff members include specialists from the farms, schoolteachers, and officials from domestic services, trade, and communications. It is advisable to use reserve officers. Such a staff successfully settles operational-reconnaissance and engineer-technical matters, supervises receiving and housing of evacuees and training of the public in a skilled manner, monitors training of non-military units, and conducts other work.

Training of village Soviet civil defense headquarters staffs as control entities is becoming an important task. At present we train civil defense chiefs and village Soviet civil defense chiefs of staff at oblast, city and rayon training courses. We extensively employ group exercises and staff drills in order to ensure that the village Soviet civil defense chiefs themselves can efficiently utilize them in training the personnel of their control entities.

At joint exercises with industrial enterprises it is extremely important to emphasize work on coordinated action both in carrying out civil defense measures in the jurisdictional area of the village Soviet and when moving plant and rural nonmilitary units into town to perform rescue operations. We were entirely successful in this at our exercise. Civil defense headquarters of the industrial enterprise and the rural headquarters staffs settled all matters efficiently and in a coordinated manner.

We have synthesized the obtained experience and are now adopting it into the practical activities of scheduled combined enterprise exercises.

In the diagram [not reproduced]: Training variant of organization of control in a suburban zone.

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Material for Radio Broadcasts

Moscow VOYENNYYE ZNANIYA in Russian No 6, Jun 78 signed to press 18 May 78
pp 16-17

[Unattributed article: "If Tomorrow There Is an Exercise"]

[Text] What we want to discuss in today's talk affects everybody. Nobody can remain indifferent to matters of defense against modern weapons. "We are living in unsettled times," stated Comrade L. I. Brezhnev. These words attest persuasively to the fact that we all need vigilance and constant readiness to repel imperialist aggression and protect our plants, factories, agricultural production enterprises, our families and loved ones.

Every person, if he thoroughly studies means of individual and collective protection, masters the techniques and skills of their proper utilization, firmly assimilates the rules of conduct during a civil defense alert, and learns to provide self-help and mutual assistance, will perform with confidence in the most complex situation. As we know, such skills are acquired at civil defense training classes in conformity with the demands of the universal compulsory training programs. But this is not enough. The acquired knowledge must be continuously improved. One of the most effective forms of firmly consolidating this knowledge is active participation by the public, including persons not employed in production or the service sphere, in combined enterprise and other exercises.

What must be done in the period of preparation for exercises?

First of all one should reread the instruction guide entitled "Everybody Should Know This." Previously-studied material is soon forgotten unless it is repeated on a systematic basis. It is also beneficial to view the film called "Preparing for a Combined Enterprise Exercise." Then one should proceed with detailed work on individual techniques and actions to be performed under special conditions, particularly those which have been inadequately mastered. This can be made a practice drill method, taking part in various competitions to meet performance standards.

At previous practical training classes you naturally not only studied the construction of the gas mask (respirator) but also acquired certain skill in putting it on within the time allotted. It is now important to practice wearing it at one's work station for extended periods of time.

Parents and all other adults should be concerned with the protection of children: they should learn to put a gas mask on a child promptly and skillfully, and knowledgeably to observe the rules of care of children in protective structures. This is not a simple matter, as it might seem at first glance. Practice is also required here.
It is useful to bear in mind how they taught you to make the simplest individual protection gear — cloth dust masks and cotton-gauze bindings. Just before the exercise prepare them not only for yourself but also for the members of your family, particularly the children.

A successful exercise will also be promoted by your active participation in other measures, such as sealing living and working areas, modifying basements, cellars, root cellars and other spaces located under grade as simple protective structures, construction of slit trenches and fallout shelters. And do not forget how you were taught to seal wells and protect water and foodstuffs against contamination. This applies not only to rural but urban people as well. Sovkhoz workers and kolkhoz farmers should not forget about protecting animals and crops, and establishing supplies of water and feed in livestock units and for the family’s personal livestock. Turn once again to page 40 of "Everybody Should Know This," where useful advice is given on how all the above can be performed in a practical manner in one’s home.

Now we come to fire-fighting measures! Fire can lead to immense losses: we might recall the heroic fight against fires waged during the Great Patriotic War by the people of Leningrad, Moscow, Stalingrad and other cities, into which fascist aircraft dropped many thousands of incendiary bombs. Their experience is useful for fighting fires which can be ignited by modern, more powerful mass destruction weapons. It is important not to permit small fires which can be extinguished immediately from becoming huge conflagrations. Everybody must know how to put out fires: schoolchildren and pensioners, housewives, workers and kolkhoz farmers.

Blackouts were extensively employed in the last war, and they are still of importance under present-day conditions. During hours of darkness towns and industrial enterprises are clearly visible from the air at a great distance. Lit windows, brightly-burning street lights, vehicle headlights and other sources of light generate a glow over a city. Under special conditions it is essential to ensure that the windows of homes, schools, public, commercial and industrial buildings are covered with the onset of darkness by shutters, protective screens or blinds. Opaque and non-flammable materials are used for making these devices.

It is particularly important to know the response procedure to civil defense alerts. Frequently during preparation for an exercise and even during an exercise procedures are limited only to response to an air raid alert. This is insufficient, for in addition to the air-raid alert there are three other signals: All Clear, Radiation Danger, and Chemical Alert. And it is necessary not only to be familiar with the signals but also thoroughly to drill one’s actions at practical training classes and drills on all alert signals. As a rule the majority of them are given at exercises.
Previously-acquired knowledge and skills, subsequently practiced at a combined enterprise exercise in a complex situation, will help you develop excellent moral-political and psychological qualities. This will prevent a possible negative reaction. Take for example evacuation of the civilian population to the suburban zone. It is quite obvious that panic can be avoided if people thoroughly understand in advance the procedures of behavior at evacuee collection and receiving points, en route and at the destinations. It is also important to know that the suburban zone contains reliable means of protection against radioactive contamination.

If you possess all these practical skills and meet performance standards, you will perform confidently at an exercise, and you will reaffirm to yourself that there is protection against modern weapons.

The exercise is tomorrow. Ask yourself: am I ready for it?

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In Kalininskaya Oblast

Moscow VOYENNYE ZNANIYA in Russian No 6, Jun 78 signed to press 18 May 78 pp 18-19

[Article by D. Solov'yev: "Skill Is Needed In All Things"]

[Text] Their specialty is rescue. They are members of the most common nonmilitary civil defense units. Each of these units is furnished with special gear and equipment. In particular, rescue detachments and teams contain mechanization groups and elements respectively, the function of which is to clear rubble, clear lanes and passages, feed air and perform other laborious jobs. And it is very important to make rescue personnel to work in close coordination with compressor station crews, bulldozers, excavators and other heavy equipment.

But in addition to the ability to work efficiently with equipment, rescue personnel must gain practical mastery of many simple techniques and modes of action in a complex situation. And this is done correctly by V. Galkin, commander of a rescue group of an experimental machinery plant in the community of Udomlya in Kalininskaya Oblast, who teaches his men techniques of rescuing people with the aid of materials at hand. That is the subject of this article.

They were preparing diligently for an enterprise exercise. At practical training classes and practice drills they worked over again and again each
element of the forthcoming exercise. The members of the rescue group listened attentively to the comments of their commander, Vladimir Semenovich Galkin, and if it was necessary, they would go over again and again any procedure which had been performed with inadequate precision.

It is true that some people felt that the commander was somewhat overloading his rescue personnel. But the experienced men immediately spoke up against such attitudes.

"I used to see this at the front," stated Fedor Arsen'yev, veteran of the Great Patriotic War. "Two soldiers would be digging a foxhole. One would be shoveling with swiftness and skill. Within 5 minutes his foxhole would be ready. The other man, poorly trained, would spend a great amount of time on this task and frequently would be delayed in obtaining shelter against enemy bullets. Therefore, as the song goes, skill, toughening, and practice are needed in all things. This is particularly true of us rescue people."

Here is a simple example. They were working on techniques of rescuing people from the top floor of a burning building. Galkin ordered the commander of the first element, Volkov, to divide his men into two groups.

"The first will be led by Klavdiya Vavilova, and the second by Fedor Arsen'yev. The two groups can compete to see who will perform the mission best."

Volkov gave the group leaders ropes of equal length (25 meters) and boards.

"You come up with a way to lower people from the third floor with the aid of these materials," he instructed. "The building is on fire. The tenants, including children, cannot get out down the stairwells. You have 10 minutes to get ready."

During this time, according to the conditions of the task, it was necessary first of all to secure the boards with the ropes in such a manner that they did not come free, with long enough rope ends left for lowering a person from the upper floor. The task was no easy one even for war veteran Arsen'yev. For some reason the board soon worked loose. This meant that it had to be secured with some other knot. Of course they were not ready in 10 minutes. An additional approximately 30 minutes was required to find a way to tie the board securely.

Immediately everybody saw how important ability and skill are even in what would seem to be such a simple task. It will come in handy in order promptly to rescue people from a burning building, for in such situations a fire ladder is not always handy.

At the second training session Galkin decided to check whether all the men knew how to handle a crowbar and shovel. The tools are simple per se, and are part of the regular equipment. And if there is no compressor equipment
and jackhammers nearby, the rescuers will have to break through the wall of the shelter with a crowbar in order to get air through for the people inside.

He led his group to a brick wall (there is such a structure at the training center). Those with shovels he ordered to dig holes, while those with crowbars were to break holes through the wall. What was the result? Some of the men were clumsy in handling the tools, particularly the crowbars. They expended much physical effort and time, with very little result.

Then Vladimir Semenovich took a crowbar and proceeded to demonstrate how to work it, explaining as he went: "Do not strike the brick head on but rather at an angle, so that it will immediately knock off a fragment. Do not chisel away but determine in advance where the next blows should be directed. They should be infrequent, but powerful. Breathe evenly, breathing out at the moment the crowbar strikes the wall...."

While his men practiced on these techniques, Galkin, unnoticed by them, set up a new training station together with communications and reconnaissance personnel. A 6-meter wooden beam lay on the ground, with a manikin sticking out from under it, simulating a person pinned under debris.

"And now show me how you would rescue this 'victim'," he assigned a new task following a short break.

The people from the second element were ordered to go to work. Four men, headed by Pavel Korolev, approached the beam. Two of them attempted to raise it with crowbars, but both were on the same side of the beam. Although a third man got his hands under it, he was not strong enough to hold it. The beam rolled over, pinning the "victim" in a different spot.

"Hold it!" shouted the group leader. "You can't be so careless! If this were the real thing you would have caused him additional injury."

Once again Galkin presented an instructive critique of the men's unsuccessful performance.

"Remember, comrades: there may not be a manikin but a real person under this beam. The finest piece of heavy equipment will be unable to assist him in this instance. Only man's hands, mind, ingenuity and mental sharpness will save him. But what have you done? You have pinned him under the beam again."

He further explained that one should approach the beam from both sides and carefully raise it. The third man should grasp the beam at one end, to prevent it from turning over. The fourth man should carefully extract the victim....
Of course an instructive lesson had been given. After this all members of the rescue group went over again and again the techniques employed in rescuing victims pinned in rubble by various structures which could tumble down in a "nuclear blast."

It is important to note that during training classes and practice drills Galkin draws the attention of personnel who have recently joined his unit to experience in fighting natural disasters, for he and many of his veteran team members have fought fire and flood on numerous occasions.

While fighting a forest fire in 1972, for example, one of his men's shirt caught on fire. Another team member, coming to his comrade's assistance, proceeded to strike the burning spot with a mitten, but this merely fanned the flames. If Anatoliy Belov, who knew proper procedures to employ in such instances, had not been nearby, the fellow would have received serious burns. The solution was very simple: cover the flame with something (clothing, cloak) to cut off the air supply. In addition, the man whose shirt caught on fire could simply have removed it and then extinguished the flame.

...At a combined enterprise exercise which was held soon thereafter in the community of Udomlya, the rescue group displayed excellent professional skill in mission performance, surpassed many time-allotment performance standards and received a mark of excellent. When Vladimir Galkin was asked what was the secret of his success, he smiled: skill, conditioning and practice are necessary in all things....

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In Kemerovskaya Oblast

Moscow VOYENNYE ZNANIYA in Russian No 6, Jun 78 signed to press 18 May 78

p 19

[Article by V. Gudimov, Combine Civil Defense Deputy Director, Novokuznetsk, Kemerovskaya Oblast: "On the Unit's Passport"]

[Text] In 1965 VOYENNYE ZNANIYA (No 12) published my report on adoption at the Kuznetsk Metallurgical Combine imeni V. I. Lenin of forms of keeping records on training of nonmilitary civil defense units. As we were able to judge from the letters received, our experience was of interest to many.

But recently, as a result of improving these record-keeping forms, we have developed many new things, which I should like to report on the pages of this magazine. The fact is that frequently commanders of nonmilitary units are commanders of production (foremen, shift foremen and section chiefs). They must know both how their subordinates are performing at their work stations and how they have mastered their civil defense duties in conformity with the specialties specified for them, and how they are reinforcing their practical skills in practical, special tactical drills, exercises, and most important, in combined enterprise exercises.

14
In other words it is high time to raise the question of having a document for each unit, in which would be recorded all information, from general training to the highest form of training — combined enterprise exercises.

Of course all this has required radical revision of our previous forms of record keeping. This was also dictated by the fact that unit commanders and their deputy commanders for political affairs were faced with an important task: moral-political and psychological training and preparation of each man for work under complex conditions of a nuclear (chemical, bacteriological) stricken area. Here too comprehensive knowledge of the moral-political and combat qualities of each man in the unit assumed great importance.

This is why we were compelled to enlarge the sections of the record, so that each commander and his deputy commander for political affairs could learn in detail about the personnel in their unit and what should be given particular attention in training and indoctrination work.

What has our unit personnel training record book become?

Whose record it is is specified on the front. We focus primarily on the group (rescue, reconnaissance, emergency-technical, etc). But such a record can also be kept on a civil defense team and detachment, which we recommend. Record keeping procedures are specified on the back of the cover.

Next execution of the training plan in conformity with the nonmilitary civil defense unit training program is recorded. We have the following columns: topic; number of hours allocated to topic; when training classes are scheduled; when they are actually held; how many persons attended.

On the next page we have a personnel-position list for the groups, with the following columns: position; last name, first name, patronymic; year of birth; party affiliation; education, place of work; telephone numbers (work, home); home address; gas mask size; blood type. Of course every commander-instructor needs this information.

The next page records attendance and progress, as well as meeting of performance standards by each individual, as graded by a special commission.

We devote considerable attention to rating the performance of the personnel of nonmilitary units at exercises (special tactical and combined enterprise), for which there is a special sheet in the journal. And this is extremely necessary, for it is precisely at exercises that each man and commander firmly reinforces his practical skills.

The following are specified in our journal: procedure of bringing nonmilitary units to readiness, including warning system, time, place and order of formation; march formation; concentration area in the suburban zone; route of advance to stricken area, plus other items. The importance of this can be seen in the following example.
A composite civil defense detachment under the command of repair-construction shop superintendent V. Zhukov proceeded out to the suburban zone at a certain exercise. Gathering of the unit, forming up and march to the designated destination were executed rapidly and in an organized manner. The team and group commanders were well familiar with their position in the march formation, reported with clarity and precision on readiness of men and equipment, and skillfully supervised field fortification in the concentration area. Following the "aggressor" attack the detachment promptly moved into the "stricken area" and successfully accomplished its assigned mission of performing rescue and emergency repair activities. The above-indicated section of the record journal was very helpful in this area.

At this point we felt that it was necessary to place a list of the unit's authorized equipment as well as a list of higher-echelon commanders, including their telephone numbers and addresses. The last part of the journal is for comments and remarks by officers visiting and inspecting the training classes.

As we see, the journal indeed constitutes a unit passport, containing the needed information for each commander-instructor. Although it is designed for the group, it can easily be converted into a summary document for the civil defense team or detachment, which will help the commanders of the latter monitor the training of subordinate subunits and to take prompt measures to correct deficiencies.

Practical experience in holding exercises, reviews and inspections has shown that such a journal enables the inspecting officer quickly to estimate the preparedness of the personnel of civil defense units, and enables the unit commander to report fully and concretely on the preparedness of his unit. A procedure has been adopted at the combine whereby the commander of each unit must take this journal to all training classes, exercises and reviews. Before the beginning of the next training year he fills in all columns and sections of the journal, with the exception of that information which is detailed in the course of working on the training program.

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WARTIME CONTROL OF AIR ARMIES AT FRONT LEVEL DESCRIBED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 6, Jun 78 signed to press 30 May 78 pp 30-37

[Article by Maj Gen Avn (Res) G. Pshenyanik, Professor, Doctor of Military Sciences: "Control of Two Air Armies as Part of One Front"]

[Text] Two air armies were temporarily part of one front in certain operations of the Great Patriotic War. This occurred both in defensive operations of the first period as well as in offensive operations of the second and third periods of the war. As a rule, a difficult problem arose in the organization and exercise of centralized control by all front aviation forces.

The first experience at controlling two air armies operating in the interests of one front was received in the summer of 1942 on the southern wing of the Soviet-German Front. In July, enemy advance units had come right up to the Don along a wide front. The Headquarters of the Supreme High Command [Hq SHC] issued a directive addressed to the commanders of the Southern, North Caucasus and Stalingrad fronts. It stated: "... The chief mission of our units on the south bank of the Don and of our Air Force is to prevent the Germans from building ponton bridges on the Don. If they still succeed in building them, destroy them without fail by attacks of artillery, ground forces and the entire mass of our Air Force."¹

In conformity with this directive, in addition to Maj Gen Avn K. A. Vershinin's 4th Air Army, which was part of the Southern Front, the 5th Air Army of the North Caucasus Front, operationally subordinate to him (CIC Lt Gen Avn S. K. Goryunov), was supposed to operate against enemy crossings in the interests of the Southern Front.² General Vershinin also had the right to assign missions to units of the Black Sea Fleet Air Force (CIC Maj Gen Avn V. V. Yermachenkov) and the 50th Air Division of ADD [Long Range Aviation] (Commander Col S. S. Lebedev). The 8th Air Army of the Stalingrad Front operated separately under its own plan. In spite of the territorial separation and the basing of aircraft in three areas, the CIC of 4th Air Army managed to organize strictly centralized control through his staff and to concentrate all efforts of the air formations and combined units for
actions against the crossings. He made decisions personally based on actual capabilities. Radios and wire communications (VCh [high frequency]) were used for control.

The 4th VA [Air Army] staff did not work up planning documentation because of the complexity of the situation and lack of the necessary time. Only records were kept and reports submitted to the Air Force Staff of the Soviet Army on results of combat actions.

Subsequently, in a directive dated 28 July, the Headquarters of SHC brought together the Southern and North Caucasus fronts into a single North Caucasus Front. Two air armies—the 4th and 5th—were included in it.

Both these air armies were transferred to the Transcaucasus Front in September 1942. The 4th VA was in the Northern Group of Forces operating on the Mozdok axis, while the 5th VA became part of the Black Sea Group of Forces, the efforts of which were concentrated on the Novorossiysk and Tuapse axes. Their areas of combat operations and basing were greatly separated from each other and divided by the Main Caucasus Range, which precluded the possibility of setting up efficient coordination among them and concentrating efforts in one area.

All this predetermined the working features of the command element and staff of the Transcaucasus Front. The role of Front Air Force CIC Maj Gen Avn K. A. Vershinin in controlling the two air armies consisted chiefly of monitoring their operational employment and giving assistance to the command element of the air armies in arranging work in the units and in the combined units. He would travel first to one, then to the other air army at the most important points in time so as to better understand the situation and decide on the spot the questions of aircraft employment which would arise for the first time.

The experience of employing aircraft in offensive operations of the North Caucasus Front in February-April 1943 provides instructive examples of the organization and conduct of joint coordinated actions by two air armies.

With the move by troops of the North Caucasus Front to the approaches to the Kuban' base of operations, the 4th and 5th air armies, previously employed on separate axes, were essentially in the same area. In addition to them, units of the Black Sea Fleet Air Force were based here (in the maritime portion) and operated in the interests of the North Caucasus Front.

At first the command element and staffs of both air armies made an attempt to coordinate a large number of matters concerning the organization of control, particularly delineation of zones of operation, operational missions, and allocation of bases in the vicinity of Krasnodar. It was decided that the 4th Air Army would
operate primarily to the north and northwest of Krasnodar, while the 5th would operate to the south and southwest of it. Experience shows, however, that in a situation where operational zones closely adjoin and the nature of missions of both air armies was almost identical, it was advisable to have a single centralized control. Based on this, overall direction of all front aviation was made the responsibility of the CIC of 4th Air Army, Maj Gen Avn N. F. Naumenko.6

As the senior air force commander, he made decisions for combat operations by aircraft, assigned missions to all air formations and units operating in the interests of the North Caucasus Front, organized coordination among them through his staff and was responsible to the front CIC for proper employment of aviation.

Meanwhile, the scope of operations by the Air Force in the Kuban' expanded. The battle for air superiority became more acute. Air engagements began to be struck up as early as March 1943. Both sides were conducting a build-up of aviation forces. Under these conditions it became more and more difficult for the CIC of the 4th Air Army to exercise control of all front aviation simultaneously with immediate direction of his army.

In this regard, the air force staff of the North Caucasus Front was set up at the beginning of April for more reliable and centralized control of combat operations by the two air armies and other aviation forces operating in the front's interests. Lt Gen Avn K. A. Vershinin was assigned as CIC of the front air force.7 This staff had a reduced strength and resembled an operations group more in its size.8 Its primary attention was focused on resolving purely operational issues of aircraft employment, and primarily organizing its control.

An auxiliary control post (VPU) was set up for this purpose. It was deployed in the stanitsa of Abinskaya, where the front CIC's CP was located. The efforts of the 4th and 5th air armies, the Black Sea Fleet Air Force and units of ADD were allocated depending on missions of the upcoming offensive operation.

A plan for an air offensive by the North Caucasus Front Air Force (with attached aviation of the General Headquarters Reserve) was drawn up for defeating the enemy grouping on the Taman Peninsula. At first it was drawn up by the front air force staff, then chiefs of operations departments of the headquarters of 4th and 5th air armies were brought in for its final processing. The plan was reviewed and approved by representatives of the Headquarters of the Supreme High Command Mar SU G. K. Zhukov and Mar Avn A. A. Novikov, who at that time were in the North Caucasus Front. Detailed procedures were worked out for conducting the battle for air superiority by forces of the front air force (4th and 5th VA), by the Black Sea Fleet Air Force and the 6th Long Range Bomber Corps (commander of 6th BAK [Bomber Corps] Maj Gen Avn G. N. Tupikov), which were operationally subordinate to the front, as well as by a portion of the forces of the adjacent 17th and 8th air armies of the Southwest and Southern fronts (CIC's Lt Gen Avn V. A. Sudets and Lt Gen Avn T. T. Khryukin respectively).
It is typical that the planning of the air offensive in the Kuban' conducted by the forces of two air armies of one front included the battle for air superiority in addition to air support of the attack and support of troops in a breakthrough of the defenses.10

Also to be included among the features of the planning of combat operations in the Kuban' were the planning schedules for fighter sorties to clear the air space of hostile aviation at culmination points in development of the offensive, used for the first time here and developed by the front air force staff jointly with the air armies' staffs.11 These schedules provided for a build-up in forces during group air battles. In essence they represented elements of the planning of air engagements.

A feature of the front air force CIC's decisions for combat action by the two air armies was the detailed depiction of the procedures for their coordination. This also related to the planning of combat actions.

It was planned to transfer certain fighter regiments of the 5th Air Army to the operational subordination of the CIC of 4th Air Army for screening front troops on the axis of the main attack in the vicinity of the stanitsa of Krymskaya.12 Patrol zones as well as forces assigned to the reserve were determined.

The reserve which was at the immediate disposal of the front air force CIC (as a rule, one fighter regiment) also was determined. Control of fighters of both air armies when screening troops in the vicinity of the stanitsa of Krymskaya was accomplished from one center—the main intercept control radio station, where acting deputy CIC of 4th VA and commander of 216th IAD [Fighter Division], Maj Gen Avn A. V. Borman, was located. The front air force CIC also came here often. He would make decisions for commitment of his reserve and, when necessary, would make corrections to the assignment of missions to fighter groups patrolling the battlefield.

Typical of this experience in controlling two air armies is the fact that it was accomplished while they were conducting combat actions on separate axes.

As a rule, the CIC and staff of each VA had sufficient independence in decisionmaking, in planning combat actions and in controlling their air units. There was, however, lack of an opportunity, except for combat actions in the Kuban', to set up operational coordination between the air armies in order to maneuver their forces to threatened axes in defensive operations and to concentrate efforts in one area on the main axis in an attack.
With regard to the control of air force combat actions at the level of the entire front, the instructiveness here lies in creation of a special control entity in the form of a front air force command element and staff. As experience showed, this entity had specific capabilities for organizing and exercising centralized control of two air armies. This was especially typical of the period of combat actions in the Kuban' in the spring of 1943.

The front air force CIC and staff also ensured uniform planning of the battle for air superiority and immediate control of aviation. Another positive point was the fact that the air army CIC's devoted much attention to problems of support to ground troops. There were mistakes as well, however. For example, the front air force staff first would amass in the staff the data received on the ground situation, and only then would report it to the air army staffs. Information as to changes in the front line was delayed. This would not have been the case if information from the troops had gone to VA staffs in parallel.

The control of two air armies (16th and 6th) which were part of the 1st Belorussian Front in the Belorussian Operation in June-August 1944 was organized under unique conditions.

By decision of the front CIC, the CIC of 16th Air Army, Col Gen Avn S. I. Rudenko, was appointed senior air chief. He had responsibility for directing both air armies, but there was no need for this in the first phase of the Belorussian operation. The front was operating in a zone 600 km long, but its main body was on the right and left wings, where the 16th and 6th air armies respectively were based (CIC of 6th VA Lt Gen Avn F. P. Polynin). In the first phase of the operation troops of the left wing did not conduct active operations, and so the 6th VA consisted only of two air divisions (178 aircraft). The attack by troops of the left wing as well began on the Kovel' Axis in the second phase of the operation (from 18 July on). By this time the 6th Air Army had been reinforced by air units of the RGK [Reserve of the Supreme Commander] and by several divisions of 16th Air Army. As of 17 July it numbered 1,534 aircraft. In connection with a significant advance by ground forces, the areas of combat action of air formations by this time had come so close together that it became possible to operate in one area or to maneuver quickly in order to reinforce one air army with another.

In this situation the need arose to coordinate their actions on the front's left wing. This was done by the CIC of 16th Air Army. In carrying out these duties, his relations with Gen F. P. Polynin were good and did not infringe upon the latter's rights as air army CIC. Mar Avn S. I. Rudenko recalls: "Fedor Petrovich understood me correctly and, running ahead, I will say that we allocated duties in such a way that when he would leave for the forward CP to control the battle, I would remain at headquarters. And we had no misunderstandings. We always went to the front CIC together. We worked so well together that it seemed it could be no other way."
During the second phase of the Belorussian Operation the maneuver of air units was accomplished repeatedly in the zone of the 1st Belorussian Front, where these two air armies were operating. This allowed rapid reaction to changes in the ground and air situation. The 16th and 6th air armies most often would operate in different areas, screening and supporting troops of the right and left wings of the front respectively. At the most important periods of the operation, however, the efforts of both armies were concentrated in one area where a particularly strained situation had formed. An example of this could be the air support of 8th Guards and 69th armies when they made an assault crossing of the Vistula near Magnuszew and Pulawy. This employment of air forces, as well as the reinforcement of one VA by another at different periods of the operation, was done by decision of the CIC of 16th VA as the senior air chief.

Although the experience of controlling two air armies during the Belorussian Operation had a positive result on the whole, shortcomings also were discovered. This complicated the work of the VA CIC appointed as senior air chief and his staff, which were not always in a position to devote equal attention to matters of controlling each air army. They were more concerned with control of their own VA. This sometimes would lead to assignment of insufficiently specific missions to the operationally subordinate air army. Monitoring the execution of the missions also was hindered. The air army staff was overloaded with planning and compiling records. A shortage of communications facilities was felt. A subjective factor also acquired no small significance: the nature of relations between the CIC's and chiefs of staff of both air armies. It was well that these relations were normal and that control was exercised precisely, otherwise various difficulties would have arisen.

Valuable experience of joint actions by two air armies was obtained in the operation by the 3rd Belorussian Front to defeat enemy groupings once and for all in East Prussia in March-April 1945. After bringing together all troops operating in this area into one front (the 3rd Belorussian), two air armies (1st and 3rd) also were included in it. They were commanded by Col Gen Avn T. T. Khryukin and Col Gen Avn N. F. Papivin respectively. The CIC of 1st VA became the senior air chief in the front. He and his staff were given the mission of controlling the 3rd Air Army, which was attached for operational subordination.

In preparing the operation General Khryukin decided to accomplish the assigned mission of disrupting enemy naval shipping in coordination with 3rd VA, for which boundaries of actions were established for each air army.

The staff of the 1st VA drew up the "Plan for Combat Employment of Aviation of the 3rd Belorussian Front for the Period from 3-10 March 1945." It provided for the allocation of efforts of both VA by time, missions and place of operations. Assignment of a specific zone to each air army increased the responsibility of the air army CIC's for performance of missions and gave them initiative in actions.
The offensive by front troops to destroy the enemy grouping southwest of Koenigsberg began on 13 March. Based on the missions assigned by CIC of 3rd Belorussian Front Mar SU A. M. Vasilevskiy and the situation at hand, the CIC of 1st VA made a decision according to which all forces of his army and one bomber division of the 3rd VA were concentrated to support troops of 28th and 3rd armies, which were delivering the main attack. It was planned to use air units of 3rd VA to support the 11th Guards Army on the Semland Peninsula. The staff of 1st Air Army did not work out a plan of combat actions by front aviation in the given operation. All planning was reduced to its drawing up a plan allocating air units of both air armies among the attacking combined-arms armies of the front. This plan was approved by the front military council on 7 March 1945. It was the main document regulating the joint actions of two air armies by place and sorties flown. On its basis, the air army staffs drew up special plans for coordination with the combined-arms armies they were supporting. Unfortunately, these plans were not drawn up for the entire operation, but for one or two days.

After eliminating this grouping and conducting appropriate preparations, troops of the 3rd Belorussian Front began an operation to take the fortress and city of Koenigsberg on 6 April. Major air forces were brought in for this operation. In addition to the 1st and 3rd air armies, which were part of the front, the operation included the 18th Long Range Air Army, one corps from each of the adjacent 4th and 15th air armies and a portion of fleet air forces with an overall number of 2,400 aircraft. Chief Mar Avn A. A. Novikov, representative of the Headquarters of the SHC for Aviation, coordinated the combat actions of these air formations and units.

In conformity with the decision by the CIC of 3rd Belorussian Front, Mar SU A. M. Vasilevskiy, and instructions of Chief Mar Avn A. A. Novikov, the CIC of 1st VA, Col Gen Avn T. T. Khryukin, decided to employ both air armies. His staff developed a plan for combat actions of the 1st and 3rd VA prior to the beginning of the operation. It provided for the conduct of preliminary air preparation for the purpose of destroying forts and strongpoints in zones of attack of 43rd and 11th Guards armies. An overall plan of combat action by all aviation forces used also was drawn up by the staff of 1st VA with the immediate participation of an operations group of the CIC of the Air Force of the Soviet Army.

After receiving instructions from Mar SU A. M. Vasilevskiy, Chief Mar Avn A. A. Novikov updated missions to the CIC's of 18th Air Army and of Baltic Fleet Air Force and to the commanders of two bomber corps of 4th and 15th VA. Certain refinements were made to the tactical plan of the 1st and 3rd air armies. The plan for employment of front aviation which was finally elaborated and coordinated was approved by the front military council on 1 April.
The front CIC was the primary organizer of coordination between both air armies. On the basis of his decision he would give instructions on their coordination. Guided by his instructions, the CIC of 1st Air Army as the senior air chief would directly arrange coordination. In particular, Gen Khryukin would determine when which air army units would be used to perform particular missions on land and at sea, and he would determine the number of sorties and control procedures.

He would exercise direct control of aviation through his staff. After receiving instructions from the front CIC, he would assign missions both to the 1st and to the 3rd air armies.

Each VA had its own radio net with callsigns, authentication signals and radio signals for controlling air units in the air. With joint operations by both air armies on the battlefield, control was exercised over the radio net of the army which had its CP in the given sector. For example, the CIC of 1st VA was responsible for air support of 28th and 3rd combined-arms armies attacking on the main axis. He would control air units over his own radio net. His command post was the primary control center for both air armies and was situated in the immediate vicinity of the front CIC's CP. Each VA used its own authentication signals. Frequency data of the air radio nets were exchanged among them for this purpose.

During joint operations in support of 11th Guards Army on the Semland Peninsula, control of air units of both air armies was exercised by the CIC of 3rd VA over his own radio net. His CP was deployed in the vicinity of where the army was based.

Thus the variant of control of two air armies in the East Prussian Operation is largely similar to the variant used in the Belorussian Operation. The difference consisted only in the fact that the senior air chief—the CIC of 1st VA—had somewhat less independence in decisionmaking, inasmuch as the representative of the General Headquarters of the SHC, the CIC of the Air Force of the Soviet Army, was in the 3rd Belorussian Front with an operations group. His specific instructions on employment of aviation and his updating of missions at times went beyond the bounds of ordinary coordination of actions of the two air armies and other air forces used for the operation. In essence, the work of the General Headquarters representative was tantamount to making an overall decision for employment of all aviation forces, on the basis of which the tactical plan for front aviation was finally developed with the direct participation of his operations group. In this sense the General Headquarters representative assumed to a certain extent the functions of CIC of the front air force.

Out of the variants examined above for control of two air armies included in one front in some operations of the Great Patriotic War, the best in our opinion was the variant where they were directed by a special control entity—the CIC and staff of the front air force.
The working experience of this entity in the Transcaucasus and North Caucasus fronts in 1942-1943, and especially during the period of operations in the Kuban' in the spring of 1943, provides instructive examples of how control of combat actions by two operational air formations can be organized and exercised from one center.

The VA command element and staffs could perform their immediate duties of controlling combat actions of their subordinate air units to the full extent without being diverted for deciding matters of control on a front-wide scale, as was the practice in other operations.

Firm, purposeful direction of combat actions by all front aviation forces was accomplished by the higher echelon—the command element and staff of the front air force, and in a number of cases by the representative of General Headquarters of the SHC for aviation, who sometimes performed their functions to a certain extent. This was particularly typical of the East Prussian Operation in the assault on Koenigsberg. This direction permitted rapid concentration of efforts on the main axis, accomplishment of a maneuver laterally in conformity with the changed situation, reinforcement of one air formation by another when necessary, and the provision of close and constant coordination between them. The Headquarters, SHC representative's performance of such functions would have been more effective if he had had the appropriate personnel and control facilities.

The experience obtained during the years of the Great Patriotic War has not lost its currency even under present-day conditions. The maneuver of personnel and weapons of the Air Force will apparently be accomplished on an even broader scale in front operations of a future war. Permanent, cohesive aviation control entities will have to be present at the front (army) CP for stable and efficient control of major air groupings.

FOOTNOTES


4. K. A. Vershinin was appointed CIC of the Transcaucasus Front Air Force in September 1942. He turned over command of the 4th VA to his deputy, Maj Gen Avn N. F. Naumenko.

5. North Caucasus Front was newly created on 24 January 1943 on the basis of the Northern Group of Forces of the Transcaucasus Front. At first it included only the 4th VA. On 5 February the Black Sea Group of Forces with its supporting 5th VA was transferred to it, after which there were two air armies in the front.


11. Ibid.

12. TsAMO, fond 224, opis' 214836, delo 1, p 70.


16. Ibid.

17. S. I. Rudenko, "Kryl'ya pobedy" [Wings of Victory], Voyenizdat, 1976, p 238.

18. VOYENNO-ISTORICHESKIY ZHURNAL, No 4, 1976, p 33.


20. TsAMO, fond 290, opis' 29309, delo 4, list 96.

21. Ibid., opis' 20181, delo 15, listy 146-147.

22. Ibid., opis' 201813, delo 16, list 145.


25. TsAMO, fond 290, opis'29309, delo 4, listy 82-96.

26. Ibid., opis' 252727, delo 2, list 19.

WARTIME COMMAND AND CONTROL OF BALTIC FLEET FORCES DESCRIBED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 6, Jun 78 signed to press
30 May 78 pp 38-45

[Article by Vice Adm A. Kosov, CIC of Twice Red Banner Baltic Fleet: "From
the Experience of Controlling Forces of the Red Banner Baltic Fleet in 1944-
1945"]

[Text] The Red Banner Baltic Fleet (CIC Adm V. F. Tributs, Member of Mili-
tary Council, Vice Adm N. K. Smirnov, Chief of Staff Rear Adm A. N. Petrov) was given an important part in offensive operations on the Northwest Axis. Suffice it to say that in the third period of the war the Fleet took part in
an operation at Leningrad and Novgorod, and in the Vyborg, Svirsk-
Petrozavodsk, Tallin, East Prussian, East Pomeranian and other operations.

The Fleet conducted active combat operations in providing protection for the
approaches to Leningrad, for the flanks of ground forces and for Kotlin
Island, and it also assisted troops of the Leningrad Front to hold the
extremely important Oranienbaum base of operations. The precisely developed
combat control exercised from the FKP [flag plot] of the Fleet CIC (Sketch 1) facilitated the successful accomplishment of these and subsequent
missions. Admiral Tributs and the Fleet staff as the tactical control entity
determined the place for each command post, provided them with communications
facilities and arranged coordination. In addition to this, they accomplished
coordination with the staff of the Leningrad Front as well as stable control
of Fleet forces operating in the interests of the Ground Forces.

The first joint operation carried out in 1944 by the Fleet and the Leningrad
Front (CIC Arm Gen L. A. Govorov) was an operation to smash the enemy at
Leningrad and Novgorod (14 January-1 March). In conformity with the plan of
the General Headquarters of the SHC [Supreme High Command], the front CIC
assigned the Fleet the mission of secretly moving troops of 2d Shock Army to
the Oranienbaum base of operations and using guns and aircraft to aid the
front in breaking the defenses and destroying the Petergof-Strel'na grouping.

**KEY:**
1. KBF
2. CIC of KBF/Leningrad
3. CIC of Leningrad Front/Leningrad
4. People's Commissar of Navy/Moscow
5. Squadron commander/Leningrad
6. BPL [Submarine brigade] commander/Leningrad
7. BTKA [Torpedo boat brigade] commander/Kronshadt
8. Skerries detachment commander/Leningrad
9. Leningrad VMB [Naval Base] commander/Leningrad
10. Chief of Air Defense Troops/Leningrad
11. Air Force CIC/Leningrad
12. KMOR [Kronshadt Naval Defense Region] CIC/Kronshadt
13. Chief of rear/Leningrad
14. Chief of BO [coastal defense]/Leningrad
15. LVF [Ladoga Naval Flotilla]
16. CIC of LVF/Novaya Ladoga
17. Commander of Ostrovnoy Naval Base/Lavensaari Island
18. OVR [seaward defense] commander/Kronshadt
19. Osinovets Naval Base commander/Osinovets
At the instructions of Admiral Tributs, the KBF [Red Banner Baltic Fleet] staff under the direction of Rear Adm A. N. Petrov worked out plans for operational sealift and the employment of Fleet aviation and guns. Rear Adm I. D. Kuleshov, CIC of Leningrad VMB [Naval Base], and Rear Adm G. I. Levchenko, CIC of KMOR [Kronshtadt Naval Defense Region], were responsible for the sealift. The KBF military council exercised overall direction of the sealift. Staffs of the Fleet, the Leningrad VMB and the KMOR precisely planned the sealift, camouflage of loading and unloading operations, and artillery and air support. All naval artillery was placed in combat readiness prior to the convoys' departure into the bay, and combat aircraft were placed on stand-by at the airfields. Thanks to skilled planning and management under the extremely difficult conditions of winter navigation in the ice, the Fleet carried out the sealift successfully. By 22 January a total of 53,800 persons, around 2,300 vehicles and tractors, 211 tanks, 677 guns and up to 30,000 tons of various cargoes had been delivered to Oranienbaum.

Plans for employing aircraft and artillery in the operation at Leningrad were worked out by the Fleet command element and staff, reported to the front CIC and approved by him.

Inasmuch as almost all Fleet aviation (CIC Col Gen Avn M. I. Samokhin) was being used in support of the attacking troops of 2d Shock Army, the plan for its employment was carefully coordinated with the command element and staff of this Army and with the staff of 13th VA [Air Army]. The VPU [auxiliary control post] of the KBF Air Force was organized on 12 January and located in the immediate vicinity of the CP of 2d UA [Shock Army]. This organization made it easier to control the units and facilitated their coordination in performing combat missions.

The Fleet naval artillery, chief of which was Vice Adm I. I. Gren, actively assisted the front troops. During the period of combat action he was operationally subordinate to the CIC of artillery of the Leningrad Front, Col Gen Arty G. F. Odintsov.

By decision of the Fleet CIC, the naval artillery brought in for participation in the operation was broken down into five groups, each of which had its own staff and commander. Consideration was given to the technical specifications of guns, nature of assigned missions and location of the fixed batteries when the groups were set up. The first group (commander Lt Col Ye. A. Proskurin) included artillery of the Izhorsk and Kronshtadt coastal defense sectors, a battleship, two destroyers, a gunboat and two armored trains (a total of 91 guns ranging in caliber from 305 to 76-mm, including 16 305-mm guns intended for destruction of enemy permanent defenses. This was the most powerful group, and it had the mission of assisting the 2d UA in a breakthrough of the defenses and in the attack. It was operationally subordinate to the CIC of artillery of 2d UA. The artillery groups of Vice Adm Yu. F. Rail' (a battleship, three cruisers, a leader and four destroyers for a total of 42 guns of 305-130-mm caliber), Capt 1st Rank M. G. Ivanov (three destroyers and three gunboats for a total
of 22 130-mm guns), Engr-Capt 1st Rank I. D. Smitko (naval artillery scientific test range—a total of seven guns of 406-180-mm caliber), and Maj Gen Coastal Serv D. S. Smirnov (batteries of the 101st Naval Railroad Artillery Brigade—a total of 51 guns of 356-130-mm caliber) were concentrated at positions for interworking with troops of 42d Army attacking on the Krasnoye Selo Axis.3

The front command element assigned fire missions for naval artillery only through the Fleet chief of artillery. Such centralization of control made it possible to coordinate the actions of naval artillery with combined-arms commanders in conformity with the operations plan, to strictly allocate missions between naval and field artillery, to maneuver weapons, and to use them en masse at any time on the most important axes. A certain decentralization of control also was allowed, however. For example, group commanders were given the right to open fire independently in their zones and sectors for counterbattery bombardment and for carrying out requests for fire from attacking troops.

Plans for combat employment of artillery in the operation were worked out jointly by staffs of the CIC of front artillery and the fleet artillery chief. It was they who coordinated matters of operational and tactical interworking, compiled catalogues of stabilized firing positions of hostile batteries and distributed them to all artillery units. Fire planning tables were readied by 11 January by the fleet artillery staff and coordinated with the CIC's of artillery of 2d Shock Army and 42d Army. Since the targets varied and were at different distances from combat formations of fleet artillery, a schedule was drawn up which provided for successive destruction of targets by guns of different calibers. A registration chart was simultaneously developed.

In conformity with the assigned missions, the fleet artillery chief's staff worked up the operation order, the plan for destruction of targets in the preparatory period and the plan for artillery support when troops penetrated the enemy defenses; and he drew up a map with target coordinates and determined ammunition expenditure by calibers and days. As offensive operations developed, scheduled fire was replaced by fire against those points where the strongest opposition to our units had been encountered.

With consideration for the rapid advance by our forces and the load on the Army telephone network, the naval artillery staff issued vehicular radios to liaison officers. This was of great importance for organizing coordination. Optical reconnaissance of fleet artillery also played no small part in accomplishing coordination (flash ranging platoons and stations of ships and batteries which reported on friendly troop locations and called in fire against targets hindering the infantry's advance).

In supporting the advance of ground forces at Leningrad, the KBF artillery conducted 1,005 firings in 14 days of the operation, sending around 23,600 rounds of 406-100 mm caliber against the enemy.4 The fleet CIC order noted
the battleship "Oktyabr'skaya Revolyutsiya," the cruiser "Maksim Gor'kiy,"
the cruiser "Petropavlovsk," the leader "Leningrad," the destroyers
"Svreppy" and "Strogy," artillerymen of Engr-Capt 1st Rank I. D. Snitko's
group, and artillerymen of the Izhorsk Coastal Defense Sector.

Skilled command and control led to successful employment of naval artillery,
which had the following features: strict centralization of command; forma-
tion of tactical groups; precise planning; creation of a VPU of the fleet
artillery chief; organization and maintenance of continuous coordination
between naval and field artillery, as well as with ground forces; mass use
of naval artillery and assignment of targets to it beyond the range of fire
of field artillery.

The experience of command and control of naval artillery in defeating the
enemy at Leningrad was subsequently used in the Vyborg Operation in June
1944, as well as in offensive operations in the Baltic in September
1944 through April 1945. The practice of placing artillery groups of naval
railroad artillery in operational subordination to armies and their accom-
plishment of long-range artillery missions proved itself during combat
actions in the Baltic.

The Fleet assisted troops in the attack by making amphibious landings (a
total of 31 landings were made during the third period), in which the
command element skillfully controlled the forces. As an example, let us
examine the Tuloksinskaya Amphibious Operation conducted by units of 7th
Army of the Karelian Front and the Ladoga Flotilla in June 1944. Its goal
was to interdict main lines of communication on the east shore of Lake
Ladoga and assist in defeating the enemy's Olonets grouping. Participating
in it were 78 ships, 237 aircraft of KBF Air Force and the Karelian Front,
and two naval infantry brigades with an overall total of over 8,000 men.

Command of the operation was given to Rear Adm V. S. Cherokov, CIC of the
Ladoga Flotilla (Sketch 2). His deputy was Capt 1st Rank N. I. Meshcherskiy,
who at the same time was commander of the amphibious forces. Subordinate to
him were commanders of detachments of fire support ships, escort ships,
transports and landing craft. A commander of the landing base also was
appointed. Prior to organization of a firm defense in the landing sector,
the landing force commander was subordinate to the amphibious forces
commander, and then he was resubordinated to the CIC of 7th Army.

The operation was well planned. One of its main documents was a planning
table for the operation to assist troops of 7th Army. Success of the
landing was ensured by secrecy of preparations, surprise, a proper selection
of the place and time of the landing, skillfully arranged direction,
coordination, and the personnel's heroism.

Tactical control of the forces was conceived ahead of time and organized
precisely. While forces were assembling and the landing party was boarding
ships and vessels, the CIC of the operation had his CP with the staff of the

31
Ladoga Naval Flotilla, and in the phase of the sea passage, landing and accomplishment of the mission ashore, his CP was aboard the gunboat "Bir," where an operations group (OG) of four persons headed by the flotilla chief of staff was deployed.

Sketch 2. Organization of command and control in the Tuloksinskaya landing operation

Tactical control during the operation was distinguished by its stability and reliability. This was achieved by the following: unity of command, which provided precise organization of liaison among the personnel and weapons taking part in the operation; presence of the operation CIC aboard a ship in the vicinity of the landing, which made it possible for him to observe the situation personally and react swiftly to all its changes; personal exercise of supervision over the progress of the operation by the fleet CIC, and the positioning of his VPU at the flotilla CP.

Certain shortcomings, however, also should be noted in the command and control. They involved the absence of an air OG from the KBF Air Force and the 7th Air Army at the CP of the operation CIC. Communications were not established with aircraft aloft, which prevented timely influence on actions of aviation. Mutual recognition was insufficiently developed.

Command and control in the Moonsund amphibious operation is instructive. The Headquarters of the Supreme High Command gave instructions to the Leningrad Front and the Red Banner Baltic Fleet to conduct it immediately after our troops had moved to the shore of Moonsund. In coordination with troops of 8th Army, the Fleet had to prepare and conduct an amphibious landing for the purpose of taking the islands. After screening the landing personnel from the sea with air and ship forces, it was necessary to support the attack by units and subunits along the beach; to organize delivery of ammunition, equipment and rations and the evacuation of wounded from the islands; and prevent reinforcement of the enemy or his evacuation by sea.

Admiral Tributs issued a directive on 28 September 1944 which assigned missions to ships and aircraft during the period of liberation of islands of the Moonsund Archipelago.

In contrast to the scheme previously employed, direction of actions was made the responsibility of Lt Gen F. N. Starikov, CIC of the operation on land, and Rear Adm I. G. Svyatov, CIC of the operation at sea. Starikov in fact was the CIC of the amphibious landing operation while Svyatov was commander of the landing craft.

Headquarters locations were as follows: Hq, KBF at Kronstadt; Fleet CIC Field Headquarters at Tallin. His VPU deployed at Paldiski on 26-27 September, and three days later in Haapsalu. There, too (in Haapsalu) were located the VPU's of CIC's of the operations on the land and at sea, and of the Air Force. It should be noted that the staff for direction of the operation at sea, activated only at the beginning of the operation, was put together even while combat actions were under way and it acquired experience in command and control in the process.

Two ship detachments were set up to perform the assigned mission: a northern detachment headed by Capt 1st Rank G. G. Oleynik, commander of a torpedo boat brigade (CP at Rokhukyulya), and a southern detachment headed by Capt 1st Rank Ye. V. Gus'kov, commander of the OVR of the Tallin MOR (CP at
The swiftness, surprise, precise management by the command element and decisive, selfless actions of personnel permitted the troop landing to take place with minimum losses.

Command and control of forces during the operation was exercised reliably and in an organized manner. The intelligent combination of centralized and decentralized control methods should be noted. In granting a great deal of independence to Rear Admiral Svyatov in his actions, Admiral Tributs personally monitored the progress of the operation at sea. Location of the VPU of operation CIC's on land and at sea and that of the KBF Air Force at the same point should be considered a positive factor. A shortcoming is the fact that a single headquarters for the operation CIC was not set up. The staff of Rear Admiral Svyatov was undermanned and had no rear services entities at all.

A need was identified during the amphibious operation to seek out those forms and methods of accelerated preparation of naval and ground forces combined units, units and subunits which would preclude the possibility of confusion and muddle which are inherent to haste. There is no question that the precise arrangement of coordination of fleet and Army forces led to success with such accelerated preparations. The landings on the Moonsund Islands differ favorably from preceding ones in this regard.

After the liberation of the Moonsund Archipelago, the Fleet had an opportunity to operate on enemy lines of communication in the central and southern parts of the Baltic. For this purpose, however, the Fleet had to move its submarines, small surface ships and vessels to ports and bases freed from the enemy and rebase aircraft to airfields of Latvia and Estonia.

This was no easy task, and its accomplishment required flexible, efficient direction. While continuing to conduct combat actions, the Fleet had to deploy forces, re-establish basing points, set up new command posts and provide them with communications. Deployment took place under conditions of an insufficient number of transport facilities and material resources, and a considerable danger of mines in the Gulf of Finland. In spite of the serious situation, the command element provided stable, reliable control of all the Fleet's combat activities. Its slow tempos were the primary shortcoming in the first phase of deployment. Rear services entities at times did not cope with the task of technical supply. These shortcomings later were successfully avoided. It should be emphasized that the KBF Air Force CIC and staff did a good job in organizing, conceiving and conducting the rebasing of aircraft in a rapid and timely manner.

Admiral Tributs was energetically and purposefully working to provide tactical control. He brought the CP nearer to the battle area. Let us follow the chronology of events. Tallin was liberated on 22 September, and just two days later the first echelon of the Fleet headquarters relocated here and the Fleet CIC's CP was deployed. The CP's of coastal defense, the Air Force, and the Tallin MOR deployed there simultaneously.
By the end of 1944 and the beginning of 1945, the organization of tactical control changed (Sketch 3). An Ostrovnoy MOR and VPU's of the CIC's of the Fleet and Air Force and of the commander of the submarine brigade were set up.

Sketch 3. Organization of command and control of KBF forces by the end of 1944 and beginning of 1945

KEY:

1. KBF
2. KBF CIC/Kronshtadt, Tallin
3. People's Commissar of the Navy/Moscow
4. Chief of rear/Tallin
5. Squadron CIC/Leningrad
6. Commander of 1st BTKA [Torpedo Boat Brigade]/Sventa, Memel
7. Commander of BShK [possibly skerries ship brigade]/Leningrad
8. Commander of Leningrad Naval Base up to 6 Nov 1944/Leningrad
9. Commander of Air Defense Forces/Leningrad, Tallin
10. Chief of BO [coastal defense]/Tallin
11. CIC of TMOR/from 24 August 1944 on, at Tallin
12. CIC of OMOR/Riga
13. Commander of BPL submarine brigade/Helsinki, tender "Irtysh"
14. Air Force CIC/Tallin
15. CIC of KMOR/Kronshtadt
16. CIC of YuZMOR [Southwest Naval Defense Region]/from 6 April 1945 on, at Kol'berg
17. Commander of Porkkala-Udd Naval Base/as of 9 November 1944
18. Commander of Libau Naval Base/as of 9 November 1944
19. VPU of BPL/Palanga
20. VPU of KBF/Palanga
21. VPU of Air Force/Palanga
22. Commander of Ostrovnoy Naval Base/up to 24 February 1945 at Lavensaari
23. Commander of Pillau Naval Base/from 24 February 1945 on
CIC of the KBF Air Force Col Gen Avn M. I. Samokhin and his staff exercised tactical control of aviation from his CP and VPU. During the liberation of the Baltic, VPU's were deployed at Haapsalu and Kuressaare, and in Palanga from November 1944 until the war's end. Constantly bringing the VPU's closer to the battle areas ensured reliable and stable control of the Air Force. Its precise organization and well-arranged reconnaissance permitted timely detection of enemy ships and transports and the vectoring of aircraft against them to destroy the enemy with crushing attacks. Here is an example. After receiving intelligence information about a convoy (five transports, three escort vessels and one minesweeper) which was moving troops from Libau for the purpose of reinforcing the Danzig grouping, the Fleet command element decided to deliver an attack against the enemy. Five transports were sunk on 12 March 1945 as a result of the operation (director was Col Gen Avn M. I. Samokhin), in which 69 torpedo aircraft, bombers and ground assault aircraft took part under the cover of 96 fighters.

The operational situation abruptly changed in our favor with the move of ground forces to the shores of the Baltic, the rebasing of naval aviation to airfields at Vil'nyus and Panevezhis, and creation of an airfield complex in the vicinity of Palanga. Enemy lines of communication throughout the Baltic were in the zone of responsibility of the KBF Air Force. The Air Force CP relocated to the vicinity of Palanga, which helped improve tactical control. A typical feature of the control was the constant relocation of the CP nearer the battle areas.

The submarine brigade (BPL) commanded by Rear Adm S. B. Verkhovskiy, and by Capt 1st Rank L. A. Kurnikov from April 1945 on, operated actively on the enemy lines of communication. Technical support to the BPL was accomplished by the tenders "Polyarnaya Zvezda," "Smol'nyy" and "Irtysh," which had been relocated to ports in Finland. Control of the submarines was exercised from a CP located aboard the tender "Irtysh" (Helsinki). The basic principles of control and organization of communications with the submarines reduced to orders and instructions being sent to them by long wave communications using radio transmitters of the Fleet communications centers and even the Leningrad broadcasting station transmitter. The submarines would break surface to receive radio messages, which greatly violated the secrecy of their operations. Reports were transmitted from the submarines in the short-wave band. Traffic was exchanged basically without being receipted for.

During the period October-December 1944 submarines at sea were insufficiently supported with continuous and timely information as to the movement of convoys, transports and warships from data of aerial and other types of reconnaissance. To eliminate this shortcoming a VPU of the BPL was set up at Palanga next to the VPU of the KBF Air Force at the end of December 1944. It was given an independent radio for transmitting information to submarines via the radio at Kronshtadt, which unquestionably improved the organization of their tactical control. It should be noted that the BPL VPU was actually an information collection point and a liaison entity between the brigade headquarters and the submarines, i.e., a repeating echelon.
The chief mission of the KBF in 1945 continued to be the disruption of enemy lines of communication by submarines, aircraft and torpedo boats. Operational coordination of this was arranged by the Fleet staff. Actions by the forces were rather fruitful: in the third period of the war the KBF sank 236 transports and 228 warships and auxiliary vessels. This unquestionably was facilitated by well arranged tactical control.

Thus the experience of command and control of forces of the Red Banner Baltic Fleet in the third period of the war allows us to establish certain of its features and trends: the combination of centralization and decentralization; an increase in the role of fleet and combined-unit headquarters, especially in organizing the interworking of all-arms forces; and a growing importance of auxiliary control posts and operations groups of the fleet headquarters.

The command element and staff of the Twice Red Banner Baltic Fleet and commanders and staffs of combined units and units presently are carefully and thoroughly studying the practice of command and control of fleet forces in the war years and are creatively applying the experience of the war years in their work.

FOOTNOTES

1. Department of TsVMA [Central Naval Archives], fond 74, delo 13372, listy 20-21; fond 74, delo 13261, listy 97-98; fond 9, delo 21558, list 32.

3. Ibid., fond 9, delo 12679, list 22; fond 28, delo 40041, listy 235-242

4. Ibid., fond 9, delo 33324, list 55.

5. Ibid., delo 33038, listy 191-195


9. Due to the difficult mine situation in the vicinity of the Gulf of Finland, it was not possible to move out large or medium ships.


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Russia's defeat in the Russo-Japanese War of 1904-1906 showed not only the rottenness of Czarist autocracy as a political system, but the insolvency of its military organization as well. In particular, many weak aspects were identified in the Russian Army and its General Staff, which was called upon to elaborate plans for preparing the country for war and measures for increasing its mobilization capabilities, and to direct the work of the General Staff Troop Directorate (VUGSh).²

Many officers of the VUGSh did not even have a precise idea of their functional duties when they were in a theater of war, nor did they possess sufficient skills at staff service in a combat situation. In the absence of proper management of them by the General Staff, they often were running errands for line commanders or they removed themselves entirely from any sort of active work.

Combat practice showed that the officers' training in the General Staff Academy and their further service in VUGSh positions in peacetime prepared them insufficiently for performing staff duties in war. It was a rare practice to hold major maneuvers and military games within staffs of military districts, while the VUGSh officers' yearly trips to the field, as well as practical troop problems which they directed, often were conducted in an oversimplified situation and were not very instructive. As a result, their work reduced to a significant extent to bureaucratic correspondence. General N. D. Butovskiy, a prominent military writer of that time, wrote: "... The position of a General Staff officer among the troops in the sense of giving him exercise in his art is simply desperate. ... All these exercises hardly comprise, in work and in time, a tenth of the General Staff officer's yearly work. Just what does he do the rest of the time? He compiles, briefs and dispatches tens of thousands of papers."³
The sharp criticism of the General Staff's work in the Russo-Japanese War of 1904-1906 by the progressive Russian public, including military figures, as well as the attempt to clarify the real causes for serious shortcomings in the work of the General Staff, and primarily in the work of its Troop Directorate, spurred the heads of the military department to set up a special commission, the conclusions of which were the basis for making substantial changes, considering war experience, both in training programs of academies as well as in the system of General Staff officers' special training for troop control. As a result, by the beginning of World War I a more improved organization of the service of staffs had been created which provided for following uniform principles of the technical aspect of troop control in the Russian army by means of special staff control entities. This comprised the essence of General Staff service. A most important role here was given to the VUGSh, which performed functions of a peripheral "nervous system," as it were, connecting the "brain of the army"—the General Staff Main Directorate (GUGSh)—with lower troop control entities down to and including the separate brigade. Special documents defined the legal status and functional duties of the VUGSh.

On the eve of World War I, the General Staff Troop Directorate consisted of General Staff officers occupying authorized positions in directorates of military district CIC's on corps, division and fortress staffs, and in directorates (on staffs) of separate brigades. In addition, the VUGSh system included unit staffs of Cossack troops and of Semirechenskaya Oblast, as well as the staffs of the Separate Border Guard Corps.

/Military district directorates./ The number of authorized General Staff positions on staffs of military districts depended on the category of the district (border or internal). For example, the manning table of the staff of the Warsaw Military District authorized 21 General Staff officers, while the staff of the Omsk Military District authorized 6.

The district staff was headed by the district chief of staff, under whom were all general staff officers in authorized positions in district staffs and directorates, as well as all officers attached to the General Staff and detached to the district staff "for thorough testing of their conformity to General Staff service." The district staff consisted of the following directorates: quartermaster-general, duty general and chief of military transportation. Matters related to general staff service were concentrated in the first directorate and partially in the third directorate. An exception was the Kazan' Military District, where the position of chief of military transportation was absent, and the Omsk Military District, in which there was an assistant district chief of staff in place of the positions of quartermaster-general, duty general and chief of military transportation.
The quartermaster-general directed the work of the directorate in accommodating and training troops, in mobilizing troops, in collecting military statistics related to the district's location, the nearest oblasts of adjacent states, and so on; and he directed the work of the military topographic unit. He was the immediate assistant to the district chief of staff for service and for management of all General Staff "shtab" and "ober" officers, both those in authorized positions on district staffs and directorates as well as those attached to the General Staff.

The quartermaster-general directorate consisted of three departments (line, mobilization and records) and a military-topographic unit. Two General Staff positions were authorized for each department—a senior adjutant and his assistant. The line department handled the compilation of schedules and correspondence on allocating district troops and border guard units located in the district to corps, divisions and brigades; compilation of quarters and camp schedules, routes, stationing and provision of instructions to troops and their commanders; correspondence on troop accommodations, movement and training; planning of maneuvers, training problems and troop courses, including training courses for reserve warrant officers, reserves of "lower ranks" and the militia; correspondence to fortresses and directorates; line, sentry and field service of troops; and compilation of an annual account as to the district's status. The mobilization department handled questions relating to mobilization of troops (including border guard units), district establishments, and militia units; keeping records on "lower reserve ranks" and the militia; registration of personnel in the district, as well as horses, subject to cavalry duty; implementation of mobilization schedules, and supplementing and changing them in conformity with the availability of ranks, the reserve, and the number of horses and in conformity with changes in troop location; elaboration of a plan for mobilization and concentration of district troops; determination of troop readiness times and of measures to screen mobilization and railroads right at first with the declaration of war. The records department handled the collection of military statistics (and intelligence) as well as military topographic information on the district area and nearest oblasts of neighboring states; correspondence on the organization and accomplishment of geodetic, topographic and cartographic work performed in the district area; the receipt, storage and dispatch of maps and plans to troops and district establishments; correspondence on personnel, service and special activities of General Staff officers located in the district and of the corps of military topographers.

The district chief of military transportation directed the development of all data necessary for compiling a final plan for arranging military shipments over railroads, dirt roads and water routes. The directorate of the chief of military transportation consisted of two departments: a military highway department and a transportation department, each of which had two general staff positions—a senior adjutant and his assistant. The following districts were exceptions: Kazan' and Omsk, in which there were no military highway
or transportation departments, and the Moscow Military District, where there was no transportation department. The position of senior adjutant in the transportation departments of the remaining nine military districts, and the position of assistant to the senior adjutant in eight military districts (except for the Odessa Military District, where a General Staff officer was authorized), could be filled by General Staff officers.

/Corps staffs/ had three General Staff positions: chief of staff, senior adjutant and aide-de-camp. The corps chief of staff was directly subordinate to the corps commander and was the immediate executor of his instructions. He managed all General Staff "shtab" and "ober" officers in the corps, both those in authorized positions and those attached to the General Staff, directed their special activities and checked their overall preparedness for service in the General Staff. Data were assembled by the chief of staff as to the number of personnel and horses; location of corps troops; status of corps ordnance depots, clothing supply depots, trains and motor pools designated under wartime manning tables in case of unit deployment; and military statistical and topographic work necessary to the stationing and operations of corps troops.

/Division staffs/ of infantry, grenadier, rifle, cavalry and Cossack divisions had two General Staff positions: chief of staff and senior adjutant. The division chief of staff was directly subordinate to the division chief and was the immediate executor of his instructions. He had the following duties: he personally submitted files and papers to the division chief for examination and signature; he would receive and announce orders and instructions of the division chief and would see to their precise execution; he would work out the division mobilization plan and was responsible for the proper status of this plan. The division staff handled troop training and service; mobilization and combat readiness of division units and establishments; military topographic, military statistical and other data; data on the strength of units and establishments of the division, on changes in this strength, awards, promotions (i.e., on award of the next ranks), assignments to positions and other matters of an inspection nature.

/Staffs and directorates of separate brigades/ (rifle, Cossack and "plastun") had the position of General Staff "shtab" officer since 1910. The 1st and 2nd separate cavalry brigades were an exception. Here a General Staff "ober" officer was authorized under the manning table. In 1913 the directorates of the Ussurisky Cavalry Brigade, Transbaikal Brigade, Transcaspian Brigade, Siberian Cossack Brigade and Kuban' Plastun Brigade were redesignated brigade staffs, and the position of senior adjutant from among General Staff "ober" officers was introduced in the first two, with the granting to him of "duties, rights, privileges and all types of allowances established . . . for senior adjutants of General Staff officers on staffs of cavalry (Cossack) divisions. Duties of General Staff officers on staffs and in directorates of separate brigades were similar to those of corresponding officers on division staffs.
Fortress directorates, which consisted of a fortress staff and an artillery, engineer and supply directorate, were authorized to have three General Staff positions for 1st class fortresses: chief of staff (major general or colonel), senior adjutant ("shtab" officer) and his assistant ("ober" officer). The staff of the Vladivostok Fortress (secret staff of 4th Siberian Army Corps) was an exception. Here a chief of staff (major general or colonel) and a General Staff department made up of a senior adjutant ("shtab" officer) and his assistant ("ober" officer) were authorized. In 1914 a "shtab" officer aide-de-camp was added to the General Staff department. The corps commander simultaneously was acting commandant of the Vladivostok Fortress, while the corps chief of staff was fortress chief of staff. There were two positions in 2nd class fortresses, chief of staff (colonel) and senior adjutant ("shtab" officer). And in 3rd class fortresses there was a chief of staff ("shtab" officer) and senior adjutant ("ober" officer).

Unit staffs of Cossack troops/ (Kuban', Terskiy, Orenburg, Urals and Transbaikal) had one General Staff position each (major general or colonel) while the staff of the Don Cossacks had three: chief of staff (major general, or a lieutenant general might be assigned), his assistant (colonel, or a major general might be assigned) and two aide-de-camps.

Unit staff of Semirechenskaya Oblast/ had three authorized General Staff positions—chief of staff (colonel or major general), senior adjutant ("ober" officer) and aide-de-camp.

Staffs of the Separate Border Guard Corps/ had four authorized General Staff positions: corps chief of staff (major general or colonel) and three positions in Transamur District—chief of staff (major general or colonel), "shtab" officer aide-de-camp, as well as a "shtab" officer (or "ober" officer) aide-de-camp under the district chief. In addition, another 11 positions could be held by General Staff "shtab" officers.

A comparison of data in the General Staff officer schedule for positions in the VUGSh as of 18 July 1914 (see table) with the "List of Positions for the Military Department filled by General Staff Officers" can lead to the conclusion that out of a total of 835 General Staff positions, (over 75 percent) went to the General Staff troop directorate. Even higher was the percentage of VUGSh officers in General Staff positions which were subject to be filled without fail by General Staff officers (602 of 733, i.e., over 80 percent).
Schedule of General Staff Officers in Positions in the General Staff Troop Directorate as of 18 July 1964*

<table>
<thead>
<tr>
<th>No</th>
<th>Directorates &amp; Staffs</th>
<th>Generals</th>
<th>&quot;Shtab&quot; Officers</th>
<th>&quot;Ober&quot; Officers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Directorates of 12 districts</td>
<td>57/46</td>
<td>94/85</td>
<td>75/64</td>
<td>226/195</td>
</tr>
<tr>
<td>2</td>
<td>Corps staffs of 36 corps</td>
<td>36/36</td>
<td>36/33</td>
<td>47/41</td>
<td>119/110</td>
</tr>
<tr>
<td>3</td>
<td>Division staffs of 94 divisions</td>
<td>--/94</td>
<td>94/78</td>
<td>94/78</td>
<td>172/188</td>
</tr>
<tr>
<td>4</td>
<td>Staffs and directorates of 25 brigades</td>
<td>--/23</td>
<td>23/13</td>
<td>22/13</td>
<td>45/36</td>
</tr>
<tr>
<td>5</td>
<td>Fortress staffs of 17 fortresses</td>
<td>6/6</td>
<td>20/19</td>
<td>11/19</td>
<td>37/34</td>
</tr>
<tr>
<td>6</td>
<td>Unit staffs of Cossack Troops</td>
<td>6/6</td>
<td>3/2</td>
<td>3/2</td>
<td>9/8</td>
</tr>
<tr>
<td>7</td>
<td>Unit staff of Semirechenskaya Oblast</td>
<td>1/1</td>
<td>1/1</td>
<td>1/0</td>
<td>3/2</td>
</tr>
<tr>
<td>8</td>
<td>Staffs of Separate Border Guard Corps</td>
<td>2/1</td>
<td>13/10</td>
<td>--/0</td>
<td>15/13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>108/97</td>
<td>284/267</td>
<td>250/206</td>
<td>642/570</td>
</tr>
</tbody>
</table>

NOTES:

*The numerator indicates the number of General Staff officers by manning table (Order No 1 for the Military Department dated 2 January 1914 with the "List of Positions for the Military Department filled by General Staff Officers"). The denominator indicates the number of General Staff officers on the rolls ("Spisok General'nogo shtaba" [General Staff Rolls], city of Petrograd, 1914, pp 714-754).

**This number includes 602 General Staff positions and 40 positions which could be filled by General Staff officers.

/Reinforcement of the General Staff troop directorate in wartime./ Under the 1910 mobilization schedule, a total of 861 General Staff officers were required for filling VUGSh positions in wartime, including 129 generals, 365 "shtab" officers and 367 "ober" officers. Under peacetime manning tables, a total of 572 officers were included in general staff positions, including 77 generals, 269 "shtab" officers and 226 "ober" officers. Thus
the number of General Staff officers which were needed for filling VUGSh positions in wartime, in comparison with peacetime manning tables, was 290 (53 generals, 96 "shtab" officers and 141 "ober" officers). There were 5 generals, 29 "shtab" officers and 205 "ober" officers which could be assigned from the corps of general staff officers to wartime positions in the VUGSh, i.e., there was a shortage of 47 generals and 67 "shtab" officers with an average of 64 "ober" officers (in the final account, there were 50 officers lacking). It was planned to cover this manning shortage partially by filling many General Staff positions in army field directorates (chiefs of transportation, chiefs of highway directorates, and so on) with officers having an ordinary military education. This totaled 33 authorized units with categories of colonel or general.

Calculations led the Russian Army leadership to very optimistic conclusions that "even in the most difficult situation, i.e., with general mobilization of all troops and a simultaneous formation of all armies, there would be almost no shortage of General Staff officers in the first period." In addition, it was believed that instructors of military subjects in military schools, certain General Staff officers in central directorates, the permanent staff of the General Staff Academy and its last graduating class would remain for replacing losses during the war itself. But World War I, which broke out two years later, and which, according to V. I. Lenin, "was an imperialist . . . war on both sides," showed the total insolvency of prognoses by the Russian General Staff as to its scope, duration and human losses. These miscalculations led to a fundamental revision of all war plans compiled in peacetime and of matters concerning the filling of VUGSh positions, especially on newly activated staffs of divisions, armies and fronts which were not covered by the mobilization schedule.

FOOTNOTES

1. This article is a continuation of a series of scientific reports by A. G. Kavtaradze on the history of the Russian Army General Staff (see VOYENNO-ISTORICHESKIY ZHURNAL, No 12, 1971; No 7, 1972; No 12, 1974; and No 3, 1976).

2. The General Staff Troop Directorate first appeared in Russia in 1698 in the form of a quartermaster unit (N. P. Glinoyetskiy, "Istoriya Russkogo General'nogo Shtaba" [History of the Russian General Staff], Sankt-Peterburg, 1883, p 5). In the period described it brought together General Staff officers who were among the troops and who occupied corresponding staff positions there.


5. See VOYENNO-ISTORICHESKIY ZHURNAL, No 8, 1975.


8. Military Department Order No 1 dated 2 January 1914 announced the "List of Military Department Positions to be Filled by General Staff Officers," which indicated the positions subject to being filled without fail by General Staff officers, as well as those which could be filled by these officers.

9. The CIC of Peterburg Military District was designated the "commander in chief of guards troops and the Peterburg Military District."

10. In peacetime the Separate Border Guard Corps had a dual subordination: its chief was the minister of finances, although matters of manning, stationing, training and so on were within the purview of the war minister.

11. "Svod shtatov voyenno-sukhoputnogo vedomstva" [Code of Manning Tables of the Military Ground Forces Department], Book I, 1912, Section 2, Manning Table No 13, pp 110-118.

12. A special category of officers who successfully completed the full course of the General Staff Academy and were intended "for replenishing the annual loss on the General Staff and for reinforcing its strength in wartime" (Svod Voyennykh Postanovleniy) [Code of Military Decrees], 1869, Book VI, 2nd ed., Chapter 7, Article 158).

13. V. V. Nagayev, "Sbornik zakonopolozeniy i rasporyazheniy po sluzhbe lichnogo sostava korpusa ofitserov General' nogo shtaba" [Collection of Laws and Instructions on Service of Personnel of the General Staff Officers Corp], Sankt-Peterburg, 1914, p 7.
14. Concentrated in the duty general directorate were matters of the strength and manning of troops, their provision with the main types of supplies, as well as assignments to officer physicians. This directorate did not have a single General Staff position. The chief himself could be a General Staff officer.

15. The following military districts were the exception: Vilenskiy and Caucasus, where the line department had two assistants to the senior adjutant who were General Staff officers; Moscow and Omsk, which had no records departments, and the mobilization department did not have the position of assistant to the senior adjutant; the Odessa Military District, where the records department lacked the position of assistant to the senior adjutant; and the Kazan Military District, where there was no records department ("Svod shtatov voyenno-sukhroputnogo vedomstva," Book I, 1912, Section 2, Manning Table No 13, pp 110-111).

16. In the Russian Army the rank of warrant officer (the first officer's rank) was retained only for reserve officers in peacetime beginning in 1884. It was introduced with the beginning of war.

17. The corps of military topographers was a component of the Russian Army. It included two officer-topographers (including those who completed the geodetic department of the General Staff Academy), as well as military topographers with class ratings (military officials).

18. The division commander in the Russian Army was called the division chief.

19. TsGVIA [Central State Archives of Military History], "Delo prikazov po voyennomu vedomstvu" [File of Military Department Orders], Order No 105 dated 14 March 1913.

20. The authorized category of the chief of staff on the unit staff of the Transbaikal Cossack Army was a colonel.

21. The 6th Turkestan Rifle Brigade and the Siberian Cossack Brigade were stationed in the oblast, as well as other units ("Raspisaniye sukhroputnykh voysk" [Roster of Ground Forces], corrected as of 1 May 1914, Sankt-Peterburg, 1914, p 393).


23. Chiefs of staff of 1-7 districts and three duty "shtab" officers of detachment staffs, as well as the senior adjutant of the staff of the Transamur District (Military Department Order No 1 dated 2 January 1914).
24. Military Department Order No 1 dated 2 January 1914.

25. Positions subject to filling without fail by General Staff officers and positions which could be filled by them; but this number did not include General Staff officers (59 persons) who were instructors of military subjects in military schools.

26. Calculations compiled from materials of TsGVIA for 11 February 1912 (fond 2003, opis' 1, delo 700, listy 1-6).

27. For formation of two staffs of fronts (Northwest and Southwest), eight armies, including two separate armies, 31 infantry divisions, as well as for reinforcing corps staffs (new army corps were not created) and filling other general staff positions (TsGVIA, fond 2003, opis' 1, delo 700, list 1).

28. TsGVIA, fond 2003, opis' 1, delo 700, list 1.

29. TsGVIA, fond 2003, opis' 1 delo 700, list 4.

30. Classes in the Academy ceased with the declaration of mobilization: the instructors were appointed to wartime positions (primarily in the army in the field); senior class students who had studied two years in the Academy were attached to the General Staff and appointed to General Staff positions in the troops; while junior class students were detached to their own units to the authorized positions they held and which had been retained for them during training in the Academy.

31. V. I. Lenin, "Polnoye sobranie sochineniy" [Complete Collected Works], XXVII, 303.

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