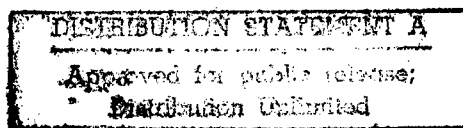




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Military Affairs

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Soviet Union

Military Affairs

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Lt Gen Kostin Comments on September Plenum
90UM0194A Moscow KOMMUNIST
VOORUZHENNYKH SIL in Russian No 20, Oct 89
pp 6-9

[Interview with Lt Gen A. Kostin, member of the Military Council and chief of the Political Directorate of the Order of Lenin Moscow Air Defense District, by a KOMMUNIST VOORUZHENNYKH SIL correspondent: "Relying on Reason and Not On Emotions"]

[Text] Immediately following the September plenum of the CPSU Central Committee our correspondent interviewed Lt Gen A. Kostin, member of the Military Council and chief of the Political Directorate of the Order of Lenin Moscow Military District, who took part in the plenum.

[Correspondent] Aleksey Yakovlevich, all of us have long awaited this plenum. What do you consider to be the most important decisions coming out of it?

[Kostin] First of all, I want to say that the discussion which took place at the plenum was not just about problems of international relations. It was essentially about ways to renew socialism, improve the state and expand democratization in all areas of national life. Also, of course, about the party, about its role and place in the restructuring and about the responsibility of each Communist for restoring its prestige. M. Nenashev, chairman of the State Committee for Television and Radio Broadcasting, spoke out strongly on the matter, although, judging from the reaction of certain comrades, not everyone liked it when he said that all of us are to blame to one degree or another for the decline in party prestige.

I listened with alarm to the speech by A. Brazauskas, first secretary of the Lithuanian Communist Party Central Committee, who said that many republic party organizations link the concept of renewing the independence of the Lithuanian Communist Party with the adoption of their own program and charter. Such proposals are being made also in other republics. I therefore consider it fundamentally important for the plenum to speak out resolutely for the ideological and organizational unity of the CPSU with a common Program and Charter and to unanimously reject the concept of federalism in its structure.

As a military man I must direct attention to that point in the CPSU platform which states with great specificity that the Armed Forces of the USSR are formed on a multi-ethnic basis and that all citizens perform service in accordance with common Union laws, regardless of ethnic origin.

[Correspondent] There has recently been serious criticism in the nation about deformations in the area of ethnic relations: extreme centralism, injustices committed with respect to a number of peoples and the ignoring of their ethnic development needs. But the army is not insulated from the society; it is subject to the same maladies....

[Kostin] Meaning that various deformations have been tolerated also in it? I would not put it that way, because with respect to the Armed Forces there have been practically no excesses in the treatment of servicemen of various ethnic groups in them. This is indicated by all of my more than 30 years of experience in the army. The climate in the military collectives has always been imbued with a spirit of internationalism. The fact that the deformations about which you speak could not but cause the army additional problems is another matter. That is true. Take Central Asia as an example. It is a known fact that it has a surplus work force due to disproportions in its economic development. This means that thousands of school graduates are unable to find work or are performing unskilled labor. The educational level is also lower in that region than in the Baltic republics, let us say. Naturally, all of this affects the preparation of the draftees and their technical sophistication. This means that it takes a far greater effort to teach the young soldiers combat specialties.

[Correspondent] How would you assess relations among fightingmen of different ethnic groups three or four years ago compared with today?

[Kostin] The premise that the army suffers from the same maladies as the society as a whole is perfectly applicable here. I want to say—without attempting to lessen the acuteness of the problem, by the way—that manifestations of ethnic discord have decreased many times over in the army. Remember the cruel tragedy of the Meshet Turks. Several members of that ethnic group serve in our district. There have not even been any attempts to humiliate them by the Uzbek soldiers, though. This was the result of a wholesome moral climate in those military collectives. We should not be lulled by this, however. The situation is worsening with each new draft. Particularly in relations between Armenians and Azerbaijanis. There have already been run-ins between them. These have been isolated incidents up to now, to be sure, but there is no guarantee that they will not increase.

It is time to acknowledge publicly that cases of nonregulation relations occurring on an ethnic basis are increasing. Furthermore, the structure of "abuse by seniors" has changed. While most of the infractions were formerly committed by fightingmen in their second year of service, the statistics provide a different picture today. Abuse, rudeness and insults are committed against colleagues more and more frequently also by the new soldiers. Some of them arrive in the army with home training, if I may put it that way, with the mentality of that crowd blinded by nationalism in which they have already spent time and flaunting views smacking of ethnic extremism.

[Correspondent] The plenum decisions require changes in the work forms and methods of commanders, political workers and party organizations in the international indoctrination of the personnel. Just what are these changes?

[Kostin] We still have to figure that out. The time has passed for hasty plans merely for the sake of reporting

that party decisions are being implemented. One thing is clear: that high-sounding statements about friendship of peoples and unity of nations, optimistic appeals to strengthen international fraternity and lectures hastily put together with scissors and glue are not working. Far from all of the commanders and political workers understand the subtle aspects of what is presently occurring in many republics. One soldier recently let us read his diary. It contained a statement something like this: "I am only beginning to become aware of my ethnic dignity.... I want to read books and speak in my native language."

In short, the whole relationship of ethnic and state interests is being reassessed. And one has to be extremely sensitive and be able to determine when it is a person's awakening ethnic pride speaking and when it is ethnic arrogance.

We recently assembled in the political directorate members of all the ethnic groups represented among the soldiers and NCOs in the district. They discussed in advance with their colleagues in the units what advice, what requests and what complaints to put forth. The meeting was useful. We are presently planning to conduct another meeting, this one with officers representing around 20 ethnic groups. Most of them are Communists. And the Communists, the CPSU platform stresses, "must... combat manifestations of nationalism and chauvinism first of all within their own ethnic group." The attention of the officers must be directed to these words, "within their own ethnic group," during the forthcoming meeting. We are presently making little use of the ethnic officer cadres in the international indoctrination of the personnel.

Union republic days have begun to be fairly interesting in the units. Delegations are invited to take part, the native flags are raised, ethnic foods are prepared.... I could mention other interesting forms of work. In the final analysis it is not a matter of the number of new things, however, but of how skillfully the matter is approached. For now, the new forms can turn out to be... pro forma. Most of the indoctrinators have a catastrophic lack of knowledge of the history, customs and traditions of our nation's peoples. Some special literature has apparently begun to be published, although there is still not enough. We are unable to draw the attention of commanders and political workers even to that which exists, however. The soldiers themselves said at the meeting that many officers lack skill in dealing with fightingmen of different ethnic groups. It is not surprising that signs of increasing alienation between officers and enlisted men have appeared in certain military collectives with the most diverse ethnic makeup.

We are trying to prevent this kind of gap, of course. We invite specialists in international relations to the units as frequently as possible, but the scientists ordinarily limit themselves to theory and are unable to provide the platoon commander with even a minimal body of practical advice.

The primary party organizations can and must do a great deal in this situation. One has the impression, however,

that most of the party committees and party bureaus have been caught unprepared by the exacerbation of inter-ethnic problems. I can frankly say that the lower party aktiv is not yet prepared to operate in the new situation, which is far more complex than several years ago. We all got a good sense of this during the report-and-election campaign. The reports of certain secretaries contained not a word about problems of uniting the multi-ethnic military collectives. I have inquired about the plans of party committees and party bureaus more than once, with the same picture emerging. Everyone agrees that the situation is worsening but does not know what to do about it. People continue to wait for instructions as in the old days.

Sadly, the political organs themselves are doing little to help the primary organizations at this time. We are currently considering the subjects for training plans at schools for the party aktiv and the system for the training and advanced training of ideological workers, and are attempting to put real substance into the work of international relations groups set up under the party committees. We want to see soldiers of various ethnic groups more actively involved in public work. At the present time we frequently have companies slightly more than half of which are made up of Russians, Ukrainians and Belorussians, while they account for just about 100% of the Komsomol bureau, the Lenin room council and other public agencies.

[Correspondent] In certain republics there are people advocating the establishment of their own ethnic military formations. How do you assess such proposals?

[Kostin] Such ideas were expressed even at the plenum. G. Gumbaridze, first secretary of the Georgian Communist Party Central Committee, complained that they had contacted the center several times about the possibility of forming their own units but had received no reply. I am absolutely against such an idea. And the plenum—I have already named the pertinent point in the CPSU platform—made what I consider to be the only correct decision. From the political standpoint this would be a step backward in the resolution of inter-ethnic problems. Unfortunately, not everyone is cognizant of the fact that in indoctrinating the soldiers in the concepts of internationalism, the army is serving not only itself but also the society as a whole. Just imagine Russian, Armenian and Georgian youth living on the same street and attending the same school and then being separated among "their own" units. That is absurd. It is political nearsightedness.

Nor can such proposals stand up to criticism from the economic standpoint. Just how would such formations be supplied with equipment and weapons? Do the republics have the funds for maintaining ethnic units?

Finally, before advancing such ideas, we need to realistically weigh the effect this would have upon the combat readiness. Where would the officers and junior specialists be trained? How would we set up the proper training facilities? How would we resolve hundreds of other

problems involved in the functioning of the extremely complex army system? The matter of ethnic formations could be seriously raised only by one who does not know its specifics. This is a case in which the elements of ethnic emotions drown out the voice of reason.

[Correspondent] As a compromise, those same people call for at least granting fightingmen of different ethnic groups the opportunity to serve within their own republics.

[Kostin] On the human level I can understand such a desire. It is easier, of course, to serve near one's native hearth, near friends and relatives. And the parents feel more at ease. We cannot be guided by feelings of kinship when it comes to protecting the homeland, however. Activists in various people's fronts who promote such ideas among the pre-draft youth are doing them a disservice. I have met several times with soldiers drafted from the Baltic area who showed me hand-printed leaflets planted among them by nationalistically minded elements. They suggested registering in "our own army." The young men develop a split understanding of duty to the homeland. Requests by Latvians, Lithuanians and Estonians to be assigned to serve in their own republics have now become more frequent. Furthermore, we have had cases of desertion for those same reasons. Are the members of the pseudo-radical groupings thinking about what they are encouraging the youth to do?

We have had cases of late in which attempts were made to pressure soldiers, particularly those of the Baltic ethnic groups. Questionable literature is sent to them and despicable ideas are planted among them both in letters and in personal meetings, which are far removed from the principles of internationalism. It can be frankly stated that the propaganda aktiv does not have an easy task today.

[Correspondent] A contraction of the area of application of the ethnic languages and a decline in their role have been occurring for a long time in the nation. At the same time, more and more soldiers of various ethnic groups are arriving in the army with a poor knowledge of the Russian language....

[Kostin] Or merely pretending they do not understand Russian. There have been such occurrences. The language problem is one of the most acute. The suggestion made at the plenum that the Russian language be legally established as the common state language was very timely. The draftees' poor knowledge of Russian gives rise to numerous problems: in the training of the personnel and with respect to the establishment of a wholesome moral climate in the military collectives. What is the solution?

The job of converting the army to universal study of the Russian language is a complex and difficult matter. A common state program is needed. For the time being we have been forced to set up more than 200 political training groups which study under a special program. The first hour is assigned to the study of the Russian language; the second, to the mastery of political fundamentals. Naturally, these classes are little effective. There is not enough time, and the instructors lack

teaching skills. It is obvious that sooner or later we will have to allocate time in the combat and political training schedule for studying the Russian language in order to place this difficult task onto a more solid foundation.

Something else: It would be a good thing for the commanders and political cadres to acquire at least a minimal knowledge of the language of this or that Union republic. Here is an example. Officer V. Shirvashidze is one of our political workers. He is an ethnic Georgian. While serving in Central Asia he has learned Uzbek and has acquired an excellent knowledge of the traditions and customs of the Central Asian peoples. Understanding the peculiarities of the ethnic mentality, he finds with enviable ease a common language with soldiers of practically any ethnic group.

If we had just one such person in each company or even each battalion, so many problems could be promptly eliminated.

[Correspondent] It would seem that the number of young officers representing other, non-Russian-speaking peoples has decreased of late.

[Kostin] I would not say so. The number has also not increased, though. This is at a time when the ratio of draftees from Russia, the Ukraine and Belorussia and the other republics is changing in favor of the latter. The shortage of ethnic officer cadres is due primarily to an overall decline in prestige for the officer's career. The situation has also been affected by the anti-army campaign being conducted today by certain mass media. It is my opinion that the problem will not be resolved until serious steps are taken to provide social protection for the professional military man.

[Correspondent] One last question. Discrimination against people because of ethnic origin is increasing in certain regions. Antisocial elements and groups are attempting to create the opinion in the society that it is encountered at almost every step in the army.

[Kostin] I absolutely disagree. This is another device used by those attempting to defame the army. I know that certain undisciplined soldiers try to depict the increased demandingness made of them by commanders as a desire to insult their ethnic dignity. Let their conscience deal with that. It is another matter that certain OICs are rude and mean to subordinates, regardless of ethnic origin. Why try to pass off this basic lack of culture, against which a determined battle is being waged, as discrimination based on ethnic origin, however?

In conclusion, I would say that no matter what, the traditions of internationalism in the army are powerful enough to withstand attempts to sow discord in the multinational military collectives. This is a real treasure for us. In the final analysis, it is up to us commanders and political workers and the party aktiv to see that it is not cheapened.

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Response to LITERATURNAYA GAZETA on Soviet Military Art in WWII

90UM0194C Moscow KOMMUNIST

VOORUZHENNYKH SIL in Russian No 20, Oct 89
pp 36-41

[Article by Maj Gen B. Singayevskiy under the rubric "Polemical Comments": "Is This the Truth About the War?"]

[Text] About the author: Boris Fedorovich Singayevskiy was born in 1928. He has been a member of the CPSU since 1955. He completed the Kiev Artillery School and the Military Artillery Academy imeni M.I. Kalinin. He has served as commander of a platoon, a battery and a missile battalion. He completed postgraduate studies. He is presently chief of a department at the Military Artillery Academy imeni M.I. Kalinin. He is a candidate of military sciences and a docent.

Despite the fact that much has been written about the Great Patriotic War, every new publication about it receives a lot of attention. And this is perfectly natural. Directly or indirectly the war seared the hearts and souls of tens of millions of Soviet people. And numerous "blank spots" in our military history have given rise to conjectures and rumors, even out-and-out speculation. Everyone who undertakes to write something about the war in this time of glasnost and a return to the truth bears all the more moral responsibility because of this.

In recent years the periodic press has carried a number of interesting articles making it possible to assess from a position of historical truth this or that event of the Great Patriotic War. Unfortunately, however, there has also been an increase in articles which create confusion. Particularly when they are assessed from a purely military, professional point of view, since the events described in the articles are contrary to the laws of military science and elementary logic. The assessment of the events of 1941-1945 contained in them is based not on historically reliable facts or reference material but more on emotions and tall tales about the war written or told sometime, somewhere by someone.

Issue No. 25 of LITERATURNAYA GAZETA of 22 June 1988, for example, contained, under the innocuous rubric "Magazines: Month by Month" V. Shaposhnikov's article "The Price of Victory" (although it was written a year before, the remarkable thing is that it actually initiated an entire series of such articles in LITERATURNAYA GAZETA). It was logical to assume from the name of the rubric and the article that this would be a survey of magazine articles of recent months on military subjects and an analysis of their artistic merits and shortcomings. However, the author... immediately rushed beyond the framework of this task. Tendentially selecting and grouping excerpts and pieces from private discussions, speeches and creative works, he attempted to provide the basis for a simple and categorical military-historical assessment—no more and no less—of such a vast and large-scale event of world importance as the Great Patriotic War of 1941-1945.

The essence of his assessment: "We simply did not know how to fight. And we ended the war without knowing how to fight." This theme is from a speech by V. Astafyev at a conference on Important Questions of Military Science and Literature (LITERATURNAYA GAZETA 18 May 1988), which the author of the article was attempting to substantiate. I am not disputing V. Astafyev's merits as a prose writer, but I do not believe that any self-respecting scholar and historian could take it on himself to make such an unsubstantiated statement so lightly and casually.

What arguments are cited as justification for such a categorical assessment? There are many: lack of talent on the part of commanders at all levels throughout the war, including the Berlin Operation; the terror inspired by military lawyers and Chekists; the spontaneity of the partisan movement; confusion at the front, beyond the front line and in the rear area, and so forth. There was only one way out as a result: death at the hands either of the enemy or of our own people.

Anyone who fought or saw the war "from the inside" can confirm that this sort of thing did exist. There was much which evoked perplexity and anger. This was not what determined the course and the outcome of the war, however. We could not have won the extremely fierce battle with fascism with fear and unjustified sacrifices alone. This would have been unnatural. I therefore wish to express my own opinion on certain matters brought up in V. Shaposhnikov's article, including the following: "Did we know how to fight"? (unfortunately, the editors of LITERATURNAYA GAZETA refused to publish my response to this article).

"Look at any map of 1941 or even 1944. On every one you will find nine red arrows against two-three blue ones. This was nine of our armies opposing two-three enemy armies. And this is the way it was throughout the war," V. Astafyev states, and V. Shaposhnikov follows suit.

We know that the "arrows" on military maps designate troops of the attacking sides. There are objective laws of warfare, one of which states that the attacking side must have an overall superiority in forces and equipment in order to achieve success, and a four-to six-fold superiority on the axis of the main thrust. Military cunning, daring, surprise, courage and heroism can win an individual battle, but the laws of warfare operate inexorably in an engagement or an operation, and particularly in a war as a whole. It is impossible to assess the level of military art without taking these laws objectively into account.

If we turn to the official sources (there is no basis for doubting the reliability of the information contained therein), we can see that we could not compare to the enemy with respect to the numerical strength of Soviet Army forces operating in the Soviet-German front until November 1942 and that we subsequently surpassed the enemy by 20% in some places. This ratio was preserved until the end of the war. We established a two-to three-fold superiority only for the most important operations on selected axes and at the

expense of other sectors of the front, but certainly "not all of the time, throughout the entire war."

Assessing the ratio of forces from the number of "arrows" and drawing generalized conclusions from this is an activity for dilettantes, particularly since our armies were considerably inferior to the enemy's armies in both size and quality.

A complete picture of the combat capabilities of the sides can only be provided by an aggregate calculation of such factors as the number of divisions, the degree to which they were manned and outfitted, the quality of the weapons, the level of professional training of the commanders, the training of the personnel, and others. A detailed description of these factors can be found in the pertinent sources (see table).

Table 1.
Dynamics of Balance of Forces on Soviet-German Front

Periods	Personnel (millions)		Number of divisions	
	Enemy	Our forces	Enemy	Our forces
At the beginning of the war (June 1941)	5.5	2.68	190	170
November 1942 (before the Battle of Stalingrad)	6.200	6.591	266	290
July 1943 (before the Battle of Kursk)	5.325	6.612	232	280
January 1944	4.906	6.354	245	-

We began conducting large offensive operations in 1942, for which purpose it was necessary to build up a superiority in personnel and equipment at the expense of other sectors. It was the minimal superiority necessary, however (see Table 2) and only in the Berlin Operation did we have a 2-to 3-fold superiority, but certainly not "throughout the entire war." Furthermore, it should be borne in mind that participating in the operation in addition to 63 Wehrmacht divisions were 37 separate infantry regiments, 98 separate infantry battalions and around 200 battalions of Volkssturm and security troop battalions. These are purely quantitative indicators.

Table 2.
Balance of Forces in Certain Operations of the Great Patriotic War

Periods	Personnel (millions)		Number of divisions	
	Enemy	Our forces	Enemy	Our forces
Battle of Moscow (counteroffensive)	1.708	1.0	51	69
Battle of Stalingrad (counteroffensive)	1.012	1.103	48	71
Battle of Kursk, Orel Offensive Operation	up to 0.6	0.810	37	65
Berlin Operation	1.0	2.5	63	177

I have already stressed the fact that only an aggregate calculation of all the indicators can provide a complete picture of the combat capability of the sides. Let us try to describe these in the most general terms.

By the beginning of the war the enemy had deployed 190 divisions totalling 5.5 million men on our western borders. We had 170 divisions and two rifle brigades numbering 2.68 million men in the western border districts by the beginning of the war. The average numerical strength of the enemy divisions was 14,000-16,000, while ours did not exceed 10,000 men, since most of them were maintained at reduced, peacetime strength. The Wehrmacht divisions were at full strength with respect to personnel and modern combat equipment, were trained and smoothly organized and had combat experience. Our divisions were at the stage of being brought up to strength, trained and organized for combat. We had more aircraft and tanks, but only 21.3% of the aircraft and 18.2% of the tanks were new models. The others were obsolete models with limited combat capabilities and little motor life. Here is just one example. The 8th Mechanized Corps of the Kiev Special Military District, one of the most fully manned and equipped, left up to 40% of its equipment on the 114-kilometer route to the area of combat operations before even entering combat, due to malfunctions, breakdowns, lack of repair capabilities and air strikes. And around 20% of its vehicles were new. Some corps did not have a single new tank.

About the command and political staff of the army: "We eliminated more than 40,000 men during the purge of 1937-1938. More than 40,000 men were advanced to command positions in the first 10 months of 1938. Only 10 of 108 members of the old Military Council remained." This is from a speech delivered by Voroshilov at a meeting of the Military Council under the People's Commissariat of Defense on 29 November 1938. And it was the best trained personnel who were "purged." The army was practically rendered leaderless. Out of 827 members of the higher command and political staff 720 were "purged." These are the sad statistics. There is no need to explain the role of the commander in the accomplishment of missions by subordinate troops or the cost of an unjustified or untimely decision. "More than 100,000 men were promoted to positions of commander in the first 10 months of 1938...." But it is not enough merely to "advance" a person to commander. He has to be trained and he has to master his duties. Finally, he needs time to mature, to grow morally, ethically and psychologically to the level of the complexity, the importance and the significance of the decisions he is to make and the enormous responsibility for their execution. And not all of them acquired the experience and knowledge essential to a commander rapidly enough (by July 1941) or fully. We also know something else: that the individual's merits as well as his shortcomings become manifested very early in a war. Courageous and decisive men, better trained militarily, took the place of weak, weak-willed, incompetent commanders at all levels when the

war began. And the vast majority of our commanders clearly demonstrated these qualities during the very first fierce battles with the fascists. There is much proof of this.

We recall that the fascists allocated only a half hour in their plans for destroying the Soviet border komendaturas, but the border troops thwarted their plans. Not a single outpost on the entire border of the USSR flinched before the enemy with his numerical superiority. The border outposts headed by Lt A. Lopatin fought the Hitlerites until 2 July, and the border troops led by Lts A. Kizhevator and F. Morin demonstrated exceptional steadfastness. The small garrison at the Brest Fortress engaged in uneven battle with the fascists for a month. Remarkable examples of courage were set by the defenders of Liyepaya, Hanko, Peremyshl, Mogilev, Tallin, Odessa, Sevastopol....

"With respect to our losses in the war set at the overly 'round' number of 20 million (V. Astafyev had a reason for casting doubt on these numbers.—B.S.), we are told that the enemy was treacherous and cruel, that he spared neither women nor children nor old people. There is no questioning this. It all took place, as they say. And still, still, still..." V. Shaposhnikov writes.

Indeed our countrymen accounted for half of the human losses in Europe during the war.

Issue No. 9 of the weekly ARGUMENTY I FAKTY of 7 May 1987 cites the following structure of our losses: "Our people paid for the Victory with 20 million lives, 11 million of which died somewhere other than at the front—from bombs, shells and hunger—7 million civilians died during the occupation, and 4 million Soviet prisoners of war were tortured [to death] in concentration camps." We therefore lost 9 million men on the battlefield.

Fascist Germany lost 13 million, including hundreds of thousands of tortured Communists, antifascists and peaceful residents killed by bombs or shells. Unfortunately, we do not have data on the structure of Germany's losses in the war, but the facts confirm that the proportion of "peaceful" victims of the war in Germany was several orders lower than ours.

More than 73% of all the losses suffered by the German fascist army occurred on the Soviet-German front. They amounted to around 9 million people. Citing this fact, U.S. President F. Roosevelt wrote at the end of the war: "From the standpoint of the great strategy... it is difficult to escape the obvious fact that the Russian armies are destroying more enemy soldiers and weapons than all of the other 25 states of the United Nations taken together."

Does all of this provide a basis for stating that "we shed our blood and buried the enemies under our bodies" (V. Astafyev), that "if we compare Germany's losses just on the Eastern Front with our 20 million, we have some very lamentable arithmetic" (V. Shaposhnikov). The

arithmetic is indeed lamentable from the human standpoint, but V. Shaposhnikov is supposed to be discussing the military aspects of our Victory. The arithmetic for this is somewhat different.

There is no question that we still have an enormous amount of work to do to precisely define our losses and those of the enemy, their structures and distribution by years and operations. The absence of publicity about these matters during the pre-restructuring period gave birth to all sorts of conjectures. It is now fashionable to subject everything to doubt. It is just a matter of how this doubt is expressed.

"...We are told that the enemy was treacherous and cruel, spared neither women nor children nor old people. There is no denying this. It all took place, as they say," V. Shaposhnikov writes. Could there be any doubt that the mass, fanatical, unprecedented annihilation of peaceful people, Babiy Yar, the Uman Pit, the Jewish ghettos, the concentration camps and other similar features of the Hitlerite invasion "took place"? This is not surprising, though. Many ideologues in the West have long attempted to prove that it is all "communist propaganda." I do not believe that any person who saw the war and experienced it along with his people or who has at least taken the trouble thoroughly to study documentary material on it (this is a labor-consuming activity, to be sure, which does not produce rapid results) would permit himself to make such a free interpretation of one of the most heroic and tragic pages of our history, our pride, our enduring pain and sorrow.

"Let us recall at least how much ink and paper have been used to prove to and convince us once and for all that the victory over Hitlerite Germany was achieved with a meld of national heroism and wise strategic thinking on the part of Soviet military leaders, from the marshal down to the battalion and platoon commanders," V. Shaposhnikov goes on to write. And he states categorically that it is "a lie, a falsification, historical legends and myths, with which we have been deluded for so long."

In that case, what about the feats performed by the heroic cities, by the followers of Kosmodemyanskaya, Gastello and Matrosov, by the Panfilov heroes, by workers in the rear area, by the underground fighters and partisans? Are they not proof that the Soviet people's unequalled heroism during the Great Patriotic War is a generally recognized historical reality?

I could cite the assessments of our enemies, our allies, foreign military historians and public figures who admire the Soviet people's mass heroism. There are hundreds. Many of them are cited in L. Yeremeyev's book "Glazami družey i vragov" [Through the Eyes of Friends and Enemies] (Nauka Publishing House, Moscow, 1966). Incidentally, it also graphically shows that the mass heroism was demonstrated at the dictate of the soul, out of a sense of duty to the homeland and for

the sake of saving it and not out of a fear of severe punishment, which is what people sometimes try to convince us.

Here is another statement from the aforementioned book: "If the Russians fight fiercely and determinedly, this should not be attributed to the fact that they are forced to fight by GPU agents, who would allegedly shoot them in case they retreat. On the contrary, they are convinced that they are protecting their homeland." This statement was made by Hitlerite propagandist Goebbels. More than 40 years later, however, V. Shaposhnikov attempts to convince us that the national heroism is a lie and a falsification. Is there any need to go on with the debate?

With respect to the strategic thinking of Soviet military leaders, we need to make a small digression, need a methodological foundation, without which an attempt to assess Soviet military art is groundless.

War is an extremely complex sociopolitical phenomenon. The predominant significance of the political objectives in the war of 1941-1945 was what determined the substance of the strategic decisions, which were not always optimal from the purely military standpoint. Only with this approach can one objectively assess the quality of the strategic thinking. One cannot assess this or that operation in isolation from the entire aggregate of conditions and objectives within which it was conducted.

Speaking of the "strategic thinking" of Soviet military leaders, the author of the article discussed cites a statement on the Berlin Operation allegedly made by Gen Gorbatov: "...I am of the opinion that from the military standpoint there was no need to storm Berlin. There were political considerations and rivalry with the allies, of course, and we were eager to exult. The city was adequately ringed, however, and would have surrendered on its own in a week or so...." This is from the purely military standpoint, and one can agree with it. But how would several additional weeks of war have influenced its political outcome in view of the inclination of the leadership of the practically prostrate Germany and the routed Wehrmacht to enter into talks with certain circles of the USA and England and given the political objectives of our allies?

A statement by Gen D. Eisenhower on 7 April 1945 answered this question to some degree: "I would be the first to agree that the war is being conducted for the sake of political objectives, and if the joint staff decides that the efforts of the allies to capture Berlin outweigh purely military considerations in this theater, I will gladly rectify my plans and my thinking so as to carry out such an operation" (G.K. Zhukov, "Vospominaniya i Razmyshleniya" [Recollections and Reflections], Moscow, APN, 1978, Vol. 2, p. 278). This was a frank statement, but it did not tell all.

If we are to assess Soviet military art as a whole, we should acknowledge that the last war was not just "10

Stalin strikes" to which they have attempted to reduce four years of extremely heavy fighting, fierce defeats and brilliant victories.

Lessons should be derived not only from the victories but also—and to a greater extent—from the defeats. The defeats were kept "in the background" for many years, however. They were not talked about. But there was the tragedy of the Southwest Front in September of '41; there was the Kharkov Offensive Operation in May of '42, which ended in the encirclement and rout of two of our armies and Gen Bobnin's group; there was the failed Donbass Offensive Operation in January and February of 1943, and so on. We have to thoroughly analyze the conditions surrounding and the causes of the failures and defeats, because behind each of them lie tens of thousands of needless casualties.

But then there were also dozens of operations worked out, prepared for and successfully conducted which became classic, textbook examples not just of Soviet but of world military art, which ultimately determined the outcome of the war. Furthermore, many of them were conducted in political and military-economic conditions which were not the best. And the brilliant victories were won in them precisely because of mass heroism and extraordinary strategic plans.

The counteroffensive at Moscow in the fall of 1941, which dispelled the myth of the Wehrmacht's invincibility, was conducted against an enemy with an overall superiority in personnel and equipment.

In the counteroffensive at Stalingrad in November 1942 we had a superiority of tanks and artillery, while there was a practical equality of personnel and aircraft. This is how Leo Stern, vice president of the German Academy of Sciences at Berlin, assessed the level of Soviet military art in that operation: "This was a real Cannae, in the sense of morale, for the entire German general staff, that very classical Cannae about which Clausewitz, Moltke and Schlieffen... dreamed."

And was the Manchurian Strategic Offensive Operation, during which imperialist Japan's million-man Kwantung Army was routed in 10 days (9 August-18 August 1945) under extremely difficult physical and geographic conditions, not a model of military talent and skill?

According to the laws of basic logic, at least one of two warring sides must know how to fight. If, according to Shaposhnikov, we were the ones who did not know how to fight, it follows that our enemies knew how to fight and their opinion should have been authoritative. Just how did they assess the level of our military art in the Great Patriotic War? Interesting evidence on the matter is provided by Army Gen S.M. Shtemenko in the first book "Generalnyy shtab v gody voyny" [The General Staff During the War]: "At the Nurnberg trials of Germany's war criminals a lawyer named Gering commented sarcastically that while in prison Field Marshal Paulus read a lecture on strategy at the Soviet Higher Military Academy imeni K.Ye. Voroshilov (which did

not actually take place). Paulus, who attended the meeting as a witness, responded: "Soviet strategy was so far above ours that I could scarcely equal a Russian even for teaching at an NCO school. The best proof of this is the outcome of the battle on the Volga, as a result of which I ended up in prison, and also the fact that all of these gentlemen are sitting here on trial."

This kind of evidence has not become less convincing with the passage of time and does not depend upon the circumstances of the moment.

The truth about the war is our priceless possession, which must be preserved and protected for eternity. I would like to add "and multiplied." That will not happen. There are fewer and fewer participants in and witnesses to the war. We therefore hear their testimony with all the greater interest, testimony which K. Simonov selected with such thoroughness. He selected and recorded that which each of them had seen with his own eyes. This is the truth of witnesses. I am therefore beside myself when certain people try to approach the past with the yardstick of current concepts, to discuss the military aspects of the war while ignoring the fact that their military knowledge has remained at the level of their last (ordinarily, low) military position, at the level of 40 years ago. And they are judging not tactics or even operational art but strategy and even the war as a whole, judging them categorically, simplistically....

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Interview with Maj Gen Semenov on Azeri Servicemen

18310046B Baku KOMMUNIST in Azeri 11 Nov 89 p 3

[Interview with Major General V. V. Semenov, commander of the Order of the Red Banner Army Division: "It Is Not Easy To Be A Soldier". First paragraph is KOMMUNIST editorial introduction.]

[Text] Soldiers of the well known Order of the Red Banner Army Group—formerly the Azerbaijan Mountain Artillery Division—are serving in the Ural Military District [Now the Volga-Ural MD—FBIS]. This division, which was formed in the fall of 1920 from Red Guard units and workers of the 26 Baku Commissars Iron Regiment in Baku, won great renown in past military battles. This unit which was awarded the orders of the Red Banner and Suvorov (2nd degree) took part in the defense of Novorossiysk, the attack on Sapun Mountain, and in the liberation of the Ukraine and the Baltic. The current generation of soldiers considers the combat traditions of its fathers to be sacred and are fulfilling their duty with honor. There are also many Azeri youths among them.

The Azerinform correspondent met with Major General V. V. Semenov, the commander of this famous army unit.

[Interviewer] Valeri Vasilyevich, managing a military collective is not so easy, but managing a multiethnic

collective must be twice as hard. From what we have heard there are no disturbances among soldiers of various nationalities in your group. Is this the result of educational work?

[Semenyov] We are following the complex processes going on in our country closely. Certainly the national question is disturbing the soldiers. The question has sharpened to an unprecedented level in a number of regions, and the fact that we are disturbed by it is not by chance. Representatives of 62 nationalities are serving side by side in our group. Commanders of multiethnic collectives have to know the people's customs, traditions and national character. It is also necessary because certain irresponsible individuals are also trying to ignite the flames of nationalism and set soldiers of one nationality against the others. But such efforts have not discouraged the commanders and political workers. They have begun to pay more attention to conducting individual work with the soldiers. Officers are not avoiding discussions on the national question.

The meetings between soldiers and workers at industrial facilities in Sverdlovsk are helping us a great deal. I would note that many Azeris are living and working in Sverdlovsk. We are glad when representative committees come from the Union Republics, and expect such a committee from Azerbaijan.

[Interviewer] But it is not that conflicts in the national sector, no matter how slight, among soldiers in your group have not occurred...

[Semenyov] Today I was witness to one soldiers giving another a rude response on the parade ground. Such conduct of a soldier to his colleague made me angry. I called them over and said: "Does it have to be this way? You serve in the same place and eat at the same table". They answered: "We were not accustomed to sincere conduct..."

Such rudeness among soldiers begins before military service. This rudeness is ignored in the school, they do not express it in public and sometimes they meet such actions with indifference. From this a kind of protest—rudeness, discourtesy—emerges. Some parents put their hopes in the army: "The army will straighten him out; the army will make him a man." But the army is primarily a school for military expertise and courage; it makes people physically and mentally healthy. Those who think of the army as a corrective labor colony are mistaken. But with this I do not wish to reduce the responsibility of certain officers and NCOs. They have to perfect their manner of communication with the ranks, sometimes in a serious manner.

[Interviewer] Some parents are disturbed that their children cannot bear up under the difficulties of military life.

[Semenyov] One cannot avoid the difficulties. Today I myself stood in knee-deep mud on the parade ground. And why? Because one has to be able to run equipment,

shoot and fulfill many duties under all kinds of conditions. Soon it will be bitter cold and even more difficult. But one has to serve. But if we men cannot endure it, who will?

We are trying to do a lot of work to make the soldiers' service easier. Primarily, we are creating better living conditions. For example, we are installing drying equipment for shoes and clothing after drills; we are trying to organize Lenin rooms so that they will be both agitation areas and places of rest so that time will be spent as profitably as possible.

I wish to make use of the opportunity to speak to the fathers and mothers of Azeri soldiers: we are following the events taking place in the Soviet republics of the Transcaucasus with great interest. Our army unit, which has twice been awarded the Order of the Red Banner is a strong, friendly family which shares joys and difficulties equally. There is no room for national hostility or arbitrary action in our soldiers' collectives. There are no grounds for soldiers of any nationality, especially the Azeris who are distinguished by their good services, to have a poor relationship to their military duties. Our gunners Ogtay Akbarov, Rafiz Ibrahimov, Elshen Yusifyanov and the driver-mechanic Aydyn Talybov and others are worthy of thanks. I express the sincere gratitude of a commanding officer to the fathers and mothers who educated these soldiers.

Today Azerbaijan is going through a difficult period. The processes going on in the republic are disturbing all the peoples of our country. But we are quite sure that the national problems which have accumulated can be resolved peacefully, constitutionally, and in the spirit of perestroika and new political thought.

I am sure that Azeri mothers and the republic's public organizations and military commissariat will send our army group its best sons who are worthy to serve under the banner of Azerbaijan's first mountain artillery division.

On our part, our personnel contingent will make the maximum effort so that the people of Azerbaijan can take pride in our division which was created and perfected by the Baku proletariat.

Lithuanian Supreme Soviet Declaration on Military Service

90UM0172A Vilnius SOVETSKAYA LITVA in Russian
17 Nov 89 p 1

[Unattributed article: "Appeal by Lithuanian SSR Supreme Soviet Presidium"]

[Text] Service by young people from Lithuania in the USSR Armed Forces is today an acute problem of our social and political life. The legal opportunities of perestroika to a substantial degree still do not satisfy the hopes and aspirations of society, the civic activeness of which has greatly increased. The Lithuanian SSR

Supreme Soviet Presidium shares the alarm and concern of the people about the health and lives of youth serving in the USSR Armed Forces, and along with the republic government is taking all possible steps to overcome the difficulties, and calls upon all residents of Lithuania to comprehend and support these efforts.

The Supreme Soviet Presidium intends to concentrate the activity of all state and social forces in Lithuania aimed at solving the problems of military service of young people in the following directions:

- to seek to ensure that the appropriate USSR laws and Armed Forces departmental regulations are changed;
- by improving legislation to increase the independence of the Lithuanian SSR, and create new relationships and understandings with the USSR Armed Forces, which are more favorable for Lithuania;
- to develop state and social institutions for solving the specific problems of military service by youth from Lithuania, and to encourage and support their cooperation.

Questions concerning the military service of youth have been studied in detail in the republic supreme soviet. The commission on matters of military service by republic youth created at the presidium is seeking opportunities to help soldiers who have fallen into a difficult situation solve specific conflicts. Through the concerns of the commission, many soldiers have been transferred to other units, and some have been released early from military service for reasons of health. This year more youth from Lithuania have been sent to serve in the Baltic Military District. The state of health of persons subject to military service obligation is being checked more responsibly, and more rigid requirements on suitability for military service have been established. Matters concerning military service of youth are being discussed in more detail in the press, and on radio and television. Plans are to inform society more widely about accidents and crimes in military units.

However, we all must understand that perestroika of the USSR Armed Forces is a very complex process, associated with the interests of the entire country and international relations. The process of restoring Lithuanian sovereignty does not yet allow us to adopt the functions of state life directly from the union organs.

The duty to serve in the army is defined by the Constitution and the Law on Universal Military Service. A boycott of the callup for military service, or other non-fulfillment of civic obligations, would confuse young people and complicate their lives. It would increase political tension, and impede the achievement of the great goal of restoring Lithuanian sovereignty in a parliamentary way.

While coming out in favor of freedom of conscience and civic actions, for democracy and independence, the Lithuanian SSR Supreme Soviet Presidium at the same time calls upon the youth of Lithuania and their parents to regard with particular responsibility refusal to serve in

the army. We do not yet have the legal capabilities to defend persons who, through their positions and by civil disobedience, have demanded humanization of the laws of military service.

The Lithuanian SSR Supreme Soviet Presidium appeals to all draft age youth, and their mothers, fathers and relatives, to be guided in their actions by good sense and a feeling of responsibility. Conflicts associated with refusal to carry out military service may also cause great difficulties for those youth who are already serving in the army.

Recognizing the importance of the problem, we must all seek to ensure that the youth of the republic are protected against nonregulation relations, and are able to carry out their military service quietly and return home successfully. Every youth, and his parents and family members, can always appeal to the ispolkoms of local soviets, labor collectives, military commissariats, and republic, rayon and city commissions on matters of military service by youth, who will establish permanent ties with those who are serving in the army, and will effectively solve problems and render assistance.*

Solving the problems of military service will continue to be a constant concern of the Lithuanian SSR Supreme Soviet Presidium and the republic government.

So let us be staunch and wise!

* The address of the commission on matters of military service by republic youth at the Lithuanian SSR Supreme Soviet Presidium is: 232008, Vilnyus, Gedimino Prospekt, 53, Reception, Lithuanian SSR Supreme Soviet Presidium, telephone 61-56-72.

'Geneva-49' Anti-Draft Activist Interviewed
90UM0162A Tallinn SOVETSKAYA ESTONIYA
in Russian 1 Dec 89 p 2

[Interview by V. Repetskiy: "Having Taken the Bit Between Their Teeth, Activists of the 'Geneva-49' Movement Are Inciting Some Youths To Break the Law"]

[Text] In various places throughout Tallinn, signs have begun appearing with the following message: "Those who have decided to refuse to serve in the occupation army can turn in their military service card or draft card through the 'Geneva-49' movement during working hours, from 14:00 to 17:00 hours at the following address: 1 Gogol Street, second floor, Tallinn. Telephone 438-390."

I too set off for that address, where I met with movement activist Yuri Liim.

[Repetskiy] To start, I naturally asked him to tell about the movement.

[Liim] It was conceived on October 30 of this year at a republic conference of assistance committees. The initiative committee is made up of representatives of the

Estonian Christian-Democratic Union, the Society for the Preservation of Historical Monuments, the Estonian People's Front, the PNNE [Estonian National Independence Party], the Estonian Greens movement, the Greens Party, the Tallinn Independent People's Patrol, and the Republic Association. In addition to Tallinn, local chapters of the movement have been set up in Virumaa, Pärnu, Tartu, and Harjumaa.

The movement takes its name from the Geneva Convention, which on August 12, 1949, proclaimed in Article 51: "An occupying state does not have the right to compel persons on the territory under its control to serve in its armed forces and auxiliary forces. Any propaganda or pressure aimed at encouraging voluntary enlistment in the army is prohibited."

The USSR signed the aforementioned convention in 1954.

Insofar as the USSR forcibly occupied and annexed the independent and autonomous Estonian Republic in 1940, we consider it our duty to support those Estonian youths who refuse to serve in the Soviet occupation army.

[Repetskiy] And how is this done in practice?

[Liim] A fellow comes to us, most often with his parents or friends, and says that he doesn't want to serve in the army. We take his military service card from him and give him a form to fill out, in triplicate, that declares his refusal to serve and is addressed to the USSR Minister of Defense. We send his military document and one copy to the republic to Military Commissariat, the draftee keeps the second copy as confirmation that he has given his card to us, and we keep the third copy.

[Repetskiy] Does this procedure apply to all who refuse to serve?

[Liim] No, unfortunately. For the time being it applies only to those who are descendants of citizens of the Estonian Republic, which is to say people whose forefathers lived in Estonia prior to 1940.

[Repetskiy] Have many fellows turned their service cards over to you?

[Liim] In Tallinn somewhere in the neighborhood of more than 100 people, and over 300 in the republic as a whole.

After such a matter-of-fact and enlightening beginning, the questions started arising one after another. Since reporting on the movement has yet to appear in the press, I'll try to set forth the course of the rest of our conversation with the utmost precision.

[Repetskiy] Yuri, did you serve in the Soviet Army?

[Liim] Yes, in the 1960s.

[Repetskiy] I don't rule out the possibility that you may have forgotten this, but as soon as you take a military

service card into your hands, it shouldn't be very hard at all to remember the regulations regarding what can be done with it...

[Liim] What are you referring to?

[Repetskiy] To the place on it where it says that a military service card can be signed over only to the staff of a military unit or civilian basic military training facility, or to a military commissariat, a military registration desk, a judicial-investigative agency, or a housing administration—for purposes, naturally, of registering one's residence or departure. There is no mention whatsoever of any public organization. So why are you inciting fellows to break the law and assuming functions that you are in no way authorized to perform?

[Liim] But we only take their military service cards temporarily, then we forward them to the military commissariat.

[Repetskiy] However, neither you nor the draftee has the right to do that. Why this deliberate violation of procedure? If a draftee decides to refuse to serve, let him go the military commissariat and take care of the matter himself.

[Liim] No. He needs to be aware of our support, he needs to know that the people are on his side.

[Repetskiy] To what do fellows most often attribute their refusal to serve?

[Liim] First, the state of affairs in the army. After all, you know that the army has fully discredited itself. Parents tell us outright that they will hide their sons just to save them from service.

Second, we would not object to service if the Ministry of Defense were to take Estonia's interests into account. Why does our little republic need so many soldiers? Let them withdraw the missiles and tanks, and most importantly, let Estonian fellows serve in their own republic as border guards, militiamen, firefighters, and customs officers. If you look at the situation closely, all our economic troubles stem from the army. It's a compulsive hoarder. According to my information, the arsenals still hold weapons from czarist times. This means warehouses, lubricants, security guards. Who needs all that?

Recently General Pyder said in an article in the newspaper that our fellows are drafted into the rocket forces and air force... Why do we need all that? These military specialties are not essential to Estonia's needs.

And in general I think that the army should be voluntary and professional. And Estonian guys should serve either in their own republic or in the Baltic region. They are needed more here.

[Repetskiy] In that same interview with Gen R. Pyder, it says that a considerable number of draftees from Estonia already serve in the Baltic Military District.

[Liim] Incidentally, he called me recently. He told me to stop doing what I'm doing, that 25 percent of our draftees already serve here. But 25 percent is not enough for us. We need all 100 percent. And that's what we're going to fight for.

[Repetskiy] Still, aren't you concerned about the fate of the fellows who turn them military service cards over to you? After all, just recently Estonian SSR Deputy Procurator Yu. Kazesalu gave some explanations in the press. Among other things, he recalled that evasion of military duty is punishable under Article 78 of the Estonian SSR Criminal Code. Who is going to answer for a youth's fate if, under existing laws, he is prosecuted and convicted?

[Liim] First of all, they won't dare convict him. A fellow from Vyra was given a one and one-half year suspended sentence, and during this time our government is supposed to enact new laws on military service.

[Repetskiy] So in your view, the court didn't punish the conscript but gave republic authorities a time frame in which to change the legislation.

[Liim] Of course. We use pressure on the authorities. Otherwise, you can't accomplish anything. Look for yourself at how many laws have been enacted in the past three years because the people wanted it. The same thing will happen where army service is concerned.

[Repetskiy] Time will tell. But these youths' fates are being decided today, right now. Does it not seem to you that you are playing with their fates?

[Liim] They, their parents, and we take this action deliberately. You see, we have stepped up our activities specifically in order to bring about more instances of refusal. The logic here is simple: If an instance is isolated, they could jail the fellow; but if there are hundreds—and we hope that there will soon be thousands of refusals—they will not jail the guys. The people won't let them.

[Repetskiy] Tell me, have you distributed many of your announcements giving the 'Geneva-49' movement's address?

[Liim] Not very many in the city. Not many at all... It may be that we haven't even posted a single one...

[Repetskiy] But you have made copies of it and pass them out to draftees; it can't be ruled out that they distribute them. Don't you think that these are the kinds of actions Yu. Kazesalu had in mind when he warned that the activities of persons who seek to persuade draftees to evade military service are also punishable? Under criminal law, such persons are instigators of a crime and are liable not only for arousing criminal intent in the draftee, but also for intensifying that intent, which then induces the draftee to evade military service in a given instance.

[Liim] I know all that. But we didn't adopt those laws, and we are demanding that the Estonian SSR Supreme

Soviet immediately repeal Article 78 of the Estonian SSR Criminal Code. This was also declared at the recent annual meeting of the STK(E) [Union of Labor Collectives (of Estonia)].

[Repetskiy] I would like to cite the experience of our neighbors, the Latvians. They—like everybody in the Union, incidentally—are looking for ways to improve the way in which compulsory service is carried out in the ranks of the armed forces. The Latvian SSR Supreme Soviet recently adopted a special resolution that, after offering specific proposals, ends with the words: "The Latvian SSR Supreme Soviet believes that ill-considered actions by citizens and attempts to return or destroy military registration documents and to boycott the draft for active military service are unconstitutional and impede efforts to improve legislation on military service."

"The USSR Armed Forces are carrying out their constitutional duty to protect the state, and therefore attempts to discredit them in the eyes of the public and any actions that do harm to the Soviet Army are inadmissible."

The document is signed by A. Gorbunov, Chairman of the Latvian SSR Supreme Soviet, and by I. Daudish, Secretary of the Latvian SSR Supreme Soviet Presidium.

Perhaps we should heed our neighbor's call.

[Liim] we have our own specific conditions. We will pursue our cause to the end.

[Repetskiy] Intentionally or not, you are confusing a public organization with a state agency with striking persistence. Any public organization can only announce [vynosit] political decisions; legal relations, on the other hand, arise only with state agencies and organizations.

[Liim] That is not indisputable, as it seems to me that you in turn underestimate the power of a popular movement. It will achieve its objectives without fail.

[Repetskiy] Even at the cost of the fate of youths who are still weak both intellectually and physically?

[Liim] Yes. I see no other way.

Col Gen Kostenko on Minority Units, Conversion, Career

*90UM0223A Minsk SOVETSKAYA BELORUSSIYA
in Russian 10 Dec 89 p 2*

[Interview with Belorussian MD Commander Col Gen Anatoliy Ivanovich Kostenko by SOVETSKAYA BELORUSSIYA Correspondent A. Lemeshenok, date and place not specified, under rubric "At Your Request": "Not Doing One's Duty Is Even More Agonizing"]

[Excerpts]

[Lemeshenok] Anatoliy Ivanovich, the latest call-up for military service recently concluded. What would you advise the new recruits who augmented military collectives in these days?

[Kostenko] Above all I congratulate the replacements. I understand their mood and feelings. Even for a young man it is no simple matter to change the customary tenor of life abruptly, but the majority of men have taken this path and coped with it worthily.

[Lemeshenok] One hears demands that the republic's own military formations be established on its territory. Is such a phenomenon realistic?

[Kostenko] To a certain extent I already answered this question. I consider the establishment of such formations illegal. We already had them at the dawn of Soviet power and they historically outlived themselves, above all from a military standpoint.

As a commanding general I can excellently imagine the extent to which command and control of a small or large unit would be complicated where the spirit of national exclusiveness and isolation always would soar whether we like it or not. No matter what mission would be assigned to such a team, it always would be evaluated from the standpoint of ethnic privileges or ethnic infringements.

As a People's Deputy I know how burdensome this practice will be for the republic budget.

[Lemeshenok] Much is now being said about conversion. Does this concern the Belorussian Military District? Is a district contribution to the republic's economy planned?

[Kostenko] Defense enterprises are not part of the district structure. Questions involving conversion are decided centrally in the appropriate ministries. But we do what we can to help the republic's economy. This year we transferred more than four million rubles worth of equipment, basically excavators, bulldozers, scrapers and vehicles, via Gossnab BSSR.

Four battalions are working in 500 populated points subjected to radioactive contamination as a result of the accident at the Chernobyl Atomic Electric Power Station.

Our subunits are involved in resolving problems on rail transportation. Prompt unloading of railcars by military personnel in the cities of Brest and Grodno enables the state to avoid losses amounting to tens of thousands of rubles.

District military construction personnel were first to build three 48-unit apartment houses in Armenia.

We take in the harvest, build roads, and assign transportation to enterprises and kolkhozes. Sometimes people reproach us for this, saying it is not becoming of us military to harvest potatoes; we should be concerned about national security. By the way, this does not keep these same people and the mass media from coming around from the opposite side as well: allegedly working hands are more needed in the national economy than in the Army, and even without this the Army spends too much on food.

Well, until the economic mechanism has been adjusted, we have to lend a hand where it would be possible to get by even without the military. But we also cannot be indifferent to the country's needs; this is not in the traditions of our Army.

[Lemeshenok] The question of the "Afghans" [Soviet Veterans of the War] is a sore one to this day. How are relations with them shaping up?

[Kostenko] At the present time over 16,000 soldier-internationalists are living on the republic's territory, and 436 of them are invalids, i.e., people who especially need help. Such help is given through channels of the USSR Ministry of Defense and the Ministry of Social Security. All who were wounded or mutilated in Afghanistan have been given pensions, 279 persons are working, 55 are studying, 409 have been provided housing, 92 have been given automobiles, 213 have had telephones installed and 124 have been granted preferential travel authorizations to sanatoriums.

There is a total of 2,497 Afghanistan veterans in a preferential sequence and each year 623 sanatorium travel authorizations are assigned for their treatment, not counting invalids. The figures are not small if we bear in mind the shortage of all benefits being granted and the overall social tension.

Such problems now are being resolved enormously faster and more productively than a year or two ago. The coordination of efforts of party and soviet entities and republic military commissariats in fulfilling the USSR Council of Ministers Decree dated 9 August 1988 is having an effect.

Recently a CPSU Central Committee and district staff commission studied this question in Grodno Oblast. Commission members concluded that the soldier-internationalists and families of deceased soldiers are surrounded by attention and concern here, especially in rural areas, where all those in need have been provided housing, fuel for the winter, and repair services.

We are far from considering the problem closed. We have only begun to take it up in earnest. Assistance to Afghanistan veterans will be increased.

[Lemeshenok] Are there instances of corruption and abuse of office in the district?

[Kostenko] I know of no precedent for bribery of officials in the district. There are instances of abuse of office. Criminal cases, which are approximately up to two percent of the total number of infractions, have been brought by the district procuracy based on these facts. Most often this consists of officers and warrant officers exceeding authority, and more rarely embezzlement.

[Lemeshenok] Tell me a little about yourself. How did you become a military man? A district commander?

[Kostenko] I was born in Krasnodar Kray. I lost my father, a T-34 driver, in 1944, when he died in the Balaton defensive operation.

Mother and I received the official notice and then after the war we traveled to Kaliningrad Oblast.

I tried to enter the Kiev Suvorov School twice as a lad. Out of despair I wrote a letter to then Minister of Defense Bulganin. I do not know whether or not it reached him, but I was enrolled in 1951.

Later I studied in the Odessa Combined-Arms School. My wife completed the philological faculty of Odessa University. Since then she has followed me like a thread follows a needle—to the GDR, to Belorussia, to the Kuriles, to Primorye and again to Belorussia.

I went through all positions from platoon commander to district commander.

[Lemeshenok] Do you believe you were lucky in service?

[Kostenko] How can I say this? Everything happened. I remember I wanted to leave school during the well-known 1.2 million man reduction in the Armed Forces, but my comrades and commanders talked me out of it.

As is customarily said, I went evenly up the career ladder, but such straightforwardness cost a great deal. My children (I have two sons, Vasiliy and Zhenya) changed schools eight times and my wife had to quit her job and break away from long-occupied places even more times.

We lived in communal apartments a great deal. I remember we would dine according to schedule in a kitchen for 12 families.

I did not chase after positions. When they were offered I did not refuse or try to gain anything; I dropped everything and traveled to where I was ordered.

Of course, you do not build a career on luck alone, but no luck is also bad.

[Lemeshenok] As they now write, it is not easy to be young and a lessee, but is it easy to be a district commander?

[Kostenko] It is difficult. I always worked this way: you go to work early in the morning and you return late in the evening. I thought I was used to being overworked, but it turned out even that habit is not enough.

The district is complicated both as a military structure and as one of the oldest in the Armed Forces, and it has strong, significant traditions. Here one cannot be below the demands which all previous district leaders met to the full extent. It is necessary to work on oneself both from a professional standpoint and in the sense of improving one's personal traits.

[Lemeshenok] Is there time left for hobbies and other passions, reading, sports?

[Kostenko] It is an old rule: the more loaded down a person is, the more rigidly he builds his routine and the more he succeeds.

I also try to succeed. I prefer literature containing information—documentary and historical literature. I take pleasure in reading Ch. Aytmatov, novels by A. Rybakov and A. Pristavkin, and poetry by Yu. Drunina and R. Gamzatov.

I have had a long-standing affection for the theater. In Moscow I managed to hear the La Scala performances. This was great good fortune and a holiday. I value the successes of Minsk's theatrical collectives.

I used to play basketball, volleyball and tennis, but now I do not even take up a racket very often; I am just maintaining my form.

[Lemeshenok] Thank you for the interview.

Statement on Jurisdiction Over Crimes in Clashes in Azerbaijan

90UM0229C Moscow *RABOCHAYA TRIBUNA*
in Russian 17 Jan 90 p 4

[Article by N. Panyukov: "The Military Procurator's Position"]

[Text] The editor's office has been receiving many telephone queries in connection with the situation in Azerbaijan and Armenia.

In particular, readers are interested in the position of the Main Military Procuracy in regard to so-called "boyeviki" operating in Armenia and Azerbaijan. Someone is arming and financing them, and they are shooting at soldiers and officers rising to the defense of citizens and safeguarding public order and security. What does the Main Military Procurator think in this regard?

Our correspondent turned to Deputy Main Military Procurator, Major General of Justice V. Vasilyev with these questions. Here is his reply:

"In cases where servicemen find themselves in the role of victims, criminal proceedings are initiated by local law enforcement organs. As far as I know, the procurator's offices of Armenia and Azerbaijan are conducting investigations in regard to certain cases, but far from all. Many of them are ignored, unfortunately, or even covered up. For example criminal proceedings have not been initiated even in regard to as scandalous a case as the four tanks that were stolen from a rail flatcar.

"Organs of the military procuracy join an investigation only in cases where servicemen are known to be involved in illegal actions. Unfortunately, such cases do arise as well. For example criminal proceedings were initiated against a company commander who was unable to adequately organize protection of the subunit's armament, as a result of which it was appropriated by a bandit grouping."

Reader on Need for 'Renewal' of Military-Political Organizations

90UM0229A Moscow *KRASNAYA ZVEZDA* in Russian
18 Jan 90 First Edition p 2

[Article by Capt 3d Rank S. Ivashchenko, ship deputy commander for political affairs: "Discussion Is Needed"]

[Text] I would like to share some ideas concerning problems touched upon by Lieutenant Colonel I. Glebov in the article "Speaking as an Apparatchik" (*KRASNAYA ZVEZDA*, 3 October 1989). I feel that the issues he raised are more crucial in real life than was reflected in the newspaper.

The present system of party and political structures in the army and navy needs improvement. That's the first thing. Second, from my point of view, attempting to make a political organ answerable to a party conference is not always effective. I may be mistaken, but a party conference does not have the right to elect a new leader to a political organ that has dropped the ball. And if communists do give such a leader a failing grade, this would be more like a complaint to higher organs: This comrade has been unable to do the job, they would be saying, so replace him. And then the corresponding organ would have to determine whether to replace him, or leave him in office.

It seems to me that during the current preparations for the 28th Congress, it is very important to begin a collective search for ways to deepen democratization and interactions of political organs with party committees, bureaus and organizations right now. What is the fastest way to renew the present system of party leadership in the army and navy, which has been called upon to vigorously move perestroika forward? How do we bring party life up-to-date, so that it would become more open, more human? There is very little time left before the 28th CPSU Congress. I think that the time for opening up partywide discussion is now.

Letter Opposes Elimination of Military-Political Organizations

90UM0229B Moscow *KRASNAYA ZVEZDA* in Russian
18 Jan 90 First Edition p 2

[Article by Lt Col V. Koltsov: "Falling Into Extremes Once Again"]

[Text] Appeals for abolishing political organs and the institution of unit and subunit deputy commanders for political affairs have recently been heard with increasing frequency. Such proposals are offered up as an "effective" means of finding money that is so highly needed by the country. Frankly speaking, the arguments are intended to appeal to simpletons. I see far more behind such statements than concern for the contents of the state's pocketbook. Their ulterior purpose is to try to undermine the authority of those who are on the forward edge in the struggle for perestroika in the troops today,

to dismantle party-political work, and thus to ideologically disarm our personnel. Why would someone want to do this? Perhaps so that they could later sing in harmony with the group Aquarius: "Colonel Vasin, lead your youngsters home..."?

Once again we are falling into extremes, swinging from one pole to the other. As before, we are not learning from either the mistakes of others or our own mistakes. What kind of blinders do you have to wear in order not to see the obvious, that all civilized armies maintain a corps of officer-indoctrinators, psychologists, chaplains and lawyers? And this is understandable—the struggle for the mind and the heart is increasing in pitch. And yet you can hear some of our "wisemen" saying that we don't need them, that we can do without them. But who is better able to carry out the tasks of teaching the principles of political culture to soldiers, instilling discipline, a sense of patriotism and pride for the country and its armed forces in them, and finally, showing concern for the personnel's leisure time than political workers?

I firmly believe that we have a very great need for commissars. And I mean right now, now that perestroika has entered such an intensive phase.

Joint Civil-Military Dependent Evacuation Effort

90UM0263A Moscow KRASNAYA ZVEZDA in Russian
27 Jan 90 First Edition p 6

[Article by Lt Col G. Starykh, senior instructor, Political Directorate, Air Forces: "Aerial Bridge in Operation"]

[Text] It was not long ago that this airfield was little known, even to those within the confines of the Apsheron Peninsula, with the possible exception of military transport pilots, who would from time to time take off and land here. More recently, however, it has become known to many. The command authorities decided to make this an evacuation area, as of 20 January 1990, for dependents of personnel serving in the Soviet Army, Caspian Flotilla, MVD, KGB, and construction railroad, and border troops.

The aerial bridge, which has its origin in the Transcaucasus, extends to Moscow, Kiev, Rostov-on-Don, Tashkent, Sevastopol, and other cities of the country. Thanks to the energetic efforts of pilots of Military Transport Aviation, the Air Forces, and Ministry of Civil Aviation, in the period from 20 to 25 January more than 13,000 evacuees were flown from this airfield alone. By 25 January, more than 16,000 persons were evacuated from the Transcaucasus by means of MTA aircraft alone.

Credit is due the fliers for their selfless and meritorious labor; it is they who have shouldered most of the burden of evacuating women and children. They spend hours in the air, in acceptance of the responsibility for the lives of hundreds of persons, hurrying to their assistance day and night. Of the many crews carrying out their military

duty, mention must be made of transport aircraft commanders N. Bakhanov, A. Ryzhakov, S. Savelkov, N. Kozhin, I. Didenko, M. Ruchev, and G. Mikheyev. There are others.

Also carrying a heavy burden are helicopter personnel. In these days they transported more than 2,000 military dependents from cities and posts in the Transcaucasus. Crews headed by Lieutenant Colonel S. Pustoval and Major B. Damdinov completed more than 150 transport missions in one day. Flight Commander Major S. Markov picked up people from the very edge of the sea, to where they had been forced by a disorderly mob. Crews commanded by Lieutenant Colonel V. Bogomaz, Major N. Blokhov and Major S. Kopelev landed their craft under difficult meteorological conditions on unimproved landing areas, where they were awaited by military dependents.

Armed Forces Communications Chief on Situation in Caucasus

90UM0263C Moscow KRASNAYA ZVEZDA
in Russian 28 Jan 90 First Edition p 1

[Interview with Col Gen K. Kobets, Deputy Chief of USSR Armed Forces General Staff, by KRASNAYA ZVEZDA special correspondent Lt Col B. Kaushanskiy; date and place not given; first three paragraphs are KRASNAYA ZVEZDA introduction]

[Text] Presented below are responses to questions put by our special correspondent to Colonel General K. Kobets, USSR Armed Forces Communications Chief, deputy chief of the General Staff, and candidate for RSFSR people's deputy.

First a few words about what occurred before this interview. One of the many problems caused by the events transpiring in Baku is the absence of communications, mainly postal service. At the present time in the city one cannot send a telegram, receive a money order, or contact relatives by telephone. The automatic telephone exchange is enormously overburdened.

These are the extreme circumstances under which an effort was initiated to restore a working communications system in the republic. The idea, proposed by Colonel General K. Kobets, doctor of military sciences, was considered and approved by the republic Ministry of Communications. That is where the interview was held.

[KRASNAYA ZVEZDA] Konstantin Ivanovich, let us start with your assessment of the communications situation in the republic and why you were moved to take action.

[Kobets] I can start off by citing the human factor. Is it a normal situation when a mother does not know the whereabouts of her son for a long time, and a man cannot locate his brother for a week?

There are other kinds of factors, however. Absence of communications paralyzes an economy. Even for us—

military people—the loss is substantial. We cannot for a single minute permit interruption in troop control, maintaining a state of readiness, and providing air communications. All this taken together triggered humane and extremely necessary action.

[KRASNAYA ZVEZDA] How do you plan to implement this idea, actually concept, of restoring the communications system?

[Kobets] Communications headquarters will be set up in the next few days in areas that are economically important to the republic. By that I mean that our best specialists will take to the field and use their equipment to organize a joint effort with local communications personnel. The benefits will be reaped by the people and economic interests. The result will be a reliable redundant system that will be capable of withstanding both natural calamities and raging passions.

[KRASNAYA ZVEZDA] Do you intend to coordinate the work personally?

[Kobets] Yes. Working jointly with the republic minister of communications. For some time we will labor shoulder to shoulder.

[KRASNAYA ZVEZDA] Incidentally, Konstantin Ivanovich, while you and the Azerbaijani comrades are working on urgent tasks, proceeding full force in the “rear” is your pre-election campaign in which you, for obvious reasons, are unable to participate. Are you not disturbed by the lack of personal contact with your constituents and the associated results of the pre-election struggle?

[Kobets] Well, that is a question that is close to my heart. All I can do is apologize through the medium of KRASNAYA ZVEZDA for my absence on 27 January at the meeting that was scheduled with my constituents of Chekhov Electoral District No 100.

FROM THE EDITORS: As of 26 January, communications troops were able to provide protection for the republic's most important communications sites, organize communications headquarters, and install redundant networks and routes. Repair work has been initiated wherever necessary.

Obituary: Gen Army P.A. Kurochkin

90UM0210B Moscow KRASNAYA ZVEZDA in Russian 3 Jan 90 First Edition p 3

[Obituary: "General of the Army Pavel Alekseyevich Kurochkin".]

[Text] General of the Army Pavel Alekseyevich Kurochkin, prominent Soviet military leader, active participant in the Civil and Great Patriotic Wars, laureate of the Lenin Prize, and Hero of the Soviet Union, died after a serious and prolonged illness. A true son of the Soviet people has died who devoted all of his conscious life to selfless service to the Socialist Fatherland and to the cause of the Communist Party whose ranks he joined in 1920.

P.A. Kurochkin was born on 19 November 1900 to a peasant family in the village of Gornevo in Smolensk Oblast. He worked as an assistant locksmith in Petrograd from his youth. During the days of the Great October Socialist Revolution, he stormed the Winter Palace in the ranks of the Red Guards. In 1918, he voluntarily entered the Red Army. He participated in engagements against counterrevolutionaries near Gatchina and with the interventionists in the North, defended Petrograd from Yudenich's troops, and fought the White Poles on the Western Front.

After the Civil War, P.A. Kurochkin became commander of a regimental school, commander of a cavalry brigade and a division, chief of staff of a cavalry corps, and commander of an army and the Baykal Military District. In 1932, he graduated from the Military Academy imeni M.V. Frunze and, in 1940, he graduated from the Military Academy of the General Staff of the Armed Forces of the USSR.

A vivid page in P.A. Kurochkin's biography was his active participation in the Great Patriotic War. Being in an active army from the beginning to the end of the war, he commanded armies and was commander of troops of the Northwestern and 2nd Belorussian Fronts. He participated in preparations for and conduct of the Korsun-Shevchenovskiy, Lvov-Sandomir, Vistula-Oder, Moravska-Ostrava, and Paris operations.

During the post war period, P.A. Kurochkin commanded the forces of the Kuban Military District, was deputy commander in chief of Soviet forces and commander in chief of the Soviet Military Administration in Germany, and aide to the commander of Far Eastern Forces. Since 1951, he was deputy commander of the Military Academy of the General Staff, and afterward headed the Military Academy imeni M.V. Frunze for 14 years.

In all entrusted sectors, P.A. Kurochkin manifested exceptional industriousness, high competence, and a principled approach in accomplishing assigned missions.

The Communist Party and Soviet government highly valued the services of P.A. Kurochkin. He was awarded

the rank of Hero of the Soviet Union, was decorated the Order of Lenin six times, the Order of the October Revolution, the Order of Suvorov First Degree, the Order of Kutuzov First Degree twice, the Order of the Patriotic War First Degree, "For Service to the Fatherland in the USSR Armed Forces" Third Degree, and many medals.

The blessed memory of Pavel Alekseyevich Kurochkin, true son of the Communist Party and the Soviet people, will be forever preserved in our hearts.

[Signed] M.S. Gorbachev, V.I. Vorotnikov, L.N. Zaykov, V.A. Ivashko, V.A. Kryuchkov, Ye.K. Ligachev, Yu.D. Maslyukov, V.A. Medvedev, N.I. Ryzhkov, N.N. Slyunkov, E.A. Shevardnadze, A.N. Yakovlev, A.P. Biryukova, A.V. Vlasov, A.I. Lyukyanov, Ye.M. Primakov, B.K. Pugo, G.P. Razumovskiy, D.T. Yazov, O.D. Baklanov, M.A. Moiseyev, P.G. Lushev, K.A. Kochetov, A.D. Lizichev, A.S. Pavlov, Yu.P. Maksimov, V.I. Varennikov, I.M. Tretyak, A.N. Yefimov, V.N. Chernavin, M.I. Sorokin, V.M. Arkhipov, V.M. Shabanov, N.V. Chekov, V.L. Govorov, D.S. Sukhorukov, Yu.A. Yashin, S.F. Akhromeyev, V.G. Kulikov, S.K. Kurkotkin, N.V. Ogarkov, V.I. Petrov, S.L. Sokolov, I.G. Pavlovskiy, I.N. Shkadov, and V.N. Konchits.

From the commission organizing the funeral of General of the Army P.A. Kurochkin

The coffin with the body of General of the Army P.A. Kurochkin will be placed in the Central Museum of the Armed Forces of the USSR (2 Soviet Army Street).

It will be open from 11:00 until 12:30 on 3 January 1990 to pay respects to the deceased. The funeral will take place at Novodevichy Cemetery on 3 January.

TEKNIKA I VOORUZHENIYE: 1989 Index of Articles

90UM0242A Moscow TEKNIKA I VOORUZHENIYE in Russian No 12, Dec 89 pp 40-42

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Opening Day Coverage of All-Army Officers' Conference

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[Report by Col G. Miranovich, Lieutenant-Colonel Yu. Vladykin, Lieutenant-Colonel I. Yesyutin, Captain 3rd Rank Yu. Gladkevich and Maj S. Kusher, special KRASNAYA ZVEZDA correspondents, under the rubric "The All-Army Officers' Conference": "The Times Demand New Approaches"]

[Text] The All-Army Officers' Conference ended in December.

Speeches by the participants continued on the second day. At the end of the discussion General of the Army D.T. Yazov, Candidate Member of the Politburo of the CPSU Central Committee and USSR Minister of Defense, summed up the forum. Speaking of the significance of the conference, the minister of defense stressed the fact that it had given new impetus to the process of consolidating and enhancing the political and service activeness of the officer corps, to the restoration of the noble concepts of dignity and honor and their establishment as a standard for the officer's daily functioning. This will unquestionably contribute to the resolution of urgent problems of combat readiness and combat training, to the strengthening of military discipline, to an overall enhancement of the makeup of the Armed Forces and a strengthening of its prestige.

O.D. Baklanov, Secretary of the CPSU Central Committee, took part on the second day of the conference.

Participants in the All-Army Officers' Conference approved an Appeal to Officers of the Armed Forces of the USSR.

Today we are covering speeches delivered from the speaker's platform on the first day of the conference. A report on the second day and the text of the appeal will be published in tomorrow's issue.

The floor was turned over to Captain N. Zherelin, a company commander.

Despite all our arguing, he said, in my opinion we shall achieve a professional army—more precisely, an army of professionals. The officer cadres already provide the foundation for such an army. We do not need a mercenary army. A mercenary army is a clear sign of the society's deterioration. We do need an army of professionals, however.

From our discussion of these matters we comrades arrived at the conclusion that we do not need enormous additional funds, that we are capable of resolving this problem with our available personnel and equipment. Now for what we believe is specifically needed. The first thing is to alter the organization and establishment of the units and subunits. We are passing on suggestions from the Far East fightingmen to the conference secretariat. The second thing we need to do is to alter the officer training system at VUZs. We have isolated the theory from real daily army life. In the third place, we need to be permitted to engage in the scheduled combat and political training for the personnel strictly in accordance with our direct purpose, to be relieved of superfluous paperwork and the calculation of nonexistent percentages and to use our experience in conducting combat operations in the Republic of Afghanistan not just on paper but in the actual work. In the fourth place, the unit and formation commanders need to be given real independence in the resolution of all matters pertaining to our life and work instead of tormenting them with constant and sometimes unneeded instructions from above. In the fifth place, the higher agencies should not merely monitor but should provide effective on-site assistance—not in the form of orders, as is presently the case, but with action. The sixth point is that the final tests should not be on the training subjects but on the performance and accomplishment of combat training missions in accordance with our direct purpose, in full and at actual facilities when possible. And they should evaluate the main thing: whether or not the unit is combat-ready. This criterion will make it possible to avoid chasing after scores. The seventh thing is that we need to be emancipated and be assured that the time for glasnost and openness without punishment has arrived.

I have not been an officer very long, Captain M. Seleznev said. I graduated from military school in 1985. I already knew that I was lucky, though. In the first place, I was serving in the Strategic Missile Troops, which are a real force for restraining imperialism's aggressive aspirations. In the second place, my career as an officer began during the first year of the restructuring, when it had become clear that large changes were in store for both society and the army.

The kind of people he encounters on the way and the group which surrounds him are very important for any person arriving in a new and unaccustomed situation. Very frequently this determines the individual's entire subsequent life. We therefore consider the development of healthy collectives and the shaping of comradely, humane and respectful relations among their members to be one of the main issues in the army's restructuring. These problems—problems of relations between superiors and junior personnel, OICs and subordinates—have frequently been raised in our officers' assemblies. Many people have expressed the idea that we need to develop a code of honor for the Soviet officer. We feel that such a code—figuratively speaking, an officer's oath—should be an integral part of the initiation ceremony for officers graduating from military schools.

One other thing: the matter of altering the organization and establishment. There is obviously a need for the General Staff and the Main Staff of the Missile Forces to confer more extensively with us, the commanders and officers of the groups, battalions and regiments, on the development of the new T/Os. As commander of a preparation and launch group I can say with confidence that the officers and warrant officers in groups such as ours are even now prepared to begin operating the equipment and maintaining it in a state of readiness without enlisted men, which would make it possible to use them in other places. Furthermore, this would enable us to devote more time to our personnel training and to improve ourselves both professionally and culturally.

Writer K. Rash attended the conference. The army has not experienced a single hour of stagnation, he said. We must not tar our entire society with this brush. The moral restructuring must be led by those members of society who adhere to the concept of honor and have not known stagnation.

In order to understand the essence of the officers' Conference we have to return to past history. Every people has its own orientation in history and has made a small contribution to history. The Germans are considered to have entered the historical arena with the concept of knighthood and honor; the Americans, with the concept of pragmatism. All of our Soviet ethics are based on a legacy of honor which has continued through the centuries and which is now being inherited by the better part of the officer corps. Russia and the Russian people have given the world the concept of a feat—not a burst of instantaneous action but a feat extending a lifetime, which is known as heroic devotion. The Russian army was always the bearer of this devotion in Rus. The officer corps is imbued with this concept. This Russian heroic devotion has given the world Russian military comradeship, which does not exist in any other army in the world.

Chernobyl, Karabakh and other events have demonstrated our army's noble nature. Military men died even in peacetime. The Russian people have always been the freest and most democratic, despite assertions to the

contrary. The popular Conference has existed in the towns and villages, and the army has had its Conference.

The speaker went on to offer a number of suggestions: the establishment of officers' assemblies for sections and troop arms; the erection of a memorial to G.K. Zhukov on Manezhnaya Square in Moscow; publication of the documents on the investigation into the Tbilisi matter.

Those officers serving as people's deputies should demand the establishment of commissions for each republic to calculate how much each republic owes Russia. Let every republic settle its bill and then leave the Union. The press must also be used for "firing back," since the army is under intense fire from the entire press, but *Sovetskiy Voin* and *Krasnaya Zvezda*, the most intimidated publications in the Soviet Union, are not yet able to do this. Other suggestions were also submitted.

Senior Lieutenant D. Nefedov, a battery commander in the missile and artillery section on the escort vessel *Gordelivyy*, devoted his address to questions pertaining to the officers' Conference's influence on the quality of the combat training and the ensuring of a high level of combat readiness for the units and ships. We frequently reduce the combat training, he said, to the performance of individual exercises. We do not have the capability for a comprehensive approach. The technical condition of certain ships is extremely sorry, periods between repairs are extended two or even more times and the repairs themselves are dragged out to 2-3 years instead of 5-6 months. During that time the personnel completely lose their skills in maintaining the equipment.

Unfortunately, the new equipment received by the navy frequently is not adequately reliable, not to speak of its endurance in combat. This is due to the total monopoly of the military industry and the impossibility of placing orders where they will be best filled.

Speaking of combat readiness, the speaker continued, we invariably encounter questions pertaining to the people who are supposed to maintain it. Everyone knows that the level of training of the seamen, petty officers and warrant officers, and frequently the officers themselves, leaves something to be desired. The existing system of training detachments has not justified itself in most cases, there are no training centers in the navy and the combat equipment has to be used for the training. This leads to premature wear and tear.

The officers also lack moral and material incentive. Legislative enactments pertaining to the Armed Forces are passed without extensive discussion by the officer community and the entire Soviet people. And we need to know what kind of Armed Forces the nation wants and what the Soviet people are prepared and able to give them. Only this knowledge will make it possible to work out a well-conceived concept for the organizational development of the Armed Forces. We are now forced to take funds away from strategic defense programs for resolving our social problems. With this approach we

shall never achieve the needed level of defense capability. The navy does not have enough developed wharfing facilities and the latest ships are anchored in the roadstead, using up their engine life, and the money needed for building new piers has to be spent on housing.

In his speech, Colonel G. Gershkovich, chief of the scientific research department at the Irkutsk Higher Military Air Engineering School, stressed the fact that the USSR Supreme Soviet's decision to discharge students into the reserve was actually a deviation from the principle proclaimed in the Constitution of the USSR that protecting the homeland is the sacred duty of every Soviet citizen. This has resulted in a discrepancy between the army's need for highly intellectual personnel to service the extremely complex weapon systems and the actual intellectual level of the personnel.

In the speaker's opinion, it is not possible to switch to qualitative parameters for military organizational development without eliminating discrepancies between the great importance of the jobs performed by the regular officers and the exceptionally low level of payment for their difficult military labor. The limit has been reached for the state's exploitation of the officer's lofty moral choice of making the homeland's protection his career. Funds have to be found within the next 2 to 3 years for eliminating the large gap between the standard of living for officers' wives at remote garrisons and "sites" and the level at prestigious western garrisons, particularly in the capitals. So long as the "difference in potentials" has not been eliminated a number of officers will continue to strive for a transfer from the east to the west and the more "resourceful" part of the officer corps will try to remain in the capitals. We suggest rating all garrisons according to the degree of difficulty of climatic and geographic, material, cultural and other conditions and establishing a corresponding factor for increasing rates of pay at each garrison.

A large number of internal problems have accumulated in the army. We believe that the matter can be resolved by establishing a new social structure, an officers' union, within the Armed Forces, which would not only protect our social rights but also place at the service of the army and navy that entire, extremely rich intellectual potential which our officer corps has accumulated.

The relatively good tactical and technical features of the air, missile and naval combat systems, the speaker went on to say, are incompatible with their poor operation. Our scientific, engineering and technical cadres must eliminate this inconsistency. The most important scientific and technical problems have gone without resolution for decades, however. Only 5% of the army and navy engineer personnel take part in invention work, and only 20% of the personnel in rationalization work. Only 3% to 10% of the proposals worked out by our innovators are extensively adopted at that.

Finally, the most important aspect of the matter of strengthening the prestige of the army and navy:

restoring the former significance of the concept of an officer's honor. This requires making the military school more humane and establishing departments of world culture, ethics and esthetics at the VUZs; working out the officer's status, introducing an officer's oath to be taken when the first officer rank is awarded and finally, returning to the concept of "requesting retirement." In that case there would be no reason for us to charge the officers' Conference with the functions of a comradely court of officers' honor.

With respect to strengthening the prestige of the army and navy, the speaker stressed, the people's deputies of the USSR should take a more active stance.

Capt S. Yastrebtsov, people's deputy of the USSR and deputy commander of an airborne battalion, took the floor. The Officers' Conference of the Airborne Troops wrapped up its meeting yesterday, he said. As a citizen, an officer and a people's deputy of the USSR, I have become further convinced of the high moral ideals proclaimed by the officers and generals and of the purity of their intentions.

The nation and the Armed Forces have some common problems. There is also a large number of local problems specific to the division, the regiment and battalion. All of this is interwoven with the sociopolitical situation in the society. The level of legal sophistication and efficiency has recently dropped in the nation. The very mechanism for a law-based state has not been regulated, and this cannot help but produce various disorders. The turbulent process of politicizing life in the nation and the growth of democratization and glasnost do not always take acceptable forms. This is also sometimes the case among the officers. An incorrect understanding of democracy and one-man command leads certain servicemen to a basic lack of discipline. The noble concept of social, cultural and personal service support for the troops is placed in opposition to combat readiness. The reduced level of supplies for the population has also made itself felt in the restructuring in the army. At a time when economic reform has freed the enterprises, the army has no long-range program for enhancing the standard of living for the officers and the prestige of their work. This has produced uncertainty in the future and social apathy in some officers.

I believe that the Officers' Conference should regard the matter of what we are creating as a fundamental issue. A new structure which will center around the performance of functional duties and therefore carry the threat of becoming yet another tool in the hands of the commanders for suppressing the officers? Another extreme is also possible: reducing the role of the officers' Conference to a cultural and educational one, which would markedly reduce its indoctrinational effect. We must thoroughly consider the purpose, the role and the nature of the officers' Conference.

The group of issues which the officers' assemblies will decide is of considerable importance in this respect. I

believe that the Officers' Conference of the Armed Forces and its elected bodies should focus on matters pertaining to problems of social justice and the protection of officers and on prospects for development of the officer corps and the development of tact, honor and dignity in the officers—that is, those matters which simply cannot be squeezed into the regulations. I believe that the counsel of the officers' Conference will prove valuable for making decision on matters of state defense.

The unit officer's Conference should concentrate on the moral climate among the officers. One must not downplay the Conference's role in the shaping of public opinion, in the accomplishment of combat training missions, the stabilization of the collectives, the campaign against abuse by "superiors," the development of a high level of international communication, international indoctrination within the military collective and the establishment of good relations with the local population.

Sr Lt S. Zhuravlev, operations duty officer at the command post of a radiotechnical unit, reminded those in attendance of the well-known violation of the state border of the USSR by a citizen of the FRG in a light aircraft, which was a heavy blow to the Air Defense Forces.

The decree passed by the CPSU Central Committee on 12 June 1987 called for a comprehensive approach to the matter of fundamentally enhancing the combat readiness and the standing of alert duty by the air defense units and subunits. The speaker noted that much has already been accomplished. We still do not have enough radar facilities capable of detecting low-flying targets and tracking them at long range, however. We do everything possible with the available facilities to reliably cover the nation's air borders. Our radiotechnical unit detects and tracks up to 500 air targets each day with its personnel and equipment, for example.

The speaker then noted that the radiotechnical troops understand that the new equipment models will not be received everywhere immediately and that the unit is therefore training crews for making longer use of existing equipment. There is concern, however, that in the situation of conversion industry "will forget" about producing the special sets of spare parts, instruments and accessories for equipment taken out of production. There is also serious concern about the fact that a number of facilities are chronically short of chiefs in those organic categories made up of warrant officers. Despite increased benefits, they do not respond to calls to serve in the remote subunits with their unsatisfactory living conditions and housing situation. An officer therefore has to service two or three equipment models and carry an additional workload. Perhaps it would be possible to provide the radiotechnical subunits on the border with specialists taken from subunits in the interior. This is the border, after all!

The restructuring has required a profound reshaping of the minds of the people and of our officer cadres. Not everyone has passed the test of political maturity. Some people have exhibited confusion and, finding no way out of the situation which has developed, have requested to be discharged from the Armed Forces. One can understand their economic and other interests, but one cannot understand—and all the more, not support—the betrayal of the dream, betrayal of the concept, betrayal of the honor and dignity of the man in the shoulderboards!

While supporting the Temporary Statute on the Officers' Conference, we believe that the following amendments should be made:

1. It is doubtful that we need to have both the officers' assemblies and the large number of other public organizations and commissions set up in every military unit. The officers' Conference should truly be the highest body and not petitioners before certification and housing commissions, comradely courts of honor of officers and other organizations.

2. The funds of the officers' Conference should not be made up solely of volunteer contributions by the officers. We need a special item in the [budget] estimate of the Ministry of Defense.

3. To have a real rebirth of the officers' traditions we must work out and introduce a ceremony for initiating young officers as members of the officers' Conference.

Capt I. Temnyuk, commander of a tank company in the Southern Group of Forces, took the floor next. He spoke with distress of the fact that he does not achieve complete satisfaction in his work. The results of the combat training could be better and more stable if the mechanisms hampering the restructuring, as they are called today, were eliminated.

The strengthening of military discipline is an urgent and distressing matter for us. There are no gross violations of military discipline in our company today, the speaker stressed. However, I am always tormented by the question of whether an "unofficial Kazan group" could remove a company commander? It is perfectly possible. There have been many examples of this. Officers who work with the personnel are waiting for drastic changes in this matter. The violators must be punished and not those officers who work hard to reveal shortcomings. Honorable and bold commanders should be rewarded. Those who "smooth over" incidents and crimes should be punished, as well as those officers personally to blame for them, but not through the "top to bottom" chain.

With respect to the content of the Temporary Statute on the Officers' Conference, Capt Temnyuk indicated the need to more precisely define certain points. The opinion of the unit officers' Conference must be the main factor for determining regular and early promotions in rank, appointing officers to higher positions and transferring them, recommending them for state awards and sending them for training, and for discharging from

the ranks of the Armed Forces officers who have defamed the high title. When necessary such decisions should be made on a competitive basis and by secret ballot. If the superior commander or OIC does not agree with the decision adopted by the officers' Conference, he must explain the reasons for his refusal. The officers' Conference will then become a real force, become an agency which protects the officer's honor and dignity and at the same time function as the public educator of negligent officers.

Hero of the Soviet Union Guards Colonel V. Vostrotin, Commander of a Guards Airborne Division, spoke. I am profoundly convinced, he said, that the officer corps has been, is and will remain a healthy, morally educational and mobilizing force. Enormous sorrow recently befell our division. The Il-76 disaster ended the lives of officers and enlisted men of an airborne company. It has now been re-formed, and the brothers of the deceased airborne troops have entered the formation. This is a new team, however, and an enormous amount of work will be required for it to reach the level of its predecessors. I appealed to the officers, and 30 of them expressed a readiness to take charge of this difficult job. Today we listen with tears in our eyes to the company song, which contains the words: "The 8th has perished, the 8th lives...." The actions of our officers in helping to stabilize the situation in Armenia and Azerbaijan and in the mopping-up operations following the earthquake at Spitak and Leninakan can only be described as a peacetime feat.

The problems of social protection, the social and personal service situation and service prospects are the most troubling for us. Because of the reduction of the Armed Forces certain young officers have developed negative attitudes, a sense of hopelessness and pessimism. In some cases even the senior commanders have become disoriented. Strange as it seems, it is not the service but the moral pressure of various kinds of unofficial organizations and the mass media regarding problems of the homeland's armed defense which has contributed to the negative moral attitude of the officers.

Speaking of the development of the officers' Conference, the speaker noted that wisdom and consistency are needed in this matter. It seems apparent that an Armed Forces Conference will take on the problem of defending the interests of the officer corps at the highest state and party level (all the way to advising top officials on problems of the armed forces). The division and regimental assemblies will focus on the moral indoctrination and the moral climate of the collectives. Rigid regimentation of their functioning is in no case to be tolerated. At the same time it is of fundamental importance for the opinions of the officers' Conference to be reflected in the officer's certification and service record. This will require adjusting the authority of the officers' Conference and the comradely courts of honor of junior and senior officers and the certification commissions, since their work will be duplicated in great part.

I want to make you aware of the concerns and needs of the Transbaykal officers, Lieutenant-Colonel Yu. Yashin told the Conference participants. I speak for those who traveled the arid plateaus of Mongolia, lived through redeployment and spent long months freezing in tents in the Irkutsk taiga, those who are even now performing difficult duty in remote garrisons along the Chinese border, their wives and children. I am alarmed at the continuing loss of the best traditions of the Russian and Soviet army, the traditions of the front line heroes, of that army in which my father and grandfather served and in which my brother now serves.

At the present time a prejudice against military service is developing in the society. It is artificially kindled by a small group of individuals. Why is this? Political near-sightedness concealed by pseudo-pacifist slogans or planned action to undermine the state's combat might? We see a clear underestimation of the capabilities of army Communists on the part of local party organizations and even in the central party press. Our thoughts and positions on general party issues are published in the central newspapers extremely rarely. We therefore insist that the package of proposals set forth at this conference be presented to the 2nd Congress of People's Deputies of the USSR.

Combat readiness is out of the question within the framework of the existing T/O and positions. The reduced units are destroying the officers. They are being degraded both as professionals and as commanders and are stifled by the inordinate amount of administrative work. Combat readiness cannot be forged in stokeholes and endless construction with one's own means and personnel, and it is also impossible to prepare well for mobilizational measures. We must convert to full-strength units with strong support and security subunits.

Here is another aspect of the problem. Our pools are overflowing with obsolete equipment. Can it be that a country which sells so many modern armaments abroad cannot adequately supply its own Armed Forces? Even the existing equipment is frequently stored in the open. And this is in the minus 40-50 degree temperatures of the Transbaykal.

The strengthening of military discipline is no less a problem. A situation is being created in which we are frequently simply unable to punish a soldier for a real infraction out of fear of an extra check mark in the reports. An officer should not be punished for the infractions of a subordinate if all preventive steps have been taken. All the more since the group of replenishments arriving in the units is becoming more and more complex each period. I participated in the reception of one team of draftees from Khabarovsk Kray for the construction troops in the spring of this year. Out of 57 men 32 had convictions on their records and 17 suffered from oligophrenia. What can be expected from such personnel? The decision must be made to remove the

military construction workers from the jurisdiction of the Ministry of Defense and turn them over entirely to state support.

Military personnel were the first to come to the aid of the victims in Armenia, said Maj Gen M. Surkov, people's deputy of the USSR. They came to assist led by officers. Enlisted men's mess halls were turned into operational feeding facilities and more than 25,000 tents, around 100 field kitchens, three bakeries and much more were set up. Furthermore, the families of 385 officers and warrant officers lost members. It seems to me that this was a time when most of the military personnel demonstrated those qualities for which the army has always been famous: nobility, honor and courage. In addition to rescuing people, the servicemen performed traffic control duties, combatted looters and unloaded freight. And they did so around-the-clock. They found, collected and turned over to the state more than 24 million rubles worth of valuable items.

I am a deputy from Leninakan. It pleases me to report that the military construction workers are the only ones fulfilling their restoration plans. Around a thousand families will be living in [new] apartments by the end of the year, two schools have been built and placed into use and all of the barracks, mess halls and clubs have been restored.

There is also a number of problems, however. The first one is the request that, considering the entire situation in the region, including the seismic situation, the Transcaucasus region be made substitutable. If this is impossible, then at least an earthquake area. The second: Considering the many difficulties with respect to medical support, doctors and specialists in gynecology and pediatrics need to be added at the hospitals and medical battalions. The third is that it is practically impossible to do the job, particularly today, when a knowledge of the language is required.

And one final problem: The military deputies are being criticized today. I am confident that our activeness is not always confined to speeches. Most of the deputies are doing everything possible at the sites and actively working to increase the prestige of the Armed Forces.

The participants listened with interest to the speech by Lt Gen Justice A. Katusev, main military procurator and deputy general procurator of the USSR. He underscored the fact that the functioning of the officers' assemblies does not infringe upon the authority of the sole-commander in those areas of combat life and training which demand absolute one-man command with full authority and responsibility. Wherever the laws, the regulations and life itself require consulting with the officers and a team effort to resolve problems in the best way possible, the commander has the opportunity to rely upon the officers' Conference. This democratic institution helps to strengthen the barrier which separates sole-command from the arbitrariness and despotism which still exists in some places.

Many aspects of the legal situation, the procedure for serving and the benefits and privileges established for various categories are defined in joint documents of the CPSU Central Committee and the USSR Council of Ministers, decrees of the Council of Ministers and orders issued by the USSR minister of defense. In legal terms these are called legally binding documents and are not laws per se.

The regulation of matters with legally binding enactments formerly created no special difficulties. On the contrary, it permitted the government and the minister of defense efficiently to make the changes dictated by life without a bureaucratic legislative process in the situation of infrequent and brief sessions of the USSR Supreme Soviet. The situation is different today. The USSR Supreme Soviet functions constantly. The role of the law is increasing in the society. In a number of areas priority is given to republic laws over legally binding enactments of the national government and All-Union departments.

In this situation, the speaker commented, we consider it essential to raise the entire system of basic documents on the legal situation of servicemen to the level of All-Union laws. And the fact should be clearly stressed that these are matters of defense, which, as we know, are under the jurisdiction of the USSR and apply in all the republics. It is the opinion of the main military procurator that the draft statutes on the military service for officers and the general military regulations which have now been prepared contain a number of important and fundamentally new provisions. Their adoption as laws will provide the officers with real legal guarantees of their public status.

In addition to this, the military procuracies will conduct a series of inspections next year to verify that laws on the preservation of socialist property are being observed in writing off the military equipment. We are counting on army and navy specialists to help us with these inspections.

In their attacks on the army as a state institution and on the military service, the forces opposed to the restructuring sometimes gain the sympathy of citizens, because negative things which actually exist in military life are used as arguments. It frequently does not occur to the bystander that individual extremists, using the pretext of protecting common human values, are inciting antimilitary sentiments actually based on the socialist essence of our Armed Forces and their devotion to Soviet power and the concepts of internationalism. It would therefore not be an exaggeration to say that the state of military discipline, law and order in the Armed Forces is a political issue today and not just a factor of combat readiness.

Deliberate cover-ups of crimes and infractions of subordinates in an attempt to maintain the appearance of well-being or out of fear of suffering for actual or imaginary blunders of superiors are causing great material harm. The main military procuracy understands that the practice of evaluating the commander from the

arithmetic on infractions in the unit still lives. We are also having a hard time reorienting the military procurators from the conventional, quantitative comparisons to analysis of the factors giving rise to infractions of the law. We have begun firmly implementing a line of abandoning evaluations based on statistics, however, and shall consistently protect against unsubstantiated accusations officers who report honestly on the state of affairs and actively apply their authority to the violators, including the right of investigative agencies to file criminal charges. The speaker stressed the fact that the overcoming of legal ignorance and the universal legal education being initiated in the army and navy will unquestionably help strengthen legality.

Speaking for the military construction workers, Capt P. Chumachenko commented that not everyone understands what kind of jobs are performed by his colleagues at various sites in the nation. The mass media have come out with many articles belittling the role of the military construction units in the strengthening of the national defense. One gets the impression that military construction workers do nothing but dig ditches and that there is nothing more degrading than serving in a construction battalion. I want to report to the All-Army Officers' Conference at the outset that an absolute majority of the officers serving at military construction sites are proud of their occupation and cannot imagine life without the projects and without the people.

We are not dependent upon the people. We ourselves create material wealth. We have to our credit hundreds of well-built military posts, apartment buildings, kindergartens and schools to our credit. We build unique defense facilities.

The restructuring is producing much improvement also in the military construction units and affecting the lives of the officers. There are numerous unresolved problems, however. We are greatly troubled by a recent increase in pessimism, depression and passivity on the part of some young officers. This is confirmed by their requests to leave the service. More than 180 of our officers have submitted such requests at Baykonur alone. This is due to the decrease in the officer's prestige in the society. I would like to hear a more powerful voice in defense of the army from the speaker's platform of our parliament on the part of the military people's deputies.

The speaker proposed that by decision of the officers' Conference up to 50% of an officer's pay be withheld for each day he fails to go to work.

Hero of the Soviet Union Major General V. Neverov, commander of a motorized rifle division, took the floor. He commented that the officers' Conference should perform the dual task of developing honor in the officer and defending it. And we know that there are some against whom it needs to be defended....

In order to support and enhance the prestige of the Armed Forces in the society the speaker proposed submitting to the USSR Supreme Soviet for consideration

the matter of holding individual citizens and the mass media accountable for defamation and unsubstantiated attacks on the Armed Forces and for the passage of a law to that effect.

The speaker proposed additions to articles 18 and 22 of the Temporary Statute on the Officers' Conference. The first would provide for the officers' Conference or its council to take part in the consideration of candidates for advancement, recommendations for awards, the demotion of officers in position or military rank and their early discharge into the reserve. The second, in connection with the establishment of the officers' assemblies, would eliminate the comradely courts of honor of junior and senior officers, turning their functions over to the Conference councils. No distinction would be made between senior and junior officers in the case of infractions, since the concept of honor is the same for all. The third amendment involved performing organizational work, enhancing the efficiency and effectiveness of the officers' assemblies and their councils and considering filling the vacated position of chairman of the Officers' Conference Council.

Capt 1st Rank V. Golovanov, commander of a submarine cruiser, began by analyzing the problem of raising the qualitative criteria of combat readiness. It is very difficult to provide a high level of combat readiness, he commented, when the defense industry does not always guarantee the required operating efficiency for all systems and machinery. Officers of the Northern Fleet have a suggestion: return the money for replacement claims to the Navy as reimbursement for damages instead of placing it into the state budget.

The speaker then recommended that the minister of defense assign the military commissariats the task of clarifying how many of the students discharged into the reserve are actually studying at VUZs and reporting the figure to the people's deputies.

Discussing military discipline, V. Golovanov stressed the need drastically to reduce the number of directives issued. Each year one has to study and fulfill the requirements contained in thousands of various documents, which frequently duplicate regulations. We should also increase the authority of commanders in matters of providing material incentives for subordinates by redistributing the money of officers and warrant officers who have failed to go to work or have been late.

Those officers at the forward edge in maintaining combat readiness should have guaranteed privileges. Let us not be afraid to use this word. Percentage-wise this category of officers comprises the smallest portion of the officer corps, which means that the material outlays would not be particularly great.

Maj Gen Avn B. Barabash, chief of the Achinsk Military Air Engineering School imeni 60th Anniversary of the Komsomol, directed the attention of the Conference participants to the following fact. The monopoly of the manufacturing plants and the total dependency of our

military acquisitions upon the leadership of the manufacturing plants results in a situation in which the military units receive expensive but totally elementary, unfinished systems which are a burden to the officers operating them. And the developers and manufacturers "drain" the military budget within a period of 10-12 years as a result of the expensive additional work. Just what other state has such an absurd system in which one directorate orders the equipment, another maintains it and a third trains cadres for this purpose? It is time to assign authority to make expenditures out of the military budget exclusively to the Ministry of Defense.

In order to make more effective use of the funds allocated by the state for defense, to introduce economic incentive methods in the army and navy and to achieve good combat training results, we must turn over authority for the planning and the expenditure of all funds allocated to the military unit, the ship, the military installation or the military educational institution directly to the unit commander (VUZ or installation chief).

The Law on Defense being prepared by the USSR Supreme Soviet must provide for relieving the army and navy of functions not naturally theirs. Special formations not a part of the Ministry of Defense should be set up for this purpose, and serving in them should be regarded as an alternative to serving in the ranks of the Armed Forces of the USSR. The workday of the career military men should be regulated. All overtime worked by officers, seagoing and shore-based warrant officers and extended-duty personnel in peacetime should be compensated for financially or by increasing their regular leave. Accountability (even criminal liability) should be established for any derision of a person in a uniform also when they are on duty. Like any desecration of the State Flag or the Emblem of the USSR, this should be regarded as an insult to the state.

With respect to the new public organization, its status should be defined in a special Statute on the Officers' Union and the Officers' Conference in the Armed Forces of the USSR. A public commission should begin preparing it. For now, officers at the Achinsk school have proposed their own draft.

In order to resolve the main social problem, housing, I propose, along with the steps already taken by the Ministry of Defense, that we begin allocating furnished military apartments for all regular servicemen where the military unit is based while simultaneously giving the regular serviceman the choice either of building his own private home, building his own apartment on a contractual basis with the help of the Ministry of Defense or receiving housing in complete conformity with the standards in effect in the nation at least a year prior to discharge.

Many commanders, political workers and staff officers today exhibit attitudes of dependency and fear of assuming responsibility. Lieutenant-Colonel A.

Khokhlov, a regimental commander, took the floor and stressed the fact that this is a dangerous malady. Many of these shortcomings are subjective, but their causes are objective. In the first place, there is no planned basis for the combat training. In the second place, the leveling of pay for officers gives rise to idlers. We have long talked about this but little has changed.

Our officers need suggestions from science very much today. We have academies, military institutes and dozens of departments but we continue to work in isolation.

A great deal is being said today about flaws in the officer training. It is time to establish a training system which would require them to study—both where they are stationed and on assignment.

The officers are tired of appeals. They too want order and organization in the service, want to schedule time for the family. Why, for example, is the well-known order issued by the minister of defense on discipline not being fully adhered to? In great part because there is a universal fear of objectively indicating the real state of discipline.

The social and legal defenselessness of the officers is very troubling. It means nothing, for example, to criticize an officer in public, to cut his overcoat with a razor blade on a train or bus, to insult him or even beat him up. Our officers and their families are also suffering the consequences of the Chernobyl tragedy. Unlike civilians in my city, for example, we cannot get medical examinations. Our children continue to go bald in Chernovtsy.

We should also give some thought to the impoverishment of the officers. I am not afraid to use that word, since many young officers are at the poverty line today. The district officers' Conference has supported a proposal for issuing the officers food rations instead of the so-called ration money in all regions of the nation and not just in the groups of forces and remote areas.

Col V. Kostin, military commissar in Riga's Moskovskiy Rayon Military Commissariat, began his address by saying that many line officers have developed the idea that serving in the military commissariats is the easiest work, work which does not require physical effort or mental exertion. This opinion is absolutely incommensurate with the importance of those difficult jobs by means of which we link the army and the people by vital threads. Particularly today, when the restructuring of the work of the military commissariats and of each officer individually is performed in a drastically exacerbated internal political and ideological situation. In Latvia, for example, we no longer have those traditional links which previously existed between local organizations and party organizations of the military commissariats. On the eve of the elections some councils of people's deputies curtailed their functioning. Attacks on the Soviet Army are being stepped up. Legislative enactments are being passed which infringe upon the constitutional rights of servicemen and members of their families.

We must not fail to mention the extremely acute problem of organizing the youth's induction for active military duty. It has become the normal thing for the youth to boycott induction into the service with strong support from their parents. No more than 30% of the draftees will voluntarily report to the military commissariats in response to draft notices. The law-enforcement agencies keep looking for "new approaches" in determining criminal liability for evading military service. Nor do existing laws provide answers to questions pertaining to the call-up for assemblies of cooperative members, lessees and self-employed people. In addition, the fact that part of the population regards the army as an "occupational" force is destroying the prestige of the officer's service. While 109 of the 1,072 individuals applying for admission to the schools were Latvian in 1987, there were only 60 this year.

We need to revise as rapidly as possible the Law on National Defense, which provides for alternative (non-military) service. If this is not done before spring, it will be even more difficult to carry out the spring induction, and state agencies of the republic which have already passed the draft law will come into conflict with military units and workers of the rayon military commissariats. We must also alter at once the Law of the USSR on Universal Military Duty, which is hopelessly obsolete and is hampering the work. We need to add to the law a penalty in the form of a large fine for failure to appear at the induction section.

The restructuring requires alterations in the organization and establishment structure of the military commissariats, which was established a long time ago and has remained practically unchanged for a long time.

The speaker then proposed transferring a large number of functions from the military commissariats to the local soviets.

One final thing: Induction into the army is carried out not by the military commissariats, as many people believe, but by the Soviet government. Logically, then, the orders on induction and discharge into the reserve should be issued not by the minister of defense but by the chairman of the USSR Supreme Soviet; in the republic, by the chairman of the Supreme Soviet; in the city and rayon, by the chairman of the local soviet.

The floor was turned over to L.N. Zaykov, member of the Politburo of the CPSU Central Committee, who attended the conference.

I believe that each of us takes satisfaction from the rebirth of a glorious tradition of the Russian army, the officers' Conference, he said. The good traditions indeed need to be restored, comrades.

The discussion at the All-Army Officers' Conference is a serious one, a party-minded discussion about the officer's honor, about the service, about the establishment of order, discipline and organization. One senses that officers of the Armed Forces of the USSR are

serious about their job and have a sense of great responsibility for the homeland and to the people. This is felt in every speech. The restructuring is proceeding in the army and navy and, judging from the fervent speeches made here, intensively, albeit not without difficulty.

Many of the speakers are concerned about how to combine one-man command and democracy today. The problem is indeed a new one. In the first place, however, no one has stripped the officers of their right to one-man command. The fact that it has to be used within the boundaries and the framework of the current military regulations is another matter. In the second place, democracy is first of all respect for people, for discipline and order. There is an inseparable unity between these indicators. Furthermore, diverse people serve in the Armed Forces today. The group of draftees has changed, and this needs to be taken into account. Naturally, the work of the officers has become far more complex in the new situation.

Another subject has been discussed here: the matter of the officer's honor. Let us frankly say that we need to do everything possible to uplift this concept, which has been lost to some degree—and for reason. The title of officer in the Soviet Armed Forces should be synonymous with valor, nobleness and a high level of culture.

Certain comrades indicate concern that the security of the nation and of our allies might be harmed by the process of reducing the Armed Forces and weapons. The Malta talks demonstrated that new political thinking is gaining force and becoming a reality of our time. In that situation, while reducing military outlays and destroying certain types of weapons, we must constantly maintain a good defense capability for the state. Therein lies the significance of our defensive doctrine. And this requires outfitting the forces only with modern combat equipment which is an order higher with respect to its precision and, most important, that it go into the hands of highly educated officers and fightingmen of the army and navy. This means that we need to make prudent, skilful and economical use of the funds allocated by the people.

In this respect completely justifiable claims have been leveled complete at those branches of industry which provide equipment and weapons for the forces. A lag in this area is all the more inadmissible in the situation of the conversion underway. This positive process is designed to help increase the output of civilian products. On the other hand, however, it requires—primarily of the Ministry of Defense as the main client—the ability to spend the allocated funds prudently and effectively. Proper order does yet exist in this matter.

The restructuring has moved man with his concerns and needs to the fore, L.N. Zaykov underscored. This fully applies to those who perform the difficult job of guarding the peaceful labor of the Soviet people. We need to provide social protection for the officer corps. Our commanders must have normal living conditions both in

the service and after being discharged into the reserve. Right now the government is considering a draft new statute introduced at the initiative of the CPSU Central Committee on a procedure for recording and improving housing conditions for fightingmen discharged into the reserve. As you know, a clearly obsolete statute dating back to 1964 is in effect today. It contains certain restrictions on registering in a number of cities. The officers will be permitted to return to where they were drafted from. And why should it be otherwise? If one entered the army from Moscow, he should return to Moscow. And the same for all the other regions.

Incidentally, it is planned to apply part of the funds freed by reducing defense expenditures to resolving such problems as housing and the social situation.

I want to assure you, comrades, that all of the questions raised here will be thoroughly reviewed in the Defense Council of the USSR, the Ministry of Defense and the Main Political Directorate, and by those ministries and departments to which they pertain.

L.N. Zaykov answered numerous question from participants in the All-Army Officers' Conference.

Speeches at First All-Army Officers' Conference

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[Report by Colonel G. Miranovich, Lieutenant-Colonel O. Vladyskin, Lieutenant-Colonel I. Yesyutin, Captain 3rd Rank Yu. Gladkevich and Major S. Kusher, KRASNAYA ZVEZDA correspondents, under the rubric "The All-Army Officers' Conference": "The Times Demand New Approaches"]

[Text] As previously reported, the All-Army Officers' Conference was held on 7-8 December. There was a frank and concerned, comradely discussion about the honor and dignity of the Soviet officer, about disturbing problems at the contemporary stage in the development of our society and the Armed Forces, about ways to intensify the restructuring processes in the army and navy and about a future new organization of the officer community.

Representatives of the All-Army Conference laid wreaths at the V.I. Lenin Mausoleum and the Grave of the Unknown Soldier at the Kremlin Wall. After the conference there was a lively debate and a comparison of positions and opinions in a meeting between the participants and military people's deputies of the USSR.

A proposal that the proceedings of the First All-Army Officers' Conference be published met with approval at the conference.

Today we are publishing an account of the speeches delivered from the speaker's platform at the December All-Army Officers' Conference.

Major Yu. Polishchuk, Deputy Battalion Commander for Political Affairs, spoke. He was elected to take part in

the All-Army Officers' Conference by officers of the railway troops. I can frankly say, the officer stated, that all of the military railway workers are concerned about the decision to remove the railway troops from the Armed Forces of the USSR. It has given rise to various kinds of conjectures and incompetent ideas about the role and the place of the railway troops both in peacetime and in war. Serving in our forces is presented as an alternative to military service in a number of publications and in speeches by certain military leaders.

The speaker went on to express his thoughts on the temporary Statute on the Officers' Conference and shared his thoughts about ways to make the officers more active in the service.

At officers' assemblies held in the units and formations, he said, most of the officers expressed the opinion that the officers' Conference must have not only the functions of advisors and consultants but also specific authority for resolving issues. They support the proposal for eliminating the comradely courts of honor of junior and senior officers and transferring their authority to the officers' Conference and its council. Possibly the certification commissions also need to be eliminated in certain battalions and their functions turned over to the Conference council, which would make it possible to reduce the number of various organizations and commissions and duplication in their work.

The speaker then presented a number of proposals pertaining to the service of officers in the railway troops and military construction units.

Due to the fact that call-ups are held twice a year and take as long as 2 months, he said, we have senior personnel being discharged while the new fightingmen have either not yet arrived in the units or are undergoing military training. Two or three of the most important months for construction are lost as a result, which later leads to all-out, last-minute efforts and the completion of jobs at any cost. I propose drafting youth for the railway troops once a year, in the fall.

Army Gen D. Sukhorukov, deputy USSR minister of defense for personnel, took the floor and noted that a proposal had been put forth at the beginning of the conference that the status of the All-Army Officers' Conference be defined. Since the temporary Statute on the Officers' Conference was worked out by the Main Personnel Directorate of the USSR Ministry of Defense and the Main Political Directorate of the Soviet Army and Navy, he considered it necessary to express his own opinion on the matter.

The temporary Statute on the Officers' Conference was placed into effect by a 20 May 1989 order of the USSR minister of defense, Army Gen D. Sukhorukov said. The plan was to accumulate experience with the officers' assemblies until 1 October 1991, to consider all proposals and make the necessary changes during the preparation of a permanent statute. Officers' assemblies are

being set up in the military units, at military installations, military educational institutions and garrisons for purposes of developing in the officers a sense of the officer's honor and dignity and comradely communication, uniting the officer collectives and protecting the officers from arbitrariness, rudeness and social injustice as they perform their military jobs.

The bulk of the officers are in military units or at garrisons, and the officers' assemblies should therefore be firmly established and function there, and they should have a single, united collective. Today's All-Army Officers' Conference was convened by decision of the minister of defense to exchange opinions on the initial stage and the functioning of the officers' assemblies, to hear from various categories of officers and give new stimulus to the functioning of the assemblies. This is the first such undertaking. In view of the matter on the agenda the status of the All-Army Officers' Conference and the frequency of its meetings could be considered in a directive from the minister of defense and the chief of the Main Political Directorate on the outcome of our officers' conference. And it could state that constituent officers' assemblies may be conducted in the formations, large formations, branches of the Armed Forces and troop arms and on the scale of the entire Armed Forces. Constituent officers' assemblies would be convened at the demand of at least one third of the total number of officers' assemblies of military units, formations and large formations or by decision of the corresponding command element; on the scale of the Armed Forces, by decision of the minister of defense. They would also specify the numbers of representatives and the dates for holding the officers' assemblies.

Now, about refining the temporary Statute on the Officers' Conference. The order states that it is to be precisely defined by 1 October 1991, but considering our conference and the opinions expressed here, the Statute on the Officers' Conference could be issued in 1990 with the agreement of the minister of defense.

With respect to the chairman of the officers' Conference, the experience and traditions of previous officers' assemblies were taken into account. We have discussed their history, beginning with the times of Peter. The chairman of the officers' Conference in the past was always the commander of a regiment or a military unit. There was a council or cochairman of the officers' Conference. This underscored the respect for the sole-commander and for his authority. He was the organizer of the officers' Conference, as it were, and made the final decisions based on the Conference's recommendations. Today it can be agreed that, although this matter needs to be thoroughly considered, any one of the most worthy officers in the unit could be elected chairman of the officers' Conference.

Membership in the officers' Conference is voluntary.

The matter of the officer's code of honor was brought up. There is a draft code. A Statute on the Service of the

Officer Corps has been completed. It will be reviewed within the near future at a meeting of the Collegium of the USSR Ministry of Defense and sent to the forces for discussion. After your proposals are received it will be refined and submitted to the government for approval. This statute calls for officers to take the Officer's Code of Honor during graduation from their school.

I am a platoon commander and work directly with personnel, and I thoroughly understand how the soldier views and evaluates his commander, his training and particularly his human qualities, the most highly valued of which are his sense of honor and his ability to assume responsibility, Sr Lt V. Zvyagintsev said. I therefore believe that the most important thing the officers' Conference can do is to develop in the officers a sense of dignity and great honor. Other agencies should deal with living conditions, leisure time and other types of support. The officers' Conference will then be performing that special job for which it was created.

Now, about a matter which is very disturbing to the subunit commanders. I refer to regulating the system of inspections of the troops. As a platoon commander, do practically no work with the platoon but merely prepare for one or another test or inspection and then work to remedy the deficiencies. This does not meet the needs of the personnel, who want to master military affairs, nor does it satisfy us officers. Look at our district: endless inspection parties from Moscow and tests disturb our military collectives. Is there no faith in me and others like me that we can train a platoon? Let us work with and train the soldiers, impart to them that body of knowledge which we acquired at the school and in the regiment. And we could be tested once a year—overall, so to speak.

Another thing: We are always talking about closeness between the officers and the soldier. But place a soldier, a warrant officer, an officer (junior or senior) and a general side by side. There is a total difference, beginning with buttons and boots and ending with headgear. Is this not a detriment to our army? After all, not so long ago the Red Army's enlisted men and commanders differed only in their insignia and their professional training. And the example of the developed nations, who know how to count their money, indicates that this is far more economical and most important, more democratic.

I would like to bring up one last thing.

I serve in Dushanbe. I have comrades serving with me who have nothing but difficulties when it comes time to go on leave. Why is it that travel documents are issued only to the officer? What about his family? Should we not resolve the matter of free kindergartens for officers and warrant officers at garrisons, with supplementary meals for our children? We serve and believe that we shall receive some kind of benefits in a year or a year and a half....(?) What about our families in Kushka and elsewhere? They receive nothing! If these problems and a large number of attendant ones were resolved within the limitations of the funds allocated, I believe that everyone

would assess with understanding and sincere joy the concern shown by the party, the state and the Ministry of Defense for their own, state people and members of their families.

Captain O. Kashara, commander of a motorized rifle company, called the officers' Conference the first real mechanism for democratizing army and navy life. Looking at the past and assessing the situation today, one can unequivocally state, he said, that the restructuring processes are penetrating into the army body and increasingly capturing the hearts and minds of the servicemen. The officers have begun demonstrating greater demandingness of those individuals who deviate from the regulations and from moral and ethical standards. At the same time, there are more than just isolated cases in which senior officers and sometimes even generals display rudeness and arrogance. This considerably heats up the moral climate among the officers and therefore in the unit as a whole.

It is vitally necessary, the speaker went on to say, to grant greater independence to the subunit and unit commanders with respect to accomplishing the tasks involved in the combat and political preparation, the training and indoctrination of subordinates. And the officers' Conference can play an important role in this. Decisions of the officers' Conference and matters raised there should be binding for superior organizations. Without this, the possibility is not ruled out that the decisions will prove to be merely talk or a summation of unfulfilled desires.

Now, about the matter of awarding military ranks. It seems to us that this should not be an issue in general. When a person has an advancement in position, he must be awarded the corresponding military rank. In most cases the military rank is awarded only after the final tests or on the occasion of important dates. If an officer does not measure up to his position, he should be removed from the position instead of holding up a promotion in rank.

Preparation of a law on defense is presently underway. I believe that its preparation and discussion should involve active participation by the entire officer corps. They still know nothing about it in the forces, however. Public opinion in the officer collectives should be thoroughly studied and there should be a timely response to their needs and requests.

Lieutenant-Colonel N. Vasilyev spoke of military science and its problems. He commented that one of the key elements is the problem of scientific cadres. It is a known fact that the cadre policy conducted for many years has resulted in a situation in which the scientific research institutes have many people not suited for real scientific work. They came to the institutes only because the latter do not involve the hardships and deprivations which fall to the lot of officers in the forces. Military science has begun losing its creative initiative as a result

and has relinquished its forward positions in many areas, and the military scientist's prestige has dropped significantly.

The drop in prestige for military science has led to a situation in which obsolete concepts are frequently worked on. The test ranges and the forces sometimes receive inferior equipment as a result. In many cases the defense branches of industry do not meet their commitments with respect to development deadlines. And they go unpunished. When Comrade Zaykov spoke, he stated that the matter of transferring the financing of defense projects to the Ministry of Defense is finally being resolved. I would like to know on what basis this financing is going to be achieved, however. Placing the money into thrifty hands is unquestionably an element of economic accountability, an essential element, but it is not enough to get matters well organized. Furthermore, we need a well-based economic system of accounting, something we still do not have. All accounts are presently carried out on an outlay basis. If our civilian economists headed by Comrade Abalkin are unable to work out a normal system of economic relations, then we military scientists must develop one for ourselves.

The localistic attitudes of many officials very frequently hamper the selection and development of highly skilled scientific cadres. They try to retain the capable and gifted young officers in the units because they know that it is easier to accomplish the complex practical tasks with a responsible and competent officer present. In the contemporary situation we obviously need to find new ways of to achieve closer interaction and cooperation. What kind of ways? I believe that it would be a positive thing to open special post-graduate departments at scientific research institutes and VUZs, to have the councils of young scientists regularly work together and to introduce an exchange of officer/specialists among the scientific research institutes, the testing grounds and the units for a period of 1 to 2 years.

The restructuring of military science depends upon the introduction of economic accountability. The very concept of economic accountability is constructive and productive. The practical results already achieved indicate that the concept in its present form is not capable of producing fundamental positive changes in military science, however. The practical implementation of economic accountability calls for establishing new economic relations between military science and the ordering, designing and producing organizations. These new relations must replace the existing, long obsolete planning and accounting system and not be squeezed into its obsolete, bureaucratic framework. The main ordering, producing and monitoring organizations must focus their main attention only on obtaining actual results and not on numerous plans, of which there are sometimes 8 to 13 in a section, or on the infamous man-hours. It is time for the Ministry of Defense to discuss the preliminary results from the adoption of economic accountability with representatives of all the organizations concerned.

Colonel P. Prashka, senior instructor in the Vystrel courses, followed, speaking with military brevity. We love our homeland, he said, and we want the love to be reciprocal. The Conference is highly important, but for some reason it is being discussed only in the military press. When it comes to criticizing the Armed Forces, many people are prepared to write anything at all, but when it comes to our Conference they are in no hurry to cover it.... It is a great pity that the chairman of the Defense Council of the USSR could not find 10-15 minutes for those who are prepared to sacrifice their lives on the alter of the homeland.

Discussing that part of the report by the minister of defense in which he talked about the components of the officer's honor, the speaker stressed the fact that efficiency and military discipline suffer primarily from a lack of respect for orders. The defense minister has barely issued an order before it is altered.

The speaker concluded with two proposals. The first was to appoint higher officials only after they have completed the corresponding courses or on a competitive basis. The second was that those who are being discharged into the reserve and those who do not want to study not be sent to attend the Vystrel courses.

Captain I. Dubrova, commander of a reconnaissance company, expressed what he said was the collective opinion of officers in the Turkestan Military District: that today's organization and establishment structure in the forces does not measure up to the demands of the times. It does not provide for maintaining a constant state of combat readiness, for conducting planned combat training or for the professional growth of the officer corps. Take the reduced motorized rifle regiment. Half of the personnel are constantly serving on the daily duty detail. Training is out of the question in this situation. The only concern is to put together a second shift for the daily duty detail. This gives rise to the deliberate violation of orders, instructions and general military regulations. The General Staff should adopt a decision as rapidly as possible to eliminate the reduced units and leave perhaps two-three times fewer formations, but fully formed ones capable of maintaining combat readiness at the appropriate level, engaging in combat and political training and improving the combat skills of the officers. This will also make it possible to strengthen military discipline considerably, to make the military service more interesting and to regulate the workday for officers.

The speaker expressed perplexity at the position taken by people's deputies of the USSR who advocate building a quality defense on the one hand, while cavalierly voting to discharge students from the Armed Forces on the other. Where is the logic? One needs to ask the deputies from the military, and there are 82 of them, what they have done to halt the flow of biased information on the Armed Forces and our officer corps in the press and on television and how they are protecting the honor and dignity of the Soviet officer.

I have the schooling of Afghanistan, the officer said. I am not misspeaking; this was real schooling in professional development. And I do not understand the following inconsistency. During the war we trained the personnel based on the principle of "learning that which is essential in a war." During the training period today, however, there are two field exercises and more or less new training aids—in a classified section. How long are we going to be secretive? If you open a Western military magazine, you will find that they have long contained all the information about our organization and establishment structure. We believe that more than half of the information in the regiment's classified section could and should have been declassified long ago.

I want to mention another problem, which is disturbing many officers. The first thing an officer realizes upon arriving in the unit is the fact that one can live either poorly or well. There is a large choice of models for "living well," and almost every officer puts his heart into one of them. And their aspirations frequently diverge from industry and abilities. In view of this, we need to uplift the prestige of the officer who works with personnel and establish additional material and moral incentives for his work.

One other problem: The unit commanders should be granted authority to withhold pay from officers guilty of absenteeism and failure to show up for work without a valid reason. Unearned money is not paid out in a single labor collective.

Captain Yu. Sheyko, a deputy unit commander, spoke for the multithousand-man detachment of road-building officers carrying out the government Program for the Construction and Repair of Roads in the Nonchernozem Zone of the RSFSR. The road-building servicemen, he said, increasingly have the opinion that roads are needed by the military itself and by the residents but not by local authorities. This is the cause of our problems. As we know, the money is dispensed by the oblast ispolkoms through the clients. The clients delay payment and refuse to pay without justification. I propose that the money be removed from the client and placed directly into the bank at the disposal of the brigade commanders. This would make it possible to resolve all matters efficiently. Furthermore, the rayon ispolkoms in a number of oblasts pit the army against the people, declaring that the military come in and take over their apartments. We must revise the legislative enactments and begin petitioning the Council of Ministers to issue precise instructions on this matter to local authorities.

I also have to mention that part of the Statute on the Officers' Conference which is moving it onto the path of formalism and theoretical participation in the resolution of this or that matter. It seems that the officers can "discuss," "support" and "mobilize" but cannot decide anything. Such "authority" degrades the very essence of the officers' Conference and casts doubt on the competence of the certification commissions and the principles of party organs. Would it not be better for us to focus our

main attention on developing in the officers such qualities as honor and dignity, and on combatting arrogance, conceit, rudeness, high-handedness, abuses of service position and disunity among the officers? I propose that if the officers' Conference decides an officer should be discharged (and it should have this authority), the matter should be irreversible, should not be changed or turned over to the collective.

We particularly need to discuss the professional training of officers for the road-building formations. They are trained at only one school. And how disappointing it sometimes is when you are expecting a specialist to serve as a platoon commander in the unit but get a graduate of a combined-arms or some other school. Captain Sheyko offered a number of specific proposals:

1. reviewing the possibility of promoting conscientious officers to higher military ranks, regardless of the category of their position and with a mandatory pay raise;
2. demanding that local authorities fulfill the decree passed by the USSR Council of Ministers on providing service housing for officers implementing the Nonchernozem roads program. It is not being universally fulfilled and is actually being sabotaged in a number of regions.
3. legislatively making the following addenda to the Statute on the Performance of the Service by Various Categories of Servicemen:
 - withholding pay from officers who do not report for work;
 - granting to the officers' Conference of units of the Central Road-Building Directorate of the USSR Ministry of Defense the authority to decide on the payment of increments for success in the work at the expense of the remiss and those who are not successfully performing their service duties;
 - providing reimbursement for the cost of locating servicemen who have gone AWOL from the unit at their expense;
 - subtracting the time spent in the guardhouse from the total military service of soldiers and sergeants;
 - covering the cost of treating servicemen who have been injured as a result of nonregulation relations at the guilty party's expense.

An officers' Conference was held in our Transbaykal Military District in August of this year, Lieutenant-Colonel Yu. Andrianov said in his talk. More than 50 proposals and requests were sent to Moscow based on the Conference results, the implementation of which is under the jurisdiction of central agencies of the USSR Ministry of Defense or the nation's Supreme Soviet. Only 23 have been implemented as of today. And these were mainly in the material area. What about the rest? The officers have not yet received answers to their questions.

What is degrading the officer? His material situation, which, we all know, approaches the poverty line for many. But not that alone. The officer continues to be an appendage of an enormous system, without rights. The

opinions not just of individual officers but of entire collectives are not taken into account. Three commissions began functioning for the summer at our garrison: two from the General Staff and one headed by the commander of the Ground Forces. We offered our suggestions for changes in the establishment structure, but our suggestions were hardly taken into account. All of the former shortcomings are contained in the new T/Os. Once again, we have to do the impossible—to perform an enormous amount of work considerably exceeding the physical and mental capabilities of the small forces available. And in the process we have to preserve our professional skill and competence. Is this possible? The officers from the General Staff who visited us agree that it is impossible, but no changes have been made. Lack of prospects in and prestige for the service are the main factor motivating young officers to submit discharge requests.

Attempts to embellish the reality continue. And we do not have the right to do this if we want to achieve qualitative advances in the combat readiness with fewer personnel and funds. In order to achieve qualitative changes we need quantitative ones. This does not involve increasing something. It most frequently involves skillful redistribution of the effort. This will apparently be a long time coming, however. This accounts for the fact that military labor is being turned into some sort of race in which the individual never keeps up as he tries to carry out the avalanche of directives, instructions and orders. He begins to feel helpless, to lose his vigor, his reference points in the service and his enthusiasm for it. And he loses the main thing for an officer: his professional skills.

How can we speak of an officer's honor and dignity in this situation? We mainly talk about grades of cement, sources of scrap metal, the price of construction materials and where to get them. We talk about hauling out coal and repairing facilities. Why are we engaged in doing that which is not our job? Why was I taught one thing, while something entirely different is demanded of me? Why should weapons depots handle all sorts of things, with weapons storage in last place? Why do the training units not have training sections, instructors, training equipment and weapons?

Today we are attempting somehow to improve the service for officers by means of various public organizations. It is not clear just how the officers' Conference is going to carry out its functions when it is totally subordinate to the commander, who is its chairman. It would be extremely difficult to expect efficient work from the council of the officers' Conference, given the large number of officers and their military workload. It would be expedient to pay council members a remuneration out of the Conference fund for working in the Conference or to reestablish the position of chairman of the council of the officers' Conference. We must also think about establishing councils of officers' assemblies in the armies, corps and districts and in the branches of the Armed Forces.

We need to resolve a number of practical issues, Major V. Litvinov, political worker, said in his speech. We need to approve an appeal to officers of the Armed Forces and decide how often the All-Army Officers' Conference is to be held, the number of members of the central council, the numbers of representatives from the districts and branches of the Armed Forces and the need for a press for our agency.

We also need a general state program for improving the Armed Forces, with the nation's government, the CPSU Central Committee and local authorities taking part in its implementation.

The reduction of the Armed Forces has become a reality. It will be impossible to improve the quality parameters without making changes in the organization and establishment structure. At the present time, in our opinion, it is inadequately adapted to accomplish the missions involved in the combat training, the performance of the service and the normal vital functioning of the forces and is forcing commanders to form supernumerary subunits by yanking the corresponding specialists out of the companies and taking them away from the combat training. We need support subunits and organic training and combat training equipment subunits over and above the combat T/O.

The time has come, the political worker went on to say, to review the matter of enlisting personnel and equipment to harvest the crops. This was supposed to be a temporary measure in response to a shortage of workers and equipment in the civilian economy. There is nothing more permanent than something temporary, however. This is how a lack of organization and order in the civilian economy is being covered today. The army should engage in its own work.

We need to resolve the issue of whether an officer who has selected the wrong career has the right to depart into the reserve, whether one who has served out half his service time "in remoteness" has the right to select his station and whether those being discharged into the reserve have the right to choose their place of residence. Many of the benefits are merely proclamations. The families of servicemen share the difficulties and living conditions of the service. There is no group of people with fewer rights in our nation. They do not even enjoy the right to work, because there is no place to exercise it. The wife of a serviceman is sometimes not hired simply because she is a serviceman's wife. Many people discharged into the reserve as a result of the reduction of the army have come up against the fact that our benefits are imperfect. The law should provide guarantees for an officer caught up in the reduction of the army, and he must be provided with training in a specialty prior to discharge, with a job and housing.

The time has come to deal with improving the organization of field life in the forces. These problems are resolved in a primitive manner today. The equipment is made by the personnel themselves out of whatever is

available. The life and leisure time for officers is poorly organized in exercises, in the field and therefore, in a combat situation. Officers in regimental command and control, not to mention the battalions, have practically nowhere to relax. The supply norms for officers must be changed to include the gear essential for the combat training. The military industry has now begun producing electric mixers, fans, beds, washing machines and other civilian products. It would not be too much to expect our own industry to provide us first with everything essential for the service.

One cannot cut corners with the army. The stingy pay double. The armed forces are the guarantor of tranquility in any state. And the fact that we live in a situation of peace is not due to posters with doves nor the unofficial organizations but to the Armed Forces.

I cannot refrain from mentioning also the fact that we have substituted noncircumspect trustfulness, complacency and an attitude of anything goes for essential faith in our officer cadres. This has resulted in the degeneration of individual officers, in the appearance of a group of officers who parasitize others and despite this, successfully advance in the service, since they are the ones to be gotten rid of first. To rule out this sort of thing I propose adding to the Statute on the Officers' Conference the following provision: "The council of the officers' Conference reviews the recommendations of officers for promotions." I also propose turning over to the officers' Conference the functions of the comradely courts of honor and the permanent certification commissions.

The officers' Conference should also be a kind of officers' club. In connection with this I propose including video and radio equipment and toy semiautomatic rifles in the supply norms for the officers' assemblies.

Our All-Army Officers' Conference is taking place on the eve of the 2nd Congress of People's Deputies of the USSR. I would like to pass on to them a mandate from the regimental officers' Conference: to take a more principled and active stance in the discussion of matters pertaining to the Armed Forces and to stand up for these issues more competently. Not just by raising their hands.

Maj V. Afanasyev, a regimental reconnaissance chief, asked to speak. He noted that not enough time had been allocated for the conference to be productive. He went on to state that we delegates from the Air Defense Forces propose several specific points for defining the authority of our Conference and forming a preliminary organizational structure:

1. that all the participants in our conference be considered members of the permanent Central Officers' Conference, elected for a period of 2 years;
2. that the next convocation of the Central Officers' Conference be held in 6 months, in May or June;
3. that a council of the Central Officers' Conference consisting of one representative from each delegation be

formed to make preparations for the next meeting, to summarize the proposals submitted here and to handle the routine work. The council should meet every 2 or 3 weeks to decide on organizational matters.

Lieutenant-Colonel V. Nastachenko, senior instructor in a political section, devoted his talk to problems of improving the group of draftees. Studies have shown that 68% of the draftees have used alcohol in the past, 25% have been taken to the police for fighting or hooliganism, 8% did not work or study anywhere during a period of a year or more prior to their induction, and 15% were brought up in dysfunctional families. This situation demands that the officers master the basics of psychology and the ability to discuss things, to convince the young fightingmen and shape in them a proper understanding of their role as defenders of the homeland. Unfortunately, not all of us are capable of this at the present time. There are several reasons for this. In the first place, the platoons and companies are commanded by recent graduates, and they were trained extremely superficially at the school to work with people. In the second place, the complex interethnic relations are affecting the state of military discipline. A shortage of objective information is also making itself felt.

The speaker expressed the opinion that two chairmen—a chairman of the Conference and a chairman of the council—were too many. There should be one council chairman, who should also be the chairman of the Conference. Things should be arranged so that a decision adopted by the officers' Conference is binding for all officers without exception, including the unit commanders.

Our series of disasters and accidents with their serious effects has revealed our lack of preparedness for them, said Captain V. Vikharev, a senior pilot. We need to set up the production of special gear and equipment for rescuers as rapidly as possible and build a special aircraft. The matter of forming a single, Union interdepartmental rescue service has clearly been put off too long.

For purposes of making efficient use of the air transport we need to permit the transport aviation to engage in air shipments together with Aeroflot. A part of the earnings should go into a fund for military aviators. For purposes of establishing garrisons (instead of areas) with special benefits, the speaker proposed establishing a commission made up of representatives of the USSR Ministry of Defense, national people's deputies and the All-Army Officers' Conference and issuing a corresponding order based on its findings. It would also be worthwhile to think about establishing courts of honor of NCOs and lower-ranking personnel.

Our economic policy has placed the Armed Forces into a difficult situation, Col A. Andreyev, chief of a political organ, said in his talk. As already mentioned, the units and subunits are performing jobs other than their own. In certain republics an abnormal situation has developed

around the units and subunits stationed on their territories. The question of what has caused this attitude and how long it will last should be asked point-blank so as to receive a specific answer at the 2nd Congress of People's Deputies of the USSR.

And now, a basic matter pertaining to the press: I believe that we need to help members of the press understand our problems. We are prepared to form groups of members of the Conference and send them to the Vzglyad program and other agencies of the mass media. Let everyone hear our opinion.

And the last thing: It has somehow turned out that actors who perform military roles and are therefore contributing to defense are left in the background. We need to support in every possible way those who are using art to get the truth about the army and the officers to the masses and developing a concept of military honor in people, including us.

Noting the importance of giving the officers' Conference greater authority than it has today, Major S. Zaytsev, a deputy chief of staff, stressed the fact that the officer has a special place in the structure of state authority. And this should be established by law and backed up with proper benefits. Among other rights which the officer can count on after being discharged into the reserve, he should have the right to select his place of residence.

The speaker also raised the following issues. Due to the establishment of paramilitary formations in various regions the 2nd Congress of People's Deputies of the USSR should be asked to pass a law immediately banning and disbanding them. There should be legal reinforcement for the statute whereby a serviceman who goes AWOL should be sought for no more than three days, with the case then turned over to the procuracy.

After the discussion concluded, General of the Army D.T. Yazov, Candidate Member of the Politburo of the CPSU Central Committee and USSR Minister of Defense summed up the meeting.

The All-Army Officers' Conference approved an Appeal to Officers of the Armed Forces of the USSR.

Qualitative Parameters: Aged Field Equipment

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[Article by Lieutenant-Colonel A. Prilipko: "Qualitative Parameters of Combat Readiness: Items In The 'Alert' Briefcase—A Firsthand Look At Living Conditions For Officers In The Field"]

[Text] Belorussian Military District—I read in KRASNAYA ZVEZDA excerpts from a speech that Major V. Litvinov, a political officer, delivered at the All-Army Officers Conference, in which he talked about the disorderly conditions of our life in the field, and I recalled the following episode. In the Sporting Goods Store in Grodno, two lieutenants were picking out sleeping bags.

"Are you planning on doing some traveling?" the saleswoman asked them as she brought out another pair of trunks.

"No, we're camping in the field..."

What can be said about this? By the standards of an officer's field gear, a sleeping bag is a huge and cumbersome thing. But a useful piece of luggage is no burden, as they say, and many officers would rather spend the 40 to 50 rubles; that way, they'll always have some shelter in the field. Otherwise...

I remember the awkward position in which I once placed by Colonel S. Testov during a command post exercise when I asked him for a place to spend the night. It turned out that at the forest garrison in which I found myself that night every third command and control officer had virtually no sleeping accommodations.

As we know, equally hapless field conditions are characteristic of staffs of higher rank, with vehicle cabins able to accommodate far fewer people than are actually present. But this is where staffs are concerned. Bivouac life for subunits is even more unseemly... In this regard, one can only recall the concern voiced at the All-Army Officers Conference over the fact that, despite our having such a powerful defense industry that supplies the economy with saucepans, beds, washing machines, and other civilian output, we are unable to provide military men with even a minimum of what they need to do their jobs.

Paradoxically, it is a fact; my trips into the field today vividly remind me of my childhood in a garrison, long ago. It was with such boyish delight that we children of soldiers viewed the rare excursions on which our fathers took us to the field camps, which were shrouded in an aura of romanticism! How pleasant it was to sit in the semi-darkness of the tent, to breathe in the smell of the warmed tarpaulin, and to drink tea brewed over the campfire from a dented iron mug...

Yes, we've long been accustomed to our truly frontline conditions. We've gotten used to it and learned to see it as something inevitable and even necessary—as a manifestation of the rigors and hardships of service that we are obliged to endure according to regulations. But it is with bitter irony that you look on your existence in the field and think: 'Something is seriously wrong here.' After the training drills, the officers turn off the computers and head off to get some rest in tents of World War I vintage, brew tea on a campfire, and wash at a washstand nailed to a tree.

"Do you know," a colonel, who has been in the service for almost as many years as I have been alive, once asked me, tapping on the cover of his "alert" briefcase, "how old this little piece of paper here is? I glued it on in Bulganin's time, and I've kept it ever since. I buy new briefcases, retype the list, and have added only one item to it—a 'dosimeter.'"...

The list in question is well known—it is the list of the officer's personal gear and equipment in the event of an alert. I myself have carried it around for 15 years, although it's true that I've never given any thought as to how essential all those items are to working and living in the field. And then it occurred to me to analyze it. And, of course, a great many questions immediately arose. For example, what sense does it make for every officer to take along a clothes brush, a shoe brush, and shoe polish? After all, officers don't go to war or to exercises alone but in a group, in which it is quite possible to get by with common brushes. But it is impossible to get by with a single first aid kit for all—something that, incidentally, isn't specified on any list. Are we to think that, in an emergency situation, shiny boots are more important than a person's health? And why does my briefcase also contain underwear, towels, socks, and other accessories? Or are these things that rear services are never going to supply us with and that, consequently, we should pack just in case?

Every person who has ever had to pack his "alert" briefcase knows that much of its contents are of no practical benefit but, like aiguillettes, serves ritual, a list of 32 items. The fact is that no one is going to leave handy things at home, even if there are no lists. A sleeping bag, a Chinese lantern (you can't find batteries for our own signal lanterns, which don't shine very brightly and don't work well in damp weather), an electric heating plate, a pullover that doesn't show under one's uniform, a transistor radio, a thermos bottle—all these things are inevitably present in the "field" trucks, which are usually jammed with bags like nomad tents. And naturally so. The rigors of life in the field have taught people to be prepared. Any subunit, in addition to its standard equipment, also has its own equipment devised by its own craftsmen.

At a recent exercise, I spent the night in a standard staff vehicle, so to speak, in which the sharp-witted proprietor (incidentally, he was from the district rear services political department) had installed a cleverly designed heater. It burned firewood loaded from the outside, and you could breathe freely in the cabin, in a way that you can never breathe with the constant rumbling and smell of oil coming from the capricious standard-issue heater. At another site, I shaved with satisfaction near a home-made and very convenient washbasin. I stepped on a pedal, and water heated by some simple method poured out of the faucet.

As they say, necessity is the mother of invention. Nevertheless, this situation is a crying shame; how long are handymen (please, don't any talented craftsman take offense at me for using this word) going to think for the departments and agencies that are professionally charged with seeing to our living conditions? Maybe a subjective view exaggerates the situation, but those trucks loaded with goods, which serve as a silent reproach to these professionals, do not encourage moderation and scrupulousness. Will a time come when the Ministry of Defense Rear Services will pluck up the businesslike courage to

start competing with these clever handymen who work on their own? Surely it is not beyond the capacity of that sizable organization with its own enterprises and design bureaus to modernize and set up the mass production of these notorious tents, lanterns, heaters, and washbasins? Surely it's not so difficult to set up the production of compact thermos bottles and dry rations that are ready to eat and that come with throw-away plates, forks and spoons, so that an officer doesn't have to haul all these utensils around in the field in his "alert" briefcase? Perhaps it needn't stitch together those heavy mattresses but shift to the production of sleeping bags? And even the "alert" briefcases themselves, which we officers constantly buy wholesale could, for purposes of standardization, be made to conform to single set of specifications, like trunks and knapsacks.

Complaints about the sluggishness and "impenetrability" of rear services of all levels have become routine for us, like our own reflection in the mirror. Not a single meeting or conference in the district goes by without criticism of them and of the people in charge of them, who are alleged to be callous and deaf to soldiers' needs. This may sound trite, but the majority of rear service personnel are a responsive lot—at least no less responsive than other people. Why, then, is the demand that concern be shown for people—a demand that is popular at this time of restructuring—constantly heard primarily with respect to living conditions?

It is considered axiomatic that the subordinates of a tactful and concerned commander do not suffer from disorderly conditions. That may be, if we look at concern as something purely psychological that does not involve the material capabilities of that commander. In the unit in which Lieutenant-Colonel V. Davydenko serves, for example, the officers speak well of their superiors. Nevertheless, the men make their way to the rifle ranges (there are two of them, nine and 40 kilometers from the camp) anyway they can, relying on private cars or vehicles headed in the same direction and taking with them fire direction computers, status boards, and their personal gear. There is one bus there, and it has undergone every possible repair. The other vehicles are "tied up" by their fuel allocations and limits on the number of kilometers they can be driven. And the artillery troops are not the only ones with needs for vehicles [avtozaproty]. No matter how you look at it, without transportation, it's difficult to oblige one's subordinates, even if you do have a sympathetic personality.

Living conditions. Feeling fatigued, a platoon or company commander who doesn't suffer from insomnia takes it into his head to wake himself up at the firing range with a cup of coffee. Can such an extravagant thought, by our ascetic standards, occur to him after midnight? Where would he find one? After some exertion, the food service could come up with a substitute concentrate, while the commissary could sell him a can of water-soluble powder. But don't dream of getting your hands on a piping hot cup of coffee served on a saucer. Where are you going to find a snackbar or mobile post

exchange open at 03:00 hours near a firing range tower? As it turns out, the problem is not in rear service supply as such but in service.

Meanwhile, we also have positive experience in this area. In the Strategic Rocket Forces and the Air Force, for example, the social sphere is meager indeed, but it is linked with the training process and oriented toward the minimum of comforts to be enjoyed at the launch site or airfield. And nobody complains that the "creature comforts" dampen people's ardor. But in the Ground Forces the picture is different. The commanders don't have the personnel or sufficient authority, especially in units of reduced strength, to organize in the field such services as comfortable accommodations, showers at dusty tank bases, and snackbars at training centers.

Service? Hothouse conditions? Some Spartan-minded opponent might object to this, pointing out that the very purpose of going into the field is to become hardened, not to luxuriate in soft beds. But I am not against truisms. Let exercises be tough, and let field exercises model the most difficult situations in actual combat. But let everyday life be easier. We must combat intellectual and physical laziness, but we cannot go against human nature. That path does not toughen us, it degrades us. In packing our "alert" briefcases with all sorts of odds and ends and at the same time gathering up the things we really need, we do not become more undemanding. We merely orient ourselves and rear services to authorized and unauthorized delays. And until we make it a rule to live with comfort everywhere—in maneuvers and in marches, we'll also endure wintry apartments.

I once visited a kolkhoz that is by no means one of the republic's best. But even it had a sauna in the fur-processing facility and recreation rooms in the various sections. I thought: 'Can it be that a military person experiences any less mental and physical tension than a milkmaid or tractor driver?' And who knows, maybe a mental relaxation room or self-training session before driving or firing would enable us to avoid mistakes and injuries better than impersonal safety instructions. We've built so many expensive training facilities at our firing ranges, but there are so few social facilities at them. Yet today people are experiencing fatigue on duty more than in previous years. The demographic situation, the set of problems stemming from the cutbacks in troop strength—all these things are a heavy burden on our men. Stress is becoming an importunate concomitant of an officer's life. In our district's hospitals, the patients of the well-used cardiological wards are, as a rule, people in their 30s and 40s. Their progressive neuroses, dystonia, and hypertensive crises, of course, are not cured by daily troubles arising from disorderly living conditions—and not just in the field, alas. The officer's workday is 10 to 12 hours long, sometimes even longer. True, even a compressed daily routine has "windows" of relatively free time. But where can you rest for a half an hour or an hour in a company office or battalion headquarters that is so cramped there's no vacant space anywhere?

Solitude is not a luxury but a natural human need to put one's self and one's impressions and thoughts in order. It is a kind of break from the constant activity and information, an opportunity for someone who works with people to recharge his batteries. Perhaps these are the considerations that led the Czechoslovak People's Army to begin setting aside rooms for its officers in subunits and training centers. They are comfortable rooms in which each nook bears the unique imprint of its occupant. In my opinion, the family photographs on the shelves, the paintings, the knickknacks, and the vases do not so much create comfort as erase the psychological boundary between one's official duties and private life, between work and relaxation. It is in the merging of these two traditionally separate spheres of the officer's life that one finds comfort—useful and vital for the soul and for working with people.

We have become accustomed to speeches about the social problems that confront officers, and we take this to mean, as a rule, the shortage of apartments, the difficulties facing their families, and so forth. But conditions over which we have little control have somehow hidden the state of affairs in the army. Let us call this social tension of a departmental nature. Despite certain difficulties, it can be relieved more quickly and more cheaply than can social tension that afflicts the state as a whole. Today the officer is subject to excessive hours on duty, tomorrow concern will be shown for his food and rest, and the day after tomorrow he'll become convinced that changes have come and that he should work harder. As one classical author asserted, a person cannot lose his desire to improve his life.

Obstacles to Innovation Require Reorganization

90UM0210C Moscow KRASNAYA ZVEZDA
in Russian 4 Jan 90 First Edition p 2

[Article by Captain A. Ovsyannikov: "We Do Need Lucid Minds: What Is Interfering with the Work of Military Innovators".]

[Text] Inventiveness and rationalization. I think it is no accident that the conversation at the All-Army Officer Conference was, as we know, about the most critical problems of our lives and that many speakers also paid attention to this side of it. Inventiveness and rationalization are frequently called the poetry of technology.

Of course, I was not the only one who appeared to be surprised when Colonel G. Gershkovich, chief of the scientific-research department of Irkutsk Higher Military Aviation Engineer School, pointed out in his speech at the All-Army Officer Conference that only five percent of engineer personnel in the Army and Navy participate in inventiveness and only 20 percent of personnel participate in rationalization work. That only from three to ten percent of all suggestions created by innovators are introduced.

However, surprise rapidly passes and we only need to have closer contact with this problem.

Senior Lieutenant Yu. Lisetskiy expended quite a bit of labor and effort to improve one complex electronic instrument. He manifested not only perseverance, but also exceptional skill and native intelligence. The change he proposed in the design of the instrument allows its service life to be extended several times over. If we take into account that expenditures for realization of this innovation in serial production would total no more than 300 rubles per unit of production and that the cost of one instrument is assessed at several hundred thousand rubles, what a solid economic impact the introduction of this young officer's suggestion promises.

Lieutenant Colonel V. Dankov thought of an original method to eliminate sulfatization of the active mass of a charge of severely run down lead batteries. While demonstrating the capabilities of the proposed technique for a specially formed commission, the officer restored several batteries that had exceeded the maximum time periods and had become completely unusable. The established operating life is five years. That is, in five years, we will have to replace hundreds of batteries in a tank regiment. This will cost us a very tidy sum. Dankov's rationalized suggestion increases battery service life by more than a factor of two and consequently we are talking about savings of millions on the scale of the tank forces.

It would seem that the "green light" would instantaneously light up on the road of these highly promising innovations. Alas, the "poetry of technology" has retreated in the face of the prose of life.

"Eight months ago," says Sr Lt Lisetskiy, "we sent out a detailed description, diagrams, and blueprints of my and certain other suggestions to improve efficiency along with Lt Col Smirnov, chairman of our unit's commission on inventiveness, to the appropriate department of the military district headquarters. However, to this day we have received neither an answer nor a greeting..."

Lt Col Dankov's innovation has become stuck somewhere in the bureaucratic labyrinth. No, no one has rejected him at the doorstep, everyone is allegedly "for" it but time is passing and the officer cannot get a final decision regarding his suggestion.

The examples listed are not the very worse. It happens that innovators' ideas roam through various headquarters for years. Thus, still at the beginning of 1987, Major P. Kharitonov sent his suggestion to improve efficiency for review. He is still waiting for a reply. A year before, Lt Col D. Malanich's description of an innovation went "upstairs." And it also disappeared on the [River] Lethe [was consigned to oblivion].

To find out just where these ideas of military innovators end up, I decided to follow the tracks of Officer Malanich's suggestion to improve efficiency. What did I find out? The documents left the unit headquarters in January 1986. Having passed by several echelons, it ended up in the military district headquarters six months later in the office of Lt Col V. Chekmarev, chairman of

commission on inventiveness of one of the services. It safely lay on his desk until he was replaced by Colonel V. Limonov last year. Only after this did a resolution appear on the documents addressed to Major V. Sarin, senior officer of the commission on inventiveness: "For further review."

I do not dare to assert that any suggestion of military innovators, having been introduced, promises many thousands of [ruble] in profits and a solid savings in assets. However, I suggest that each idea requires careful and efficient examination and a well-grounded and well-thought out decision should be made and disseminated to the author on each one. This is a matter of principled importance and in many ways the development and effectiveness of the rationalization movement in the Army environment depend on it. It is becoming quite critical now when we are being oriented to primarily qualitative parameters in the development of military equipment and weaponry. By the way, we were talking about this at the All-Army Conference of Inventors and Rationalizers that took place at the end of 1988. But things are right where they started.

Who is guilty of creating barriers on the paths of technical creativity of military innovators? It is very easy to throw "stones" at the chairmen and secretaries of commissions on inventiveness of units and large formations or of some military district headquarters directorate or department. People say the chairmen and secretaries have been entrusted with this matter and they need to be made to answer.

Without removing guilt for red tape from chairmen and secretaries, let us nevertheless try to put ourselves in their places. Commissions on innovation are organizations that operate on a voluntary service principle. The officers that head them, as a rule, have a large number of direct service duties that they are strictly held accountable for. Naturally, no matter how efficient or conscientious a "volunteer" is, he cannot deal with this vast [responsibility]. That is why at times that matters related to rationalization and innovation are put off. It cannot be denied that officers will not be removed from a position nor will they be transferred to the reserve because of them.

Furthermore, insufficiently thought out instructions for organizing innovation activities severely hobble commission activities. Let us say that we need to cover a mountain of paper with writing and expend a lot of time to comply with all requirements to process just one suggestion to improve efficiency. It is very difficult for non-professionals to do all of this competently, rapidly, and without error. All the more so since the guiding documents suffer from a vagueness of formulations and wordiness.

As an example, Major Sarin quoted an excerpt from instructions where "The Coefficient of Attained Positive Impact" table states (we are talking about substantiating the effectiveness of an innovation): "Improvement of

technical characteristics recorded by a document. Improvement of primary technical characteristics... Achievement of qualitatively new primary technical characteristics... Improvement of secondary technical characteristics."

"You read this and there is no way you can understand it," sighed Victor Andreyevich. "Where are 'simply' technical characteristics, and where are primary and secondary ones? To reduce all of these subparagraphs, to make two out of six, yes and with clear and precise wording. I do not think that there is a need to have to prepare so many documents while processing suggestions to improve efficiency. It is entirely possible to limit it to one statement on it. People are just simply frightened by all of these office gymnastics."

The documents regulating payment of efficiency-improving ideas are also not perfect. The formulas proposed in them for determining the size of awards are capable of frustrating even a knowledgeable man and they do not permit us to precisely determine an innovation's economic impact. In such a situation, how do we justly assess the work of an inventor? And there is nothing surprising in the fact that a very real leveling of material stimulus is flourishing in a number of units. For example, 500 rubles are allocated to it, 20 suggestions to improve efficiency are submitted, and each person receives 25 rubles so that no one will accidentally be offended. Yes, and we also do not have to rack our brains over the calculations.

And there really are innovations that are far from equally great both in the intellectual efforts expended on them and in their impact.

By the way, the bureaucratic horns do not only lie in wait for those who set out on the path of technical creativity. The prose of life places even more tangible barriers before them. Lt Col A. Smirnov, chairman of the unit commission on inventiveness, told me about one of them:

"Our officers developed quite promising, in my view, innovations directed at improving the training process. But we cannot introduce them into all subunits. We do not have the required radio components and other materials. It is most shameful that they are readily available in abundance at the military district combat training materiel support depot. But try to get them.... No one will sign the vouchers for expenditure of equipment for development. What kind of nonsense is this—We are really concerned about the quality of that very combat training and we cannot cross the barrier—they will not give us the manual."

"This is all true," Major Sarin confirms. "No one will actually approve the voucher. Because there is not even an article in the official document regulating expenditures on rationalization work. The only thing they have authorized us to spend money on is—I am citing the original source—on the publication of materials on invention, rationalizing, and patent-license activities,

including rationalizer sheets, and production of blank forms, etc. In short, money is allocated for... paper. It is as if we can manufacture an instrument, assembly, simulator, or a radio circuit from it.

The issues of supply of required instruments and devices are critical for military innovators. The situation with space for rationalization work and with technical literature is bad. And the state has finally become aware of the importance of a comprehensive increase of the rationalization and innovation movement and has undertaken practical steps for its development. Thus, maybe things are finally moving in military collectives? The transition to qualitative parameters in military job performance really requires this.

While working on the material, I heard quite a few opinions and judgments from our innovators on how to better restructure the organization of technical creativity. Their sense, in short, is reduced to the following. First of all, we need to examine the existing organic structure. It is not right when in an entire military district, it is the duty of only one officer to be involved with the problems of rationalization and inventiveness. The innovators think there should be a special department with 5-8 staff workers. There should be a staff position for organizing rationalization work in each unit or at least in each formation. Place the salaries of these officers in direct relation to the economic effectiveness of the ideas introduced through their help and assistance.

I foresee a typical objection for present time: The Army is being reduced, expenditures on defense are being reduced, and you are proposing an increase in staffs and allocating additional moneys...However, we will not forget an old truth: The stingy man pays twice.

Siberian MD: Shortage of Draftees

*90UM0210E Moscow KRASNAYA ZVEZDA
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[Interview with Colonel V. Tomin, Chief of the political directorate of an Oblast Military Commissariate, by Lieutenant-Colonel N. Fedoseyev, permanent KRASNAYA ZVEZDA correspondent to the Siberian Military District: "The Draft Occurred, Problems Remain".] txt [Text] Lieutenant Colonel N. Fedoseyev, permanent KRASNAYA ZVEZDA correspondent to the Siberian Military District, and Colonel V. Tomin, Chief of the Oblast Military Commissariate Political Directorate, discuss this while analyzing the results of the last draft into the Army and Navy.

[Tomin] It is becoming increasingly difficult to implement the draft with each passing year. We especially sensed it this past autumn—it became much harder to recruit the required number of draftees. In many ways, this is also associated with carrying out the decision of the USSR Supreme Soviet on releasing students of day (classroom) VUZ's [Higher Educational Institution] from active duty military service. Add to the number "losses" of the drafted contingent and those who by the

time of the draft turned out to be not on good terms with criminal law. The list of diseases that disqualify young men from being drafted into the ranks of the Armed Forces has been increased. We see that there is really no one [available] from whom to conduct a strict selection. The numbers for consideration: last year, 9,152 young men had arrest records with the militia and were placed on the list. Of the 200 draftees among whom we conducted a survey, more than 10 percent regularly used alcoholic beverages. This, as they say, is where there is an untilled field for the application of efforts of society, workers collectives, and the Komsomol in the plan to educate the younger generation.

[Fedoseyev] Valeriy Pavlovich, you have already said the VUZ students were not drafted. But how many Novosibirsk residents returned from the Army formation to student lecture halls? Do you have this data?

[Tomin] I do. Of 2,598 men who have studied at Novosibirsk's VUZ's and who were discharged from the Army in accordance with the USSR Supreme Soviet decision, 520 have not begun their studies. Having taken their documents, they went to work in the national economy, at cooperatives, and at various cost accounting organizations. But there is also another side to the problem: The decision not to draft VUZ students reinforced the opinion among a certain portion of young people that service in the Army is optional. Therefore, the number of so-called "refusers" that the voyenkomat is forced to look for with the help of the militia is also growing. In Kupinskiy Rayon, we conducted a sociological study among a large group of draftees. There was also this question: "Would you have avoided military service if you had had the opportunity?" And what did they answer? About 30 percent of those surveyed replied in the affirmative. This data has to alarm us.

A lot has already been said about the causes of these phenomena and the fact is not only in the decline in the prestige of the service, fears of "dedovshchina" [harassment of recruits], etc., but also in the decline in morals and morality in our society. Unfortunately, in recent times, anyone who feels like it attempts to present the Army in a bad light as something that corrupts both the minds and fates of young people. Our mass media is saying that service far from home is harmful to a young man and is giving the impression that law enforcement agencies are not obliged to react to cases of draft evasion. After such articles it is unlikely that a young man would express the desire to honorably and conscientiously fulfill his duty to the Fatherland.

But I will return to the problems of the draft. We are very concerned about draftees lack of physical fitness and poor initial military training skills. More than two dozen defense sports health camps operate in the oblast but this is obviously inadequate. As for NVP [Initial Military Training], I think it is long since time to more seriously look at the problem. It is really not a secret that the material base for initial military training is poor at many schools, especially at rural schools, and there are no

required study aids or structures. What the chiefs give, the schools will use. Yes, and the level of training of military training officers leaves a lot to be desired.

I have already said that quite a few draftees remained home due to a poor state of health. I will list the following case: Last year, 279 men in the oblast were recognized as unfit for military service due to psychological deviations. It is increasingly occurring that defects in a draftee's health are being detected at the last possible moment. For example, during the Spring draft, we determined that 18 young men from the Soviet Rayon of Novosibirsk have brain trauma. We were told about the draftees' traumas literally on the eve of their departure into the Army. Such cases are proof of unsatisfactory medical support of draftees. And where will we get good support if there are no oculists in four rayons, there are no neurologists in 8 rayons, there are no psychiatrists in 11 rayons, and there is a shortage of other medical specialists.

[Fedoseyev] You have painted a sufficiently bleak portrait. It seems that nothing has changed here and it is as if voyenkomats have been describing their own impotence. But they must be primarily interested in insuring that reliable replacement personnel come into the Army and they need to aggressively work in this direction.

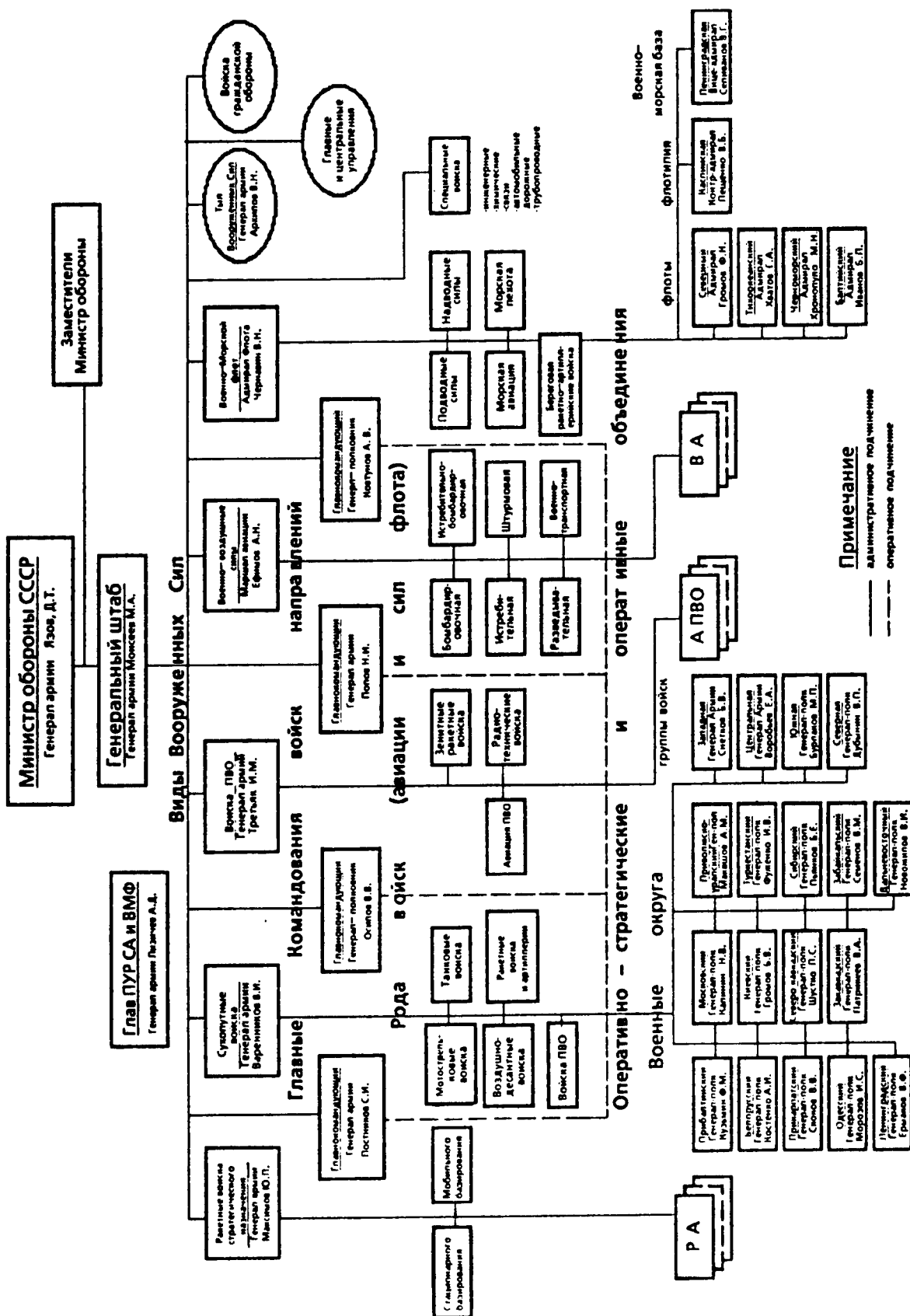
[Tomin] Yes, there are also quite a few deficiencies in the work of voyenkomats: They do not become well acquainted with drafted personnel, individual activity with draftees is not at the proper level, and there is no close contact with party, government, or law enforcement agencies, the Komsomol, or collectives where draftees work or study. However, I would like to point out that henceforth they will not have time to engage in this. They have not succeeded in finishing with one draft when they need to prepare for another. I think that we need to conduct one draft into the Army per year, best of all in Autumn when the fate of each draftee will be determined. In this event, the voyenkomat's will have a greater opportunity to work with draftees, prepare them for service, and be concerned with increasing the quality of replacement personnel. And nevertheless while passions about military service are being incited among the population, all possible rumors and falsehoods are circulating, and while the need to fulfill the constitutional duty is subjected to doubt—voyenkomats alone can hardly correct the existing situation.

Structure of USSR Armed Forces

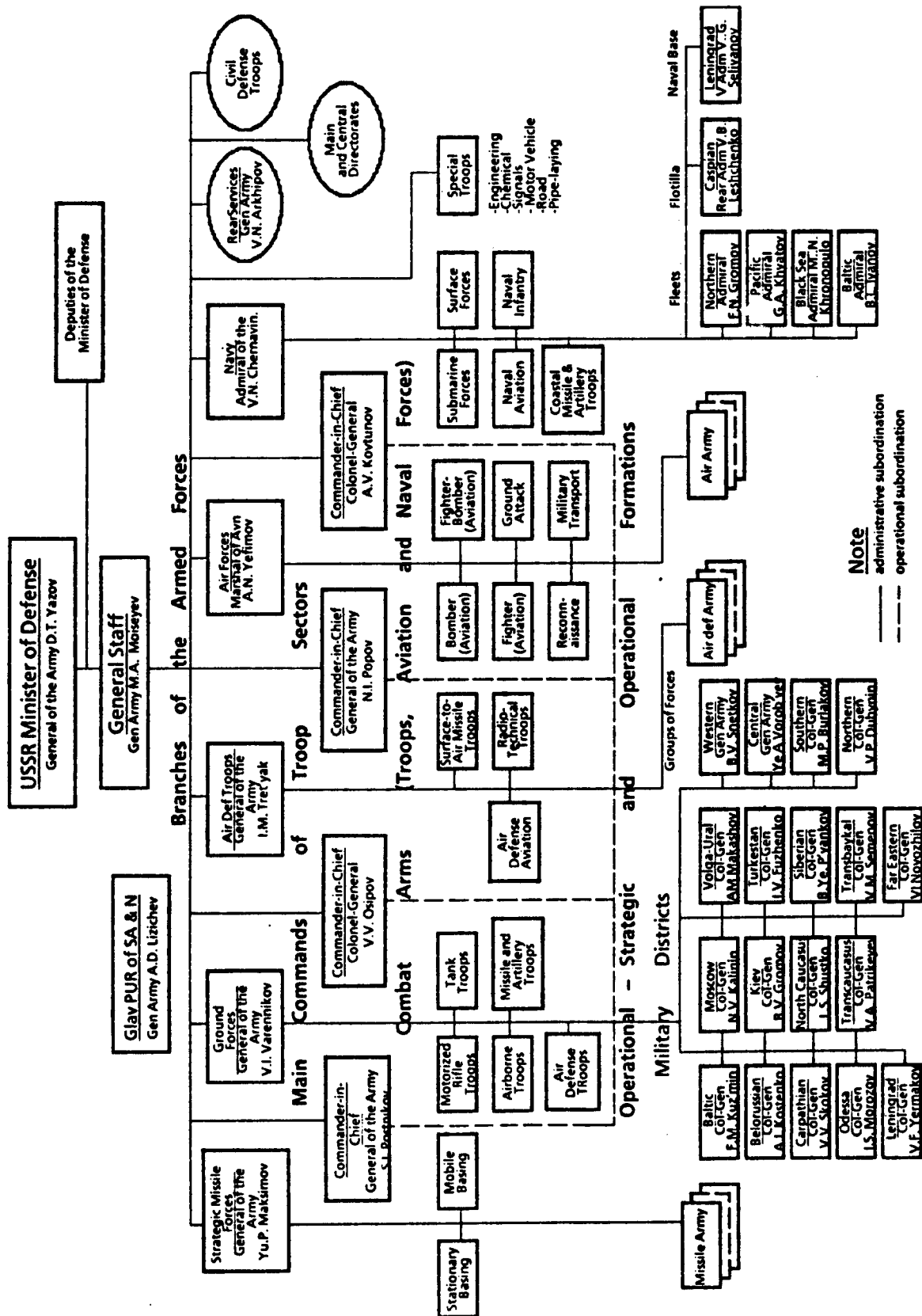
90UM0322A

[Editorial Report] Moscow IZVESTIYA published in Russian in the 22 February 1990 First Edition on page six the following chart. It was accompanied by an article by IZVESTIYA Military Correspondent V. Litovkin, entitled: "Secrets without Secrets".

Litovkin notes that a schematic of the Soviet Armed Forces has not previously been published due to military opposition. He also points out:



Structure of the USSR Armed Forces



Note
 --- administrative subordination
 --- operational subordination

- though they do exist, the Moscow Anti-missile defense(s) are not depicted due to their relative insignificance;
- that the name of the Commander of the Civil Defense Troops is not named, since the Civil Defense Troops are subordinate not only to the Armed Forces, but are also a part of the structure of the "Civil Defense of the Country, which is commanded by General of the Army V.L. Govorov. It is significantly larger than the framework of the Army and Navy and within the competence of the USSR Council of Ministers";
- "though it does exist, the sole District of the Air Defense Forces, Moscow, is not drawn in due to the space available. Its Commander is Colonel-General of Aviation V.A. Prudnikov;"
- the diagram does not show the Border, Internal and Railroad troops, since they have been removed from the Armed Forces;
- "... Now the question of the removal of Civil Defense forces, military construction detachments in more than 20 civilian ministries and agencies, and also road-building units, working on the construction of roads in the non-black earth zone of the RSFSR, is being reviewed;"
- the chart "reflects a defined stage in the development of the Soviet Armed Forces. Indeed tomorrow and the day after tomorrow they will appear in large part different."

Gen Army Tretyak on Army Navy Day, 1990

90UM0324A Moscow TRUD in Russian
23 Feb 90 pp 1-2

[Report on interview with General of the Army I.M. Tretyak, Commander-in-Chief of the Air Defense Forces, by V. Badurkin on the occasion of Soviet Army and Navy Day; place not specified. Title: "On the Eve of Military Reform".]

[Text] Is the Army to be professional, are its combat capabilities being lowered, is the discharge of students ahead of schedule warranted, has "dedovshchina" [mistreatment and abuse of recruits] been eliminated?.. General of the Army I.M. Tretyak, Commander-in-Chief of the Air Defense Forces, answers these and other questions asked by TRUD.

[Badurkin] One of the most popular subjects lately is the military. Many, from students to people's deputies, are discussing the situation in the Army and its outlook. I would like to hear the opinion of a person who has spent more than a half century in the Armed Forces as to the condition of the Armed Forces today.

[Tretyak] That society is not indifferent to its Army is comforting. It is worse when it is evaluated by people who are not competent to do so. I have not yet met a person in my life who would be ecstatic over criticism directed against him. I am no exception. Of course, I do not accept malicious nit-picking. I read reasoned criticism with pleasure.

Has the Army changed? Yes and no. I will not talk about the technical side of the question—understandably. But with respect to soldiers and officers, there is something to think about here. I often catch myself making comparisons between my subordinates today with those whom I led into battle as a 22-year old regimental commander. There is the same loyalty to the oath, duty, and the home-land. The same courage and readiness for heroic deeds.

But our whole society is changing with the years, and so are those people who come into the Army. They are not only more educated, but they are more demanding of social and everyday living conditions, and they aspire to greater democracy and legal protection. I see this, understand it, and accept it as proper. Another thing troubles me. Last year alone we reviewed about 2,500 reports of officers who could not cope with the burdens of military service. And what is most alarming is that among these there were 130 graduates of military schools. We must think about this problem and resolve it.

[Badurkin] Many speeches by military leaders note that perestroika in the Army is moving along the path of "strengthening the priority of the qualitative parameters." What do you specifically mean by this term?

[Tretyak] You know that the total sum of expenditures for defense this year is 8.2 percent lower than last year. The structure of the Armed Forces is being changed in keeping with the new defensive doctrine, and the process for reducing their numerical strength has been started. Given all of this, how does one avoid a reduction in the combat capability of the state? Only through the qualitative growth of its components. And this is people and combat equipment. Therefore, the main thing now is professional skill combined with discipline and high moral qualities.

We are also perfecting arms. For example, the obsolete TU-128 interceptors were replaced by the far more advanced MIG-31 and SU-27. The same applies to surface-to-air missile systems and radar sites. This process affects all armed forces. The more so because now our relationships with enterprises of the defense branch industries are changing. The Ministry of Defense now will be in its rights not to accept poor quality equipment and to apply punitive fines for failure to meet contractual conditions.

[Badurkin] At the Second Congress, a group of people's deputies who are young officers put forth a program of reorganization of the Armed Forces...

[Tretyak] I am very familiar with this "concept of military reform," as the authors called it. It has quite a few constructive points, which are already being resolved.

[Badurkin] One of the main points of this program is a transition to a professional army...

[Tretyak] Yes, and I am not in full agreement with it personally. And not as a General and Commander-in-Chief, but as a People's Deputy. For if you examine the problem of a professional army in its pure form, then for the military—from lieutenant to marshal—this is advantageous. Monetary salaries would increase substantially, social and everyday living conditions and other problems would be resolved better, but the main thing is that there would be a sharp increase in combat training and personnel discipline. For the Air Defense Forces, the question of a professional army is far from new. Already today, 35-40 percent comprise such specialists, and in aviation it is significantly more. But, nonetheless, I am against a quick transition. Because our society is not ready for it now. Not on a political, economic, or social level.

[Badurkin] Since we have already touched on the Congress, then there is this question for People's Deputy Tretyak. Many people have observed that, during its work, a certain confrontation was noted between the deputy-officer corps and the deputy-generals. Is this not a reflection of the real situation in the Army?

[Tretyak] I would not call this opposition. In the officer corps, as in any collective, there can be (and there are) various opinions, views, and even polarized points of view. And this, perhaps, is not bad. No one needs a show of unanimity. Because even the "generals" in the national economy do not always coincide with the intentions of their subordinates. Everyone is free to think his own way and to defend his own point of view. If the debate is conducted with reason, then a matter can only win from this. So there are differences on certain questions, but there are no antagonisms. I declare this with complete amenability.

[Badurkin] The decision of the Supreme Soviet of the country concerning the discharge of students was received in different ways in society. A bitter joke is making the rounds: Is it time to return to the Army its former designation—Worker-Peasant...

[Tretyak] Of course, this decision was hasty and not thought through. Here, the decisive role was played by emotions, and not by a well-considered approach. The leading specialists and the junior command personnel left the Army, as a rule. Just from Air Defense units, about 19,974 were discharged. Could this have occurred painlessly? Of course not. The result is a paradox: With one hand we vote to increase the professionalism of the soldier, and with the other, we vote to discharge highly professional specialists.

And more. They were demobilized to continue their education, but one out of every five did not even try to reenter a higher educational institution [VUZ]. Therefore, the Ministry of Defense is preparing a proposal to the government to recall them to complete their service. I think that this will be fair.

[Badurkin] The Air Defense Forces are special. They protect our peaceful work directly. Are the "defects" of the Army, especially "dedovshchina," present in the Air Defense Forces?

[Tretyak] Unfortunately... In 1989, compared with the previous year, we were able to reduce the number of such crimes by one-third. I understand, this is not enough, but it is still a real achievement.

We are especially troubled now that "dedovshchina" is assuming a tendency toward mocking based on ethnic origins. At present, there are relatively few such incidents—11 percent, but if the recent outburst of national emotions is taken into account... We have to continuously consider this exceedingly unpleasant phenomenon in work, right down to the formation of individual alert duty staffs.

[Badurkin] And from your standpoint, what were you able to do that was most significant in your two and a half years in the position of Commander-in-Chief? Because you, as I recall, were appointed after the well-known "visit" of Rust.

[Tretyak] I would not like to tire the reader with a detailed report about my service activity. I will observe only that we reduced the number of stages of transmitting information, cut back command and control organs by 10-15 percent, and strengthened the subunits on alert duty, because the main load falls on them. More than 90 radars are activated every 24 hours to prevent violations of air space, about 100 commands are issued to bring surface-to-air missile batteries to No. 1 readiness condition, and about 20 aircraft and helicopters take to the air. In January of this year alone, more than 220 reconnaissance aircraft approached the borders of the USSR.

Many people do not know about this. And this is good. This means we are working normally.

[Badurkin] Some of our readers were perplexed by the government's decision to increase the officers' pay rate, thinking that the military receives a lot as it is. Pardon my impudence, but, nonetheless: What is the rate of pay of a USSR Deputy Minister of Defense?

[Tretyak] When they talk about an increase in the salary, for example, of a teacher, then it is not a question of the Chairman of the Committee on National Education or his deputy, but of that huge group of people which, figuratively speaking, sits behind a desk.

Until the present increase, a senior lieutenant with two children (the wife, as a rule, does not have an opportunity to work) received an average income per family member that was on the poverty line (R55-60). Other categories of junior and even senior officers are not much different. Add to this service duty at times equal to one and a half to two shifts. There is a popular saying that two permanent moves are equal to having one fire. And, during his service, an officer moves from six to 12 times. A lot has been written about how much he pays to

rent part of an apartment. You cannot get by with R100 in the cities. So, calculate whether the R40-50 was a large addition.

As for myself, my new duty pay (without taking increments into account) is R620 ([TRUD] editor's note: The pay of a soldier in the U.S. Army is \$783.60).

[Badurkin] So much has already been said about the daily living burdens of servicemen, and "things are still not moving..."

[Tretyak] Unfortunately, the "residual principle" in the resolution of housing and social and living condition problems has led to the fact that today in the Air Defense Forces more than 20,000 families of officers and warrant officers do not have apartments. We lack dozens of clubs, schools, consumer service facilities, and stores. Soldiers' barracks and mess halls are in a rundown condition in a number of garrisons. This did not happen today and yesterday. The problem has built up over the years. But it is not enough for the people that the leaders recognize the presence of the problem. Deeds are needed. Improvement in facilities and the resolution of the problems of housing and everyday living conditions are broadly reflected in my platform as a USSR people's deputy.

[Badurkin] Speaking in the Supreme Soviet, the Minister of Defense reported on the participation of the Army in

the resolution of national economic problems: food, construction, etc. What do you think of an alternative service?

[Tretyak] Yes, today our subunits have to resolve numerous tasks that are not part of their mission. Even those who are on permanent alert duty. But, understand, this is not on behalf of a good life and not because the commander would like very much to raise steers. Our table of organization does not have "piggens," "shepherds," and "milkmaids." And this increases the burden on those who are on combat teams.

As an ideal, everyone should be engaged in combat training. But it is not necessary, I trust, to explain to anyone what the situation is in the country with respect to food and construction. So we take part of the burden on our shoulders.

The subject of an alternative service deserves attention. But this should not be service that is easy, a "loophole," for those who are too "resourceful."

In conclusion, I would like to say: Defense of the country is not a matter just for the military. The Army today, perhaps, as never before, needs the active assistance and support of all of the people. And not only in words. The main thing that is needed is action.

T-72 Maintenance in Mountainous Terrain

90A10164A Moscow *TEKHNIKA I VOORUZHENIYE*
in Russian No 11, Nov 89 pp 10-11

[Article by Maj V. Solovyev and Capt V. Sokolov under the rubric "Study, Maintenance": "The T-72 Tank: Maintenance in Mountains"]

[Text] In high-mountain terrain there are frequent fogs, snowfalls and drastic temperature fluctuations during the day. The mountain roads run across numerous bridges with small load capacities, have steep and short or gently sloping inclines and descents, and abound with sharp turns. The ground is ordinarily rocky. In addition, the thin air affects the functioning of the tank systems, units and assemblies at altitudes of more than 2,000 meters above sea level. The rapid attenuation of ultrashort radio waves makes it difficult to conduct radio traffic in the mountains. All of this makes certain demands of the training of the tank crews with respect to servicing and operating the tanks in the mountains.

The assemblies and units of the power plant, the transmission and the running gear are carefully checked when readying a tank to operate in high mountains. The condition of the controls and their adjustment to conform to the technical documents receive special attention.

The complex road situation requires that the mechanics/drivers pay increased attention both when operating a tank individually and as part of a column. The interval between tanks in a column should be 70-100 meters on long inclines and descents in poor visibility. All members of the crew must also watch the road in front of the tank. In poor visibility the commander is to climb out of the tank and guide it.

On a narrow mountain road with sharp turns it is recommended that the tank be driven in the lower gears, as far as possible from the edge, and that turns be made in good time and with the least number of brakings in order to avoid overheating of the brake disks. Steep inclines and descents are traveled in low gear, without shifting gears, halting or turning the tank. When necessary the tank is slowed by means of the engine and the stopping brake, preventing the tank from sliding and the engine from exceeding the operational rpms.

In order to prevent increased wear on the clutch plates, the brake button should be pressed as long as necessary to reduce the tank's speed. In addition, when starting down inclines the crankshaft is slowed down—to minimal speeds on steep descents. When traveling within a column one must not begin a climb or an descent until the tank ahead has completed it.

Experience has shown that stopping and starting the tank on inclines and descents is the most difficult operation for the mechanic/driver. In order to stop the tank on an incline or a descent while moving in first or reverse gear by means of the steering arms, one should first slow the engine (but to no less than 1300 rpms) and simultaneously move both steering arms to the extreme rear position. After stopping the tank,

before releasing the steering arms, one should depress the clutch pedal and the stopping brake as far as possible and return the steering arms to the initial position. The gearshift is then placed into neutral, the clutch pedal is released and the brake pedal is locked down, while preventing the tank from slipping.

When taking off in a tank being held on an incline by the stopping brake, one should set the rpms at 1300-1600 with the manual fuel feed lever, release the stopping brake pedal from the catch and hold it with one's foot, while preventing the tank from slipping. Then press the clutch pedal, shift into first gear and, without releasing the clutch and stopping brake pedals, pull the turning arms toward oneself as far as possible. Then, after releasing the pedals in turn, rapidly return the control pedals to the initial position, one of them more rapidly than the other, and simultaneously increase the fuel supply.

If the tank begins rolling backward while in gear and with the engine running, rapidly depress the clutch and stopping gear pedals and shift into neutral. Otherwise, the crankshaft will be turned in the opposite direction, which can result in the uncoupling of the engine stopping mechanism (MOD). If uncoupling still occurs, recouple the MOD by placing the manual fuel-feed lever in the extreme rear position and moving the fuel-feed pedal toward oneself until it locks. If the rolling tank cannot be halted with the brakes, it should be steered onto a nearby obstacle, avoiding a strong impact if possible.

At altitudes high above sea level (2,000 meters or more) the low barometric pressure lowers the temperature at which the water (coolant) boils, which causes it to evaporate rapidly. The temperature of the coolant and the rate at which it rises must therefore be closely monitored while traveling, and the level in the cooling system should be checked during halts. The rapid evaporation of the liquid from the cooling system may be caused by a disturbance of the pressure-and-vacuum relief valve adjustment (pressure relief, for an overpressure of 2.1-2.2 kilograms per square centimeter; vacuum relief, for a vacuum of 0.05-0.15 kilograms per square centimeter). In order to avoid excessive consumption of liquid in the cooling system the temperature of the coolant should be maintained below that recommended for ordinary conditions. If it increases drastically, the tank should be stopped, the cause ascertained and eliminated.

It should be borne in mind that it is not recommended that the engine be operated at below 1700 rpms at altitudes of more than 2,000 meters, and one gear lower than that permitted by road conditions is therefore selected. When executing marches in mountains the extra fuel consumption should be considered and the necessary reserve provided.

In mountainous terrain the frequent use of the tank controls throws them out of adjustment and causes extra wear on the clutch plates, particularly for fourth and fifth gears. For example, if the tank pulls to the side when shifting gears, this indicates that the clutch drive is out of adjustment (nonsynchronous gear engagement), and poor braking when the stopping brake pedal is depressed

means that its drive is out of adjustment due to wear on the clutch plates. The control drives must be immediately adjusted in this case.

When traveling over mountainous roads (particularly rocky ones) the running gear assemblies experience increased dynamic loads and rocks frequently get into the space between the tracks and the road wheels. This damages the road wheel arms, shock absorbers and road wheels (particularly their rubber parts). In addition, the track pins may be broken, causing the tracks to fall off. Proper and even track tension (a sag of 16-18 millimeters is permitted) helps to reduce the amount of damage to the track and suspension assemblies. It is permitted to operate the new tracks with rubber and metal joints the first 300 kilometers (by the speedometer) with a sag of 10-18 millimeters, but the difference in sag between the left and right tracks should not be more than 3 millimeters.

In many cases it is necessary to tow a broken-down tank. The technical state of the tank, particularly the condition of the track, suspension and brake assemblies, is checked before the tank is towed. The tracks and suspension are repaired when necessary. The towed tank is linked to a tractor with two crisscrossing cables of equal length. The mechanic-driver of the vehicle in disrepair must drive it so that the cables are constantly taut. The tank hatch must be closed. A tank with a defective stopping brake may be towed only with a rigid tow bar (rod).

One should also bear in mind specific aspects of organizing the operation of tanks for specific conditions. For example, it is recommended that the control drives, brakes and BKP [not further identified] and the track tension be checked during the daily technical maintenance. The electrolyte level in the batteries and the condition of the enhanced off-road devices should be checked more frequently. It should also be borne in mind when operating a tank that the additional work, with a simultaneous reduction in the frequency, increases the total time required for servicing by as much as 30%. The likelihood of more frequent breakdowns of the assemblies and units (particularly those of the tracks and suspension) make it necessary to lay in mobile repair supplies and other materiel.

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Driving Characteristics of GM-569 Tracked Vehicle *90A10204A Moscow TEKHNIKA I VOORUZHENIYE* *in Russian No 1, Jan 90 pp 12-13*

[Article by Lt Col (Res) N. Kosarev: "Driving Characteristics of GM-569 Tracked Vehicle"]

[Text] The GM-569 tracked vehicle (Figure 1) with a hydromechanical transmission (GMT) differs substantially from vehicles with regular mechanical transmissions in the configuration of the main units and assemblies, and the positioning and purpose of controls and instrumentation.

The GMT combines in one unit a synchronizing reduction gear, a hydraulic torque converter, a planetary gear box, a summator series, and a hydraulic pump-controlled steering mechanism (GOMP). With the use of this transmission, especially combined with the hydraulic steering mechanism drive, the procedure for preparing vehicles for movement and the techniques and methods of driving it also changed.

Automatic tractive force control by the hydraulic torque converter makes it possible to begin moving in practically any gear (except fourth gear) and travel in high gears at slow speed. However, it should be kept in mind that extended operation in this mode can result in transmission overheating and excessive fuel consumption (since the torque converter operates at low efficiency values during this time). A light signal warns the driver-mechanic that he has selected the wrong gear (the transparency "Engage lower gear" lights up). In addition, one should avoid moving the vehicle in first gear with the brakes engaged (the transparency "Brakes" lights up), since this will inevitably result in a breakdown of the brakes and the final drive as a result of overheating.

The GM-569 has electromechanical gear shifting with hydraulic actuators. When engaging it, the driver mechanic puts pressure on the gear lever 1 (Figure 2), closing the appropriate electrical contacts. Before moving the vehicle, it is necessary to put the type of movement switch 4 into one of the corresponding positions: "Fwd" (forward movement), "Rev" (reverse movement), or "R=B/2" (turn in place). At halts and stops, the switch must be in the "Fwd" position. Switching of types of movement is accomplished only when the vehicle is completely stopped and the brakes are applied. In so doing, the gear lever must be in the "N" position.

In order to improve the engine's economy and maintain the optimal heat conditions of the GMT when traveling in favorable road conditions, the vehicle has a device for blocking the hydraulic torque converter. Its switch 3 is located on the link. The blocking is turned on when moving when the engine crankshaft speed is at least 1,700 RPMs. On sharp declines the hydraulic torque converter must be blocked, since only then is it possible to brake with the engine. The blocking works in all gears and disengages when gears are changed. It is necessary to remember that it is categorically forbidden to engage the hydraulic torque converter blocking if the transparency "Engage low gear" lights up, located on the engine instrument panel.

The GMT electrical control circuit has blocking that can be turned on with the "Blocking control" toggle switch on the onboard electrical system panel. In this control mode, gears can be engaged only at a specific vehicle speed.

If the speed is not appropriate for the gear engaged, "Engage lower gear" will light up. In this case, it is

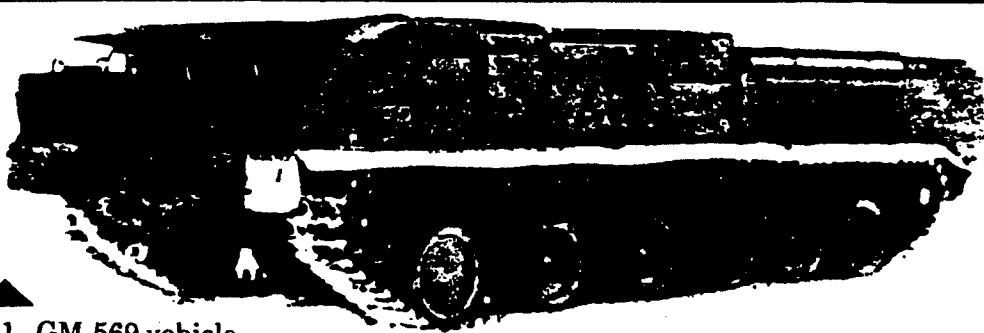
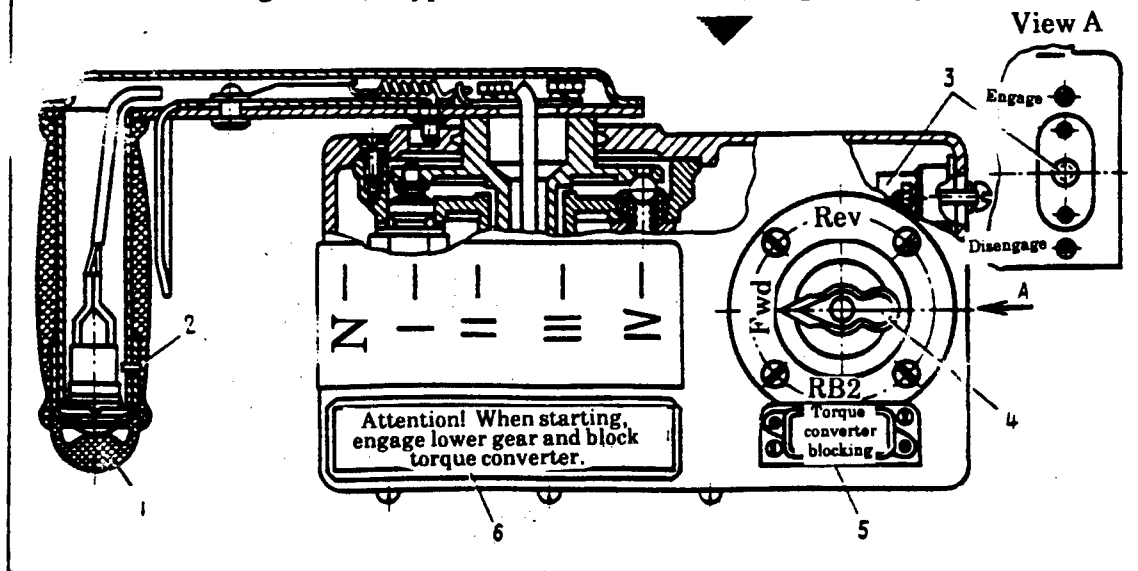


Fig 1. GM-569 vehicle

Fig 2. Gear change link: 1-neutral button; 2-gear lever; 3-hydraulic torque converter blocking switch; 4-type of movement switch; 5, 6-light transparencies.



necessary to increase fuel feed and (if the light does not go out) shift to a lower gear.

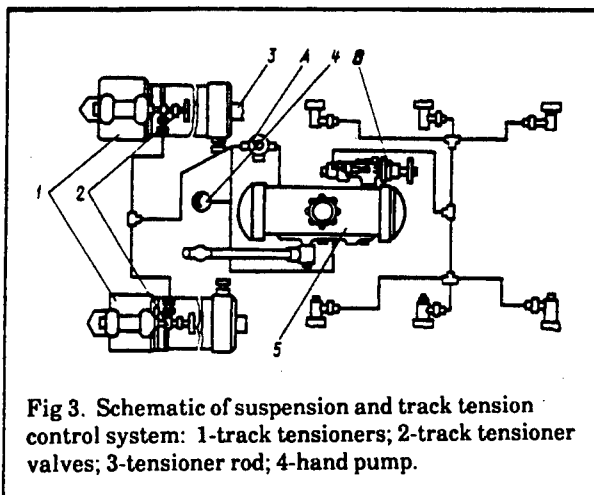


Fig 3. Schematic of suspension and track tension control system: 1-track tensioners; 2-track tensioner valves; 3-tensioner rod; 4-hand pump.

If elements of the automatic blocking system malfunction, move the "Blocking control" toggle switch to the "Disengage" position (emergency operation mode). In this case, the gears can be engaged at any speed. Operation of the vehicle in this mode is permitted only in exceptional cases and with strict observance of established speed ranges. To ensure forward movement of the vehicle, it is necessary to engage the sleeve valve of gear II with the lever located on the valve box and secure it. For movement in reverse, the reversing gear valve is engaged with the lever on the reverse valve box of the GMT.

It is necessary to remember that with the vehicle suspension and the drive reduction gear of the reserve block of the electrical power system generator system engaged, control system of the GMT precludes engaging any gear.

After pressing on neutral button 2, any gear can be engaged without shifting the gear lever to the "N" position.

A characteristic feature of the vehicle is turning control using the steering column and only with the traction engine running. The steering column folds forward to make it easier for the driver-mechanic to get in and out. It locks in the operating position with a stop lever. Regulating the turning radius is done smoothly and continuously by use of a differential double-flow steering mechanism with a hydraulic pump-controlled drive. The following modes of steering are possible: in place around the center of the vehicle with the travel mode switch in the "R=B/2" position; in place in the "Fwd" or "Rev" modes; or when moving. To avoid throwing tracks, it is recommended that turning around the center of the vehicle be done on areas with a hard surface.

The turning radius depends on the vehicle speed and the RPMs of the engine crankshaft. The vehicle's maneuverability is better at slow speed and high crankshaft RPMs. To avoid impairing controllability, it is not recommended to turn and simultaneously brake the vehicle using the stopping brakes. The turning radius can be decreased considerably by simultaneously pressing the neutral button 2 and increasing crankshaft RPMs. When traveling with the hydraulic torque converter unblocked, the turning radius is less than with it blocked. It must be remembered that the direction of the turn and direction of turning the steering column are mutually opposite when going in reverse.

A characteristic of the GM-569 distinguishing it from existing tracked vehicles is that it has disk dry-friction brakes. The stopping brakes are hydraulic, and the parking brakes are mechanical. There is a hydraulic accumulator for braking without the engine running. During the process of operation, the brake disks adjust automatically as they wear. Braking and turning control should not be done with the two parking brake levers when the disabled vehicle is being towed without the engine running and with the gear couplings separated from the final drives.

Limit switches are installed in the control linkage to monitor brake operation. They are connected to the red transparency "Brake" on the engine instrument panel. The transparency lights up when both the stopping brakes and the parking brakes are used.

When moving, it is necessary to closely monitor the oil temperature in the GMT cooling system. If it exceeds 130 degrees C, it is necessary to shift to a lower gear and block the hydraulic torque converter. If the oil pressure in the GMT is lower than the permissible level (0.4 kg/cm²), the transparency "Main oil pressure" lights up. If this happens, it is necessary to increase the RPMs of the engine crankshaft, shifting the GMT to a lower gear.

The GMT lubricating system and the hydraulic pump-controlled steering mechanism tank are filled with TSZp-8 oil. Its level in the GMT should not be below the

"V" mark on the dip stick after the vehicle has been standing for a day. The oil level in the hydraulic pump-controlled steering mechanism tank should not be below the "V" mark on the eye glass.

For track tension, the vehicle has hydraulic mechanisms with a pneumatic compensator. The correct track tension is checked by external inspection after having put the vehicle on a hard, level area. With normal track tension, the top run of the track should be positioned on the top rollers without an noticeable droop. The distance from the end of the rod lug to the end of the track tensioner cylinder should be 25-100 mm. If it is more than 100 mm, it is necessary to remove one track link. When the track has 108 track links remaining and it does not have normal track tension, the tracks are replaced.

If it is necessary to tighten up a track, power is first connected to the onboard system and valves "A" and "B" (Figure 3) are closed. After doing this, the transparency "Valves closed" should light up on the engine instrument panel. Next, after opening valve 1 of the track tensioner for the appropriate track, use hand pump 5 to create a pressure of 90 kg/cm² according to pressure gauge 4 (on earlier vehicles pressure is built up until the "Pressure normal" transparency lights up), and close valve 1. After tightening the tracks, open valves "A" and "B"; the transparencies "Valves closed" and "Pressure normal" should extinguish.

The independent torsion suspension is equipped with hydropneumatic, cooled shock absorbers mounted on the 1, 2, and 6 road wheels. Only antifreeze grades 40 and 65 is used as coolant.

To disengage the suspension, it is first necessary to connect power to the onboard system and close valve "A". The transparency "Valve closed" should light up. Next, open valve "B" and create a pressure of 120+10 kg/cm², according to pressure gauge 4, in the hydraulic system using hand pump 5. All remaining valves should be closed. After this, close valve "B" and open valve "A".

The hydraulic system for disconnecting the suspension and tightening track tension is filled carefully with TSZp-8 filtered oil. Its level in the oil tank should be between marks "V" and "N" on the dip stick.

The vehicle's electrical equipment is characterized by a high saturation with sources of current. Besides the traditional sources (storage batteries and SG-10 starter-generator), the vehicle has an electrical power system (SEP) that includes a main block of paired alternating-current generators driven by a gas-turbine engine (GTD) and a spare block of similar paired generators driven by a traction engine via reduction gear. It is necessary to remember that using the traction engine to drive the spare block of generators is permitted only when parked (in the event the GTD or main alternating-current generators malfunction).

The time of continuous operation of the electrical power system driven by the GTD and the main engine is stipulated by the appropriate instructions. When parked, power can also be supplied by an external source. To ensure reliable starting and stable operation of the GTD in a strong wind, it is desirable to park the vehicle so the exhaust pipe is on the leeward side.

When operating the traction engine to drive the electrical power system, crankshaft RPMs must be maintained constant and the coolant temperature must not be less than 85 degrees C. It should be remembered that the reduction gear of the spare generator block drive can be

engaged and disengaged only when the engine is not running and with the gear lever in the neutral position.

During operation of the electrical power system, it is necessary to constantly monitor the insulation resistance relative to the ground. Even if only one of the insulation monitoring instruments shows insulation resistance below the acceptable level (60 kilohms) or the transparency "Danger! Insulation of system G-1" ("Danger! Insulation of system G-2") lights up, it is necessary to disconnect the power supply and determine and correct the cause of the insulation resistance.

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Flt Adm Chernavin on Struggle for SLOC

90UM0325A Moscow MORSKOY SBORNIK
in Russian No 1, Jan 1990 (signed to press
9 Jan 90) pp 18-28

[Article by Admiral of the Fleet V. Chernavin: "The Struggle for the Sea Lanes of Communication: Lessons of Wars and the Modern Era ¹"]

[Text]

Introduction

The problem of warfare on sea (ocean) lines of communication arose in distant antiquity. However, it has never been as complicated as during the wars of the 20th Century. In peacetime, sea lanes promote the development of international ties, economies, and trade. During war, they become the arena not only of military but also of military-economic confrontation of the parties and have a significant impact on the course and outcome of warfare as a whole.

It is characteristic of the current disposition of forces in the world that not only socio-political world systems but also individual countries within military blocks are divided by ocean expanses: Of the U.S.'s 43 allies through mutual military obligations, 41 are located overseas.

In the research of foreign authors, paramount importance is traditionally attached to the issues of providing uninterrupted functioning of sea routes of communication. Warfare on the sea lanes of communication is an important element of foreign navies' operational and combat training during the conduct of which the existence of a "Soviet military threat" is considered to be the point of departure.

The World Wars have demonstrated the amplifying role of the economic factor in warfare. This was caused by the coalition nature of wars and the development of forms of warfare based on massive military production and the increase of the scale, intensity, and duration of combat operations. The capability to seize the strategic initiative depended to an ever greater degree on mobilization readiness and effective utilization of the state's economic potential. The course of military events began to be determined by long duration factors and primarily by the size of material and human resources and by the parties' capacity to increase production and insure production of armaments during the course of the war.

The armed forces were more frequently and more broadly than ever before tasked with undermining the military industrial potential of opposing countries and coalitions and the interdiction [narusheniye] of the functioning of sea routes of communication between them. Therefore, operations on sea lanes of communication, especially in the Atlantic and also in the Pacific during the Second World War, acquired unprecedented proportions. The result of amphibious assault operations depended on the stability of the "sea routes" since

troops, weapons, and all types of supplies were delivered to overseas TVD's [Theater of Military Operations] on them. All of this taken together caused an increase of the scale of armed pressure on sea lanes and the resources that they provide.

The continuous increase of the role of foreign economic ties of the majority of the world's states is characteristic of the modern world economy. Its analysis demonstrates the increased significance of maritime shipping of raw materials and manufactured goods. Maritime transport currently occupies a leading position and sea routes are main transportation arteries in the worldwide system of foreign transportation ties.

Maritime shipping became an important factor that determines the capacity of NATO countries to maintain economic and military potential at a high level. All of this foreordains their military and political leadership's constant attention to further improvement of the maritime transport system in the direction of a substantial increase of its capabilities. At the present time, the maritime transport system of the main capitalist countries consists of more than 44,000 vessels (of which about 11,000 are modern ocean-going [vessels]) and a developed network of ports and bases that provide dispersal of [naval] force basing and that have a high traffic capacity that allows processing of up to 5,000 vessels simultaneously.

After the Second World War, maritime shipping volume doubled every 8-10 years and at the present time totals about 4 billion tons and about 60 percent of this volume is petroleum and petroleum products.

The problem of maritime cargo transport also undoubtedly interests the USSR as a major sea power that has a modern and developed merchant fleet at its disposal. The Soviet Union's state interests include insuring its merchant fleet's secure utilization of sea lanes of communication.

We can glean quite a bit of information from the Western press that is concerned with the possible consequences of global warfare that first of all involves the interdiction [narusheniye] of foreign economic transport. Hence in our view arises the need to once again return to the problem of warfare on sea lanes of communication in spite of the fact that foreign and native researchers have frequently turned to it.

While examining the issue based on the experience of the last war, we need to first of all establish how the specific capability for conducting warfare on maritime routes depends on which politico-economic and operational-strategic factors, how they have changed during various stages of combat operations, and what significant influence they have had on the overall course of warfare.

As a rule until the present time, warfare on sea lanes of communication has been examined in isolation from the total course of the war although it is perfectly obvious that events on sea lanes of communication do not occur

in an isolated environment and that they need to be considered as an integral part of warfare as a whole.

We also need to extract lessons from the polemics that have already repeatedly been conducted both in foreign as well as in our literature regarding underestimation of the role of naval forces in war and its separate component services and weapons.

It is perfectly obvious that the experience of German naval combat operations on the sea lanes of communication in the Atlantic is most interesting and informative where they [the Germans] were in a position to inflict great material losses on the Allied Powers' merchant and military fleets. The American Navy also achieved outstanding results in interdicting [narusheniye] Japanese sea lanes of communication in the Pacific Ocean.

This is also important because U.S. and NATO Armed Forces commanders' war preparation plans allot a leading role to warfare on sea lanes of communication. The experience of the Second World War is being painstakingly analyzed. It is thought that many strategic missions were decided at sea despite its continental nature on the whole. Of these missions, disruption of the sea lanes of communication has occupied a very important place and its resolution has caused a number of substantial changes in techniques of warfare at sea.

While encompassing various sides of reality, theory must be scientifically based on practical naval operations to form views on the structure and use of forces in warfare, including on the sea lanes of communication. The defensive orientation of the structure of our fleet is primarily toward qualitative parameters and the focus of attention precisely on them is raising the development of military theoretical issues to a new level.

Results of [Naval] Force Operations on the Sea Lanes of Communication²

In spite of the abundance of various types of statistics, it is difficult to find an analysis of what influence naval operations on sea lanes of communication have had on the course and outcome of some continental operations, land warfare, or the Second World War as a whole in the literature about warfare on sea lanes of communication.

It is more correct to select effectiveness criteria on enemy maritime shipping while considering the influence that they are having on enemy troop formations' capabilities to accomplish missions in a given specific situation on the adjacent continental TVD or on the reduction of the economic capabilities of a belligerent state to provide the armed forces with required materiel.

Based on a generalization and analysis of the experience of two world wars, we usually define the result of such impact using the standard term "interdiction [narusheniye] of maritime shipping." Depending on the degree of mission accomplishment, this general concept can be

divided into impeding [zatrudneniye] of maritime transport or the reduction [sokrasheniye], [temporary] interruption [sryv], or prevention [nedonushcheniye] (severing [presecheniye]) of it.

Impeding [zatrudneniye] maritime shipping is understood to be the destruction by naval forces (independently or in coordination with other arms of the Armed Forces) of such a number of enemy transport vessels loaded with military cargo and also reduction of port traffic capacity as a result of which enemy troops in a given area of a continental TVD cannot accomplish their assigned missions within planned time periods (to carry out an offensive, to land an [amphibious] assault force, etc.). An approximately 25-30 percent reduction in the volume of enemy maritime shipping is required to achieve these goals. **Reduction [sokrashcheniye]** of shipping is understood to be a 30 to 50-60 percent reduction in its volume.

When maritime shipping is [temporarily] interrupted [sryv], enemy troops in the continental TVD and the military economy supplied with its help are deprived of being regularly replenished with reserves and materiel and they lose the capability to effectively carry out their characteristic functions. This is achieved through a 60-80 percent reduction in the volume of maritime shipping.

The prevention [nedonushcheniye] of maritime shipping requires reducing its volume by more than 80 percent. In practice, this is achieved through a sea and air blockade of the enemy when enemy troops and the economy can only utilize previously accumulated reserves of materiel for their [continued] functioning and the population for subsistence.

For example, let us examine British troop transport movements in the Mediterranean Sea Basin from 1941-1943.

In the middle of 1940, the situation in this theater of war was extremely complicated. Italy's entry into the war, the capitulation of France, and the loss of bases in Greece placed Great Britain in a difficult position. British naval forces were barely adequate to support the evacuation of troops first of all from Greece and later from the Island of Crete. Shipping along the extended sea lanes of communication that link Gibraltar with Alexandria nearly ceased [prekratil].

This would have [temporarily] interrupted [sryv] or prevented [nedonushcheniye] maritime shipping if the Mediterranean Sea had been the only route through which British troops in Egypt could be supplied. However, the British were supplying troops and military cargoes to Egypt and the Middle East without losses by using the southern route around Africa and they transported more than 200,000 officers and men using this route during the second half of the year. Consequently, the [temporary] interruption [sryv] and even the severing [presecheniye] of Mediterranean shipping did not result in a reduction of British troop combat capabilities,

although the alternate route did prolong the convoy travel route, increased transit time, and created additional problems for the transport fleet.

From January through June 1941, after the German Luftwaffe was redeployed to the Mediterranean TVD, extended British sea lanes of communication were completely severed [presecheniye] but even this only partially affected the condition of British troops in North Africa since the southern route was operating without interruption.

During the first half of 1941, the German leadership had opportunities to interdict British sea lanes of communication near the African coast. However, the falaciousness of the German strategy of war at sea, which existed as if in isolation from military operations in the land theaters, was reflected as in a mirror.

An entirely different situation took shape for Italian and German sea routes in the Mediterranean Sea that connected ports of Italy and Libya. They were not duplicated and, therefore, even their insignificant interdiction immediately had an impact on supplying troops operating in Africa. By January 1941, the superiority at sea won by the German and Italian forces allowed them to reinforce their troops in Africa. They managed to seize Cyrenaica and emerge on the borders of Egypt. However, the redeployment of a German Aviation Corps to the Eastern Front changed the balance of power in favor of the British Navy and allowed it, by the second half of 1941, to impede [zatrudneniye] and by the end of the year to break off [sorat] maritime shipping that was being conducted in support of German and Italian troops: if approximately 6,000 men were supplied to Libya in May and June 1941, 2,160 men were supplied in November, and only 783 men in December. Losses of military cargoes increased from seven percent of their total volume in July to up to 60 percent in November³. This allowed the British to once again begin an offensive and to dislodge the enemy from the northeastern portion of Libya.

In the beginning of 1942, the Germans only had to once again reinforce their Navy and Luftwaffe in this theater of war and set up maritime shipping for the situation on the land front in North Africa immediately to change for the better for them; the troops renewed the offensive and in June 1942 entered Egyptian territory. But this was an individual operational victory since events on the Soviet-German Front did not allow them to exploit it. German troops were not reinforced and the Luftwaffe was once again redeployed to the East. The Italian Navy turned out to be in no condition to deal with the enemy and as a result every sixth ship and from 30 to 60 percent of military cargo was lost on the sea lanes of communication to Tunis in November-December. During the first four months of 1943, losses reached critical dimensions and in April shipping was terminated along this route. At first, supply to the Italian and German "Africa" Group of Forces was thwarted and afterward its evacuation was

also prevented. This is evidence of the interdiction of the sea lanes that foreordained the Allied victory on an operational-strategic scale.

We will note that, in contrast to their enemy, the British operated more selectively on the sea lanes of communication. Thus, average monthly losses of cargo being transported by ships of Italy's and Germany's merchant fleets exceeded tonnage losses by almost a factor of two. During shipments to Libya during combat operations, 6.5 percent of Italian and German tonnage and 14 percent of military cargo were sunk, and 16 percent of tonnage and 29 percent of cargo were lost on routes to Tunis. This occurred as a result of the British Mediterranean Fleet's more purposeful operations that were aimed primarily at destroying transports carrying military cargoes to Africa.

While analyzing the effect on the sea lanes of communication in this region, we need to also consider that, from the moment of Italy's entry into the war in June 1940, her Navy had to count on only its own reserves of petroleum products. They did not exceed 1,660,000 tons and monthly consumption totaled 200,000 tons. As a result, already by February 1941, there were only 600,000 tons of fuel remaining. After protracted negotiations with the Germans, 60,000 tons of Romanian oil began to be transported to Italy each month through the Dardanelles and afterward by rail through Yugoslavia. Yet another 90,000 tons of fuel were allocated from German Naval reserves. However, these deliveries ceased from the second half of 1942 for a number of reasons, including the interdiction of the sea lanes of communication. Being completely paralyzed due to the lack of fuel oil, the Italian Surface Fleet lost its combat capability from August 1942 on.

It is no accident that we have directed our readers' attention to this strategic sector of the Second World War that on the whole had a small number of combat troops engaged. The fact is that the dependence of the continental TVD's combat operations on the state of affairs on the sea lanes of communication is most clearly manifested here. And it is precisely here that the entire complexity and inconsistency of the selection process for criteria to evaluate the results of the war on the sea lanes of communication are brought to light.

But military shipping in the Mediterranean Sea Basin in general was limited in nature and did not go beyond the framework of the operational-strategic scale.

The sea lanes of communication on the Atlantic had special significance for the U.S. and Great Britain whose ruling circles have attempted at all times to conduct wars on foreign territories while attempting to prevent destruction on their own soil.

During the Norwegian amphibious assault operations alone (April, 1940) the British Navy brought more than 40,000 men to Norwegian ports from England and afterward evacuated them from there.

The best transports and fast-moving passenger liners were used for troop transport. The largest of them took up to 15,000 men on board. The total capacity of all ships used by the British, provided the capability to simultaneously transport about 250,000-280,000 men. U.S. merchant fleet ships could transport yet another 130,000 men.

A total of 6.9 million men were transported from the U.S. and arrived at designated locations during the Second World War practically without losses. Furthermore, transport ships carried 40 million tons of military cargo from North America and 7 million tons of petroleum and petroleum products from Central America to the European Theater for the American Army. At the same time, losses did not exceed 0.62 percent.

Shipping which was conducted immediately prior to the beginning of strategic amphibious assault operations, while they were being conducted, and also the subsequent build-up of forces on bridgeheads seized were particularly important. As a rule, transport ships were simultaneously concentrated in limited areas, in large groups and were used repeatedly.

Thus, for example, while conducting the Normandy Operation, during 100 days up to 2.2 million men, 450,000 trucks, prime movers, tanks, and armored personnel carriers and up to 4 million tons of various military cargo were transported from various English, Canadian, and U.S. ports to the coast of France. Besides combat ships and various amphibious assault vessels, approximately 1,000 transport ships participated in supporting military transport movements.

Everything said above is evidence that German and Italian Naval operations on Allied sea lanes of communication did not have any significant impact whatsoever on the course of combat operations of a strategic or even an operational scale just as, in their turn, the strategic goals of the Allied Navies in the blockade of Fascist Germany were not achieved. Although the intensity of German shipping was reduced several times in contrast to prewar shipping, the blockade turned out to be ineffective since German troops turned out to be comparatively less dependent on the functioning of sea lanes of communication.

At the same time, the "blockaded" German Navy succeeded in carrying out the landing of a 100,000 man assault force in Norway during the first stage of the war. Operations by the [opposing] sides to attain superiority in the Norwegian Sea were the main content of naval

warfare during the conduct of this first major naval operation of the Second World War. The mission turned out to be backbreaking for both enemies. The British Navy which was significantly superior to the German Navy in numbers of aircraft carriers, destroyers, and cruisers could only accomplish two missions; at first, it supported the landing of their own and French expeditionary forces in Norway and afterward their evacuation from there. But it did not accomplish the primary mission—it could not interfere with [vosprepyatstvovat'] German shipping in the North and Norwegian Seas.

The Norwegian amphibious assault operation revealed that under the new conditions the outcome of similar operations depend to a significant degree on the achievement of superiority in the air. The Germans achieved it after seizing Norwegian airfields while at the same time possessing qualitative superiority in aircraft. This circumstance nullified the superiority of the British Navy over the German Navy.

The Economic Aspect of Warfare on Sea Lanes of Communication⁴

According to the plans of the [opposing] forces, the naval blockade should have become the most effective instrument of economic confrontation of the enemies during the Second World War (as also during the First).

On one hand, the Anglo-American blockade of Germany and Japan and, on the other hand, the impact of the German Navy and Luftwaffe on Allied Atlantic Ocean lines of communication were perceptibly reflected in maritime shipping of all countries that participated in the war and of the neutral states.

Just what was the specific impact of warfare on sea lanes of communication on the development of the military economy of each of the belligerent nations? Let us turn to statistics. It is obvious from Table 1 that if the German blockade had an impact on the operations of Great Britain's industry (the highest level of military production growth rates were achieved in 1940 and afterward sharply declined in contrast to the U.S. where it steadily increased until the market was completely saturated), the naval blockade of Germany was only slightly reflected in the capabilities of its wartime economy. Even Japan, which lost a large part of its transport and tanker fleet (about 70 percent) toward the end of the war, continued to increase the rate of military production until 1944 inclusively. The Americans succeeded in [temporary] interrupting [sorvat'] enemy maritime shipping and noticeably disorganizing the Japanese economy only by the middle of 1945.

Table 1: Comparison of Military Production Indices of the Capitalist Countries that Became Part of Opposing Coalitions (Maximum Production—100 Percent)

Year	Great Britain		U.S.		Germany		Japan	
	Military Production Index	Growth of Military Production	Military Production Index	Growth of Military Production	Military Production Index	Growth of Military Production	Military Production Index	Growth of Military Production
1936	6.7	—	4.7	—	4.7	+2.0	5.5	+0.2
1939	13.3	+5.4	5.4	+0.9	16.5	+2.4	32.4	+2.4
1940	57.1	+43.8	6.6	+1.2	38.6	+22.1	35.6	+3.2
1941	76.5	+19.4	13.8	+7.2	52.3	+13.7	48.7	+13.1
1942	89.7	+13.2	34.6	+20.8	65.2	+12.9	63.8	+15.1
1944	97.4	+1.7	98.2	+18.4	100.0	+21.3	100.0	+20.9
1945	100.0	+2.6	100.0	+1.8	—	—	—	—

Now about the ratio of transport fleet tonnage losses and damage inflicted on military production by this. In accordance with the accepted concept of "gross tonnage," the commander of the German Navy suggested that it was sufficient to sink more ships than the British and their Allies could build for the blockade of England. According to their calculations, the "Critical Level" of losses totaled 700,000 tons per month. Great Britain's ship building capacity did not exceed 84,000 tons per month and, therefore, the Hitlerites hoped to resolve the problem of severing [presecheniya] the British sea lanes of communication during the course of one year, having reduced the tonnage of the Allied transport fleet to a minimum. Let us point out that the Germans succeeded in carrying out their plans only during two months of 1942.

As for cargo losses, they were significantly less. For example, the maximum average annual losses of raw materials and food on British sea lanes of communication even during the most difficult periods of the war did not exceed 10 percent of total imports.⁵ The last quarter of 1942 became a record in the number of ships lost by the Allies. But even during this period the volume of raw materials that arrived in England was just slightly less than the calculated standard and the reserves on hand exceeded the amount of semiannual imports. Cargo losses generally were relatively small on maritime routes leading to U.S. ports with the exception of 1942 when German submarines sank up to 60 ships per month off the coast of the U.S. But even this damage was only partly reflected in the nation's foreign freight turnover. Really by this time the U.S. ship building industry had achieved a high level of production that deprived the Germans of any prospect of realizing the concept of "destruction of gross tonnage." However, the German strategy of naval warfare was also not re-examined.

The degree of pressure on the sea lanes of communication and also the course of warfare as a whole depended on the economic and military capabilities of the opposing forces. But these capabilities were not identical, since the sides' economic potential was different. It is precisely this circumstance that became the determining factor for the course and outcome of the world

war. For well-known reasons, the Axis Countries could not count on victory in a protracted war with a coalition of economically developed states. But the main cause that determined the development of events was the different directions of military organizational development.

If Germany wasted a large portion of its military-economic potential on the production of arms for ground and air forces that were fighting on the Soviet-German Front, and Japan and Italy were experiencing serious difficulties due to the absence of their own raw material resources, the situation was different in the Allied camp. The Soviet Union supplied its own armed forces (mainly ground forces and air forces) with 96 percent of [their] combat equipment and weapons using its own resources. The U.S., located far from the main theaters of the Second World War, could direct its powerful economic potential, based primarily on the raw material resources of the Western Hemisphere, toward the creation of a war arsenal for itself and partially for Great Britain. In contrast to the USSR, the U.S. directed its primary attention in military organizational development toward the Air Force and the Navy. England developed military production in all directions however its own economic capabilities did not suffice for complete satisfaction of consumption and replacement of huge losses. In many ways, this was caused by enemy operations on England's sea lanes of communication.

Great Britain's merchant fleet suffered the greatest losses during the war; 11.357 million tons (54 percent of total losses of Allied and neutral countries) and the U.S. only 3.334 million tons (16 percent). But from 1942, an excess of tonnage being commissioned over its losses was achieved due to the construction of ships with a total capacity of about 5.440 million tons at U.S. ship yards. In 1943, the increase of Allied merchant fleet tonnage exceeded losses by 10.96 million tons and total tonnage exceeded the prewar level.

A entirely different situation took shape in the enemy camp—Japan, Germany, and Italy could not replace their merchant fleet losses.

Japan's merchant fleet tonnage totaled; about five million tons at the end of 1943 and about two million tons by the end of the war. Matters were no better with other Axis Countries. By the end of the war, 30 percent of Germany's prewar merchant fleet tonnage remained and Italy had 18 percent.

The opposing sides' combat ship construction capabilities also turned out to be different. If you turn to Table 2, it is not difficult to note that only the U.S. coped with this task and it not only managed to increase the combat potential of its Navy many times over but it also assisted England at the same time.

Here I must point out the following. While assessing the contribution of the U.S. and Great Britain in the overall matter of the defeat of the enemy, many bourgeois

historians primarily use statistical calculations on the size of their military production. First of all the thesis is set forward about the so called "Arsenal of Democracy" that was allegedly located in the United States and provided the material basis for the defeat of the Fascist Bloc. It is difficult to agree with this and this is why. It does not require proof that the outcome of the Second World War was decided in the continental TVD's and primarily on the Soviet-German Front. It is also perfectly obvious that Germany and its European satellites directed the main portion of their forces and military output to this front. It is also obvious that the Soviet Union did not lag behind and even exceeded the U.S. in production of very important types of Army and Air Force weaponry and that Lend-Lease deliveries totaled a relatively small share of the corresponding production in the USSR (about 4 percent).

**Table 2: Combat Ship Loss Replacement Coefficient
(Ratio of the Number of Combat Ships Built or Transferred by the U.S. to its Allies to the Number of Losses)**

Main Classes of Ships	Countries of the Anti-Hitlerite Coalition			Axis Countries		
	U.S.	England	France	Germany	Japan	Italy
Battleships	4.5	0.8	0.3	0.2	0.08	0.66
Aircraft Carriers	6.8	2.8	0	—	0.59	—
Aircraft Carrying Escorts	19.6	1.2 ¹	—	—	1.0	—
Cruisers	4.8	0.9	0	0.1	0.08	0.45
Destroyers and Minelaying Escorts	10.9	1.6 ¹	0.04 ¹	0.6	0.29	0.26
Submarines	3.9	2.1	0.04 ¹	1.45	0.99	0.49

¹ Due to deliveries from the U.S. and division of the captured fleet.

However, this in no way diminishes our gratitude to the Allies for their aid in the campaign with the Fascists.

And yet. While comparing the economic efforts of the participants of the Anti-Hitlerite Coalition, it is more logical not only from the volume of production and the scale of weapons production attained during the war, but mainly to what degree it was used during combat operations. We all know that many arsenals and depots filled to overflowing in the U.S. also remained unused until the end of the war.

Conclusions and Results

In spite of the continental nature of the Second World War, warfare on the sea lanes of communication was conducted on a large scale. But none of the sides succeeded in undermining the enemy's shipping to such a degree that production of military goods and provisioning the population was substantially curtailed due to this. Germany could not sever British shipping due to its Navy's weakness and imbalance. The decisive goals that the German submarine fleet were tasked with in the Atlantic were not materially supported, were not supported by the other arms of the armed forces and, therefore, they were not achieved.

During the second half of the war, the Allies succeeded in creating antisubmarine forces that were capable of accomplishing the strategic mission of protecting the sea routes. At

the same time, the U.S. diverted no more than 20 percent of its Navy to combat the submarine threat. Great Britain, having considered a long range naval blockade to be the main method of combating shipping, based on the experience of the First World War, did not manage to organize it since such a strategic goal did not justify the resources [required]. For the same reason, Germany could also manage without sea lanes of communication this time.

The U.S., which operated on enemy sea lanes of communication with limited forces, managed to reduce raw material and food imports to Japan to critically small quantities only by 1945 when the result of the Second World War was already foreordained by events in Europe. The statements of bourgeois historiographers regarding the unavoidable crisis of the British or Japanese economies if "circumstances had not turned out for the best" do not withstand criticism. The plans of the German Navy to deprive the USSR of the capability for further resistance by cutting off the USSR's ties with its Western Allies were quite illusory.

The conservatism of prewar views on the conduct of warfare at sea on the strength of which Japan did not prepare for warfare on the sea lanes of communication, Great Britain and the U.S. underestimated the submarine and air threat, and Germany did not use its favorable opportunities to strike British sea lanes of communication

during the initial period of the war impacted the general course of events. Submarines and air forces, whose development did not receive proper attention prior to the war, were the most effective component services in operations to disrupt Allied sea lanes of communication (see Table 3).

Table 3: The Contribution of Various Combat Arms in Sinking Allied Merchant Fleet Tonnage

Combat Arm	First World War		Second World War	
	Tonnage, millions of tons	Proportion in percents	Tonnage, millions of tons	Proportion in percents
Submarines	11.15	86.8	14.69	68.1
Aviation	0.01	0.1	2.89	13.4
Surface Ships	0.57	4.7	1.55	7.2
Ship and Aircraft Mines	1.12	8.6	1.41	6.5
Other Causes	—	—	1.03	4.8

The experience of the Second World War revealed a trend to increase the scale of warfare on the sea lanes of communication and to increase its importance in the overall system of combat operations. In this war, it was the main type of activity of the German, U.S., British, and Italian Navies and was continued in the maritime theaters from its beginning until its end. Warfare on sea lanes of communication also had the form of systematic combat operations [boyevykh deystviy] (primarily) and operations [operatsii].

The entire course of the Second World War is evidence that warfare on the maritime TVD's, including the interdiction and defense of maritime shipping was subordinate with regard to combat operations on continental TVD's. The main events in this war occurred on land fronts where the main missions of the war were accomplished and determined the course and the outcome of the war. Furthermore, the Soviet-German Front, on which the entire main effort of Hitlerite Germany and its allies was concentrated, was the decisive front. The overwhelming number of troops, ground combat equipment, and air forces operated on it, the most important battles were conducted on it, and the main portion of the opposing forces' military potential was directed here.

Furthermore, maritime lanes of communication were the main element that insured realization of the military-economic potential of the countries participating in the war.

It is perfectly obvious that operations on them had a definite impact on the entire course of warfare and although this impact did not become decisive on the Atlantic and did not in the final analysis result in thwarting the sides' strategic operations, it undoubtedly impacted the course of these operations.

Our wartime allies, the U.S. and Great Britain, while not conducting any combat operations whatsoever on the land fronts in Europe for a protracted period of time, had the opportunity to use their powerful economic potential to continuously build up their naval forces, to qualitatively improve them, and to thereby strengthen the defensive systems of sea lanes of communication.

During the same time that combat operations at sea were the main front of the war against Germany for the Allies, all naval operations became events of secondary importance for the Germans, especially after the total collapse of plans for a blitzkrieg against the Soviet Union. To conduct them, they were limited by short term concentrations of naval and air forces on an operational scale in some area. The dependence of the results of German [naval] force operations on the Allies' Atlantic sea lanes of communication on events in the main TVD of the Second World War—the Soviet-German Front where the main forces of the German Luftwaffe were redeployed—is clearly visible. As a result of this, practically only submarines continued to operate on the sea lanes of communication in the Atlantic, which quite negatively impacted on their effectiveness and preordained the entire future course of events.

The use of navies and air forces in the war for sea lanes of communication during the Second World War is an important and unprecedented stage in the development of naval art. Enormous forces participated in the campaigns and combat operations which were conducted on all of the oceans. Not only new methods of warfare but new forms for using naval forces were employed. During the Second World War, the main events on the sea lanes of communication unfolded in the Atlantic Ocean and adjacent seas. Of the total transport fleet losses for the entire war, 54 percent of the tonnage was in the Atlantic (less the Mediterranean Sea); 27 percent in the Pacific Ocean; only 6 percent in the Indian Ocean; and, 13 percent in the Mediterranean Sea. There are sufficient grounds to suggest that the Atlantic Theater sea lanes of communication will also retain their predominate role in the future for the imperialist states.

The use of force while disrupting sea lanes of communication included the destruction of individual ships and convoys while transiting by sea; strikes against ships in bases, ports, and at anchorages, and also against port facilities; active mine laying along approaches to ports, in narrow waters, and at junctions of sea lanes of communication.

As it was during the First World War and in spite of the increased capability to counteract them, submarines, which sank approximately 21 million tons or 62.8 percent of total tonnage losses (33.4 million tons), were the main component service in operations to interdict (disrupt) sea lanes of communication. Great autonomy and sailing range provided the capability to use them systematically on enemy sea lanes of communication at great distances from their bases. Besides attacks against transports and combat ships, they carried out mine laying,

conducted reconnaissance, and were used for the surreptitious transportation of people, cargo, etc. However, their inadequate numbers within fleets, poor organization of combat support, and lack of coordination with aircraft and surface ships did not permit them to achieve significant results, especially at the beginning of the war when tonnage losses have a particularly disastrous impact on the functioning of the belligerent states' economies. The capability for more massive production of submarines during the war in contrast to major surface ships made them the most rational component service for combat on the sea lanes of communication. Although German submarine losses significantly increased beginning with the second half of 1943, they continued to create a definite threat for Allied shipping until the end of the war. Furthermore, the German leadership's orientation on construction for the most part of only submarines was basically a forced measure and the only way out of the situation in which the country found itself in view of the shortage of resources and time for development of a balanced navy.

Submarine utilization methods received significant development. While operating against heavily protected shipping, they achieved the greatest results during group employment.

The war very keenly revealed the need to develop submarines with improved characteristics. This once again confirmed the irrefutable fact that the state that manages to approach the beginning of a war with the best combat equipment will have an advantage. It is difficult to set up mass production of modern types of submarines during a war.

Torpedoes and mines were the main weapons of submarines. Mine laying from submarines turned out to be particularly advisable in remote areas that were inaccessible or poorly accessible for air forces and surface ships. There is no doubt that this type of submarine combat employment also has great promise for the future.

Aviation proved to be a new operational-strategic factor in the struggle for the maritime lanes of communication and was the second combat arm in terms of the results obtained while disrupting enemy shipping, having sunk 7.8 million tons, or 23 percent of the total tonnage of the transport fleet destroyed. It was tasked with carrying out varied missions—striking convoys, individual transports and the forces protecting them while transiting by sea or in ports, conducting reconnaissance of sea lanes of communication, guiding submarines to attack targets, covering submarine deployments from bases, etc. However, tasking air forces not trained for operations on maritime axes to combat shipping led to results that did not justify the efforts expended and limited their use primarily against ships in ports. During the final stage of the war in the Pacific Ocean, carrier aviation achieved major successes. High mobility, large combat radius, considerable striking power, and the capability to use its own forces to support the conduct of reconnaissance and

achievement of air superiority in the area where operations were being conducted caused the success of the use of aircraft carrier formations against shipping.

Contrary to prewar views, surface ships played a significantly smaller role than other component services in operations to interdict enemy sea lanes of communication, having destroyed a total of six percent of all tonnage losses. The reasons for this were different for different countries. For Germany, it was the small number of major combat ships and the huge threat of their loss from overwhelming Anglo-American Air Forces due to the absence of aircraft carriers. Major surface ships of the U.S. and Japanese Navies were engaged in accomplishing other missions and were only occasionally tasked with operations on sea lanes of communication. The negligible effectiveness of surface force operations on sea lanes of communication is explained, in particular, by their lack of coordination with other component services, especially with air forces, and primarily on remote sea lanes of communication. Experience has shown that raiding operations by individual surface ships already do not correspond to modern conditions for conducting combat operations at sea.

Aircraft mine weapons played a major role in warfare on sea lanes of communication. The experience of American aircraft mine laying in the Pacific Ocean revealed their great capabilities in this type of combat operation. This mine laying was conducted in enemy internal waters and in river basins where submarines and surface ships could not penetrate. Air forces, including carrier aircraft, provided surprise in mine laying and when their use was concealed, it provided the capability to create very dense mine fields in a short period of time. Furthermore, the enemy had to devote a significant array of forces (frequently exceeding actual capabilities) for the defense of vast areas from penetration by mine laying aircraft, while simultaneously conducted minesweeping of approach channels.

Combat experience on the sea lanes of communication demonstrated that protracted interdiction of enemy maritime shipping is most reliably insured through the use of different types of forces who coordinate [their activities] among themselves. In this case, while maximally utilizing its own capabilities, each of the component services simultaneously makes up for the deficiencies of the other and sea lanes of communication turn out to be under uninterrupted pressure and the war itself on the sea lanes of communication can also evolve into its highest form—a blockade.

Operations on sea lanes of communication under conditions of the total continental nature of the Second World War were generally of secondary importance although they also extended to the entire World Ocean and involved the main portion of the navies of the belligerent states in its sphere. However, successful protection of the most important sea lanes of communication that pass through the area of combat operations had a great

impact on the conduct of defensive and offensive operations in the vast island areas and on the continents. As a rule, destruction or victory on fronts supplied across the sea began from destruction or victory in the war for sea lanes of communication. The fate of all strategic amphibious assault landings was totally dependent on the reliability of sea routes.

The war revealed the lack of preparedness of countries of the opposing coalitions to conduct warfare on sea lanes of communication on a massive scale both in the area of theory and in practice. The adventuristic conception of those Fascist leadership circles who counted on the possibility of destroying a strong maritime enemy using submarine forces alone collapsed.

The fact that purposeful massive and systematic strikes were not organized against ship loading and transshipment ports during the battle for sea lanes of communication was an undoubted miscalculation in the plans of the German command. Even during the summer and autumn of 1940 when it appeared that the entire might of the German Luftwaffe was directed at England, the goal of the strikes did not consist of cutting off import and export of cargo from its ports but the clearly unrealistic idea to "bomb England out of the war" by undermining the moral state of the people and destroying certain industrial enterprises that were producing military goods.

Unsatisfactory reconnaissance support to force operations must be listed among the major shortcomings in the organization of the battle for the sea lanes of communication by the Germans. All types of reconnaissance, especially aerial reconnaissance, were poorly supplied as a result of which the German command did not have systematic data on either the state of Allied shipping and its changes, nor on the nature of cargo that was being transported on various axes during various periods of the war, nor about areas of ASW [antisubmarine warfare] force operations, nor about other events that influence force utilization effectiveness on sea lanes of communication. All of this compelled the Navy command staff and submarine commanders to frequently operate blind, to waste much time without proper results, and to frequently place themselves under attack of Allied forces for nothing.

The theory of the "eternal principles" of war at sea proclaimed by Admiral A. Mahan, the apologist of imperialist sea power, who advocated the creation of overwhelming material superiority over enemy navies and who asserted that an advantage in ships-of-the-line has decisive significance for success in war at sea, also turned out to be untenable. By the beginning of the last war, the British had undisputed superiority many times over in battleships and cruisers over the German Navy but it did not play a determining role in warfare with enemy submarines. The influence of this theory and the incorrect direction in the organizational development and preparation of a navy for war resulted in the fact that the British Navy, given the redundancy of battleship fire

power, turned out to be incapable of combat even with a relatively small number of German submarines.

Underestimation of the role of air forces in operations against sea lanes of communication was characteristic of all prewar views, although during the war it demonstrated excellent capabilities to accomplish this mission.

(To be continued)

Footnotes

1. The magazine version of individual chapters of the book "Borba na kommunikatsiakh: uroki voyn i sovremennost," [Warfare on sea lanes of Communication: Lessons of Wars and Modern Times] that are being prepared for printing at the MO SSSR [USSR Ministry of Defense] Military Publishing House in Moscow at the present time.
2. The first part of chapter four of "Uroki voyn: chemu oni uchats'?" [Lessons of War: What Do They Teach?]. The following is examined in chapters 1-3: The significance of maritime shipping during the prewar period; preparation of the Western countries and Japan for war at sea; and, the course of warfare on sea lanes of communication during the Second World War.—Editor's comments.
3. Here and further on calculations are based on the data in the book by Belli, V.A., Bogolepova, V.P., and others, "Blokada i kontr-blokada" [Blockade and Counter Blockade], edited by Bogolepova, V.P., Moscow, Nauka, 1967.
4. The first part of chapter five of the book—Editor's comment.
5. According to data in the book "Blokada i kontr-blokada."

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Chernavin on 'Struggle for SLOC': Conclusion

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[Article by Admiral of the Fleet V. Chernavin: "The Struggle for the Sea Lanes of Communication: Lessons of Wars and the Modern Era"¹]

[Text]

NATO Views on the Conduct of Combat Operations [Deystviy] at Sea²

According to foreign experts, operations [deystviya] on the sea lanes of communication will inevitably become one of the main types of naval activities in the event of war. This is confirmed by the great deal of attention that the U.S. and NATO military leadership pays to this problem during the course of operational and combat training and also by the well-known fact that questions of

interdiction [narusheniye] and protection of sea lanes of communication is an important integral part of the military doctrines of all leading capitalist maritime powers and of their military-political and strategic concepts.

In 1981, the strategy of "direct confrontation" became the basis of U.S. doctrine. Its specific goals provide for the attainment of military superiority over the USSR and the use of military force to resolve global problems, including defense of the U.S.'s "vital interests" in various areas of the world.

A very important, distinctive feature of this current doctrine is the preparation of the country and its armed forces to conduct wars of various scales and intensities: total nuclear, total conventional, "limited" nuclear, and limited conventional [war]. Primary emphasis is placed on preparations for total nuclear war. While preparing for it and continuing to build up the might of its strategic offensive forces, the Pentagon is simultaneously carrying out a modernization program of its general-purpose naval forces that are tasked to conduct total war with the use of conventional weapons alone. All of the U.S. Armed Forces's common strategic concepts alone do not determine the direction of their development and mission. Traditional views on the conduct of naval warfare also play their role.

For example, in spite of its transformation under new conditions, the theory of "Supremacy at Sea" continues to remain an important element of the military doctrine. It is understood to be the creation of such an operational-strategic regime in the World Ocean under which the Navy will be able to accomplish the missions of conducting a first strike and insuring uninterrupted functioning of the sea lanes of communication and also for conducting amphibious operations of varying scale. Furthermore, while considering the experience of the Second World War, the U.S. believes that the Navy's immediate objectives must be establishment of "control of the sea" in the most important areas of the world ocean. This concept includes not so much the defense of one's own sea lanes of communication as the establishment of control over enemy naval operations and the severing [presecheniye] of enemy sea lanes of communication.³

Despite the thaw in the international climate, it is unfortunate that no fundamental changes have been noted in NATO military doctrine for the moment. Not too long ago the concept of "follow-on forces attack" was included in it. This concept provides the possibility for the surprise initiation of war and coordinated strikes in the entire depth of the enemy armed forces operational disposition, including along his sea lanes of communication.

The progressive advances of navies and naval weapons in recent years, the existence of nuclear forces in their make-up, and the appearance of a new element of the strategic threat from maritime axes in the form of

shipborne cruise (including nuclear) missiles has fundamentally changed the role and place of the Navy among the other branches of the armed forces. Its significance has also grown as a result of the transformation of U.S. and NATO military doctrines that presuppose the conduct of protracted combat operations without the use of nuclear weapons, and also due to the great dependence of NATO ground forces in Europe and the Armed Forces of the U.S. and Japan in the Far East on transoceanic transport of troops and weapons, and the economies of these countries—on massive transportation of strategic raw materials and other economic cargoes.

All of these aspects were reflected in the development, grounding and introduction into the military planning of the world's main capitalist countries of the strategic concepts of the combat use of the Navy.

Modern American naval strategy, called the "Forward Naval Strategy," was developed at the beginning of the 1980's. It is oriented toward increasing the navy's combat readiness and conducting aggressive offensive operations on the main ocean and sea axes from the beginning of the war. In 1986, these provisions were also officially adopted by the NATO bloc. The essence of this strategy is that an increase of the offensive capabilities of the NATO countries' navies within the total structure of the Armed Forces by the year 2000 will insure their decisive superiority at sea and establishment of control of all "vitaly important" regions of the world—in the North Atlantic, in the Pacific, and in the Indian Oceans and in the Norwegian and Mediterranean Seas.

The missions of American Naval Forces are defined as follows:

"1. The U.S. considers it necessary to preposition forward naval battle groups near predesignated land theaters of combat operations in the event of the outbreak of crisis situations and to insure effective use of Naval components to neutralize the Soviet Navy. For this purpose, they are planning and developing beforehand methods of conducting strikes against Soviet ships at bases and in waters near the USSR and also against naval aviation bases during maneuvers and exercises.

2. The U.S. Navy plans to use task forces, including carrier strike groups and amphibious assault ships tasked to assist ground forces conducting combat operations on the European Continent. It provides for organization of protection of the sea lanes of communication that provide supplies to U.S. ground forces in this area of the world. They also have in mind activization of offensive operations on the flanks of the European TVD [Theater of Military Operations] and along the entire perimeter of the Soviet border to limit the USSR's capability to redeploy ground forces from other areas.

3. The use of Naval strike groups is proposed to change the balance in strategic nuclear weapons in favor of the U.S. while conducting strategic offensive operations against Soviet SSBNs [Nuclear Ballistic Missile Submarines] and for the purpose of maintaining the threat of conducting direct strikes against important strategic targets in the depth of the territory of the USSR."⁴

Furthermore, they consider one of the main missions to be bottling up and defeating the main Soviet Naval forces prior to their access to the Greenland—Iceland—United Kingdom (on the Atlantic) and the Aleutian—Kurile—Japanese Island (on the Pacific Ocean) lines. According to the assessment of U.S. and NATO Naval commanders, this allows them to: take into their own hands the strategic and operational initiative at sea; force the enemy to conduct defensive operations in coastal areas; and sever any enemy foreign shipping and insure the safety of their own transoceanic sea lanes of communication.

The appropriate preconditions to achieve the goals of the "forward naval strategy" are already being created at the moment. The NATO countries are building up their navies, their qualitative renewal is being carried out, and their offensive capabilities are being increased. They consider it necessary to bring the operational areas of the U.S. Navy and NATO and their allies as a whole under day-to-day conditions closer to the areas of probable combat operations and to create a favorable environment for bottling up and defeating the Soviet Navy's main forces. This also explains the permanent presence of the U.S. and NATO Navies on practically all of the navigable waters of the world ocean.

The naval strategy of the U.S. and NATO is realized in a number of modern concepts of which the main concept is "Forward Maritime Lines" or, as it is interpreted in NATO, "Forward Defense at Sea," and the concept of "Destruction in Depth."

The American concept of "Forward Maritime Lines" ("Forward Defense at Sea") provides for: the creation of a nuclear missile threat to the USSR and the Warsaw Treaty Organization [WTO] countries from all maritime axes by deploying combatants equipped with cruise missile, primarily with nuclear warheads; prepositioning major naval groups of the U.S., NATO and their allies in forward sea and ocean areas (or preventing the Soviet Navy from deploying or concentrating); impeding Soviet naval deployment in ocean zones to prevent or significantly reduce its capabilities to conduct combat operations on sea lanes of communication.

The concept of "Destruction in Depth" provides for the coordination of naval and air force combat operations in place and time on coastal axes. It assumes the conduct of missile and bomber strikes (employing naval carrier-based air forces, land-based air forces, and cruise missiles) against naval bases, ports, command and control centers, shipbuilding and ship repair enterprises, and second echelons of enemy ground forces and reserves prior to their entry into battle.

According to the statements of a number of American and NATO military leaders, the main provisions of modern U.S. and NATO naval strategy on issues of naval military organizational development and combat use will be preserved until the year 2000. Guided by these views, some U.S. and NATO political figures are

attempting to convince Western public opinion that the perestroika being conducted by the Soviet Union allegedly is not concerned with the military sphere and that the defensive military doctrine announced by the states who are participants in the Warsaw Treaty Organization is not supported by actual deeds.

Thus, at that time former U.S. Secretary of Defense F. Carlucci asserted after his visit to the USSR during the summer of 1988 that: "We in the West have still not observed any slowdown whatsoever in the continuing buildup of Soviet military power."

When comparing the sides' military forces, American military leaders accentuate the geostrategic differences between the USSR and the U.S. Furthermore, they proceed from the premise that the Soviet Union is a continental power that is totally self-sufficient in natural resources and that the United States of America is allegedly an island power compelled to seek the development of foreign ties. And, therefore, the U.S. needs a huge navy to support its own sea lanes of communication. In their opinion, to call on the U.S. to reduce its maritime power is tantamount to the demand for the USSR to dismantle its railways and highways.

Bluntly speaking, the logic is strange if we acknowledge the obvious fact that the "island state" occupies half the continent of North America in area and significantly outstrips the USSR (146,000 and 827,000 km, respectively) in length of railway (265,000 km) and roads (6,364,000 km). At the same time, the Soviet Union has a developed merchant marine and is no less interested than the U.S. in its uninterrupted operation on the world's maritime roads. According to data of the USSR Register (1988), there are approximately 8,000 ships in the Soviet merchant marine with a total gross capacity of 26 million tons (29.3 million tons deadweight). Our fleet is fourth in the world in gross capacity and exceeds the merchant fleets of many Western countries according to this index. Ships under the flag of the USSR visit more than 1,300 ports in 123 of the world's countries. However, protection of the USSR's interests in the world ocean is not limited only by insuring the defense of its own sea lanes of communication. This problem is more general in nature.

As we all know, we are guided by a number of factors while developing military doctrine. Among them are the assessment of the military threat and the determination of the state of the armed forces necessary to repel aggression and the direction of their combat training.

Does a real threat to the USSR exist? The possibility of a preventive war is emphatically denied in NATO, including in the U.S. But in practice, American and NATO military doctrine as a whole have not undergone significant changes for the moment. Indeed, on one hand they proclaim its defensive content by every means possible but, on the other hand, they preserve the concept of the first use of nuclear weapons and the use of the armed forces in the entire depth of the enemy defense.

They name the USSR and the other countries of the Warsaw Treaty Organization as the enemy. Having signed an agreement with the USSR on reduction of nuclear weapons in Europe, the U.S. is simultaneously setting the stage for "additional arming", operates hundreds of American bases along the perimeter of our borders and combat ready naval task forces in adjacent waters. There are also almost no changes in military organizational development and as before the emphasis is being placed on first strike weapons systems. Consequently, the primary source of distrust and suspicion—the military threat—is being preserved.

As has already been pointed out, the Pentagon, while searching for a solution to the question of insuring "survivability" of the U.S. is developing, among others, a variation of "limited" nuclear war. The U.S. leadership will permit its conduct primarily in regions far from American territory, first of all in Europe, that is, it is examining a variation under which the U.S. could avoid a retaliatory nuclear strike.

However, even in the U.S. they recognize that it is unrealistic to keep modern war within the framework of strict limitations. Thus, for example, with regard to warfare on the sea lanes of communication, foreign researchers assert that, as the experience of the Second World War demonstrates, one of the most effective ways to interdict oceanic (sea) shipping is the destruction of the primary elements of maritime transport, in particular, the port management infrastructure. Another, no less important direction of this warfare can be depriving the enemy of the capability to replace losses of transport tonnage and convoy escort vessels. Both of these methods inevitably result in massive, including nuclear, strikes on naval bases, ports, shipbuilding centers and other important military and economic coastal targets.

The Soviet Union is not concealing the fact that it is paying proper attention to its Navy's technical level of equipment and increasing its combat capability while other major maritime powers continuously improve their naval weapons. Our Navy received reliable electronic and automation systems for the command and control of combat weapons and to support communications and navigation. The Navy has considerable firepower, high mobility, and the capability to conduct combat operations in various areas of the World Ocean. Its main strike force is submarines with ballistic and cruise missiles and also missile-armed naval aircraft. The Soviet Navy along with the strategic missile forces have become one of the important assets to counterpoise the West's nuclear missile threat. I recall that Soviet strategic missile submarines created an adequate threat for the U.S. after they had created their "Nuclear Triad" and stationed first strike nuclear missiles on the territories of a number of Western European countries.

The Soviet Navy, just like the other branches of the Armed Forces, is being developed within the limits required for defense, that is, that assure the defense of the USSR and the security of its allies and friends. The Soviet Union and

other states that are members of the Warsaw Treaty Organization have never sought and will not seek naval supremacy. A comparison of the numerical characteristics of the opposing navies is evidence of that.

By comparison with the USSR, the United States enjoys a twofold superiority in guided missile-equipped surface combatants, it has 2.5 times as many naval aviation aircraft (aside from the fact that Soviet Naval Aviation is tasked with the defense of its own task forces and not with strikes against the American Continent). The U.S. Navy has 15 aircraft carriers and four cruise missile-equipped battleships in its inventory while the Soviet Navy does not have such classes of ships at all. Finally, the U.S. Navy's total tonnage is 1.7 times greater than the Soviet Navy's tonnage.

If we compare the Navies of the Warsaw Treaty Organization Countries (the forces of all navies deployed in the European zone, including the entire Northern, Baltic, and Black Sea Fleets of the Soviet Union) and the Navies of the North Atlantic Alliance (men and equipment of all Western European NATO countries), and also the numbers of personnel and the quantity of weapons of the U.S. Navy operating in the North Atlantic and Mediterranean Sea, we obtain the ratio listed in the table.

Ratio of the Size of the Armed Forces and Main Types of Weapons

	Warsaw Pact	Ratio	NATO
Naval personnel in thousands of men	338.0	1:2	685.0
Submarines (except submarines with strategic ballistic missiles)	228	1.1:1	200
Including nuclear submarines	80	1:1	76
Major surface combatants (aircraft carriers, battleships, cruisers, destroyers, frigates, amphibious assault ships displacing 1,200 tons or more)	102	1:5	499
Including:			
Aircraft carrying ships and aircraft carriers	2	1:7.5	15
Ships equipped with cruise missiles	23	1:11.9	274
Amphibious assault ships (displacing 1,200 tons or more)	24	1:3.5	84
Naval combat aircraft	692	1:2.4	1630

U.S. spokesmen have repeatedly stated that their Navy is exclusively tasked with the defense of maritime routes and, if a dangerous weapons buildup is also occurring in the world ocean, they are not participating in it. Furthermore, the reality of the naval arms race is also recognized in resolutions of U.N. General Assembly sessions and in the studies of its experts. It is precisely the U.S. that was the initiator of the creation and accumulation of individual types of naval arms and it has aggressively used its Navy more than once for armed intervention in the

internal affairs of sovereign states while in fact demonstrating the offensive nature of its military doctrine and naval strategy.

In a number of studies, Western military theorists assert that right now the U.S. Navy has a total of 600 ships whereas during the 1960's (the period of the war in Vietnam) there were almost two times as many. But at the same time they are consciously silent about the fact that the reduction has not impacted the American Navy's fighting strength. If we believe [Admiral] J. Watkins, former Chief of Naval Operations⁵, the scale of U.S. Naval operational activity has increased by 20 percent in contrast to the Vietnam War period due to increased fighting strength and ship modernization. [Political] party debate materials during the February 1986 hearings of the House of Representatives' Armed Services Committee are evidence of this. According to these materials, during the Reagan Presidency the combat effectiveness of American surface combatants increased by 94 percent, nuclear missile submarines—by 69 percent, and naval aviation by 300 percent.

The Navy's proportion in the country's total military potential is steadily increasing. The Navy and the Air Force are the strongest components in the structure of the American Armed Forces. Today their strength is approximately equal and totals 70 percent and the Army totals only 30 percent of the entire Armed Forces. There is no such situation in any other country in the world where the Navy and the Air Force are larger than the ground forces and are the basis of the state's military power.

According to foreign naval experts, submarines, aircraft, surface combatants, and also mine fields will be the threat to sea lanes of communication under modern conditions as they were during the last war. Furthermore, modern nuclear submarines whose combat capabilities for the time being exceed the capabilities of the methods of combating them will create a special threat for shipping.

An important place is assigned to issues of the interdiction of enemy sea lanes of communication in the plans of all of NATO's military measures. In accordance with the established views of the NATO military leadership and based on the experience of operational-tactical and combat training of the navies of these countries, they plan to inflict damage on enemy shipping even before initiation of combat operations.

Already in peacetime U.S. commanders and NATO as a whole attach great significance to the organization of continuous and purposeful reconnaissance of transport fleets and commercial shipping to detect the composition of ships, their condition, nature and intensity of use, travel routes, and activity areas. Space-based and ground-based electronic systems, reconnaissance and shore-based patrol aviation aircraft, surface combatants, submarines, and merchant and fishing fleet ships are used to obtain information.

The NATO reconnaissance and surveillance system at sea provides, aside from everything else, an operational exchange of information on civilian shipping with the national reconnaissance systems of NATO countries and states friendly to them and permits the Americans and their allies to have information on the locations and activities of a significant portion of the ships in transit by sea and while they are anchored in ports and also partial information about the nature of the cargoes they carry. The areas of the Central, Eastern, and Western Atlantic, the Norwegian, Barents, North, Baltic, and Mediterranean Seas, The western and eastern portions of the Pacific Ocean, and the northwestern and central portions of the Indian Ocean are encompassed by the most effectively operating reconnaissance system.

Methods of warfare on the sea lanes of communication are developed during operational and combat training. In particular, they provide for the organization of blockade operations off the enemy coast. They plan secretly to lay mines from submarines, small naval combatants, and carrier and land-based aircraft immediately prior to the initiation of combat operations on the approaches to our ports and bases and to organize blockade operations by ship and air forces mainly in the areas encompassing the straits in the Baltic, Black, and Mediterranean Seas and the Sea of Japan.

The NATO countries' Naval Commanders think that, with the initiation of war, they will use different force organizations during warfare with Soviet shipping that are capable of operating along all elements of sea lanes of communication.

At the same time, analysis of naval combat training of the capitalist states demonstrates that submarines and aircraft remain, as before, the main forces in warfare against our shipping.

The capability of modern nuclear submarines to execute rapid maneuvers between detected enemy ship transit routes and to concentrate covertly on selected axes and lines permits them to create a threat to military and economic shipping in vast ocean areas in the entire depth of the sea lanes of communication, thereby spreading out the efforts of the other side's antisubmarine warfare forces and impeding their operational maneuver.

Furthermore the capability of nuclear submarines to combat shipping in comparatively small seas and in shallow areas is limited. Therefore, diesel submarines will pose a great threat to our sea lanes of communication in closed seas (the Baltic and Black Seas and the Sea of Japan) and also in relatively shallow waters.

Modern naval aviation (carrier and land-based) along with submarines are the most effective weapons on sea lanes of communication. Its high combat readiness and maneuverability permit the rapid concentration of forces to strike transport ships and naval task forces and air combat forces covering maritime shipping. At the same time, NATO thinks that independent operations of

major surface combatants on enemy sea lanes of communication will be limited in nature as they were during the Second World War. They assume that they, just like tactical air forces, will pose the main threat to shipping only in the coastal strip.

As before, mines are viewed as one of the main weapons of warfare on sea lanes of communication. It is considered advisable to use them in narrows, at junctions of sea routes, and on approaches to loading (unloading) ports before a convoy's departure (arrival) in these ports. Furthermore, special attention is paid to massive use of mines and systematic replenishment of mine fields. Besides direct loss, mines create a general, protracted threat to shipping and also constrain maneuvering on routes.

We can anticipate that warfare with shipping will be systematic combat operations that are continuously conducted with varying degrees of intensity depending on the availability of men and equipment and the specifically developing situation in sea and ocean theaters.

U.S. and NATO Naval Commanders believe that the USSR's most intensive maritime shipping will be carried out in coastal waters and also on the North Sea route (where the volume of shipping has already reached six million tons per year and continues to grow). According to NATO experts, these sea lanes of communication can be thwarted by conducting massive strikes against ports, ship assembly areas, and directly against ships and convoys on transit routes.

Particular significance is attached to barring our shipping in closed seas (the Baltic and Black Seas and the Sea of Japan) where the USSR has at its disposal a dense network of major sea ports, shipbuilding and ship repair plants and is compelled to carry out intensive maritime shipping.

According to NATO's plans, combat operations on the sea lanes of communication in closed seas may include conducting massive air strikes against ports, shipbuilding and ship repair plants, tactical air raids against convoys, submarine attacks against ships, rocket and torpedo cutter raids, and also the broad use of mines at exits from ports and on convoy and single ship travel routes.

Enemy maritime ground forces formations that will rush to seize or bottle up ports from land may have a great impact on shipping in closed seas during the initial period of the war.

They intend to use detachments of combatants, coastal defense forces, and aircraft to seize or destroy ships and to bar their refuge in ports of friendly or neutral countries in remote areas of the World Ocean.

Referring to the experience of wars, Western researchers assert that to achieve their goals, including the severing of the sea lanes of communication, the belligerent states may resort to such a form of warfare as a naval blockade.

It is well known that it provides for the isolation of an island (coastal) state, its individual parts, ports, naval bases, and straits by severing foreign maritime ties and prohibiting passage of enemy naval forces through the blockaded zone. They plan to task submarines, aircraft, and surface combatants to do this and to widely employ mines. In this connection, let us point out that attempts to carry out a naval blockade were undertaken not only in a number of past wars but also in all local wars and armed conflicts in the postwar period.

While analyzing the experience of the Second World War, many American military experts have reassessed the significance of a naval blockade of the enemy. In particular, General D. MacArthur believed that "a blockade is the most effective weapon. If it is a total [blockade], you can kill the enemy by the millions. The capabilities of all other types of weapons are limited to a well known degree. You can kill one man with a rifle and dozens with a machinegun. Heavy artillery and conventional bombs destroy thousands of people, an atomic bomb—hundreds of thousands. A blockade threatens the life of the entire country. In modern strategy, control of sea lanes of communication by naval forces and aircraft is a factor of maximum significance."⁶

During the U.S. intervention in Korea (1950-1953), he [MacArthur] insisted on establishing a naval blockade of China, thinking that it must supplement the bombardment and shelling of the coast and the shipping arteries.

A blockade of the Korean coast was carried out during the daily combat operations [deystviy] of the U.S. Navy and its allies in the aggression. An American task group (up to 20-27 ships, including 3-4 aircraft carriers) operated off the eastern coast of Korea and a task force of U.S. allies (up to 35 ships of the navies of the countries of the British Empire and other countries who participated in the intervention in Korea) off its western coast. Two blockade lines were established. Light forces, at first escorts and destroyers and a little later—cruisers, were deployed at the first [line] near the coast. As a rule, no fewer than two ships were part of a ship patrol. Aircraft carriers operated at the second line at a distance of 60-130 miles from the coast. In addition to the blockade announced in July 1950, in September 1952, the U.S. established a so-called defensive zone around the Korean Peninsula that included significant areas of open water. Contrary to the standards of international maritime law, American naval forces ordered any ship in this zone to undergo an inspection.

The blockade from sea of the coast and ports of Vietnam (1965-1973) was similar in nature. It was carried out through constant patrols of ships at sea and aircraft in the air and each ship detected was subjected to an inspection. The Americans divided the patrol-blockade forces' zone of operations that was more than 1,000 miles long and 110 miles wide into five maritime operations areas and the forces for each of them were joined

into operational groups. Up to 130 ships and escorts and ten land-based patrol aircraft simultaneously operated in them.

The South Vietnamese Coastal blockade system created by the Americans was organizationally and technically improved during the war. Coastal and shipborne radio and radar communications and surveillance systems and coastal centers' electronic information processing equipment played a significant role. As a result of their widespread introduction and aggressive use, the Americans managed to organize effective surveillance of the situation.

But even under conditions of the almost total absence of any combat effect on the blockade forces from the enemy, they did not completely accomplish their mission. In spite of strict control, the small watercraft of patriots continued shipping weapons and ammunition.

The blockade of Cuba that received the name "quarantine" as a cover was established by the U.S. in 1962 and was even more dangerous in nature. At the beginning of October, major naval, air, and ground forces were concentrated in the area of the Caribbean Sea to prepare an invasion of revolutionary Cuba. Their deployment was conducted in conditions of total secrecy under the guise of conducting a major amphibious forces exercise. On 24 October, the establishment of a blockade of Cuba was announced. It provided for the interception of all merchant ships headed for Cuban ports, their inspection, and arrest in the event of detection of arms or military equipment and, if resistance was offered, destruction. The blockade line was an arc with a 500 mile radius with its center in the eastern portion of the Island of Cuba.

One strike and four antisubmarine warfare aircraft carriers, two cruisers, more than 60 frigates and destroyers, and more than 70 land-based aircraft operated against an independent state that essentially did not then have a navy at its disposal. According to the conclusion of the Commander of the Atlantic Fleet, the blockade was the largest operation for naval aviation since the end of the Second World War.

The U.S. announcement of the naval blockade of Cuba in peacetime when these states were not in a state of war was an obvious act of aggression and an infringement on the standards of modern international law, including the principle of freedom of the high seas. And how paradoxical that the U.S. had declared freedom of the high seas to be one of the main principles of its own foreign policy doctrine.

Great Britain's naval and air blockade of the Falkland (Malvinas) Islands and the continental portion of Argentina in 1982 was just as unlawful.

An Argentine cruiser that incidentally was located outside the blockade zone was sunk to demoralize Argentine Naval personnel and to demonstrate the military might of a British nuclear submarine. Later, during the period from 3 through 16 May, the British Navy destroyed or

damaged several Argentine ships and vessels. The British used these operations to compel the Argentines to cease the seafight of material-technical supply and food.

Furthermore, Sea Harrier vertical takeoff and landing aircraft which operated from an aircraft carrier prevented the airlift of supplies to the island garrison and dislodged Argentine transport aircraft from the zone of combat operations. These same aircraft along with Vulcan bombers based on Ascension Island launched strikes against coastal targets on the islands. The Argentine Armed Forces did not manage to establish a supply [route] to the blockaded garrison.

The Government of Great Britain established a "war zone" with a 200 nautical mile radius around the Falkland (Malvinas) Islands prior to the actual initiation of combat operations. In answer to this move, Argentina announced the formation of a special operational command in the South Atlantic with the simultaneous creation of an "operational theater" located within the borders within which she exercises jurisdiction, that is, within the 200 mile zone adjacent to the continental portion of the country and surrounding the islands of the Falkland (Malvinas) Archipelago, the Island of South Georgia and the South Sandwich Islands.

Simultaneously with the beginning of task force operations, the British Minister of Defense gave the order to establish control of airspace within the "war zone." And finally, a sea and air blockade of the islands was introduced from 30 April onward. Although one of its main goals was insuring success of amphibious assault operations, the establishment of the blockade created considerable interference for international shipping in this area of the South Atlantic. Fishing vessels of many countries were forced to leave traditional fishing areas in order to avoid sharing the fate of the Argentine trawler sunk by British aircraft on 9 May 1982. Ships engaged in scientific research also left the waters of the South Atlantic.

The opposing sides also employed characteristic methods to interdict the sea lanes of communication during the Iran-Iraq armed conflict that began in September 1980 and that also limited freedom of navigation in this area. Combat operations spread across the vast waters of the Persian Gulf that have been a zone of brisk maritime shipping since ancient times.

On 22 September 1980, Iran officially declared its territorial waters a zone of combat operations and simultaneously banned foreign ships from passage to Iraqi ports. Furthermore, it was pointed out that ships not traveling to Iranian ports must follow a definite route after passing through the Strait of Hormuz. By this announcement, Iran actually announced a blockade of the Iraqi coast. In May 1981, Iran established foreign ship sailing rules in its territorial waters and also in the western portion of the Persian Gulf.

In July 1982, Iraq in turn declared the area of Kharq Island a zone of combat operations.

During the period from May 1981 through March 1988, approximately 400 ships were shot at or damaged in the Persian Gulf and the total displacement of ships that were victims during the "tanker war" exceeded 30 million tons.⁷ The threat of escalation of this military conflict was very great since missile and bombing strikes threatened ships located in the open sea and even in the territorial waters of Kuwait, Saudi Arabia, and the United Arab Emirates. Strikes were also conducted against Kuwaiti coastal facilities and oil terminals and drilling derricks on the coast of Abu Dhabi, etc. The threat of mines did its bit to destabilize shipping.

The introduction of a system of convoys by Western countries did not totally resolve the safety of navigation problem. On the contrary, the buildup of a naval force presence in the Persian Gulf zone by these states made the situation even more complicated and losses of merchant ships of nonbelligerent states did not decrease.

As we all know, the USSR took a constructive position on this issue from the very beginning by calling on both sides to search for the most rapid political resolution of all disputed issues through peaceful means while considering their legal rights and interests.

After the conflicting parties' refusal to terminate the war, the Soviet Union was compelled to send a limited detachment of combatants into the Persian Gulf only during combat operations.

The sufficiently broad picture of interdictions of the sea lanes of communication and disregard for the standards of international law shown here confirms the entire threat of the escalation of local conflicts of the postwar period into war on a worldwide scale.

Results and Conclusions

The experience of the Second World War revealed a trend toward increasing the scale of warfare of the sides on sea lanes of communication and the increase of its role in the total system of combat operations.

During the first postwar years, some military experts in the West suggested that warfare on sea lanes of communication would lose its significance in connection with the arming and equipping of the Armed Forces of the U.S. and later of the USSR, Great Britain, and France with nuclear missiles. Furthermore, they thought that a war's strategic goals could be achieved by troops as a result of the first operations and, therefore, shipping cargo and troops would only be required at the beginning of the war. At the present time, views on the role and place of sea lanes of communication in modern war are being reviewed. The basis for this is not only that today the possibility of conducting a sufficiently protracted war with both nuclear and conventional weapons is considered to be real but is also based on the experience of local conflicts.

In the event a world war is unleashed, the significance of sea lanes of communications to NATO, as the West

believes, will be increased since they will provide strategic movements of troops and weapons to the theaters of war along with sealift of a large volume of economic cargoes. It follows from this that maritime shipping is an important factor that impacts the capabilities of NATO countries to maintain their economic and military potential at the required level both during peacetime and also during wartime.

All of this predetermines the constant attention of the military political leadership of NATO and Japan toward future improvement of the maritime transportation system and forces them to constantly buildup their capabilities to organize massive maritime shipping in the interests of their economies and armed forces. Furthermore, a great deal of attention is being paid to modernization and construction of new dual-purpose ships, both to support commercial shipping during peacetime and to carry out military shipping during wartime. Port loading and unloading facilities are receiving corresponding development.

Western military theorists proceed from the fact that in the event of a war of a protracted nature, disruption of sea lanes of communication even under modern conditions will constitute the main content of warfare at sea. The effect on sea lanes of communication may be carried out by means of conducting a series of maritime operations or systematic combat operations of various component services. In their opinion, the high level of development of military equipment, the appearance of nuclear missiles, improved electronic systems and nuclear propulsion on ships is inevitably resulting in the expansion of the composition of men and equipment used both for disruption and also for protection of sea lanes of communication that will impart a different character to these operations than in the past.

The [temporary] interruption [sryv] of the concentration, regrouping, and evacuation of enemy forces in a theater may be the goal of special operations on sea lanes of communication and destruction of loaded transport vessels and local security and covering forces in the sea and in the air, and destruction of loading and unloading ports, communications hubs, command and control facilities, and navigation systems may be the content [of special operations on sea lanes of communication].

Warfare on sea lanes of communication in the form of operations is associated with assigning a significant quantity of naval forces and also support resources and prepositioning them when necessary; it demands quite a bit of exertion of all participating forces and enormous material expenditures. In connection with this, it is assumed that naval force operations on sea lanes of communication will take on the form and scale of operations mainly during disruption of enemy sea lanes of communication with great intensity of movements of convoys that transport troops and important military cargoes that have strategic or operational significance during this period of the war.

In the majority of other cases, warfare on sea lanes of communication may have the nature of systematic combat operations [deystviy] that are conducted continuously.

As the experience of the Second World War demonstrates, one of the most effective ways to interdict the sea lanes of communication is destruction of the maritime transport infrastructure, in particular, to deprive the enemy of the capability to replace merchant fleet losses and its support forces. Both of these circumstances dictate the need to conduct massive strikes against shipbuilding centers and ports. This inevitably causes an escalation of combat operations.

The problem of warfare on sea lanes of communication does not exist for its own sake but is tied into a complex knot of international relations. As before, the actual situation does not give us grounds for complacency. American and NATO war plans as a whole are directed at the conduct of offensive operations [operatsiy] against the USSR in the seas surrounding it and attainment of the strategic initiative using preventive measures. A system of forward basing is being improved to do this, in particular, and Naval task forces are being built up at "forward sea lanes." They envision combat operations of all arms of NATO Armed Forces coordinated in place and time for the purpose of destroying the enemy on the whole depth of his defense.

In spite of the general thaw of the international climate, the military threat from maritime axes has not been removed for our country at the present time. As previously, it is a constant value and a really substantial factor for the USSR and its allies.

In the area of military policy, the Soviet Union and the countries of the socialist community are guided by a defensive military doctrine that excludes the use of the armed forces for aggressive purposes.

One of the defensive missions that the Soviet Navy must accomplish in a war forced upon us will be warfare on ocean and sea lanes of communication that have a great significance for the functioning of our economy, movement of troops, military equipment, fuel, and other materiel on the continental theaters of combat operations without which successful conduct of combat operations on land fronts by the main imperialist countries will turn out to be impossible.

As for the experience of warfare on sea lanes of communication during the period of the Second World War, it undoubtedly must be analyzed and taken into account in the work of commanders, staffs, and while training naval forces while considering that it is justified only with regard to specific conditions.

Of course, the restructuring being conducted in the Soviet Union is also not avoiding its defensive military organizational development. Soviet military doctrine that was always defensive in content is all the more convincingly manifesting its own quality. And if questions arise with regard to this among the military leadership of Western

countries, the best way to find answers to them is compare the military doctrines of NATO and the WTO—a proposal that the USSR and other socialist states has already advanced repeatedly.

However, the mission of insuring our country's security is not being resolved in a vacuum and various factors have to be considered during its implementation, including the presence of not entirely peaceful plans and powerful navies on the other side. Naturally, this is being considered by the Soviet side.

The defensive sufficiency of the military potential of the USSR and the U.S. and the non-offensive trend of military doctrine—here is the key to insuring mutual security. To have enough for defense but not enough for offense—is an externally elementary idea that demands serious restructuring of military-political thinking and the structure of the armed forces are at its base. And this relates not only to reduction of strategic nuclear potential but also to elimination of the asymmetry and disbalance in the development of NATO's and WTO's general-purpose forces.

The USSR has repeatedly proposed beginning negotiations on limiting naval activity, limiting and reducing naval arms and extending confidence building measures to the waters of seas and oceans. In the opinion of the USSR, agreement on and implementation of confidence building measures called on to promote the prevention of conflict situations and strengthen the security of sea lanes of communication that should become the highways of peace and progress can have great political significance.

Footnotes

1. The journal version of several chapters from the book. Conclusion. The beginning is in No 1 1990.
 2. Chapter three of the second part of "Magistrali mira i voyny" [Highways of Peace and War]. The first two chapters examine the interrelationships of the economy and maritime transport and the possibilities for their use for military purposes by NATO countries.
 3. Statement of the Secretary of Navy before the Committee on Armed Services [sic], House of Representatives, February 1976. [Translator's note: Original footnote in English.]
 4. Quoted from the magazine "U.S. Naval Institute Proceedings." January 1986.
 5. Keep in mind his report "Naval Strategy" that he delivered in 1986.
 6. Belo, O. "Rol morya v budushchey voyne" [The Role of the Sea in the Next War], Moscow, Voenizdat, 1961, p 71.
 7. U.S. Naval Institute Proceedings, 1988, No 5, pp 30-32.
- COPYRIGHT: "Morskoy sbornik", 1990.

Adm Ivanov: 40% Increase in Operational, Combat Training in Baltic Fleet

90UM0208A Moscow KRASNAYA ZVEZDA in Russian 1 Jan 90 First Edition p 2

[Interview with Adm V.P. Ivanov, commander of the Baltic Fleet and people's deputy of the USSR from the Kaliningrad Rural Territorial District, by Lt Col V. Kosarev and Capt 3rd Rank V. Urban, parliament correspondents: "What Was and What Will Be"]

[Excerpt] It is now apparent that the people's deputies of the USSR were the most popular people in 1989. That is not an exaggeration. The nation attached a great deal to the two congresses of people's deputies and the work of the Supreme Soviet. After the decisions should come action, however.

And what do the deputies themselves think? Col V. Kosarev and Capt 3rd Rank V. Urban asked them just two questions.

[Correspondent] What events of last year stand out in your mind?

[Ivanov] It was a busy year. From the standpoint of operational and combat training, we increased it by practically 40%. The fleet's organizational structure was also improved. It is easy to imagine what this entailed for the personnel. We coped with the missions, however, and the Baltic Fleet was named best fleet in an order issued by the minister of defense.

What about the elections? During the election campaign we met with representatives of all segments of the society to persuade and debate. It needs to be said that the people's deputy does not have an easy burden. The situation in the nation is complex. Divisions are becoming increasingly perceptible. And the struggle for power by individual groupings is becoming increasingly visible. All of this affects the Armed Forces too. We have a situation in certain regions, particularly the Baltic area and the Transcaucasus, in which the social status and social protection of the military have begun to suffer. This is what led me to take the floor at the congress.

[Correspondent] Your forecasts for the new year?

[Ivanov] I believe that we should precisely define our position with respect to state policy in the area of defense and with respect to the army and navy. What a few young officers/people's deputies are proposing by way of military reform is immature, rash and even biased. I cannot agree with it. We need to define our position in these complex and important matters, however.

Draft laws on defense and on the officer's service are presently being prepared. They unquestionably need amendments and refinement. We frequently have cases in which lieutenants just out of school submit requests for discharge, for example. One can select the wrong career, I agree. In this case, however, he should serve at least 5 years. That would only be fair. Incidentally,

graduates of civilian VUZs must by law work a certain period of time. I am in favor of permitting an officer for whom the service has not worked out to apply for retirement after serving a certain number of years.

I believe that the year 1990 will be a decisive one in two respects. First, it is essential to make it possible calmly and systematically to implement the program presented by the government. This is from the economic standpoint. The second pertains to policy. There will be movement toward people's power. The economic, political and legal levers should be turned over to the local soviets. This is stated also in my deputy's program. We military men will possibly also have to give up certain things. What do I mean by that? Our enterprises should unquestionably transfer a portion of their earnings to the budgets of the local soviets to be applied to social and economic problems.

Reciprocity is needed, however. Take the garrisons. Both civilians and the families of servicemen live there. That is a reality. We usually assume full responsibility for the social area at the posts, however. The soviets need to contribute their share. I am talking about equal responsibility.

V Adm Baltin on Physical Training in Baltic Fleet

90UM0298C Moscow KRASNAYA ZVEZDA in Russian 5 Jan 90 First Edition p 2

[Interview with V Adm E. Baltin, first deputy commander of the Pacific Fleet, by Capt 1st Rank V. Shirokov, KRASNAYA ZVEZDA correspondent, under the rubric "Combat Readiness: Qualitative Parameters": "The Sea Loves the Strong"]

[Text] V Adm E. Baltin, first deputy commander of the Baltic Fleet, answers questions posed by Capt 1st Rank V. Shirokov, KRASNAYA ZVEZDA correspondent.

[Correspondent] Eduard Dmitriyevich, more than a year has passed since the Physical Training Manual for the Army and Navy (NFP-87) took effect. During the 33rd Review of Mass Sports Work and in inspections conducted in the units and ships it was learned that there are major complaints about the Pacific Fleet sailors. Only 18% of the units tested received a "good" evaluation, while 82% received "unsatisfactory." A question for you not just as the fleet's first deputy commander but also as chairman of the fleet's sports committee: What kind of work is presently being done in the fleet to eliminate these problems and rectify the deficiencies?

[Baltin] The tasks involved in the physical training of fleet personnel are increasing today primarily in connection with the restructuring processes and the shift in the naval forces toward the new, quality parameters. Changes in the technical capabilities of fleet forces are impossible without personnel with a high level of military, physical and psychological training and capable of withstanding the prolonged, heavy burdens on the organism while retaining a high degree of efficiency and

stamina. This is why, at the very beginning of this training year, when the staffs of the units and formations check a ship's readiness for a long cruise before it sets out to sea, they are thoroughly testing the physical conditioning of the personnel.

We have also had to make a fundamental shift toward building and constantly maintaining the materials and equipment base. A total of 57 athletic grounds and 31 special obstacle courses have been set up, and the fleet's sports facilities have been reconstructed to a significant degree.

[Correspondent] But these steps will not resolve all of the problems.

[Baltin] Let us be realists and consider the new sailors just drafted into the fleet. A total of 30-40% of them cannot do two or three chin-ups, and how they suffer from seasickness! The social environment in which they were brought up and were readied to serve in the army and navy is primarily to blame. It is also important how the physical training is arranged in the unit and on the ship and how the sailors are trained on ocean cruises. Take the submarine on which Sr Lt V. Bryukhanov is the sports organizer, for example. For several years now this submarine has been one of the best in the navy with respect to physical training. And it is all because the physical training is precisely organized wherever he happens to be, at sea or on shore.

[Correspondent] Are there many such ships, Comrade Vice Admiral?

[Baltin] On most of our ships the young seamen "are placed onto a good footing" in physical conditioning within approximately a half-year. The quality is another matter. On some ships physical training is conducted systematically and intensively, while the commanders on certain ships regard the physical improvement of subordinates as a secondary matter.

And so, we cannot count on much success, as they say. But then a real commander—I stress this once again—will not relegate physical training to the background. He knows that if a sailor is physically strong and conditioned, all of the other missions will be successfully accomplished. Incidentally, prime attention is devoted to physical training on such large ships as the cruisers Novorossiysk and Minsk, and they have accumulated some good experience. It is essentially due to the fact that their crews have long practiced mutual assistance in physical education. The veteran sailors do everything possible to see that the newcomers are physically strong and capable of enduring the storms and tossing about. Particular attention is devoted to conditioning and the ability to swim and remain afloat for a long time.

[Correspondent] Eduard Dmitriyevich, what is the reason for this?

[Baltin] Everyone who serves in the navy must know how to swim well and remain afloat for a long time. The

tragedy of the Northern Fleet's Komsomolets graphically confirmed this. It showed how essential good physical strength and stamina are to every submariner.

A great deal of attention is given to the remote garrisons, where the climate is harsher than at Vladivostok, let us say. We have numerous problems of all kinds even in this area, of course. One of the main problems is the impoverished state of the sports facilities at the remote garrisons. Far from all of them have swimming pools and other sports facilities.

I want to get back to the personnel on nuclear-powered submarines. With imagination and enterprise they have learned how to conduct underwater sports days on long cruises. The program includes track competitions (running various distances on a moving track), weight-lifting, tennis and other sports.

[Correspondent] Comrade Vice Admiral, let us go back to what we were just discussing: the young sailors and their training on the ships. Negative things were revealed in the recent inspection. In certain units 46% of the seagoing warrant officers on the submarines performed very poorly. And in three of the units inspected the warrant officers turned out to be entirely unprepared physically. What is the matter?

[Baltin] Warrant officers account for 40-45% of the crews on submarines. They are mainly between the ages of 21 and 37 years. This is their youth, a time of strength in spirit and body! The primary and main cause of the poor physical conditioning of warrant officers is the absence of any sort of demandingness with respect to developing the warrant officer as a submariner and a professional sailor. In my opinion, this attitude causes enormous harm not just to the combat readiness of the submarines, but also to the warrant officer as a person. Without proper physical conditioning his health rapidly deteriorates, after all, and this is accompanied by lowered professional qualities for the submariner and the early onset of "pension condition." This is detrimental not just to the family but also to the fleet.

After serving 27 years on submarines I personally have not experienced this. Why not? It is simply essential for every officer and warrant officer to observe the requirements contained in Article No 7 of NFP-87, which states the following: "Every officer, seagoing and shore-based warrant officer and extended-duty man bears personal responsibility for his own physical condition and is required systematically to engage in physical exercises and be constantly prepared to carry out his assigned missions." Unfortunately, however, this responsibility exists only on paper for now.... So we decided, beginning in January of 1989, not to accept training assignments on the submarines without first testing the physical conditioning of the officers, the warrant officers and the entire crew.

[Correspondent] Eduard Dmitriyevich, but there are even more alarming things. In a recent inspection by an inspectorate of the USSR Ministry of Defense 37% of the

personnel in a naval infantry battalion of the Pacific Fleet received unsatisfactory marks for physical conditioning. How is it planned to rectify these conditions?

[Baltin] I do not intend to make excuses, but at the time of that inspection new replenishments from the spring draft made up 80% of that battalion's personnel. Naturally, they were unable to give a good performance after just 3 months of training. The athletic facility for the scouts has now been reconstructed and special physical exercises have been worked out, which include hand-to-hand combat and endurance exercises.

[Correspondent] The state of physical conditioning and mass sports work depends in great part on the condition of the sports facilities and equipment. As you know, these are in wretched condition in some places. Of eight fleet air force garrisons inspected, for example, only three had gymnasiums. The situation was even worse with respect to swimming pools. And is this not the reason why 50% of the sailors tested from one of the Pacific Fleet's subunits were unable to swim 100 meters in their uniforms and did not go the distance. This means that in a real battle they would simply have drowned. How is this fact assessed?

[Baltin] The percentage of personnel incapable of swimming 100 meters carrying their organic personal equipment involved primarily tankmen from the naval infantry, where 56 of every 100 men did indeed fail to swim the distance. Additional exercises have been set up for the naval infantrymen. The unit has the athletic facilities for this. There are also swimming pools. With respect to seagoing personnel, it is a fact that 15% of the seamen have a hard time staying afloat. And this is in the Maritime area, where it is possible to teach the sailors to swim in the summertime even if there are no winter swimming pools. We are therefore going to take advantage of this fact.

With respect to your conclusion on behavior in combat, that is an incorrectly formulated syllogism. A sailor fights on a ship or a submarine. If the ship is damaged in combat the crew has to engage in damage-control, to see that it is capable of fighting until all of the ammunition has been used up, and not jump overboard. This is a fundamental distinction of the Navy as a branch of the Armed Forces.

There is no front line in a naval battle. There is only one way to keep from going overboard: to win the battle. In the final analysis, effective physical training for the sailors also serves this purpose. The sea loves the strong.

Logistics Capabilities Fall Behind Fleet Growth, Requirements

90UM0188A Moscow KRASNAYA ZVEZDA in Russian
22 Dec 89 First Edition p 2

[Article by Captain First Rank I. Drozhezitskiy: "Reader Poses A Question: Rear Services Gives 'SOS'"]

[Text] Pacific Fleet—Rear service units have become accustomed to thinking that a satisfactory evaluation in training course missions is just fine for them. "Why do we need a higher evaluation? After all, we don't go to sea," ask shore service specialists.

I often remember an abiding truth: For the crew of any ship, be it a nuclear-powered submarine or a small antisubmarine ship, the sea begins on shore. And the job that shore service specialists do in preparing a ship to carry out a combat training mission has a great impact on the end result. But do we often remember those who so actively promote the successful achievements of ships, submarines, and aircraft? No, everything is taken for granted: their extremely intensive labor, their constantly being in the shadow of those whom they support, and their inability to engage in what they are constantly criticized for—combat training.

For example, take the shore unit in which officer Yu. Sinitsin serves. If we analyze the situation from 1975 to the present, it becomes clear that while the unit's strength has remained unchanged, freight turnover and work volumes have increased. But what is increasing isn't labor productivity, which would be wonderful; what is increasing is labor intensiveness. In other words, worktime is exceeding all time allocations. So when do the unit commanders have time for combat training? It is clear to all that such training is not the primary concern here, that it can wait. I recently had an opportunity to do some work in the unit with pencil in hand, and here are the figures I arrived at: Each year, the rear service personnel are more than a month short of the total amount of time that is supposed to be devoted to combat training tasks. Why? Because unbalanced changes are taking place. The fleet has been reinforced with new and powerful ships that require higher-quality and more intensive material and technical support than have earlier ships. In terms of their technical equipment, however, rear services have stayed the same, and in quantitative terms they have been "dwindling away." If we consider the work of weapons units, the picture is even more unseemly. This is because added to all time estimates are regulation work with weapons, which takes up to 40 percent to 45 percent of all worktime, the acceptance and issuing of weapons to naval forces, and weapon repair and preparation.

In the past 20 to 30 years, we have lived through the cruelty the services inherited from Stalin's time, the outbreak of Khrushchev's democracy, and the disintegration of the period of stagnation. Today we are restructuring on the basis of qualitative parameters. So let us consider how we are restructuring combat training for rear service units.

The combat training course for rear service units dates back to the prestagnation period, for all practical purposes, and there are no prospects in sight for a new course. Over the past quarter of a century, the navy has become qualitatively new, while rear services, in the role of stepchild, continue to eke out a wretched existence. In

Stalin's time, these units had three times as many personnel. Meanwhile, freight turnover has increased, as have the weight and size of the hardware being delivered and its cost and precision. But loading and unloading equipment has remained virtually unchanged, as have work methods, which continue to emphasize manual labor. Storage facilities also date back to the time of Crimean conquest, for the most part. If something is built, it is built by the do-it-yourself method. There's little hope for the contract method, which automatically becomes a building project that never gets finished. In the past five years, three storage facilities and two storage yards have been built by the do-it-yourself method; not a single facility has been built using the contract method.

The creation in rear service units of nonorganic teams to perform loading and unloading work attests to our feebleness. The policy adopted in the period of stagnation of augmenting ship crews at the expense of rear service units has led to a situation in which rear support services have essentially become the affair of ship crews themselves. Commanders of combined units and ships are justifiably indignant: "How long are we going to have to allot our own organic personnel for work in shore units?" How long? Until rear services emerges from its drowning state. And will that happen? In more than 20 years of service in the navy, no serious study of the organic structures of supply units has ever been conducted. No one has ever asked himself the question: How can the whole mass of naval forces be supported by shore manning levels that have been slashed to the minimum?

The administrative style of management and our habit of executing orders according to the principle "we'll do," plus the lack of legal protection, have led to an anecdotal situation with respect to the loading and unloading of freight cars, for example.

Through the efforts of the navy's military communications service, a service has been set up to monitor the processing of railroad cars. Those to blame for car demurrage are "fleeced" with fines in the harshest manner. Organization is on the highest level here. There has been triumphant "pealing of bells" over how we have reduced the amount of fines paid, and there are "glowing" reports to commanders about how the situation in the fleet is improving. Yes, we are complying to the letter with Article 62 of the 1986-1988 edition of the USSR Railroad Code, which says that officials to blame for the late shipment of freight from a station bear material or criminal responsibility in the established procedure. But we do not comply with Article 57, "The railroad is obliged to deliver freight to its destination on schedule..." and Article 153, "For the late delivery of freight, the railroad pays a fine to the freight recipient, unless it proves that it was not at fault for the delay..."

Why and how long will the fleet be in the position of defendant? We pay fines to the railroad, but the railroad virtually never pays fines to us. Today this has led to a situation in which cars stand 100 meters away from a

unit for hours and days and are presented for unloading at night or on holidays, when civilian organizations prefer to pay the fine for demurrage instead of a double rate to the loaders. We're now accustomed to receiving orders of the following kind: "On holidays...to unload cars, open facilities, summon proprietors, and ensure occupational safety and the absence of demurrage."

The reason for the lack of complaints filed by units against the railroad is easy to see: Even if the case is forwarded to arbitration and won, the fine will be paid to the Ministry of Defense, not to the unit. If commanders were indeed the masters of their units and disposed of the financial resources the articles provide for, then fines levied on the railroad and deposited in their budgets would offset the fines for demurrage many times over. For now, however, unloading takes place at night and in the rain (which is categorically forbidden), so that units do not have to pay out of their own pockets. We are deliberately forcing commanders to violate safety regulations. Meanwhile, a car often remains in a unit for a long time even after it has been turned back over to the railroad.

I can't help asking this question: How can we demand that rear services personnel take a serious attitude toward their obsolete combat training course and meet the course schedule when intensive freight turnover occurs every two to three days, including days off? And who are these personnel (organic, nonorganic, nonestablished)? Soldiers or ordinary unskilled laborers?

I think we need to urgently revise the combat training course for rear services units and, on the basis of an analysis of and the prospects for fleet reductions, bring the organic structures of shore units into conformity with the tasks to be accomplished. It is also necessary to reequip them, if only with automatic cranes from Soviet Army units that are being disbanded. Rear service units could also be strengthened by allowing them to use the fines they levy for their own financial needs.

Rescue Following 1983 Submarine Sinking Recalled

90UM0208D Moscow KOMSOMOLSKAYA PRAVDA in Russian 24 Dec 89 p 2

[Article by Capt 3rd Rank A. Rozhnov, Red Banner Pacific Fleet, under the rubric "A Particular Incident": "Save Our Souls"]

[Text] Every accident has its own causes, its own secrets, its own heroes and martyrs. They all also have something in common, however: somebody's bungling, carelessness or incompetence. This is why I view the tragedy which took the nuclear-powered submarine Komsomolets and 42 human lives to the bottom of the sea not in isolation but in comparison with other such disasters. And while we have now forced out at least a few details of the truth, we heard not a word about the destruction of our submarines in the past.

I consider it my duty to tell about yet another disaster. A Pacific Fleet submarine sank off the coast of Kamchatka in the summer of 1983.

...The large, wise and reliable boat perished. It lay motionless on the bottom and no longer responded to the people who remained alive on it. The seamen and officers shared their lot in the darkness and cold. And they counted on being rescued.

Water burst into one of the compartments as the submarine sank. The commander did everything possible to surface, but it was too late. The submarine settled onto the bottom.

News of the tragedy roused the nation's entire Navy. A rescue operation was launched within a matter of hours, for which the commander-in-chief of the Navy at the time activated hundreds of specialists. At that time we still did not know that water had rushed into the fourth compartment and killed 14 sailors. We did not know that 27-year-old Warrant Officer Vladimir Leshchuk had succeeded in throwing open the bulkhead to an adjacent compartment and yelling to the stunned watch officer about the accident and then disappeared once again, slamming the door beyond which there was life. His body was later found, slumped over the lock lever. Volodya had not even had time to don his respirator. The Navy Regulations specifically state: "No one has the right to abandon a damaged compartment on his own." A harsh rule born of the sorrowful experience of more than a single generation of submariners: only by sealing yourself up can you save the others.

The submariners were lucky. In the first place, the accident occurred at a shallow depth. In the second place, the rescuers rapidly located the submarine and made contact with it. The very next day people began exiting the first compartment through a torpedo tube.

Alarm increased when they saw that everyone who had escaped the underwater prison had been in the forward compartments. It was more difficult to escape the rear compartments, where there were two officers, five warrant officers and 16 seamen. There were no torpedo tubes there, and the sailors could do only one thing: use the emergency hatch. None of the submariners had attempted this even at the training station, however.

There is an emergency hatch on every submarine. The seamen do not trust it, however; there is a mental block; it is terrifying. In his book "Podzem zatonuvshikh korably" [Raising Sunken Ships], D. Gorzd recalls how, on the British submarine Thetis, one unsuccessful attempt to reach the surface through something similar to our ASL [emergency hatch], put the remaining personnel into a state of collapse: "They waited patiently until the last of them suffocated."

Two sailors, Zakirov and Cheroshnikov, undertook to help Bayev. While they donned shallow-water diving equipment, Bayev sat down to write a letter to superiors. It was a letter and not a report, as a military man should

have been writing. Let the commanders with the large stars on their shoulderboards know that the submarine has neither rescue equipment nor diving underwear, that the canisters for the emergency food supply are empty.

Bayev first accompanied Zakirov, but the latter was soon forced to return to the compartment. The latch on the upper lid was jammed, and the sailor lost his head. They wanted to send someone else, but Zakirov adamantly refused to give up. Then the upper lid was opened; they could hear the sailor step onto the submarine's stern, where he rapped out the prearranged signal: All ok!

It was no longer a problem to find volunteers: since one had emerged, this meant that success was in store for each of them. Bayev began dressing a second man, but then came the submarine commander's order to halt the exit. It turned out that there, on the surface, 10 meters from them and a few meters from the surface, a rescue diver had bumped into Zakirov's dead body. He had been pummeled by a buoy cable. The icy water rapidly depleted his final strength, and the air had run out in the tanks. And experience and stamina? Where was he to get them on this first attempt!

It is painful to know that no one taught the deceased Seaman Zakirov shallow-water diving during his three years of first-term service. If he were the only one!

...Another night passed. The crew had done everything it could. The only thing left was to wait. The waiting ended at 11:00, when the commander gave the go-ahead to exit. Everything proceeded according to plan until it was suddenly discovered that the two officers and four warrant officers remaining in the compartment could not exit. There were no more respirators.

...The battery tanks began to explode. First one, then a second... they made an inspection. The deck cover over the second compartment had been smashed. Thanks to fate, not one of the men had been injured; not a single spark had set the submarine afire.

"Put in respirators through the emergency hatch," the commander finally telephoned the order.

This was a real treasure for them: four respirators and two dozen cans of condensed milk.

"You bastards," Bayev said, cursing for the first time. "Three respirators! Crap!"

Three more were dropped to them, and again one of them had to be tossed aside. It was defective!

They had learned their lesson, and they requested more respirators than they needed. Six were immediately dropped to them.

...More pain in my heart. An armada of vessels rushed to the scene of the accident. Dozens of planes and helicopters hauled in everything needed to rescue the men. The commander-in-chief of the nation's Navy directed the operation. The crews of other submarines voluntarily

surrendered their respirators, warm clothing, camel's-hair diving sweaters and the best of their food to be taken to the sunken submarine. Without receipts, vouchers or signatures. However... only a small portion of this selfless aid reached the submarine in trouble. An audit later listed these generous donations as a loss.

After all this is it any surprise that respirators in which one could suffocate were sent into the stern compartment of the sunken submarine?

...Bayev sent the others through the hatch until only one was left.

"Bayev," came the commander's voice over the telephone, "The commander-in-chief does not order but requests that you not flood the stern compartment if possible."

Vasily himself knew that if he flooded the compartment, water would sweep to the turbine, a unique, and perhaps the most expensive, part of the submarine's structure. If both the prow and the stern were flooded, this would greatly complicate the raising of the vessel.

...One more or less usable respirator was found among the several defective ones. Calculate every move: "Stop! How are you to close the ponderous cover when there is nothing to grab onto?"

Bayev braced one leg on the gangway bannister and kicked the cover down with all his might. It was the only thing left to do. After several kicks, it clicked, but it immediately broke off and crashed below. The spring had broken.

He did not even lose his temper. He crawled silently back into the compartment, removed the spring from a door and replaced the broken spring with it.

Bayev reported to the rescuers at 19:03 that he was ready to leave. He put on the mask and coveralls and crawled into the shaft. The cover held. He felt for the key opening, inserted the key, sealed the shaft and opened the flood valve. Cold water rapidly began compressing the rubber coveralls.

He glanced at the pressure gauge. Pressure in the shaft had dropped by only two atmospheres. Too little! Bayev understood with horror: the shaft had holes in it! At that very second his throat began to tighten from suffocation. The air in the tanks had run out.

At that point the water seemed to have mercy on him. It began slowly falling. Now it was at the level of his forehead, his eyes, his nose. He greedily drew in what air was left and lost consciousness. He came to with a choking feeling. The water had dropped to the level of his chest and stopped. The vent valve was at that level. This is where the shaft is not sealed, Bayev realized. The water won't sink any lower than that. He plunged feverishly into the water, groped his way to the key handle on the bottom and inserted it into the lock but was unable to

turn it even a millimeter: Almost three tons of water was pressing down upon him. Was this the end?

Bayev stood straight up and froze. Once again he heard the gurgling of water. He realized that he had caused this himself. When he sat on the bottom he had forced water upward in accordance with the Archimedes principle. He began squatting over and over again, expelling the water with his entire body. There was absolutely nothing left to breathe, however, and he sensed that if he could not open the bottom cover at once, that very minute, there would be no more breath.

Another jerk!

He does not remember how long he lay unconscious. When he came to he immediately realized he had opened the devilish cover after all.

Now he only had to find a respirator. He carefully went through the entire pile. The tanks were empty. There was nothing left to do but burst to the surface with the air supply in the air pocket.

"He's surfaced!" someone was heard to say. "He's not moving! He's dead for sure!"

He had only the strength left to breath. And also... to reach the rescuer's deck and take himself to the commander-in-chief. The fleet admiral shook his hand and asked:

"What about the compartment? Did you flood it?"

"No."

The admiral's voice began to fade, and he could no longer feel the deck beneath his feet.

"Did you hear?" They yelled right in Bayev's ear. "The commander-in-chief is awarding you an automobile."

He was not aware of this, however. Nor was he aware of the fact that it was halfway through a second night or that his trip from the submarine to the surface continued 6 hours running instead of the 8 minutes it took for those he saved.

News of the commander-in-chief's generosity rapidly swept through the garrison. He was awarding the warrant officer an automobile and ordering that he be provided with a two-room apartment. Everyone agreed that Bayev had earned the award. He had saved men and had saved the submarine itself. They could certainly not have raised it rapidly with a flooded bow! He had sluiced himself through a hatch. Nothing like this had ever before occurred in the submarine fleet.

I ran into Bayev during that time. Yes, the warrant officer said that he had sent 22 people to the surface and had not flooded the bow. He did not call it a rescue—certainly not heroism. I asked him point-blank:

"Vasya, what made you make the second attempt when the first one almost cost you your life? You could have said to hell with the compartment, flooded it and emerged."

"I am a foolish man. I don't know why myself."

I also asked him: "Is it true what they say about the valuable reward?"

"How could they not give it to me when an officer from headquarters announced for the comrade commander-in-chief in front of a formation of the entire rescue crew that I am being awarded a vehicle. I can use it. Thanks...."

I was planning to tell about Bayev's feat both in our large-circulation publication and in the fleet newspaper. Unfortunately, however, the attitude was that we had had no accidents, that we could not have any.

Several years went by. I happened to visit the garrison where Bayev had begun his military service. It turned out that he was still there. He had been appointed boatswain on a submarine. I also learned Bayev's current address. He lived in a one-room apartment.

I learned that he had received it only recently and that the commander-in-chief had had nothing to do with it.

"What about the vehicle?"

Vasily shook his head. He did not want to talk about it. I insisted, though.

"When I returned from leave, the crew followed me around taunting me, asking me when I was going for a ride. I was not even sorry for myself but for the comrade commander-in-chief. They really 'gave him the run-around.' He had written to Moscow, explaining the situation. The assistant commander-in-chief had responded. The response was sent to my superiors, to be sure, and it contained the following: 'Ask Comrade Bayev to go to the personnel agency and straighten out these matters there.' They summoned me to the political section and began explaining things. Young fellow, you want too much. You are apparently tired of the service. If you are, just say so. I replied that this was certainly not so, that I was not tired of it. Then take a pen, they said, and write down that you have no complaints, that positive answers have been provided for all the questions and you have been provided with a two-room apartment." "What! A two-room apartment?"

The fleet doctor came to me the next morning. Get your things together and come with me, he said, you have been ordered to see a psychiatrist. Something has apparently happened to your mind since the accident. "Thankfully, the unit commander intervened...."

"And did you sign everything?" I could not refrain from asking.

"What was there left to do? I'm glad that I'm still alive. And also that they let me continue in the service. Everything else...." He threw up his hands without finishing. He was silent for a moment and then said:

"This is the way it all turned out.... I always have a bad feeling in my heart when I recall it. What do you think? Will this pass?"

Navy Clearing Out Avachinsk Ship Graveyard

90UM0208B Moscow KRASNAYA ZVEZDA
in Russian 4 Jan 90 First Edition p 4

[Report by Capt 3rd Rank V. Yegorov: "Will There Be No 'Island of Dead Ships'?"]

[Text] The ship graveyard in Rakovaya Bay has long since become an inseparable part of the Petropavlovsk-Kamchatka scene. Its main "proprietors" are sailors, but it also contains fishing vessels which civilian organizations "dump" there.

A ship-raising detachment has been established there under the command of Capt-Lt Z. Akhmedgaliyev. Its main mission is to clear the Avachinsk firth of scrap metal. The work is in full swing today in Rakovaya Bay, with cranes turning, gasoline cutters burning and trucks rushing about.

"We know that we are providing a dual benefit by clearing the bay and providing the nation with currency from the sale of scrap metal," Capt-Lt N. Minakov, chief engineer in the ship-raising detachment, said.

Today, when the ecological struggle has become particularly acute, the public demands that the Avachinsk firth be cleared of the piles of scrap metal as rapidly as possible. Only the sailors have taken on the job, however.

MEMO's Sturua on Utility of Aircraft Carriers

18120039 Moscow MOSCOW NEWS in English
No 4, 1990 pp 12-13

[Article by Georgi Sturua, section head, Institute of World Economics and International Relations, USSR Academy of Sciences: "Does the Soviet Union Need Aircraft Carriers?"]

[Text] The headline is not precise on two counts. First, "aircraft carriers" should be in inverted commas, because officially the Soviet Navy still doesn't have any. There are two heavy aircraft carrying cruisers—the *Tbilisi* and the *Riga*. While in some of their parameters (the flight deck is 300 metres long and more than 70 metres wide) these ships are not unlike the US carrier *Midway*, which has been with the US Navy for more than 40 years, they are inferior to it in terms of the number of aircraft they carry (60 on the *Tbilisi*, 75 on the *Midway*). As explained by the Soviet Navy General headquarters, they are nothing but heavy aircraft carrying cruisers.

Second, the headline should be continued thus, "...and if it does, what type and how many?" Hard to answer. In addition, details that would enable an answer, remain top secret. So I can only venture my own view of the problem.

At one time I happened to study aircraft carriers debates in the US Congress. Far from being an exclusively military and technological issue, the matter was also hotly debated in leading US papers. In this country, I think, we have even more reason for a broad public discussion of this question.

The discussion in fact was started at the 2nd Congress of People's Deputies. Speaking during the debates on the government report, Academician Georgy Arbatov said the money to build the aircraft carrying cruisers would have been quite enough to solve many social problems of the Soviet Armed Forces. Responding to this view, another deputy, Marshal Sergei Akhromeyev, was emphatically against the view that construction in this country of aircraft carrying ships had been a mistake.

Americans were deterred by the giant cost of their carriers, and—being pragmatic—wanted to know if there were cheaper alternatives to their huge carriers. It's now our turn to ponder roughly the same issue. Chief of the General Staff, General of the Army M. A. Moiseyev, maintains: "We should learn how to save on defence, and we will save." But I would stress that this saving shouldn't harm our country's defence capability: if it really takes a specific type of weapon to maintain this capability at a level of reasonable sufficiency, this weapon should be acquired.

Having studied theories on further expansion of their aircraft carrying forces, Americans found that all talk about heavy carriers being very costly but vulnerable, was a simplistic view of a rather complex idea. In terms of per ton displacement, a frigate, for example, costs more than one ton of the *Nimitz*. The cost of a nuclear-powered aircraft carrier is higher than that of a carrier with the usual power plant, but the difference in operating costs of both vessels over a 30-year period is minimal. The size of a carrier indeed makes it a more conspicuous target. But crippling one doesn't appear so simple since it may take seven to 12 antiship missiles, and as many as 20 to sink one. The bigger the carrier, the simpler it is to provide it with active and passive defences. Despite their mobility, carriers are vulnerable, but hardly as vulnerable as such stationary targets as airfields. In short, the prevailing view in the US is that as sea weapons are being improved, the era of aircraft carriers is declining. But while it lasts, it's a good bet to build large (up to 90,000 tons) nuclear carriers of the *Nimitz* type.

The Soviet Union has started work on ships approaching the carrier class at what I wouldn't call the best time, when there are serious doubts regarding these ships (concerning cost efficiency). The Soviet Navy will face formidable problems in their deployment. In case of war,

Soviet ships carrying aircraft would have to lock in combat with a navy that adheres to a strategy based on an offensive. According to official US Navy plans, the USSR would—in the North Atlantic theatre—face four aircraft carriers (100 fighters and 110 attack planes); in the Pacific theatre it would contend against seven aircraft carriers (170 fighters and 215 attack planes). In addition, and which is most important, hundreds of cruise missiles would be trained on Soviet aircraft-carrying ships. If the concept is that in order to neutralize the air threat to this country coming from the sea, the Soviet Navy should be able to deploy sea-based aviation in those areas not covered by ground-based aviation, it would appear that we should be prepared to construct powerful aircraft carriers and in a sufficient quantity at that. Otherwise, the costliest of our aircraft-carrying ships would be a considerably easy prey for the enemy.

What seems to be our choice? Spending many millions or perhaps billions, we have created a compromise—not really a heavy aircraft carrier on a par with modern US ships of this class, but a heavy aircraft-carrying cruiser, which is going to carry, according to official statements, exclusively fighter planes, i. e., planes unsuited to hit above-water targets. In the meantime, aircraft based on US carriers are capable of missile and bomb strikes against our cruisers. Thus, new Soviet aircraft carrying ships are being conscientiously put into a rather vulnerable position, given the fact that the balance of forces at sea already is not in favour of the Soviet Navy.

The probable objection to this may be that we couldn't afford heavy nuclear carriers immediately because the gradual development of ships of this class has yet to graduate to the required technological standards. One may regret that we are too late with the construction of large-capability aircraft-carrying cruisers, but regrets aren't arguments. The reality is such that the construction of heavy aircraft-carrying cruisers is nothing but a rather costly experiment. We clearly can't afford it today when we need an additional 1.2 billion roubles from the defence budget to improve material and housing conditions for the military.

Let's suppose that the Soviet Union did build its own *Nimitzes* after all instead of the *Tbilisi* and the *Riga*. I'm sorry to admit that in this case we again would have spent far greater funds and very irrationally at that. At best, 15 years from now we would have two aircraft carriers (in the world experience it's best to employ carriers in twos) in each of the two key areas, the Atlantic and the Pacific. How long will it take our Navy to master the new ships technically and tactically if the first landing of a fighter on the *Tbilisi's* deck was achieved only the other day? Fifteen years from now we would face an enemy with nearly one hundred years of experience in the construction, operation and, most important, deployment of aircraft carriers. I'm not asking how the construction of large aircraft-carrying ships of even the *Tbilisi* type tallies with the strategic policy of starting naval disarmament. Chances are we would have to agree

to some cuts in the Navy even before each rouble invested into it started to pay off, as was the case with SS-20 missiles.

What shall we do now when two "semi-aircraft carriers" have already been launched? I think we can analyze the situation calmly in a balanced way and try

to figure out if we should go on building cruisers of the *Tbilisi* type. Secondly, we should analyze whether it is expedient militarily and economically to press on for the long effort to make the cruisers a regular part of the Navy. Wouldn't it be better to use the released funds to develop alternative technology or improve the social needs of the military?

Construction Troops—Results of 1989 Socialist Competition

90UM0296A Moscow KRASNAYA ZVEZDA in Russian
10 Feb 90 First Edition p 1

[Unattributed report: "The Labor Contribution of the Military Construction Workers"]

[Text]The USSR Ministry of Defense and the Main Political Directorate of the Soviet Army and Navy have summed up the results of the socialist competition in the military construction units for 1989.

It was noted that last year the military construction workers fulfilled the State Capital Construction Plan by 102.7% for the completion of fixed capital, 101.4% for the release of apartment buildings for occupancy and 103% for volume of construction and installation work. Overall, construction organizations of the Ministry of Defense achieved the planned profit and met the target for increasing labor productivity.

The best results were achieved in the socialist competition for 1989 by the collectives headed by comrades A. Basistyy, V. Dukhin, Yu. Zhegin, Yu. Nenakhov, V. Nazarenko and V. Chernenko.

The construction program was successfully completed by the military construction workers of the Leningrad and Kiev military districts and the Northern and Pacific fleets and the organizations headed by comrades A. Vityukov, G. Glazunov, V. Gribanov, T. Ksenzov, L. Lapshin, V. Mikhaylov, V. Petrishchev, O. Solonin, V. Tukshumskiy, L. Khizhnyak, V. Yashchenko and many others.

The collectives of the enterprises headed by comrades Kutsenko, V. Kasimtsev, V. Mineyev, N. Pustovoychenko, V. Grishchenko and V. Chikalov and the branch institutes headed by comrades Yu. Abramov, Yu. Adonyev, V. Borisenkov, S. Boinov, V. Makagonov, N. Pershin, P. Pospelov and V. Spirin.

At the same time a number of construction organizations allowed a considerable lag to develop with respect to the main production and economic indicators. They included construction directorates of the Volga-Ural and Siberian military districts, the Moscow Air Defense District and the organizations headed by comrades I. Akhmedov, V. Bakutin, V. Grigoryev, V. Lisitsyn, Yu. Raykhlin, V. Savchuk, V. Soborov, O. Chernyavskiy, V. Shchuruburo and others.

The collectives headed by comrades Yu. Barkhatov, I. Golovko, V. Irzak and A. Makarov performed extremely unsatisfactorily in 1989.

Failure to meet the planned targets was caused mainly by unsatisfactory organization of production and major omissions in the material and technical support for construction.

The command and political staff and the party, trade union and Komsomol organizations are faced with the tasks of further improving control of construction, concentrating capital investments in the most important areas and on housing, social and personal service construction projects, increasing the independence and enhancing the responsibility of the military and labor collectives for the meeting of planned targets and strengthening legality, law and order in the military construction units.

The USSR Ministry of Defense, the Main Political Directorate of the Soviet Army and Navy and the Central Committee of the Trade Union of Workers in Construction and the Construction Materials Industry express their confidence that the personnel of military construction units, planning and surveying and scientific research organizations, industrial enterprises and billeting agencies will greet the 120th anniversary of the birth of V.I. Lenin in a worthy manner and commemorate the 45th anniversary of the Soviet people's Victory in the Great Patriotic War with labor successes.

Experiment in Use of Territorial Fuel Distribution Centers

90UM0147C Moscow KRASNAYA ZVEZDA
in Russian 30 Nov 89 First Edition p 4

[Interview with Colonel I. Neshchenko, fuel service chief, Moscow Military District, by Reserve Colonel F. Sernyanovskiy; date, place, and time not given. The first paragraph is a KRASNAYA ZVEZDA introduction.]

[Text] The Moscow Military District is experimenting with a territorial system of fuel distribution. Initial results are discussed by Colonel I., Chief of the district fuel service.

[Neshchenko] I will begin by saying that our service distributes fuel to all military units, organizations, institutions, and enterprises located within the confines of the district. Supplying the fuel needs of all our recipients necessitated the processing of thousands of reports, applications, accounts, and orders.

The question arose: Why not grant our bases more independence? Let them resolve operational problems themselves. To accomplish that, we set up several territorial fuel distribution centers—TTsOs. They constitute the principle feature of the experiment.

[KRASNAYA ZVEZDA] Exactly what are the TTsOs?

[Neshchenko] Fuel bases and district depots located in certain garrisons that form the basis of the center. The center does more than just issue fuel: It also monitors fuel consumption. It used to be that we could not make meaningful checks on the justifiability of fuel consumption as indicated in requests and vouchers. Now, monitoring is more effective, especially since the district commander has authorized the TTsOs to conduct documentary inspections and checks.

Something else: It was the practice to issue coupons, which entitled the presenter to receive gasoline. They were often misused. Issuance of coupons is presently much more restricted.

[KRASNAYA ZVEZDA] What about the clients? How do they feel about this innovation?

[Neshchenko] There is no simple reply to that. To be frank, many units fell into the habit of operating under weak controls. Overconsumption all too often was "hushed up" by a telephone call from above. In other words, our supply bases were largely ignored. Now it is required to settle the account on the spot, not in a higher-echelon service.

I must admit that at first there was some unhappiness over the new arrangement. For example, the Voronezh Oblast Military Commissariat wrote us a letter complaining that it had not been issued the full amount of gasoline it was due. Lieutenant Colonel N. Shambovskiy—the TTsO chief—and I went over the figures to see if that were so. We determined that it was issued the

exact amount authorized. It was merely a case of the Oblast Military Commissariat's failure to use fuel wisely.

[KRASNAYA ZVEZDA] What can you say about monitoring of accounts, usage claims, and actual consumption of alcohol? Does the TTsO participate in this?

[Neshchenko] Military unit use quite a bit of alcohol to satisfy technical needs. Usage claims should be filled out on a monthly basis. Unfortunately, some units were negligent in keeping records of consumption. Small wonder: There was only one district service inspector doing this work. Could he make careful checks on how accurate the usage claims were? These checks have been made the responsibility of the TTsOs, which are in a position to monitor closely the consumption of any type of fuel, including alcohol.

[KRASNAYA ZVEZDA] Finally, what are the results of the experiment?

[Neshchenko] Here are the figures: Since the beginning of the year, we have been able to reduce fuel consumption by 37,000 tons. There has been a 90 percent drop in correspondence with the service, with a 60 percent decrease in written orders. Now there is less cross-hauling as a result of the centralized issuance of fuels and lubricants.

Shestakov on Space Industry's Production for Agriculture

90UM0147D Moscow VESTNIK AGROPROMA
in Russian No 46-47, Nov 89 pp 8-9

[Interview with A. Ye. Shestakov, Deputy Minister of USSR General Machine Building, by VESTNIK AGROPROMA correspondent Yu. Grachev; date and place not given. The first two paragraphs are a VESTNIK AGROPROMA introduction.]

[Text] It is generally known that the USSR State Commission of the Council of Ministers for Military-Industrial Problems, in collaboration with agro-industrial complex organizations, has developed a special program for creating and implementing series production of high-output technological equipment for APK processing industries by defense-oriented enterprises. It is planned to create by 1995 3,000 pieces of new equipment and deliver machinery and mechanisms valued at 17.5 billion rubles.

Questions related to how the creators of space rockets are involved in this program are put by our correspondent, Yu. Grachev, to A. Ye. Shestakov, USSR deputy minister of General Machine Building.

[Shestakov] Our ministry is a leader in research and development of technological equipment used by the baking, confectionery, sugar, yeast, oils and fats, essential oil, and the potato processing industries; and in equipment employed to produce meat cold cuts and prepared meats. We series-produce, in addition to the above machine systems, a variety of technical items for

nine branches of public feeding and trade enterprises. The scope of our work is quite wide, as you can see. I must also say that we have been involved in peaceful production for quite some time, and we are constantly expanding this production. In 1987 the rate of this growth showed a substantial increase.

To meet the requirements of the state program, by 1995 the Minobshchemash [Ministry of General Machine Building] should manufacture and supply APK enterprises with new equipment valued at R4 billion 160 million. The task is such that we must take extraordinary measures aimed at reorganizing defense production and retooling some plants for peaceful production, which often happens to be unfamiliar to workers and design collectives. This of course is often associated with substantial difficulties of retooling for the new production. However, the high intellectual and production potential of our enterprises encourages us to anticipate successful accomplishment of the task handed the space rocket branch.

[VESTNIK AGROPROMA] Alfred Yegenyevich, two years have passed since mass conversion was initiated. What have the plants under your industry done along the lines of this plan?

[SHESTAKOV] Last year, our collectives satisfied the requirement of manufacturing and delivering processing equipment in the amount of 100.8 percent. The requirements posed by the state plan were satisfied in full measure. The 1989 plan is expressible by a substantial figure: R342 million. There is a 21-percent increase in production volume compared to 1988. In the last 10 months, the agro-industrial complex took delivery of R260.5 million worth of equipment. We are ahead of schedule; we will start 1990 with a good lead. The point is, next year we are to supply the national economy with equipment valued at R470 million.

[VESTNIK AGROPROMA] Are there many branch enterprises involved in this effort?

[SHESTAKOV] As of the present, 24 plants have taken up peaceful production. Agro-industrial equipment accounts for 22.5 percent of our production. This figure will almost double next year. Thirty-six defense plants will make the change to producing machinery for processing branches. In the next two or three years, civilian machine construction's share will attain 60 percent.

The machine builders' agenda lists more than 700 items of technological equipment to be created for APK processing industries. Included are machines for baking bread, biscuits, and gingerbread; automatic lines for producing pelmeni; lines for preparing and vacuum-packing prepared meats; equipment for processing dehydrated potatoes, quick-frozen salad potatoes, and potato chips; machinery for baking "eclairs"; integrated equipment for minibakeries.

If you were to ask me about the specific activities in progress at particular enterprises that have joined the conversion system, first on my list would be the collective

at the now nationally known scientific production association Energiya, which together with other enterprises belonging to us, has taken on the task of creating baking and confectionery machinery. This includes dough-kneading machine A2-KhTT; the dough-shaping A2-KhPO-6; the A2-ShLT caramel line; KRM-2 and KRM-3 rolling and stretching machines; candy-wrapping machines; UPT cottage cheese unit; milk valves, and much more.

I can also tell you that the capabilities of this association's collective are virtually unlimited. The point is, the fallout from the work on the Energiya-Buran space rocket system has enabled it to offer more than 600 modern technologies, new materials, and bug-free technical equipment that can be successfully set to peaceful purposes. The realization of these attainments has invigorated and strengthened development of the national economy, including the agro-industrial complex.

I would also like to point to yet another scientific production association that has made a remarkable contribution to processing equipment production. This is the NPO Rotor. It is responsible for manufacturing an integrated bakery products equipment. Especially interesting is a part of this equipment—a small machine that can be used in rural feeding rooms, bread shops, and small bakeries.

The ensemble employs a very simple principle. Two hoppers receive various kinds of dough and whatever filling is to be used: meat, fruit, vegetable, etc. The filling is introduced into the dough by means of a rotary unit. A special device located at the outlet stamps out the pieces in the particular shape desired. This machine is made in the fashion of the better foreign types, and I am sure that it will find favor with cooperatives, family and rental collectives involved with baking.

[VESTNIK AGROPROMA] You have touched on the subject of minibakeries. This question is dear to the hearts of many rural and city residents. I understand that you have a special program dealing with setting up enterprises of this kind. Has any progress been made in this regard?

[Shestakov] Yes, the program does exist, but substantial difficulties are standing in the way of progress. Our suppliers are letting us down. The trouble here is that there are six ministries that are responsible for organizing minibakeries. Ours is the lead enterprise. We manufacture three equipment types for these enterprises. The equipment ensemble consists of 13 separate items. The task as devised was to build 30 small bakeries in 1988, 100 in 1989. The task has not been accomplished due primarily to the absence of a kneading machine that provides mechanical discharge. Plants of the MGO Tekhnokhim have failed to deliver the machine.

To make at least some kind of progress, we decided to "sidestep" the problem by introducing into baking production a unit fitted with a conventional semi-mechanized discharge. We have produced about 70 equipment ensembles for minibakeries. The machine will be installed in

towns and villages of Moscow Oblast. In time, when series production of this equipment will become stabilized, it will be made available to other areas of the country.

[VESTNIK AGROPROMA] Could you tell us the details of the minibakery?

The small bakery can be set up in any low-density populated place, thus solving the problem of supplying people with fresh and tasty bread. Each bakery is capable of producing 220 kilograms of loaf bread per hour. It employs the so-called unleavened dough technique. The technological process consists of 11 operations: feed-in of flour; sifting; batching; mixing; portioning; rounding; preliminary rising; shaping; final rising; baking; and unloading onto carts. All the work can be handled by four or five persons. It would be more accurate to say that they operate the machinery, which actually does all the work.

For the convenience of customers, it is planned to install the minibakeries in small residential neighborhoods, in delicatessens, and bread stores. I say again that their purpose is to bring the goods to the consumer. Our ministry has general responsibility for providing this equipment to such locations. It should be installed by local agro-industrial committees. We recently reached an agreement with the Gosagroprom of the Non-Black Earth Region of the USSR; one of its trusts is to assume this responsibility. I think that similar arrangements will eventually be made with other committees.

However, minibakeries constitute only a small part of our work of technical refurbishing of the baking industry. This sector has long been in need of modernization. Many plants that were erected before the war have become obsolete both in their production technology and in equipment. There is much manual labor and a low order of mechanization, with production conditions quite severe in many cases. There is a reason for the large number of letters written to the editors complaining of poor quality of baked products sold in the state system. This is due to the backwardness and low technical level of production.

The baking industry is the focus of attention of collectives in eight design offices and research institutes, and of 19 industrial enterprises that come under the USSR Ministry of General Machine Building.

Our ministry recently compiled a catalog of technological equipment for APK processing industries that is being produced by defense complex enterprises. The baking industry section lists 41 machines. I would especially like to mention the R3-KhPG, a three-section oven designed to bake loaf bread made out of wheat flour grades 1 and 2. Its intended use is in small bakeries, public feeding enterprises, and aboard ships. This item falls into the higher quality category.

Also in this quality category is the A2-KhPO/7 horn-shaping machine, which is also one of the components of the integrated small bakery ensemble. It can produce 3,600 horns per hour.

The A2-KhPYa-25 electric baking oven is designed to bake bread and rolls in large enterprises. Output is 642 kilograms per hour. Our industry manufactures units that can bake bread in even larger amounts. For example, the A2-KhPYa-50 electric oven bakes 1,100 kilograms of bakery items per hour.

Something else on the list I would like to mention is a production line designed to bake 0.8-kilogram loaves of bread of wheat flour grades 1 and 2 and one-kilogram loaves of rye and wheat-and-rye dough, in tunnel ovens with a tray size of 50 square meters. This powerful unit produces over 1,300 kilograms of product per hour. That is its output. Bake time is under 60 minutes. Oven weight is 42 tons.

[VESTNIK AGROPROMA] Alfred Yevgenyevich, in the beginning you mentioned that Minobshchemash collectives are also engaged in the production of equipment for processing potatoes, which the people rightly refer to as second bread. What does this production amount to?

[Shestakov] We only recently took on this problem. However, realizing its importance on the national scale, we have expanded production of potato processing equipment. Our plants are in the process of retooling for series production of integrated equipment designed to produce quick-frozen salad potatoes, dehydrated mashed potatoes, potato chips, potato pancakes, and french fries. Deliveries of this equipment will increase. The demand is large, since storage and processing of tubers in our country is still unsatisfactory. Large amounts of potatoes grown and gathered by rural toilers simply perish due to improper handling and absence of the necessary processing equipment.

The same may be said about processing of vegetables. Only small amounts of good-quality canned fruits and vegetables reach workers' tables. A major cause once again is shortage of series-production machinery and absence of modern production equipment. We are attempting to somehow fill this gap; we have signed on nine scientific research and design collectives. They include, among others, collectives that offer substantial scientific credentials: the NPO Vympel; the TsKB for Heavy Machine Building; the KB for Transportation Machinery Construction. Each organization has been charged with specific tasking. Some of them are working on pneumatic systems and accessories; others are developing metering devices and quick-freeze apparatus; yet others specialize in hydraulic systems and controls. These directed efforts make it possible to successfully resolve the problem of improving the quality of series-production machinery and retooling for new products.

I would like to stress that in our producing equipment for peaceful purposes we apply on a broad scale the advanced methods associated with design and technological development employed in the production of military items. This has a most beneficial effect on quality of equipment that is manufactured and tends to

shorten series-production time. I include with these proven methods computer-aided design; mathematical modeling in full and reduced scale; objective measuring devices; technical diagnostics; and automated quality control of parts, assembly units, and finished articles at all stages of production.

[VESTNIK AGROPROMA] Thus, one of the major conditions for defense enterprises to make a successful change to peaceful production—equipment for APK processing industries in this case—is a reliable scientific footing. In other words, also needed here is rapid and skillful restructuring of scientific and design forces to channel capabilities toward resolving the new and important tasks.

[Shestakov] Exactly. It is a fact that making a change to manufacturing a fundamentally new product, especially one that is unfamiliar, always entails considerable difficulties. They are of a technological, organizational, and, I would say, a psychological nature. A reliable scientific footing for each stage of mastery of new production promotes resolution of difficulties with the least amount of turmoil. Everyone knows that our branch possesses—this is stated without exaggeration—enormous scientific potential. That is why it has been charged with the considerable amount of production of highly diverse processing machinery.

We are charged with developing eight machine systems. (I have already spoken of them.) To make that a reality, each one is made the responsibility of a group of scientific design collectives. Thus, development of machine systems for the meat processing industry has been assigned to 11 research institutes and design offices; for the baking industry, to eight; for the confectionery industry, to 11; for the sugar and yeast industry, to five; for the oils and fats industry, also to five; and for potato processing, to nine.

We were among the first in the defense complex to suggest that our most experienced specialists and scientists be designated as designers-general of the most complex machine systems. Dmitriy Alekseyevich Polukhin, one of the leading defense industry specialists, became head of a scientific design collective working on baking equipment. Appointed to the position of designer-general of new meat-processing equipment was famous scientist Aleksandr Dmitriyevich Konopátov. The position of designer-general for potato-processing equipment was taken on by Vsevolod Nikolayevich Solovyev, a scientist and specialist prominent in our sector. Vladimir Fedorovich Utkin, an experienced leader and man of science, was appointed designer-general for oils and fats machines.

Our scientists and designers, with their enormous background in creating space rockets and other defense equipment, are rapidly changing the fundamental principles of peaceful production, converting it to a higher scientific and technical level. However, their efforts

sometimes collide with difficulties of a purely departmental nature. The fact is that development of agricultural product processing technology is being carried out by other collectives that have no ties whatsoever to the defense complex. After the Gosagroprom and Minlegpishchemash were abolished, their scientific research institutes were cut off from equipment creators. This isolation has a profoundly negative effect on scheduling and quality of new machines.

We are of the opinion that scientific research collectives involved in the development of production technologies must necessarily unite with collectives that create the equipment for these technologies. The proven value of this association is vividly attested to by the experience gained by all branches of the defense industry. By that experience and more, incidentally.

We were given permission to experiment with the creation of potato-processing equipment by combining with a scientific research institute of the Belorussian Gosagroprom, which is involved with purely technological problems. It is now a full member of our department's collective. Several powerful defense-oriented design offices, scientific research institutes, and even three significant plants have been attached to it. The result is a unique collective offering a closed cycle of research, technological, and production-organization operations. It has confidently taken on creating new equipment. It has proved equal to the difficult task of developing automatic lines for potato processing.

This union of scientific-technological and production forces has made it possible to effect a considerable increase in the plan for manufacturing and delivering potato-processing equipment in the coming year. I believe that setting up similar associations for the production of other machine systems would be beneficial with regard to acceleration and improvement of products.

[VESTNIK AGROPROMA] After the abolishment of the Ministry of Machine Building for the Light and Food Industry, the latter's plants were transferred to the defense people.

[Shestakov] That is so. The plants belonging to Minlegpishchemash were transferred to five defense-oriented ministries, including the Ministry of General Machine Building.

[VESTNIK AGROPROMA] What constraints were imposed on the amalgamation? The enterprises' specialties were at variance.

[Shestakov] The union was less than smooth. That was not particularly because we were joined by collectives that were of a vastly different orientation. The technological level of these plants is very low. Old equipment and buildings; inadequate production areas; obsolescent technologies; in many cases, poorly qualified workers and specialists—this is what made matters difficult. It was necessary to reorganize production, reconstruct the

plants, and select and train new cadres. The process is still under way; it will take a long time. To bring enterprises of the former Minlegpishchemash up to the level of defense-oriented plants is a task that cannot be done in a year's time. It is necessary to bring to bear large capital expenditures and the mobilization of all of our scientific and technical, technological, and construction and installation forces. This kind of work has been in progress from the very first days of the amalgamation; its fruits are already being felt. The figures give some indication of this.

The Ministry of General Machine Building took in food production enterprises that had a total production (expressed as a ruble amount) of R225 million. As of today, we are producing processing equipment worth R342 million. Of this, 76.5 million is the share of defense plants, while 265.5 million is attributable to the enterprises of the former Minlegpishchemash. We can see that the growth is almost R40 million. This is not bad for a beginning, since only one year has passed since the collectives combined. It is natural that output of technological equipment for the agro-industrial complex will increase as production develops.

It is not too early for me to speak positively of a number of food-oriented enterprises that have exhibited successful restructuring, improved production, and growth in series production of necessary products. Heading the list of such collectives are the Kiev NPO Pishchemash, the PO Smelyanskiy Mashzavod, the Bolokhovo Mashzavod, the Kalinin PO Pishchemash, and the PO Rostprod mash, among others. Thanks to successful production modernization, the conveyor belts carrying series-production equipment in those enterprises are functioning reliably and uninterruptedly. New and modern machinery is being mastered there.

Thus, the Kiev Production Association Pishchemash has completed retooling for powerful I8-KhTA-6 and I8-KhTA-12 dough units. They are designed to prepare leavened wheat dough in a continuous cycle. Each unit weighs more than 6.5 tons; output is 15 and 30 tons of dough per day. Sixty-nine units will be shipped to baking industry enterprises this year, with about 100 slated for the coming year.

Beet sugar production could not do without machines such as stackers. For example, the Sh1-PKF stacker is indispensable for unloading sugar beets from trucks, removing earth and weeds, treating the root crops with chemical preservatives, and placing them into pits. Series production of these machines, which weigh almost 85 tons, is carried out by the Kalinin PO Pishchemash.

Also, this year the collective of the Rostprod mash Production Association will provide the agro-industrial complex with three A1-ELM continuous production lines for the manufacture of toilet soap. Vacuum drying of a toilet base and mechanical processing of soap

shavings from a soap rod will be employed on this line to produce every hour 2,000 bars of soap weighing 100 grams and 120 grams.

I could cite many more examples. They would all indicate that the creation and series production of technical equipment for processing industries is acquiring stability, making it possible to effect continuous growth in quality and quantity.

Comments by the Editors of VESTNIK AGROPROMA

We wish to remind our readers that this is not the first time that our country is carrying out conversion of the defense complex. This process is difficult, for realignment of enterprises always affects the interests not only of the collectives directly, but of related industries and suppliers of accessories and materials as well, since they too must restructure and adapt to rapidly changing production conditions.

This often results in breaking of established economic ties and has an adverse effect on interaction between individual branches of the national economy. It then becomes necessary to seek new partners to set up production contacts, which by itself requires considerable effort, time, and additional financial outlays.

Thus, defense production that has made the change to manufacturing equipment to be used by APK processing industries is already experiencing an acute shortage of electric motors, reduction units, geared motors, rubber items, polymer materials, stainless steel, etc. All of these items are produced by enterprises that come under the USSR Minelektrotekhpribor, Minstankoprom, Minneftekhimprom, and Minmet. However, they themselves are working under tight schedules. What can be done to interest them in manufacturing additional equipment for the APK? It is completely obvious that this problem can be resolved only by a specific program that must be developed by the interested sides.

This is another instance where we cannot do without the efforts of the USSR Gosplan. It may be a good idea for it to review the state orders with a view toward provision by lead ministries not only of ensembles of equipment and production lines, but also of accessories made by related enterprises operating on a cooperative basis. In any event, it is entirely clear that success in attaining greater processing equipment production is tied to a firm state mechanism for interbranch cooperative deliveries.

Not less important is the question of effecting start-up and adjustment work at newly created agricultural product processing facilities. For example, Minobshchemash collectives are generally responsible for production and timely delivery of the necessary equipment. The client must shoulder everything else. Is that reasonable? Foreign experience indicates that a wiser, more reliable, and economically more advantageous approach is for the producer himself to perform installation, adjustment, and start-up of new equipment.

In this regard, the Minobshchemash has a suggestion to offer—one which we feel is a clever idea: that it take over the Orgpishcheprom, the All-Union Specialized Trust for Start-Up and Adjustment, which has its own network of departments and sections located in various areas of the country. This trust, which was previously a part of the USSR Gosagroprom, has been more or less cut off. We believe that it can become more effective within the defense complex system.

Finally, one of the most troublesome questions: the price of equipment supplied to the agroprom by defense complex enterprises, including enterprises of the USSR Ministry of General Machine Building. Producers often raise prices sharply, thus placing a heavy burden on the economy of both agriculture and APK processing industries. Here are some examples. One of the plants under the NPO Energiya, after retooling for production of portioning and rounding machines for the baking industry, set a price that exceeded the list price by almost three times. The PO Polet offered to sell production lines for "eclair" pies at a contract price that also was three times greater than that listed. Also, the price of R12,000 was set for bread slicer A2-KhR3-R, for which the Progress plant retooled, instead of the list price of R3,000.

The board of the USSR Ministry of General Machine Building acted quite properly by censuring the plants supplying processing equipment for their overcharging.

Railroad Troops: Development of Eastern BAM

90UM0147A Moscow KRASNAYA ZVEZDA in Russian
3 Dec 89 First Edition pp 1-2

[Article by Major A. Vorobyev: "The BAM Is Operational". First paragraph is KRASNAYA ZVEZDA introduction.]

[Text] On 2 December, the entire Baykal-Amur Main Railroad Line, from Ust-Kut to the Pacific Ocean, was turned over to railway workers for normal operation. That marked the completion of the "project of the century," in which railroad troops participated from the very beginning. The soldiers laid the BAM's rails from Tynda to Komsomolsk-on-Amur.

JUNE 1934. As soon as Tatarskiy Strait was free of ice, the steamer "Krechet" carried into Sovetskaya Gavan Bay a railroad battalion and the first three survey parties of the Special Railroad Troop Corps. The men headed for a small settlement located near Sovetskaya Gavan, on the eastern slopes of Konstantinovka Bay. It still exists and has the same name—Zheldorbat.

The surveyors set up tents, erected a tar production facility, and constructed a dock, where kungus boats were built. Since that early time, it has become customary to consider June of 1934 as the time the railroad troops started construction work on the BAM, work that was interrupted by the Great Patriotic War.

JULY 1974. The CPSU Central Committee and USSR Council of Ministers adopted a decree on the construction of the Baykal-Amur Main Railroad Line. The first groups of railroad troops mounted their assault on the taiga from their operational bases: Tynda, Fevral'sk, Urgal, Beryezovka (presently known as Postyshevo). Their task was to lay the eastern leg of the route—a distance of 1,470 kilometers.

They had to start from scratch: Cut through the forest; negotiate untraveled taiga to reach construction sites; set up tents and prepare helicopter pads; drill water wells; maintain winter roads; lay roads for trucks. Note that most of them were not Siberians that were hardened to frosts and absence of people. Nevertheless, workers went there willingly: new places, and what a construction project!

Down through the years we—BAM people of successive generations—have inherited legends and stories, related by old residents, of heroism and courage of the founders.

The brigades and battalions arrived simultaneously at the locations of the future stations. The subunits were led by officers F. Pribov, I. Yegorushkin, K. Kurochkin, A. Zheleznov, I. Bosyy, P. Tsygankov, M. Gafurov, A. Komarov, and others.

Not everyone was fond of leading such an unsettled life, of course. There were those who would use any excuse to leave. But they were not the ones who made a large difference. Rather, it was they who today have something to remember. Such as how they fought a violent storm to save a 618-meter bridge spanning the capricious Bureya River, when the water lashed at the decking and it seemed that the supports would give way. The bridge was saved by soldiers commanded by Major L. Svetlov. Will people ever forget how the men released the almost 2-kilometer Duse-Alin Tunnel from its ice bondage? These are only two small pages in the main line construction chronicle.

In August of 1980 I was able to start serving on the BAM. I thought that the time of heroic deeds had passed. The work was strenuous and the days were long. The first several kilometers of main line had already been laid in the eastern sector. There were still assaults on the taiga, but the enthusiasm and selflessness of the BAM troops began to rely more on engineering computations, proper decision making, and effective use of equipment.

The great amount of work and tight schedules necessitated applying a high-order construction skill and implementation of progressive decisions. The subunits were replacing their construction equipment with more advanced designs and using new bridge and road equipment. The BAM took on the appearance of a production line, with bridge men, equipment operators, and road men working at the various locations. This resulted in attaining in 1983 in the eastern sector the maximum rate of tracklaying on the main line—195 kilometers per year.

APRIL 1984. Working ahead of schedule, the railroad troops laid the last section of main line of the entire eastern sector. The 27th of October marked the first day of operation of the steel road from the Baykal to the Amur—all 3,120 kilometers of it. Many people thought that the entire line would go into full-swing operation now that the BAM was built. However, that was only when the rails were joined; they would become a modern railroad only five years later.

After the "golden" joining of the rails—a minor sensation in itself, the railroad troops, the same as all the other rail builders, went through a difficult reorientation phase. The change to erecting civilian and station facilities called for a review of plans. There were times when work came to a halt; it was necessary to apply pressure to a lagging materials supplier and retrain people. As if this were not enough, the atmosphere surrounding the project had completely changed from what it was previously.

The BAM was everyone's favorite topic of conversation for 10 years. Its future then became uncertain, and the project was pushed into the background. The labors of many people extending over a period of many years fell into disfavor. All this in spite of the fact that the BAM, an undertaking comparable only to perhaps development of virgin territory, with the prospects opened up by the second road to the Pacific Ocean, had no equal. Incidentally, the new outlet to the ocean was 400 kilometers shorter than the Trans-Siberian Railroad. A statement such as the BAM being "a railroad that goes nowhere" can be made only by people who think in terms of immediate interests and cannot see further than their nose. In spite of such disbelief in the future, the railroad was built and people learned how to operate it. It is difficult to imagine how the Far East can be developed without it.

November 1989. A state commission signed the act dealing with the final acceptance of the last projects that were in progress and the announcement of normal operation of the entire main line. The BAM had become operational. What can we expect from it today? This was the question I asked of O. Makarov, First Deputy Minister of USSR Transport Construction.

"First and foremost, the BAM will take pressure off the Trans-Siberian Railroad," he replied. "Now there will be no delays in hauling coal from Yakutiya and timber from Siberia and the Far East; freight will travel faster between the European and Asiatic parts of the country. That is today. Tomorrow, the railroad will assume even greater importance, since it provides an ideal foundation for developing enormous territories. Then no one will dare say that the BAM people built an "monument to stagnation." Railroad troops are responsible for capital expenditures amounting to much more than a billion rubles. They, working with supervisory organizations, erected more than 20 settlements. They built 346,000 square meters of housing, 19 schools, 24 kindergartens,

and a great number of other facilities. They laid about 500 kilometers of station tracks."

It is true that the second Trans-Siberian Railroad—that is how the BAM is referred to—has been expensive for the country. Many problems still remain. There are many causes—too many to list.

However, one thing is certain: The people who gave years of their lives to this unprecedented construction effort and who sacrificed their welfare and conveniences for the common good deserve the people's heartfelt respect and gratitude.

Notes on Sale of Military Goods, Tempo of Conversion

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[Article by Colonel A. Dokuchayev: "I'll Have a MAZ-547V, Please: Military Equipment Sales Exhibit Opens on 1 December in Sokolniki". The first paragraph is a KRASNAYA ZVEZDA introduction]

[Text] Customers (and this includes organizations, enterprises, kolkhozes, sovkhozes, and even private individuals) are offered various models of military equipment that has been taken out of service in accordance with the terms of the Soviet-American INF Treaty. This is additional visible proof of efforts on the part of the Soviet Union to effect phased elimination of nuclear weapons, destruction of chemical weapons, and reduction in conventional weapons, operating on the principle of reasonable sufficiency and nonaggression.

More than 1,500 models of equipment are on display in the pavilion. Shown are the chassis of the MAZ-547V, which has many versions; electrical equipment (stabilized current units, power supplies with switches, voltage regulators, etc.); and auxiliary equipment.

"The transformers and cable look good to me so far," said V. Bergunov, chief power engineer of the Moscow Association of Hydraulic Excavation Operations. "I intend to have a closer look at the other pieces of equipment. I will not walk away empty-handed."

A. Balakirev of Omsk was standing with management representatives next to the MAZ-547V, discussing the price. He made his decision—he would purchase three chassis units. Colonel L. Sevryukov told us in a conversation that orders for the vehicle have been received from Khabarovsk—a timber hauling association is interested—and from Bashkiriya—from an organization involved in oil production. The demand is lively.

Another visitor to the exhibit was V. Zaytsev from Rostov-on-Don. A former missile officer, he is now working for the Rostovenergo organization. This is a

graphic example of the present military policy: People and equipment are pouring into the national economy.

"I came here for a specific purpose," said Vladimir Grigoryevich emphatically. "I know missile technology well. We will buy a standby diesel power unit and some electronic components."

"It is hard to determine on the very first day what the demand for each type of equipment will be," exhibit director Yu. Vorontsov told the journalists. "Nevertheless, we have already received purchase orders from 200 state organizations."

In a word, the exhibit organizers are attempting to gage the demand for equipment, while the customers are looking closely at the goods offered.

"Our major focus is on showing as many buyers as possible the spectrum of equipment types that can be employed in the economy and studying the resulting demand," said Colonel G. Rodionov, a member of the exhibit's management.

At a press conference for journalists, once more the point was made that the exhibit is being held on an experimental basis. The experience so gained will be utilized in the future, after the anticipated signing of the agreement on the 50-percent reduction in strategic offensive weapons and limitations on conventional weapons in Europe.

Is there a plan to reorient the defense sector's unburdened capacities? A state plan for conversion of the defense industry for 1991-1995 is under development by the State Commission of the USSR Council of Ministers for Military-Industrial Problems, the Gosplan, the Ministry of Defense, and ministries of defense sectors. It will be submitted to the USSR Supreme Soviet for review by the end of the year. As far as the present is concerned, proposals have been drawn up for three plants that are subject to total conversion.

Two programs for 1989-1995 are presently in place. The first covers the manufacture of high-efficiency technological equipment designed for the processing industry. Defense ministries will deliver equipment and spare parts valued at 17.5 billion rubles. Within 5 years' time they will produce 3,000 types of new products. Manufacture of the latter has been assigned to 345 plants and 205 leading research and design organizations.

The second program has to do with production preparation and manufacture of more than 140 types of domestic appliances: television sets with stereophonic sound; kitchen appliances; refrigerators; freezers; vacuum cleaners; and compact disc players, video cassette recorders, camcorders, and personal computers—items never before produced in the country.

This year, production of civilian goods by military enterprises will amount to 27 billion rubles (7.5 percent of consumer goods total). The total amount for the five-year period (1986-1990) will exceed 140 billion

rubles. The growth rate of the forthcoming five-year period will make it possible to satisfy the projected demand for durable goods by the year 1995.

The actual economic return provided by disarmament is largely determined by the effectiveness enjoyed by military production. Soviet economists have estimated that the steps being taken now will make it possible to enlarge the country's income by at least 1.8 billion rubles, while the total savings obtained by cutting defense expenditures, reducing the numerical strength of the Armed Forces, and engaging discharged service personnel in social production will attain the order of 12 billion rubles. The conversion process can be expected to produce, as a result of release of defense industry production funds, a total sum of approximately 17 billion rubles.

TYL VOORUZHENNYKH SIL: 1989 Index of Articles

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[Article: "Abbreviated Index of Articles Published in TYL VOORUZHENNYKH SIL in 1989"]

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UkSSR Deputy Chairman on Conversion, Consumer Market

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[Interview with V.G. Urchukin, deputy chairman of the UkSSR Council of Ministers, by A. Maliyenko: "What Does Conversion Promise?"

[Text] One of the subjects of the present time, unfortunately, is that of the depressing empty spaces on the store shelves. The coming year, which has assumed this unhappy "heritage," nevertheless brings some hope for the overcoming of the shortage of a number of consumer goods in connection with the reprofiling of enterprises of defense sectors for the production of peaceable output. There are hundreds of such enterprises in our republic alone and they can do much to satisfy the market.

How justified are these expectations? Will it be possible with the help of conversion to keep up with the growing consumer demand? The correspondent of PRAVDA UKRAINY asked V.G. Urchukin, deputy chairman of the UkSSR Council of Ministers, about this.

[Maliyenko] Viktor Grigoryevich! With what goods will the defense enterprises please consumers in the near future?

[Urchukin] Conversion will make it possible to increase the output of consumer goods in the current year by 1.15 billion rubles in comparison with last year. Such rates of growth must be maintained through 1995, and over the next 5 years the volume of production of such goods at the enterprises of the defense complex will increase by more than 80 percent. The emphasis is on the creation of science-intensive products, that is, those whose main value is improved consumers' quality.

More specifically? Such output of defense plants will include, for example, microwave ovens, video recorders, up-to-date personal computers, telefaxes and the means of satellite communication. It is not a simple matter, of course, to organize the production of complex equipment. It is for this reason that many enterprises are combining their efforts. Thus, 34 of them formed a joint-stock association for the production of personal computers. Last month the joint-stock association Ukrtelekom was also established. It will produce the means of satellite communications and cable television.

[Maliyenko] Certainly satellite communications and cable television is an important matter. But now it is not easy to buy even a television. There is also an acute shortage of washing machines and other things needed in everyday life.

[Urchukin] Precisely the increased production of complex domestic appliances has become the main direction of conversion. And not only defense enterprises are participating in this work but also machine building plants involved in the production of military equipment. There are therefore possibilities to fill the counters with goods that are now scarce. To compare: whereas last year 2,440,000 color televisions were produced, there will be 110,000 more coming off the conveyors this year and there will be a significant improvement of the quality of all models. Correspondingly, the production of electric vacuum cleaners will increase by 40,000 over last year's volume of 990,000. There will be an especially large increase in the output of washing machines, which will exceed 300,000. Their production will exceed that of last year by a factor of 1.5.

In the next 2 or 3 years, the market will be saturated with traditional consumer goods. The transition to economic methods of management and the raising of the responsibility of enterprises to the society presuppose the development of company trade to study the demand and react to changes in that demand in a timely manner.

[Maliyenko] Despite the absolute shortages, today demand is guaranteed only for high-quality goods. Inasmuch as the transition from one kind of output to another is a very complex matter, are not the collectives forgetting about having new products meet all current requirements?

[Urchukin] No difficulties ought to hide the main condition—the fact that output must be competitive in the domestic as well as the world market. This is the essence of conversion.

How can this objective be reached? It is necessary above all to raise the technological level of production. This process can be accelerated through the establishment of joint ventures, which is already widely practiced. By the way, the cooperation of our defense associations with foreign enterprises and firms is a quite new phenomenon.

A fundamental reversal in the science of defense branches, the UkSSR Academy of Sciences and VUZ's toward the resolution of social problems is also foreseen. It is important to achieve the specific application of the results of fundamental research and basic new ideas in creating products in greater demand. And it is necessary from the very first steps to rely on domestic developments, improving rather than copying the qualities of foreign models, for these goods will not be competitive in the world market even in the most successful copying of products.

Still another very important task is that of reducing the time from the development to the series production of goods. I will present an example confirming that this really can be achieved even under our conditions. It was as recently as April 1989 that the associations Dneprovskiy Machine Building Plant imeni Lenin and Oktava were given the task of organizing the production

of microwave ovens and on the basis of their efforts a test batch of these novelties has already been prepared for the women of the house. Next year 10,000 of them will be issued and after 5 years production will increase to 250,000.

[Maliyenko] The reprofiling of enterprises is intended not only for products in mass demand. What other kinds of necessary output are now being assimilated in production thanks to conversion?

[Urchukin] The enterprises of the defense complex are also oriented toward the manufacture of the most up-to-date medical equipment. For example, the Kiev scientific production association Saturn produces cryogenic medical equipment, the Dneprovskiy Machine Building Plant makes devices for the breaking of stones in kidneys using ultrasound, and the Kiev "Rele i avtomatika" Production Association deals with computer tomographs.

We are also seeing an increase in deliveries of equipment for processing branches of the agro-industrial complex. Last year, for example, the machine builders in Melitopol readied 19 lines for the bottling of baby food. This year 51 such lines will be set up, 15 of which will be for our republic.

It must be acknowledged, however, that the efforts in the production of equipment for the food industry, especially equipment for the packaging and bagging of food products, are still inadequate.

[Maliyenko] Viktor Grigoryevich! Apparently the enterprises that are assimilating peaceful output cannot count on an easy time, for they are also experiencing the difficulties typical of all of our economy.

[Urchukin] These enterprises do indeed have many problems. This is true above all in regard to their provision with raw materials, supplies and finishing products. Allow me to say that our wholesale trade is in the stage of "stone-age barter," which only slows down conversion. For this reason, the main territorial administrations of the republic's Gosstab must actively assist in providing the defense complex with everything that it needs for the production of civilian output.

The reprofiling of the enterprises is also linked with the reconstruction and modernization of production. There are unique difficulties here: it is not easy to find the means for the financing of this work and to place the corresponding order in the construction organization.

There are also problems of another kind. As you know, the rigid taxation of the increase in the wage fund does not extend to the collectives issuing finished consumer goods. But the system in question does not permit those manufacturing completing products and materials for such finished goods to increase the volumes of production. So it turns out that the enterprises that assemble products are in a more favorable position than their partners that supply subassemblies and components. For

this reason, the collectives that issue final output plan an increase of 20 to 30 percent, whereas their suppliers try to maintain the volume of production at the previous level. Accordingly, it is necessary to give all subcontractors equal rights. It was with such a proposal that I (and not just I) turned to the author of the innovation in question, deputy chairman of the USSR Council of Ministers L.I. Abalkin. An optimum decision has not yet been made in this connection.

For conversion to yield real results, it is necessary to be more purposeful and systematic this year in the establishment of joint ventures. Selling in the domestic and international markets also requires a reduction of the production cost of the manufacture of output and an improvement of its quality. It is necessary to find new forms of horizontal coordination of enterprises. Successes in the saturation of the market with goods will depend to a critical degree upon interdependence and teamwork in the actions of all enterprises involved in the production of some output or other.

Conversion: Increased Complexity, Lower Profits at Elektrostal

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in Russian 17 Jan 90 Second Edition p 2*

[Interview with Elektrostal Deputy Director for Economics Igor Gerasimovich Pivovarov by economist Ye. Kondrasheva and special correspondent L. Teushchakov: "With Petition Atilt, or What Is Hindering Effective Conversion"]

[Text] Our interview was preceded by a telephone call to the editor from I. Pivovarov, the deputy director for economics of the Elektrostal Plant: "I found the article 'Medicine for Cost Accounting' published in SOVETSKAYA ROSSIYA on 5 November 1989 interesting. I would like to take part in the discussion, but it would be good for me to first take your correspondents on a tour of our shops."

And so, having returned from the sweltering smelting furnaces and thundering rolling mills, we analyze what we saw and heard.

[SOVETSKAYA ROSSIYA] Igor Gerasimovich, the impression is that Elektrostal has received a "storm warning." The people are working feverishly, as if they fear that the plant might begin to list.

[Pivovarov] Well, you might say we weren't able to keep the plant from listing. What we need to think about now is how to keep from being tossed onto a sand bar. And this is so unusual for our multithousand collective, which has become used to being a leader.

[SOVETSKAYA ROSSIYA] How is it that in the fifth year of perestroika, the plant has suddenly become feverish?

[Pivovarov] Conversion "helped." It was quite recently that conversion unexpectedly befell our plant, one of the

principal directions of which is production of high-alloy steel, including for defense industry. And it immediately generated an entire complex of problems. First of all we were forced to change the metal assortment. And that meant assimilating new "recipes" for manufacturing our main products, and initiating production of consumer goods. As far as the latter are concerned, our approach has been to produce as large a volume of high quality goods as possible. For example, Rolling Mill No 4 is presently manufacturing blade metal, which is then shipped out of the enterprise. The problem we are now trying to resolve is that of shipping finished blades from the plant, rather than the intermediate product.

All of this is being done in a time when some of the shops, operating with obsolete equipment, are being rebuilt. Such drastic changes in production could not but have an effect on the end results. Besides an increase in the labor-intensiveness of manufacture of products designated by the conversion, you see, our income has decreased, since we lost our most expensive orders from defense industry. Thus last year the plant treasury was in the red 20 million rubles because of a shortfall in commercial production, and profit decreased by more than 6 million rubles. If we consider that the wage fund is formed on the basis of a commercial production standard, and the material incentive fund depends directly on received profit, we naturally suffered considerable losses in the wage fund. This put us on the horns of a dilemma: either reduce the number of workers, or reduce the wages of the people.

We had to fight in behalf of the interests of the workers, and we made several visits with a petition to Gosplan, the USSR Ministry of Finance and the USSR Ministry of Metallurgy. After lengthy negotiations we were able to obtain compensation for the wage fund.

[SOVETSKAYA ROSSIYA] The process of conversion is irreversible. And in connection with this, you may find yourself in an even more complex situation tomorrow.

[Pivovarov] Of course, we can't count on a rich uncle. Especially with universal transition to cost accounting and self-financing. Conversion has raised especially great concern for tomorrow, for the funds and assets which are so necessary to the enterprise's viability, and to improvement of the welfare of the metallurgists. Having analyzed our economic situation we concluded that our first cost accounting model, under which our enterprise is presently functioning, is too costly. It is no secret that it is more advantageous for a producer to manufacture expensive products, even though the consumer is overburdened by the high prices of goods even without this. And yet today's citizen—be he a producer or an ordinary customer—needs a wider assortment of articles manufactured at least expense.

In order to achieve this goal we intend to switch to a leasing contract. This cost accounting model is more progressive at the moment, since it forces us to work with maximum savings of outlays.

By switching to a leasing contract under the conditions of conversion, we will be able to first preserve our own wage fund without having to ask for compensation from the ministry, and later on perhaps we will be able to even increase the wages of the workers. Though I would have to say that in my opinion, the recently introduced extraordinary wage tax does not especially encourage the enterprise to significantly increase this fund. But we need not despair, since we can raise the welfare of the workers under a leasing system by using the assets of the social and cultural development fund. For example by organizing free meals for the evening and night shifts, by increasing the pensions of retired persons, by compensating workers for their commuting expenses and so on.

But this is all conjecture, since a leasing contract has not yet been signed with the ministry. A creative group is working at the plant under the leadership of planning department chief Yu. Anikanov; it is preparing the necessary documents.

[SOVETSKAYA ROSSIYA] The prospects are of course enticing. But where is the guarantee that you will be able to avoid excessive interference into your affairs by an authoritarian system? After all, when you switch to leasing you will hardly become free entrepreneurs.

[Pivovarov] I agree. In the presence of rigid standards, leasing would be unable to fundamentally alter the economic situation either here at Elektrostal or in the country as a whole. However, once the state order, which makes up 95 percent of our plant's work today, is reduced, the position of leasing will begin to grow stronger. And this means that we will get some working room. Even today, under the conditions of "enslavement" by the state order, we cannot deny the progressive things which leasing is introducing into mutual relations on what we call the vertical axis—that is, between the plant and the ministry. Dictatorship from above is giving way to contracts spelling out the details of all aspects of business relations. In this case both sides bear liability for violating any of the clauses.

[SOVETSKAYA ROSSIYA] The supplements to the USSR Law on the State Enterprise (Association) also state that labor collectives are granted the right to independently resolve the issue of removing themselves from subordination to higher organizations. Would you not like to exercise this right?

[Pivovarov] It is the natural desire of every producer to rid himself as quickly as he can of the dictatorship associated with authoritarian methods of administration. Everyone understands today that the economic crisis cannot be solved by such methods. However, the experience of previous years shows that deepening of crises has been aggravated by often hasty dismantling of the components of the previous system. Let's assume that the ministries have been abolished. Do we have any other mechanisms capable of compensating for the weakening of administrative control? Perhaps not. They still need to be created. This is presently being done.

Thus in addition to forming a more flexible system of vertical relations, we are introducing a new type of interrelationships on a horizontal axis of administration. I am referring to concerns.

Novosibirsk Defense Plants' Conversion Process Described

904A0153A Moscow *RABOCHAYA TRIBUNA*
in Russian 28 Jan 90 p 2

[Article by TASS correspondent V. Yelmakov: "Fact And Commentary...Conversion: The Siberian Variation"]

[Text] The inhabitants of Novosibirsk, who had been dreaming of acquiring a computer, heard the good news: three local enterprises announced their readiness to begin the mass production of personal computers. The "Sever" and "Adron" production associations and the "Khimapparat" plant concluded agreements for their sale and delivery. These enterprises from the military sector received the opportunity to organize the production of consumer-oriented computers because of conversion.

Local inhabitants are expecting a rapid increase in the delivery of goods for sale from plants of the military complex which occupy a prominent place in the industrial potential of the Novosibirsk oblast. These enterprises are noted for good technical equipment and they have their own NII [Scientific Research Institutes] and KB [Design Bureaus] serving their particular branch of industry. In addition, they have considerable experience in the production of "civilian" goods.

"Of course, defense enterprises are subordinate at the union level," said Yu. Ananin, chairman of the oblast soviet on conversion, in a conversation with our TASS correspondent. "And they are transferring to peacetime production according to programs issued at the union level. In Novosibirsk they have begun fulfilling more than 20 orders for the production of equipment for the food industry and light industry—production lines for making pastries, for gutting poultry and for processing milk...

The oblast soviet on conversion, consisting of representatives from enterprises, banks, the oblispolkom, and exploitation centers from akademgorodok [science city], compiled a list of goods sorely needed by the population. The Siberian Department of the AN SSSR [USSR Academy of Sciences] presented scientific-technical plans for those goods suited for mass production. The plans take into consideration not only the potential of the defense factories but also the oblast's financial resources and methods of cooperation with enterprises of other branches of industry.

The course has been set first and foremost for an expansion of the production of goods which the defense complex has already been producing for a number of years. This includes televisions, radios, tape recorders, furniture, and plastic items. But there will be many new

products as well: a plant which produces low-voltage devices will produce electric mixers, a precision machine factory will produce microwave ovens, the V.P. Chkalov aviation factory will produce small washing machines. This year already an increase in production of over 80 percent is expected from the oblast's enterprises of the defense complex.

At the same time some alarming tendencies have arisen in the first stage of conversion implementation. At the defense enterprises the overall volume of production has fallen more rapidly than expected. This means that revenues for the collectives' social development funds have been reduced. The shops responsible for the preparation of nonstandard goods production have shown weakness. Several thousand staff specialists whose jobs were eliminated refused to be retrained in other professions and left the enterprise.

The oblast soviet on conversion will participate as actively as possible in solving the problems which have arisen. The oblast's defense complex will have to double its production of consumer goods during this five year plan. These goods are destined not only to satisfy local needs but will also be shipped to all the republics.

Conversion Efforts Result in Green Hot Dogs

904D0069A Moscow TRUD in Russian 20 Feb 90 p 2

[Article by Ye. Varshavskaya under "Conversion: Hopes and Reality" rubric: "The Shoemaker Bakes Pies...."]

[Text] The story sounded like an anecdote at first. A solid defense firm in the scope of the widely propagandized conversion set about to issue quite peaceful automatic machines for the production of sausages. The line is wonderfully compact, the productivity is fantastic and the packaging is automated. No doubt about it, it is the rosy dream of food industry workers! Pleased, they grabbed the proposal of the defense industry workers with both hands. Do it...!

They did, 20 units. And just as everyone prepared to shout "hurrah," they looked at these sausages that the line was spitting out with the speed of a machine gun burst. They were...green! Well, not entirely green, of course, but kind of grayish-greenish. But you must agree that this made them no more similar to the usual appetizing pink links than machine gun bullets.

How is that? Why? The members of the commission froze in astonishment. And therefore they figured out almost immediately that technology is not being adhered to. Either the skillful defense workers cut the time for the aging of the sausage meat or they reduced the time for the drying, searing and cooking of the product, or they changed the temperature of the process. In general, they knew about mechanics and automation but, alas, the recipe for sausages was not their field.

In addition, it turned out that this "technological wonder" costs R230,000! It is almost four times as

expensive as the good old set of equipment for the making of sausages. The new line will not pay for itself even at the end of its service life of 10 years.

They thought and thought about what to do with the automatic machine and came up with a radical solution—write it off! So they wrote off all 20 manufactured units.

But we note this: the automatic lines for the production of frankfurters that were supposed to be prepared by the Podolsk Design Bureau have already been included in the plans of sausage shops. Some shops were able to build them and informed the population of this. But the long-awaited hot dogs are still not available. The people still face empty store counters. And how could one explain to them why the new enterprises are not producing the promised assortment?

The adventures of the sausage line developed by defense industry workers are, of course, a unique phenomenon. But if one takes a closer look at it, one can see features characteristic of our current course of conversion. The incompetence of designers from defense enterprises in the area of their new work is one thing. The remarkable expensiveness of the equipment that they are developing is something else.

Specialists from Gipromyasomolprom [State Institute for the Project Planning of Enterprises in the Meat and Dairy Industry], whose business is to incorporate new equipment in the plans of future meat and dairy combines, are simply in shock. It is unknown how to "start" the enterprises set up under these same plans. The work of the defense industry workers is not going well and the deadlines for the manufacture of ordered equipment are being extended again and again. For milk production, say, the enterprises of the Ministry of Atomic Energy and Industry were supposed to begin series production of 30 units of equipment in 1989. What about it? Only five of them were accepted for production. The rest have not yet been assimilated.

"The trouble is that the defense industry workers overestimated their possibilities," thinks T. Borisneva, top specialist with Gipromyasomolprom. "And not enough time was set for performance of the work."

It turned out that it is impossible to develop equipment for a branch in a purely mechanical manner without looking into the specific nature of the branch, even if one "copies" some line of a foreign model down to the smallest details.

This is what happened with a vacuum-evaporating device for dairy combines. They made it on the basis of the most promising models. And they miscalculated! The reason is that there, in the West, milk comes to the combines with a lower acidity. And this means that our "backward" milk will stick. For this reason, it is more expedient for our food industry workers to have equipment that perhaps is less economical and progressive but more suitable for our conditions and standards.

A program for the establishment of new equipment for processing branches was set up for the period from 1988 to 1995. Will the defense enterprises be able to meet the target in the remaining 5 years? For it appeared that it is not enough to have a strong production base and good designers. What is needed is a fundamental restructuring of production and the retraining of specialists. And this takes time. Meanwhile, the plans of future enterprises are drawn up for 2 or 3 years in advance. The specialists from Gipromyasomolprom cannot perform their work until defense industry workers are retrained. The formulation of plans and construction of new enterprises issuing meat and dairy products is being delayed for an indefinite time.

But let us suppose that the defense enterprises are able to create high-quality advanced equipment for the meat and dairy industry in the shortest possible time. Who will buy it? The milk plant in the city of Belebei, for example, refused to buy an experimental model of an electrodialysis apparatus. Too expensive! And the Simferopol Milk Plant, where it was planned to perform tests, refused to cooperate, because the Leningrad "North Plant" of the Ministry of the Aviation Industry demanded R26,000 just for the testing of a homogenizer.

Or take equipment for a meat processing complex with a capacity of two tons of meat and one ton of sausage per shift. The "universal machine for the processing of intestines" now in existence previously cost R470. Defense industry workers announced its new price: R8,000. How is it supposed to process intestines that would make it more than 17 times more expensive? It seems that its productivity changed little and other characteristics remained practically the same....

Other kinds of industrial equipment also became noticeably more expensive. And the entire set for the complex increased in price by a factor of six and a half.

"Considering that cost accounting is now in effect, the situation is becoming critical," says B. Uryash, deputy chief engineer of Gipromyasomolprom. "Will a buyer be found for such a combine? And even if some kolkhoz or sovkhoz millionaire pays for it, what will be the production cost of the meat and sausage produced at the enterprise?"

It is not difficult to see that if the production cost goes up, then the price will naturally rise too.

One responsible person in one of the defense ministries (under the condition, to be sure, that he remain unidentified) graciously agreed to raise the curtain of secrecy over the mystery of price-setting at defense enterprises.

"Despite the high prices, the output that we produce for the agro-industrial complex is not profitable for us," the person reported.

The small-scale output of products, the lack of necessary equipment and, as a consequence, the large amount of manual labor all led to a catastrophic decline in labor productivity. If we add to this the high wage rates (15 percent higher than in other branches) and high overhead.... It turns out that even if the defense enterprises produce what was formerly done at plants of the Ministry of Light and Food Industry, the prices will rise by a factor of one and a half to two. But it is necessary to produce new products and even from more expensive (and higher quality) materials. So prices creep upward at a dizzying rate.

But conversion was proclaimed triumphantly and the defense enterprises were given the task. There is no getting out of it, it must be carried out at any cost....

A seditious thought: must it really? Are we not forgetting common sense for the sake of a resonant declaration? There is no doubt that it sounds effective: some plant reduced the output of guns by a million rubles and produced so many sausage lines for this sum. Only what does this mean? It means that expensive equipment that formerly produced guns now works with less productivity and with idle time, whereas in the neighboring shop, on the other hand, many workers rivet the sausage machine by hand. For this cannot be done on a machine tool meant for guns.

We know from the classics that it is a disaster when a shoemaker bakes pies. For this is not his business. If he does not stitch boots, then he can at least sew slippers or at the extreme handle some kind of leather work. But certainly not pies!

After the failure with the automatic sausage machines, by the way, the Podolsk Design Bureau for automated lines decided to create something less remote from its basic sphere of activity. And without putting it off for long, it developed a line for the production of disposable needles. Many departments immediately took an interest in the line and there are already buyers for it. It turned out that our defense industry workers can master the production of new peaceful output and can do so without excessive distress and expenditures if they only channel their accumulated experience in the right direction.

For this reason, let us examine once again whether the Ministry of Atomic Energy and Industry really needs to make milk lines, whether the Ministry of General Machine Building has to produce machines for the filling and covering of sausage meat and whether the Ministry of the Defense Industry should make boxes for the stunning of cattle? To what extent does this correspond to the specialty of the enterprises?

It is necessary to develop a conversion program carefully and in a balanced manner. Otherwise conversion, which gave the society so many hopes, will become the next costly ineffective campaign.

DOSAAF's Pre-Electoral Program

90UM0179A Moscow SOVETSKIY PATRIOT
in Russian 10 Dec 89 p 4

[Unattributed article: "The USSR DOSAAF Election Program"]

[Text] The committees and organizations of the All-Union Voluntary Society for Assistance to the Army, Air Force and Navy of the USSR [DOSAAF] regard the upcoming elections to the republic and local soviets of people's deputies as an event of great political importance and an important and integral part of the second stage of the political reform, the further development of democratization in all spheres of life, and the revival of the soviets as the true organs of popular power.

DOSAAF considers its primary duty to be to define clearly its own place and role in the election campaign and wage an offensive on a broad front for the masses and for maximum possible representation for the USSR DOSAAF on a competitive-democratic basis in the body of soviet deputies.

It is essential everywhere to insure nomination of the most worthy representatives of DOSAAF, convinced fighters for perestroika who possess high political and business qualities and are capable of working in the new way, for posts in the republic and local organs of power. It is of fundamental importance that they be able to reflect in a statesmanlike manner both the national and local and the general public interests, and work to enhance the prestige of the USSR DOSAAF.

The upcoming election campaign is a serious test for all DOSAAF elements. Its success will be largely predetermined by the content, profundity, and activeness of the organizational and agitation-and-propaganda activity of the DOSAAF committees and organizations. It is therefore essential to insure that all election measures are implemented everywhere in a high-quality manner.

Under the conditions of the perestroika processes and revolutionary renewal of all aspects of public life now taking place in the country and in the Armed Forces, and the need to further strengthen the economic and defensive might of the socialist motherland, the importance of the patriotic activity of the USSR DOSAAF and its role and place in the political system of Soviet society are growing.

First, there is a need for consistent compliance with the demands of the defensive military doctrine, and insuring reliable conditions for the creative labor of the Soviet people requires unremitting attention to maintaining the necessary level of our state's defense capability and the combat potential of the army and navy.

Active work to raise the combat readiness of the Soviet Armed Forces and to train workers to defend the socialist motherland is the most important patriotic duty of the USSR DOSAAF.

Second, under the conditions of the complex international situation, the significant reductions in the numerical strength of the USSR Armed Forces, and the decisive move toward qualitative parameters in military development, DOSAAF faces new and more crucial tasks connected with improving training for young men for military service. This all increases the demands made of the level of professional training for soldiers, and this means also palpable qualitative changes in training for young men of predraft and draft age and for personnel in the mass technical occupations.

Increasing the efforts of DOSAAF in this priority direction means making a significant contribution in the matter of training ideologically tempered and technically trained reinforcements for the army and navy, and skilled technical experts for the national economy.

Third, during the course of perestroika and the broad introduction of democratic foundations, special importance attaches to questions concerning improvements in the military-patriotic and international indoctrination of the workers and young people and to shaping in them a constant readiness to join the ranks of the armed defenders of the motherland.

The main task for DOSAAF committees and organizations is to insure the close unity of military-patriotic and international indoctrination for Soviet people, particularly young men of predraft and draft age, and their military-technical training.

Fourth, the USSR DOSAAF is implementing purposeful measures in resolving the socially important task of improving the health of Soviet people, increasing their labor and public activeness, and training them to defend the motherland. This is fully in line with the development of mass technical and applied kinds of sports that are of great defensive significance.

One radical direction in perestroika in the work of DOSAAF is to create the conditions essential for the broad involvement of workers and young people in technical and applied kinds of sports, and to bring Soviet sportsmen into a leading position in the international arena.

Consistent democratization of the patriotic activity of the USSR DOSAAF is a demand of the times and a real contribution in realizing the instructions of the 19th All-Union Party Conference and the CPSU Central Committee September (1989) Plenum. This is the most promising road for further deepening perestroika processes, developing independent undertakings, revealing the creative activeness of the masses, and involving millions of Soviet people in military-patriotic and mass-defense work.

Proceeding from the above, the USSR DOSAAF 5th Plenum defines a specific program for action.

In the field of military-patriotic and international indoctrination: to insure high-quality preparations for the

28th CPSU Congress and work consistently to deepen and renew the content of military-patriotic propaganda and explain the behests of V.I. Lenin and the demands of the party in matters concerning defense of the socialist motherland on the principles of the new political thinking, closely linked to the military-political situation that has taken shape in the world.

In practical indoctrination work it is necessary to make more active use of powerful factors such as the international character of defense of the gains of socialism, and the favorable influence of the milieu of the defense collectives themselves in shaping in young people the qualities of the patriot-internationalist. All forms of military-patriotic indoctrination must be used to instill in young men of predraft and draft age high moral-and-political and physical qualities, professional skills, and a readiness to carry out their constitutional duty.

Everywhere it is essential to expand and deepen business links with the trade unions, Komsomol, political organs of military units, military commissariats, civil defense headquarters, the "Znaniye" Society, the organs of the USSR State Committee for Public Education, and the various youth military-patriotic clubs and associations. In work with youth it is essential to make skillful use of the prestige and rich experience of life of war veterans and veterans of labor, combat training, and loyalty in friendship and military comradeship with soldiers in the reserve.

Effective steps must be taken to strengthen the role of the DOSAAF press organs in the military-patriotic and international indoctrination of the workers and in the struggle against pacifism and nihilism in the youth environment. Exactingness toward the immediate nature and content of materials throwing light on the course of perestroika and democratization and glasnost in DOSAAF organizations must be enhanced.

In the sphere of training young men for service in the army and navy: to insure full and proper compliance with the demands of the CPSU Central Committee and USSR Council of Ministers on this question. All activity should be directed toward actively promoting adoption of a USSR law "On the Defense of the USSR" and introducing changes in the USSR law "On General Military Conscription," which are associated with procedure for the training of specialists for the Armed Forces.

A decisive change must be made on a democratic basis toward qualitative parameters in the training and indoctrination of persons attending courses in DOSAAF schools and aviation training organizations. More attention must be paid to practical training, the use of combat weapons, and introducing for draftees technical standards affecting combat readiness and the use of equipment under complicated conditions. Heroic-patriotic indoctrination and general military and physical training for people attending courses should be improved.

Together with state organs and public organizations, the DOSAAF committees and organizations must be more active in solving problems connected with providing staffs for DOSAAF training organizations and introducing scientifically sound professional psychophysiological selection processes for people attending courses, and in involving all young people in initial military training and providing for DOSAAF training organizations equipment consisting of the weapons used in the army and navy, and in using graduates in the troops only in the specialties that they have mastered in DOSAAF.

In training personnel for mass national economic technical occupations that are of military-applied importance: To achieve improvement in the quality of training for specialists at the training-material base in line with the requirements of scientific and technical progress. To organize their training in the new professions, including industrial electronics and computer and microprocessor equipment.

Effective steps must be taken to develop the network of sports-and-technical complexes, particularly in the regions of the new territorial-production complexes in Siberia and the Far East and the Nonchernozem Zone of the RSFSR, giving due consideration to the actual requirements in training for personnel in the mass technical occupations.

The independent creativity of the workers and young people should be promoted everywhere. Technical circles, laboratories, workshops, modeling clubs, and general design bureaus should be set up in the DOSAAF organizations, and competitions and exhibitions of popular creativity should be held.

In the matter of further developing the mass nature of technical and military-applied kinds of sports: to take steps to involve members of DOSAAF, particularly young men of predraft and draft age, actively in sports. Strong points and centers should be set up everywhere for technical and applied kinds of sports, giving due consideration to the regional and zonal location of DOSAAF committees and sports organizations.

More effort should be made to create in DOSAAF primary organizations technical circles and sections for technical and applied kinds of sports in the labor collectives, as joint sports clubs. Attention should be focused mainly on developing the kinds of sports that have an application.

Ministries and departments and DOSAAF enterprises should strive to comply with the resolutions of directive organs on developing sports equipment for both competitive and mass sports. Everywhere use should be made of the influence and opportunities of local organs to insure material conditions for the development of defense-mass work and to build and restore complexes for technical and applied kinds of sports.

The work of sports organizations and federations, and councils of clubs and judicial collegiums should be filled with democratic content.

In the field of developing the material-technical base and production and financial and management activity: to achieve a radical improvement in the use of funding allocated for capital construction, concentrating on projects near completion and very important challenge projects. It is necessary to overcome insistently the underestimation of capital construction on DOSAAF projects on the part of state and local party and soviet organs and contracting construction organizations. Priority attention should be given to providing amenities for DOSAAF schools and aviation organizations, and to the construction of hostels and housing. Urgent steps must be taken to reduce the volumes of uncompleted construction, and to make efficient use of available training, sports, and production bases. Taking into account local conditions, it is essential to introduce more extensively into practice the construction of DOSAAF projects using the economic method.

In line with the principles of radical economic reform, DOSAAF committees and organizations must switch completely to full cost accounting and self-financing. The renewal of equipment and the mastery of new technologies at DOSAAF production enterprises should be planned, giving due consideration to the requirements of scientific and technical progress. Special attention should be paid to improving the quality of series-produced output, and to extending the range of consumer goods.

The strictest regime of economy must be observed everywhere, and it is essential to seek out insistently additional reserves to increase income. The new economic thinking must be instilled in DOSAAF personnel, and interest must be fully revived in conscientious and full-blooded labor, and economic initiative and entrepreneurship must be stimulated.

Introducing the processes of democratization and glasnost in the activity of all DOSAAF elements is a realistic path for further deepening perestroika in mass-defense work and for successful resolution of the tasks facing DOSAAF committees and organizations.

In accordance with the decisions of the 19th All-Union Party Conference, internal democracy must be developed everywhere, the role and activeness of elected organs and public formation must be increased in the real management of all spheres of life and the activity of DOSAAF, and broad independence must be granted to defense collectives in the choice of work forms and methods.

The main effort should be directed toward increasing the activeness and combativeness of defense collectives and their practical involvement in the revolutionary renewal of Soviet society taking place under the leadership of the CPSU. Conditions must be created everywhere for displaying initiative and creativity and for revealing the

capabilities of each member of DOSAAF in the interests of the full-fledged activity of DOSAAF primary organizations.

The process of elections for DOSAAF leading organs on an open, competitive basis must be perfected. A sense of the businesslike approach, a good sense of organization, and the ability to work constructively under the conditions of perestroika must be instilled in all DOSAAF activists and workers.

In cadre work it is essential to be guided strictly by Leninist principles and the decisions of the 19th All-Union Party Conference and the CPSU Central Committee January (1987) Plenum. The role and responsibility of elected organs in the DOSAAF committees must be enhanced in the selection, placement, and training of cadres. Everywhere it is essential to affirm collegiality, and to eradicate bureaucracy in the work of all DOSAAF elements. Effective use must be made of the presentation of accountability reports by leaders and the members of elected organs about their own practical activity.

The social thrust should be raised in the work of leading DOSAAF cadres, considering the most important condition here to be mobilization of the human factor for qualitative solutions to the tasks facing us. Concern for the individual and for his work, everyday, and leisure conditions, and improvements in housing and medical care should be the focus of attention.

As we advance to meet the elections, DOSAAF shares wholeheartedly and is supporting the integrated program for perestroika drawn up by the party, and its strategy and tactics in practical actions to deepen democratization and the revolutionary renewal of Soviet society.

The USSR DOSAAF Central Committee appeals to all defense collectives to fight energetically and persistently to implement CPSU plans and do everything possible to make the USSR DOSAAF promote even more effectively the strengthening of the economic and defensive might of the motherland.

Notes from DOSAAF Central Committee Plenum
90UM0179B Moscow SOVETSKIY PATRIOT
in Russian 10 Dec 89 p 4

[V. Balabin, Yu. Grachev, and V. Grevtsev report: "There Is No Alternative to Renewal. Notes from the USSR DOSAAF Central Committee Plenum"]

[Text] Those attending the plenum were unanimous in one thing, namely, that it is impossible for DOSAAF to live in the old way and to deal with the needs of the times by cosmetic repairs and half-measures. Now it must either stand hopelessly on the sidelines of life or immediately initiate real renewal in DOSAAF.

Obviously the importance of the plenum lies in the very postulation of the issue of the "reform." And we should

be aware that it could hardly strive for anything greater. For this is also a habit of the years of stagnation when the words "there is to be a plenum" sounded calming—the "top people" will gather, they said, and adopt wise decisions and offer exhaustive recommendations and everything will be as it should, just like waving a magic wand.

This is not the way it will be, nor can it be thus. Only collective thought and search and—the main thing—the collective work of thousands, from top to bottom, can provide a decisive and stable effect. And in our opinion, measures such as those that took place at the plenum fulfill two functions. First, becoming a true mirror reflecting the state of affairs and the aspirations of the masses. Second, to be a primer providing the opportunity for a mighty explosion—that is, common action.

During the discussions two reports were debated: "On the Course of Perestroyka in the USSR DOSAAF and Measures To Further Improve Mass Defense Work," and "On the Involvement of DOSAAF Organizations in the Elections to the Republic and Local Soviets of People's Deputies."

In the report on involvement in the elections, the USSR DOSAAF Central Committee deputy chairman Major General D.N. Kuznetsov emphasized that at this time in all parts of the country preparations have been started for the elections, which will undoubtedly occupy an important place in public and political life. The election campaign that is now under way is regarded as an important and integral part of the second stage of the political reform, and as a concrete step in realization of the instructions of the 19th All-Union Party Conference aimed at strengthening democratic foundations in all spheres of life, the renewal of the soviets as Lenin understood them, and the creation of a socialist law-governed state.

In the report attention was focused on the need during the nomination of candidates for the posts of people's deputies to insure democracy, true free speech, pluralism of opinion, and strict compliance with the election laws. Here it is essential decisively to abandon the principles of nomination according to position held, and to guarantee nomination to the soviets of the most worthy representatives of DOSAAF who possess high political, business, and human qualities, enjoy the respect and trust of the people in their regions, and are capable of working in the new way. It is of fundamental importance that they be able to express in a statesmanlike way both the national and local interests and the general interests, and can act comprehensively to enhance the prestige of DOSAAF.

Statements made during the discussion showed accurately those factors that those presenting the reports—N. Kotlovtssev and D. Kuznetsov—both hit upon—the sore points. These are primarily questions of restructuring ossified, outdated structures that fetter the arms and legs of DOSAAF like manacles.

For years and years we have been saying over and over again that each labor collective is a primary organization of DOSAAF. Each primary organization is a committee. Each person studying and worker is a membership card, and each year he pays 30 kopecks in exchange for his stamp. The "membership coverage" is closer to 100 percent. Each member of DOSAAF, even old ladies, go to the shooting galleries and out on the obstacle course—at least in the reports. Each organization (right down to offices with only a dozen people) is its own material base!

Where have we come? Those taking part in the debates showed this quite graphically.

B. Rakhmanov, chairman of the Tajik SSR DOSAAF Central Committee:

Life shows that our primary organizations are far from the "center of mass defense work." Only 40 percent of our organizations in the republic have the rudiments of circles or sections. And about one-third exist only on paper...

V. Khludnev, chairman of the Mordovian Obkom DOSAAF:

We regard the Chamzinskaya rayon organization as one of the leading organizations here. And even there only half of the primary organizations carry on any kind of sports work, which is mostly only episodic. In the rest there are only dues and losses.

V. Klimov, deputy chairman of the Kirov Obkom DOSAAF:

A significant proportion of the primary organizations live thus: we send paper to them and demand paper from them. And by no means all of them have even elementary pneumatic rifles.

Such quotes could be continued for a long time; this was the spirit in which virtually all speakers spoke.

One thing is clear: the question of the primary organizations is one where DOSAAF has for a long time been firmly entrenched in formalism.

Life and common sense prompt us to concentrate work wherever young people, many young people, first and foremost young people of draft age, for it is precisely they that we can and must train, indoctrinate, and prepare for service in the army and navy, and involve in sports. At every step life has randomly given rise to the most diverse forms for uniting these young people, whether it be the political club or group hang-gliding, the technical circle or the teenage club led by "Afghan people," the ham radio section or a rock group... Life has finally affirmed that there is no work without a material base, and there is no need for a base where there are no people.

And we—we have fought so zealously for an increased member "on paper." We have not listened to the young people but have rammed into them copybook maxims of truth, and slogans. We have furiously tried to evade

everything that did not fit into our regulation structures, no matter how healthy or useful or interesting it might have been. We have formalized everything to the utmost degree—what was possible, what was not. And the result? This was formulated sharply by the chairman of the Moscow Obkom DOSAAF, N. Polyakov: "DOSAAF has lost the young people; they have gone to the unregistered formations, and many young people have fallen into doubtful enticements and allowed themselves to be carried along by those who are engaged in indiscriminate disparagement of socialist values and our history and army. Manifestations of negative attitudes toward military service are growing in the youth environment..."

So the structural problem is not merely a formal one. And it is not happenstance that all those attending the plenum supported the idea that any association can in struggle be a primary organization, and there is but one criterion—that its activity be in line with the aims and tasks of DOSAAF. Most also agreed with another proposition, namely, that there should be primary organizations only where needed and where possible; "paper" organizations and DOSAAF members are not the advantage but rather the detriment of DOSAAF and to the business that it is designed to carry out.

However, a minority also emerged here. Its views were expressed in particular by the chairman of the Khmel'nitskiy Gorkom DOSAAF in Vinnitsa Oblast, F. Mironenko: "In our present structure the primary organizations should be everywhere; not one, even the smallest group of people, should not be influenced."

But let us be realists. Is it possible to bound the boundless?

It seems to us that like a "mirror," the plenum reflected all the main negative factors that are hampering DOSAAF in staying abreast of the times. Let us name some of them.

They include, first, the extreme centralization and excessive degree of administration in DOSAAF, which have transformed it from an alliance of like-thinking people into an organization of the departmental type. Obviously, in light of this the chairman of the Yakutsk Obkom DOSAAF F. Sergeyev was not quite right when he referred to attitudes toward the idea of change the name of DOSAAF (to a "union of organizations") as a simple "change of the signboard." The proposed name change, along with transformation of the DOSAAF committees into councils, is designed to reflect the real perestroika in DOSAAF on federative foundations, and to increase the independence of each organization and effect decentralization. And a proposal from N. Polyakov for "statism" of DOSAAF and making it some kind of ministry to train a reserve for the army and the national economy sounded out dissonantly against the general sentiment. This would essentially mean moving even further along the earlier administrative-command path and taking it to the extreme.

Yet another very acute problem is the need for perestroika in DOSAAF indoctrination and ideological work. Those speaking recognized as if with one voice that the position is critical. DOSAAF has still not succeeded in moving away from the old forms and methods and in finding its place in indoctrination, particularly in international and youth indoctrination. And this is intolerable against the backdrop of the sharp deterioration in interethnic relations in the country. Chairman of the Estonian SSR DOSAAF Central Committee A. Reyntam, chairman of the Ivano-Frankovsk Obkom DOSAAF N. Nosenko, and chairman of the North Kazakhstan Obkom DOSAAF A. Dychkov offered concrete examples of the intensification of nationalist elements in their regions. Thus, the Ukrainian Helsinki Alliance, the Christian Democrat Alliance, and other organizations ideologically and organizationally close to foreign centers of the Alliance of Ukrainian Nationalists are active in the Ukraine and exerting a significant influence on young people—an influence that today the DOSAAF organization is scarcely capable of opposing "on equal terms."

In both the report and in the statements made at the plenum on these issues—indoctrination work—there were many more bitter pronouncements than specific, detailed proposals. But today, could it be otherwise? Is it possible, as some speakers suggested, to draw up detailed recommendations "on the run" for "the top people" to cover every instance in life, and to "break down into sections" a sphere as delicate as indoctrination work? It seems to us that this is precisely the sphere in which the decisive word must go to "those below," and their concrete experience of work in concrete, very specific conditions prevailing in different regions. The task for "those at the top" is to generalize and disseminate this experience. But today, let us be honest, there is still little worth generalizing. There is no end of experience of another kind: how not to carry on this work.

Questions concerning improvements in the quality of training for specialists for the Armed Forces were raised very sharply at the plenum. Many speakers, in particular the chairman of the Karelia Obkom DOSAAF Yu. Smirnov, emphasized that most problems on this plane stem from the framework of DOSAAF "internal affairs." This applies to DOSAAF relations with the USSR Ministry of Defense. DOSAAF training organizations are by no means receiving all the equipment that they need, particularly new equipment; quite often the graduates from the DOSAAF schools service with the troops without having mastered any specialty. Much could be desired in providing equipment for the military commissariats.

Those present at the plenum talked about the need to lay firm contractual foundations in relations with the Armed Forces, and in offering graduates of vocational and technical schools and tekhnikums postponements of their draft papers so that they may master military technical specialties, and for other measures that must be

resolved at the state level, like the very "painful" questions of social insurance and protection for DOSAAF workers—subjects raised in a number of statements. And here the USSR people's deputies elected from DOSAAF are called upon to play an important role: they must be more energetic fighters for the interests of DOSAAF in the organs of soviet power.

One people's deputy, member of the USSR Supreme Soviet and chief of the Kasanskiy rayon sports and technical commission in the Uzbek SSR M. Zokirov, spoke at the plenum. He emphasized that partial changes and modernization of particular aspects of DOSAAF life will not achieve the desired effect; what is needed is an integrated concept for perestroyka, and on this plane it is very timely to raise the issue of holding an all-union scientific-practical DOSAAF conference. Cost accounting and an integrated economic policy for DOSAAF should be an integral part of that conference.

Meanwhile, as many speakers noted, economics in DOSAAF is lame in both legs. In most organizations cost accounting is "truncated" and a far cry from real financial and economic independence. Moreover, many committees and clubs are simply not ready for cost accounting, both because of the weakness of their own financial and material position and because of their workers' lack of economic knowledge. And there is no serious economic training in DOSAAF.

The financial aspect directly affects all directions of DOSAAF activity, as, for example, sports. Thus, those present at the plenum, in particular the director of the Ulyanovsk Children's and Youth Water Sports School N. Vinogradov, sharply criticized the AUCCTU decision to reduce funding for these schools. This, he emphasized, can inflict serious harm on plans for the further develop of the network of Children's and Youth Sports Schools and military applied and technical sports in general.

Departmentalism in general is very harmful to the development of sports and technical work. The chairman of the Bashkir Obkom DOSAAF Yu. Blokhin talked about this. The discreteness of the trade union, DOSAAF, and sports organizations and the inability of some local soviets and the administrations of many enterprises to see the usefulness of DOSAAF sport for the labor collectives and the public, and its social thrust all hampers, in

particular, implementation of the idea of setting up combined sports clubs in the labor collectives and at places of residence.

The results of the discussion were summarized in the concluding statement of the USSR DOSAAF chairman N. Kotlovitsev

He emphasized that what is needed for cardinal perestroyka is, on the one hand, maximum realization of the public nature of DOSAAF, increased independence and initiative on the part of all its elements, and involvement of the most varied organizations in terms of structure, and combined tasks to promote the country's defense, while preserving their individuality and autonomy. On the other hand, what is needed is to overcome amateurish methods and place work on a foundation of the businesslike approach, and to combine scale and the scientific method and rise to a truly state level of thinking and activity. Resolution of these tasks will enable DOSAAF to be brought onto modern lines and will enable it to provide a worthy response to the needs of life today. And I think that the USSR DOSAAF Central Committee plenum has fulfilled the role of a "primer" for this process and become the start of the collective creativity of broad strata in DOSAAF in determining realistic ways for perestroyka. We rightly believe that this process will bring real fruits during the course of the preparations for the all DOSAAF conference.

At the plenum criticism was directed at SOVETSKIY PATRIOT. Our newspaper was upbraided for the fact that do little to show the experience of perestroyka in DOSAAF. Yes, it is still little enough. And not because we want it that way. It is simply very difficult in the editorial office to find out the addresses where experience of real perestroyka is available. We invite everyone who is not indifferent to the fate of DOSAAF to take part in collective work to work out ways to renew DOSAAF, and to engage in the broad debate that we plan to initiate before the conference.

The plenum has laid the groundwork for innovative ideas. How it will be developed and embodied in life will depend on each of us.

Material from the USSR DOSAAF Central Committee plenum was prepared for press by SOVETSKIY PATRIOT special correspondents.

Military-Engineering Academy Commander on Restructuring Military Education

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[Report on interview with Lieutenant General V. Ustinov, Chief of the Military-Engineering Academy imeni V.V. Kuybyshev, by Colonel N. Kalmykov, KRASNAYA ZVEZDA correspondent. Original title: "Academic Status". Date and occasion not specified.]

[Text] Recently the leadership of the Ministry of Defense adopted a number of documents of principles whose purpose is to expand perestroika in the military schools. Many restrictions and prohibitions were removed, and the chiefs of the VUZ's [Higher Educational Institution] were granted more rights in the selection of forms and methods of training. How does all of this affect improvements in the training process? Colonel N. Kalmykov, our correspondent, talks about this with Lieutenant General V. V. Ustinov, Chief of the Military-Engineering Academy imeni V.V. Kuybyshev.

[Kalmykov] Viktor Ivanovich, first of all, I would like to ask more specifically, what is the Military-engineering Academy today?

[Ustinov] To put it briefly, it is 9 faculties, 37 chairs, and more than 10 scientific subdivisions where about 400 doctors and candidates of science work. It is a multi-profile, higher educational institution which prepares qualified specialists for various services of the USSR Armed Forces and armies of 20 socialist and developing countries. It is a large scientific center which has its own doctoral and postgraduate degree program, and it is equipped with a modern scientific laboratory facility and computer equipment.

[Kalmykov] You were the first in the military school to begin the practice of filling vacant positions on a competitive basis. Now the innovation has assumed an official status, and it is being introduced in all VUZ's. Nonetheless, I would like to know whether the experiment justified the hopes in every way, or whether some kinds of minuses have surfaced?

[Ustinov] When the experiment began, by far not everyone in the academy greeted it with a "cheer." But today even the most obstinate skeptics became convinced of the obvious benefits. The main thing is that the competitions made it possible to identify quite a few uncommon personalities, bold and talented officers, the best of whom received appointments to key posts.

What kind of minuses? Here, I simply have nothing to say. It is important that the experiment be used in practice widely and that it is not transformed into a formality, as this frequently happens with the introduction of any good thing.

This is not our only innovation. At one time, we, for example, by way of alternative selections, brought 25 percent of the students onto the staffs of scientific

councils. And we immediately sensed how a fresh current was injected into life. Problems began to be considered more deeply, and there was an improvement in the mutual understanding and the working partnership between the professor-teacher staff and the students.

[Kalmykov] How do you evaluate the recent documents on the perestroika of military education? Do they adequately provide for measures so that perestroika would move at a faster pace?

[Ustinov] Yes, a lot is changing, and these changes, unquestionably, will improve the situation. But it is difficult to make forecasts that are overly optimistic. In recent years so many obstructions were formed in the military school, as in all popular education in recent years, that it will hardly be possible to clear them no matter how great the desire.

Take at least the situation in which science and education find themselves in this country. This is the problem of all problems for the higher school. A kind of demarcation line has been formed, on one side of which science predominates, and on the other—teaching. But a close and firm integration does not obtain between them. An enormous scientific potential is concentrated in the military VUZ's: Something on the order of 70 percent of the military scientists work in academies and advanced schools. But are there many scientific schools? We have dozens and hundreds of prominent scientists, and how many teacher-innovators are among them whose unusual approaches to training and education have been put into widespread practice and have acquired followers? A handful...

On the other hand, there is a critical shortage of teachers of higher qualifications to ensure the advanced development of military education, and without this—doctors of science and professors—there is simply no way forward in our country. Add to this: We have very old scientists. For example, the average age of the postgraduates of our academy and candidates of science is 38 years. They spend 3-4 years on their formation as teachers, when they simply do not have the time to think about important scientific work. But when they pass 40, age begins "to be felt." At least, very few of them propose original scientific projects. And it is unlikely that the situation will change in the near term. This year the average age of officers whom we accepted for postgraduate work immediately after graduating from the academy is 35 years, and from the forces—about 37 years.

The solution? To return to the former system of enrollment in the academy for the command-engineering faculty from positions of company commander.

To conclude this question, I will say one more thing. About 15-20 years ago, the periods of training in the academy were reduced. This led to a decrease in the number of scientists, and it reduced the time on the study of fundamental disciplines. Such basic sciences as

chemistry, physics, and theoretical mechanics were centered in one department. But how can science be developed and moved forward, when only several people are engaged in it?

And look at what happened to us in the study of fundamental specialized disciplines. Let us take fortification. In 1940, 840 hours were devoted to teaching it; in 1946, about 500 hours, and now the course does not exceed 100 hours. No the academy has to be given a genuine academic status. But things turn out rather strangely: We are training officer cadres for special troops, but the volume of special disciplines (sum total for schools and academies) has been cut almost in half.

I know that considerations of an economic nature have an effect here, but economizing should also be done within reasonable limits.

[Kalmykov] And what would you propose in a major way?

[Ustinov] First of all, a system has to be devised to shift VUZ's to self-financing and cost-accounting. In principle, we should support ourselves, if not fully, then to a significant degree. Why don't the services pay for the training of specialists? If they start to pay, there will be more specific orders for specialists and a stricter demand for their training.

We in the academy are training specialists for the MVD [Ministry of Internal Affairs], Civil Defense, the military-topographic service... And we also get nothing for this. Just as we do not get anything for training officers for armies of other countries.

The military VUZ's today already look like rare things. The NII's [Scientific Research Institutes] and test ranges have gone over to cost-accounting. You have to pay to conduct a test on a test range and to order some sort of a standard document from an NII. But frequently there is nothing to pay with. And here is another curious phenomenon that takes place. Staffs and directorates have begun to load us down excessively with thematic projects: But an academy is not an NII, and you do not have to pay here. The scientists and the teachers are working under great stress.

One more thing that has to be dealt with more resolutely—to increase the general culture of the officer. Such values as refinement and good breeding must stop being a fact of "sheer" declarations and must be "written into" the general strategy of a military education. The foundation for this has been set—a new training course

has been introduced on "The Culture of Mutual Relationships of Servicemen." We have to augment this effort.

We in the academy started by raising the esthetics of the living areas. Historic buildings were restored, and a new portrait gallery of famous contemporaries was established. So that everyone would sense that he is surrounded not simply by classrooms and auditoriums, but that there is an aura of history here and a temple of science. Of course, this is not much. We have to do a lot more.

Somewhere I was told about this incident. In one of the special schools that existed in this country at one time, an officer was relieved of the post he held because he addressed his students with the familiar [form of the word] "you." This is what we have to start from to increase the spirit and culture. With respect for human integrity and with the rebirth of the concept of the military spirit as the sum total of the best masculine qualities: generosity, courage, selflessness, bravery, and discipline. And this must exist not only in the army, but also in society, first of all in school.

[Kalmykov] I fear, Viktor Ivanovich, that after these words, there will be people who will accuse you of appealing for the militarization of schools.

[Ustinov] It is possible. But I would like to mention in this connection the words of the famous military theoretician and historian, a Swede by origin who served in the Russian Army, Antoine Henri Jomini: "Pity the state where avid heroes are valued more than the brave soldier who gives up his life, health, and property to defend the Homeland."

Our Information:

The Military-engineering Academy is one of the country's oldest military training school institutions. It recently became 170 years old. A whole galaxy of remarkable people is associated with its history, people who made outstanding contributions to various spheres of human knowledge and to the development of military engineering science and practice. Those who studied or taught within the walls of the academy include D.I. Mendeleyev and I.M. Sechenov, electric light inventor P.N. Yablochkov, the prominent specialist on strategy and military history G.A. Leyer, composer and professor of fortifications Ts.A. Kyum, academician of painting K.A. Trutovskiy, writers F.M. Dostoyevskiy and D.V. Grigorovich, famed generals R.I. Kondratenko and D.M. Karbyshev... Among the educators of the academy in the post-revolutionary period were eminent military commanders, more than 50 Hero of the Soviet Union and Hero of Soviet Labor medal recipients and 20 laureates of the Lenin and State Prizes of the USSR.

Bolshakov on Cuban Missile Crisis—Conclusion

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[Article by G. Bolshakov under the rubric "The Times, Events, People" (conclusion; first part in issue No. 20): "The Kennedy-Khrushchev 'Secret Channel'"]

[Text]

"For the President's Eyes Only"

I took the service elevator to Robert Kennedy's office, with which I was familiar down to the slightest detail. Unlike our previous meetings, for this one Robert was dressed in a dark, official-looking suit, his unmanageable shock of hair carefully parted. His face worn the inexpressive, official mask of the attorney general. Robert was cold and unsmiling. It appeared that everything was supposed to underscore the thoroughly official nature of our meeting.

"This is the situation, Georgie," Robert began in a somewhat apologetic tone. "The President is very busy right now and cannot receive you during the next few days. He therefore asked you to tell me Premier Khrushchev's oral message, and I shall deliver it to the President."

"In mid-September," I began, "I was received by Khrushchev and Mikoyan, who listened carefully to President Kennedy's oral message of 31 August, presented to me in your presence...."

I spoke calmly and it seemed to me, in a convincing voice, although I was naturally greatly excited. The excitement soon disappeared, however. Strange as it sounds, Robert Kennedy's official appearance helped me.

"The Soviet leaders," I continued, "positively assess the President's steps aimed at reducing tensions and at the normalization of relations between our nations. However, they must point out to the President that the situation has recently worsened mainly because of hostile actions by the American government in the area of the Caribbean Sea, around Cuba. Khrushchev and other Soviet leaders are disappointed with this development of events and hope that President Kennedy will keep his word and not permit events to develop in a dangerous direction.

"At the same time Premier Khrushchev and the Soviet leaders regard certain moves by the President as an attempt to talk with them from a position of force. The President knows very well that such a discussion is impossible and that it can lead to the exacerbation and not the improvement of relations for which the President is striving. After all, he himself has repeatedly acknowledged the equal balance of power between the two nations. It is therefore essential to do everything possible

to reduce tensions and not to increase them by interfering in the internal affairs of other states."

After a pause I continued:

"Premier Khrushchev is concerned about the situation created by the United States around Cuba, and we repeat once again that the Soviet Union is sending only defensive weapons to Cuba and not weapons for aggressive purposes against any state on the American continent, including the United States. The Soviet leaders understand President Kennedy's situation well and will not undertake any actions regarding the United States before the congressional elections in November 1962, and they hope that we can begin a new round of active talks when the elections are over."

"Good," Robert said. "I shall report Premier Khrushchev's message to the President and, if it becomes necessary, he will send a response through me."

We silently headed for the exit.

"Listen," he said hurriedly near the opening elevator doors, as though suddenly remembering something important. "I will be terribly busy these next few days, but if I need you, one of my fellows will contact you. If you need me, let me know through Angie."

"Good. So long."

Neither he nor I knew at the time that we would not see each other for 3 dramatic weeks.

It appeared to me that Robert Kennedy was expecting some additional important report from Moscow. But just what was it? I was not able to learn this until several weeks later.

One morning during the last part of October I received a call from journalist Charles Bartlett, a close friend of the President, who asked me to meet him at the National Press Club. When I entered his office, I immediately noticed some large map-boards covered with paper standing in the corner. On the boards were aerial photographs. The captions indicated that these were pictures of sites where Soviet missile bases were being built at San Cristobal in Cuba.

By that time the press had already published numerous reports about the infiltration of Soviet missiles into Cuba. A number of American congressmen had requested information from the administration. The situation was heating up. We Soviet people working in Washington at that time knew nothing about the missiles, however.

I began examining the pictures. The first ones (there was a total of around 20, arranged by dates, and in the right hand corner of each map-board, whether by accident or not—I personally think that it was deliberate—the classified stamp had not been removed, and the highest classification for the Americans is "For the President's Eyes Only") were indistinct. They showed some sort of

excavation work. Only in the very latest ones, made in mid-October, could one distinguish objects resembling missile launchers. For greater convincingness, I was shown photographs of other launching pads for our missiles along with those map-boards.

Charles Bartlett asked me to comment on the photographs.

The first thing I said was "I'm not an expert on missile launchers. I have never before seen such photographs and have no idea what they depict. They could be taken as baseball diamonds under construction.

"If you are an expert, Charlie, then tell me: Are these missiles or not"?

"Hell," he exclaimed, "I am as much an expert as you. But Bobby asked me to show you these intriguing pictures."

The following day all of the photographs were published in the American press. Later, at a session of the Security Council, Adlai Stevenson, the American representative in the UN, offered them as material evidence of the presence of Soviet medium-range missiles.

The subsequent development of events is known to everyone. At 19:00 on 22 October President Kennedy announced to the nation and the entire world that the United States was setting up an armed blockade of Cuba (as of 24 October—editor) in response to the delivery of Soviet missiles there. An hour before Kennedy spoke A.F. Dobrynin, Soviet ambassador to the USA, was invited to visit Secretary of State Dean Rusk, who handed him a text of the President's statement without any sort of clarification.

Anatoliy Fedorovich hurried to the embassy. We were impatiently awaiting him. News of the President's eminent appearance was already being reported on the radio and television, heating up an already tense situation. Anatoliy Fedorovich entered the embassy calmly, unhurriedly, and only his glinting eyes beneath his glasses gave away his alarm.

From the second floor we could hear a song being sung by our chorus, which was preparing for a meeting on 7 November 1962. "Do the Russians want war?..." one could hear through the open windows. The telephone on the duty officer's table began ringing persistently. "Is this the Soviet embassy?" the telephone operator asked. "You have a call from Moscow. Get Anatoliy Fedorovich."

The ambassador went to the telephone: "Dobrynin speaking." He took the text of Kennedy's statement and began calmly reading the main points.

We were tired when we left the embassy early on the morning of 23 October. It was growing light. Policemen were standing near the building, cringing from the cold and swinging their sticks as though to warm up. "Well, the blockade has begun," one of us said.

That same day the Soviet government issued a statement in which the establishment of a naval blockade by the United States and the restraining of vessels for inspection were assessed as "unprecedented and aggressive actions." Moscow warned that such actions could lead to the unleashing of a thermonuclear world war and, should an aggressor begin one, the Soviet Union "would carry out the most powerful retaliatory strike."

In the meantime American newspapers and magazines began publishing data on the range of the Soviet missiles in Cuba and to list in detail all of the U.S. cities which could be destroyed by them. Panicky feelings grew in the nation. People rushed to buy up "bomb-shelter food kits," crackers, chocolate and canned goods. Never before had the Americans felt the ominous breath of war so close to the threshold of their own home.

Prisoners of Our Own Actions

The prearranged nuclear alert system was broadcast over the radio at 12:00 on Thursday, 25 October. The listeners were informed that this time the transmission was only a practice one for purposes of familiarization. A tragic sequel could come at any moment, however.

On 26 October President Kennedy made arrangements to begin working out emergency measures for establishing "civilian power" in Cuba after a landing by American forces and occupation of the nation. The military machine awaited the signal to go into action. The President tarried, however. He was awaiting the next message from Khrushchev. And he received it at 18:00 the same day. In the message we stated our readiness to remove from Cuba our weapons which the United States regarded as offensive on the condition that the USA would provide guarantees of complete nonintervention in the internal affairs of the Republic of Cuba and would not violate its sovereignty in the future.

On the morning of 27 October a Soviet SAM missile shot down an American U-2 reconnaissance aircraft piloted by Maj R. Anderson over Cuba. This was the first human casualty of the blockade. The military reacted to it by proposing an immediate air strike against Cuba.

During the day on 27 October I received a call from Kenneth O'Donnel, presidential assistant, who asked me to meet with him immediately. Right away, without any explanation, he asked whether Soviet weapons in Cuba were indeed under the rigid control of Soviet specialists. This was because the destruction of the U-2 reconnaissance aircraft by the Soviet SAM missile could indicate the contrary. I assured him that all Soviet weapons located in Cuba were under the rigid control of our specialists. Speaking for the President, O'Donnel asked for official confirmation from Moscow.

The situation had heated up to the limit. The President was having difficulty resisting pressure from the military. An immediate decision had to be made.

R. Kennedy asked Ambassador A.F. Dobrynin to see him. He informed the latter that the "Cuban crisis" was continuing to intensify rapidly. The Pentagon was exerting powerful pressure upon the President because of the American reconnaissance aircraft shot down by Cuba. War was possible. The President wanted to avoid this. He was confident that the Soviet leadership wanted the same thing.

After reporting this to A.F. Dobrynin, R. Kennedy phoned me and asked me to meet him in an automobile near my home. He repeated to me the same thing he had reported to Anatoliy Fedorovich. He stressed the fact that the President, having initiated the blockade, had become "a prisoner of his own actions" and it would be almost impossible for him "to restrain the military" within the days immediately ahead, if a positive response were not received from Moscow....

I was awakened by the telephone early on the morning of 28 October. It was Charles Bartlett, who informed me in an excited and happy voice: Moscow radio has begun transmitting in clear text the Soviet government's message to President Kennedy on the resolution of the Cuban crisis. The hours counting off the seconds of war began counting off the first seconds of peace....

I was later told in Moscow that the decision to transmit the message by radio in clear text was made because there was no time left to decode it....

As we recall the events of those years, we should not forget that the agreement gained through the suffering of 13 tragic days in October, 1962, is being observed today, more than a quarter of a century later. The Cuban republic is alive, which means that our actions justified themselves, although some people still feel that the agreement we signed was a concession to American imperialism.

Toward the end of those 13 days the world had actually glanced into the abyss of nuclear catastrophe. And one needs to give due credit to both Khrushchev and President Kennedy: Both of them had the political courage and good sense to reach the understanding that there would be no winners and no losers in the Cuban crisis. I believe that this was the first seeds of the new political thinking....

But another question immediately arises: Would it not have been possible to restrain the development of events? Was it really necessary to reach the point at which Khrushchev's message to Kennedy (on the agreement to remove the missiles from Cuba in exchange for a lifting of the blockade and a guarantee of nonintervention) had to be transmitted by radio because only minutes were left? Everything could have gone differently, of course.

The official Soviet confirmation of the fact that we did indeed have missiles in Cuba came following a meeting between Khrushchev and an American businessman. Khrushchev received him in Moscow on 25 October.

During their discussion the statement was made that we did have medium-range missiles, SAM missiles, in Cuba.

A telegram reporting this reached Washington with the speed of lightning. We at the embassy still knew nothing. Charles Bartlett phoned, however, and asked maliciously:

"Well, Georgiy, do you have missiles in Cuba?"

"No!"

"Well, your friend Bobby (Robert Kennedy—editor) asked me to inform you that you do have. Khrushchev said so today. The President just received a telegram from Moscow."

This was a bolt out of the blue.

During those dramatic days in October, 1962, we did not know the source of the Caribbean crisis. This was the situation, as I later learned. In May 1962 N.S. Khrushchev was vacationing on the Bulgarian coast of the Black Sea at the invitation of T. Zhivkov. The Zhivkovs had recently visited Cuba and returned to their homeland impressed by accounts of American missiles aimed at the Island of Freedom, only 150 kilometers from Havana. The two leaders spoke with concern about the installation of American Jupiter missiles in Turkey, aimed at the Soviet Union and other nations of the socialist commonwealth....

All of this undoubtedly upset the emotional Khrushchev and prompted him to seek responsive measures. Such a measure came into being following a discussion within a narrow circle in the Presidium of the CPSU Central Committee about the deployment of Soviet medium-range missiles in Cuba. Rashidov's group, which also included deputy defense ministers of the USSR S.S. Biryuzov (commander of the Strategic Missile Forces) and A.A. Grechko, was sent to Cuba for the adoption of the final decision. They performed the necessary reconnaissance there and obtained F. Castro's consent to the installation of our missiles in Cuba.

It was decided to send medium-range missiles to Cuba. Some of them were successfully delivered to Cuban shores before the American blockade of the island was begun. Ships which later set out with missiles for Cuba were forced to turn back to the homeland on 24 October, however, by the blockade of the island.

Raul Castro flew to Moscow in July of 1962. A Cuban delegation headed by E. Che Guevara arrived in the Soviet capital on 27 August to conclude the agreement.

A joint communique stated that the government of the Republic of Cuba had appealed to the government of the Soviet Union for assistance in the form of weapons and corresponding technical specialists for training Cuban servicemen. The Soviet government satisfied the request. Military equipment and weapons, including a certain number of medium-range missiles and a corresponding group of Soviet military specialists to help

train the Cuban servicemen, were sent to Cuba. The missiles were serviced only by Soviet military specialists.

The communique was signed on 2 September 1962. The text was first made public only in 1982, however, in a joint work by Soviet and Cuban historians. The main error made by those who organized this "assistance" to the Cuban ally lay in the secrecy with which the agreement was concluded and the fact that the missiles were delivered without the "advice and consent" of higher state agencies. The "economic unprofitability" of the Caribbean crisis has still not been determined, but it apparently amounted to several tens of billions of rubles. This also increased our budget imbalance.

The agreement was kept a secret, even though it was not difficult to assume that the shipment of cumbersome missile launchers to Cuba by sea could not go unnoticed. All approaches to Cuba and the European straits were monitored by American intelligence, after all.

Strictly speaking, passions flared not even so much around the missiles themselves as around our position, our stubborn denial of their installation near American shores. The Americans had long since placed their missiles right under our nose, in Turkey. The entire world, including the Soviet Union, knew about this, however. And our deliberate secrecy constrained Soviet diplomatic actions. Whenever and wherever the subject of Cuba came up, another question immediately arose: Are there Soviet missiles in Cuba? The frank denial was immediately interpreted as a lie.

All of this worked against us in the minds of ordinary Americans. Distrust of the USSR and its actions grew. It was probably precisely because of this that, prior to the planned invasion of Cuba, President Kennedy succeeded in enlisting the support not just of the Organization of American States but also of a number of governments of European states—Great Britain, the FRG, France....

Soviet diplomats working in the Soviet embassy in Washington also found themselves in a very unpleasant situation. They concealed the truth (those who knew it) not just from others but also from our own people. What was it like for the Soviet representative in the UN to fidget and struggle to extricate himself as he evaded the issue of the presence of our missiles in Cuba before the entire world, surrounded by photographs of our launching pads. It is painful for me to think about the fact that both Robert Kennedy and other people considered me a liar in the matter, people who sincerely wanted rapprochement with our country and who, like me, were working hard to achieve this rapprochement.

The "secret channel" of personal communication between Kennedy and Khrushchev was set up and operated essentially for this purpose. Such rapprochement was a new form of relations between the leaders of our two powerful states, in which the personal "I" dominated, ruling out to a certain degree the possibility of their being pressured by opposing forces (the State Department, the Pentagon, the CIA and others). The

"channel" permitted the two leaders openly to lay out problems, thereby understanding each other better.

With a Clean Slate

A few days after the crisis ended Robert Kennedy phoned me, as he had in the good old days, and asked me to drop in on him at his office. I was there a few minutes later. He looked happy but tired. Those 13 days of crisis had not been easy for him.

"Well, Georgiy, is everything over now? Now we need to forget everything that has happened in these 13 days as rapidly as possible and begin, as the President suggests, "with a clean slate," in a new way, not looking back to the past. We must derive lessons and draw the proper conclusions, each for himself, from what has happened. The President believes that most of all we should not bounce the blame for the crisis from one side to the other. We do not need to depict ourselves as the winner, the other as the loser. We both won. The entire world won. We need to proceed from this fact. We need carefully to weigh and think through everything, take a new path and not repeat previous errors.

The November tour of the USA by a ballet company headed by Maya Plisetskaya was the first step on the new path. To be honest, we awaited this tour with certain apprehension. How would it be received by America following the Cuban crisis? And then the day arrived for the opening night in Washington. President John Kennedy and his wife, Robert Kennedy, and all of the "new horizons" fellows attended.

The President was in a splendid mood. He went backstage during the intermission to congratulate the dancers on their success and to wish them a successful tour in America. It was difficult to believe that very recently he had held his hand on the button of nuclear war against those whose art he was now admiring. Jacquelyn Kennedy invited the company, headed by M. Plisetskaya and A. Messerer, to visit the White House the following day. America's first lady also requested that the president's daughter, little Caroline, be taught the basics of Russian ballet, since Messerer had brought a ballet school from the Bolshoy Theater on the tour.

The Soviet performers arrived at the White House the following day. They were greeted by a hospitable Jacquelyn. She took them through the White House, and President Kennedy met the company, as though by accident, in the Rose Garden. He was in a good mood and joked a great deal.

"This is the third time I have attended a performance of your remarkable ballet: I saw it twice in Russia and now I have seen it here, on the Washington stage. I hope to see you again in the near future at the Bolshoy in Moscow. Thank you!"

The company received an invitation to breakfast the following day at Robert Kennedy's suburban home in

Virginia. This is how the Kennedy brothers set for the nation an example of policy "from a clean slate."

The art of Maya Plisetskaya evoked particular admiration in the Americans. Robert Kennedy and I did not miss a single performance by her in Washington.

Once, late in the evening, he phoned me at home and said that he was waiting for me outside in a car.

"Georgiy, today is the birthday of Don Wilson, deputy USIA director, and he has invited us and Maya Plisetskaya to his house for a "floor party."

A "floor party," "a party on the floor," is ordinarily in a large room with no furniture where those attending either sit or lie right on the floor. Waiters pass out cocktails, hors d'oeuvres, coffee and miniature pastries. The main thing, however, is the relaxed atmosphere of the entire party, the complete absence of speeches. Everyone dances or talks with whomever he likes, disregarding protocol, position and rank.

All of the "new horizons" fellows from the President's close circle were present at the party. One could especially sense that everyone had a lighter heart following the safe conclusion of the Cuban crisis. They felt relaxed and cheerful. Maya Plisetskaya was naturally the center of attention.

It was learned that Maya Mikhaylovna was born the same day and the same year as Robert Kennedy. Robert expressed his regrets that he could not personally congratulate her on her birthday, since the Bolshoy company was leaving for Canada. He found a way, however. At 19:00 on that day, 20 November, a messenger from Robert Kennedy went up to the hotel room in which Plisetskaya was staying during the tour in Canada and presented her with an enormous basket of flowers with the Attorney General's card. Just at that time Robert phoned from his office on Pennsylvania Avenue and sang the American song "Happy Birthday" to her. I used a second phone to translate the words of the song and the Attorney General's sincere congratulations and best wishes to Maya Mikhaylovna....

...Soon thereafter our "secret channel" of communication was practically closed down. "The Russians," Robert Kennedy subsequently wrote, "felt that Bolshakov's situation had been publicized and it would be better to recall him."

I was indeed recalled. At a farewell lunch held for me by Charles Bartlett, I joked: "We met the United States half way and made quite a lot of concessions. You demanded that we remove the missiles; we removed them."

"Finally, you demanded that Bolshakov be recalled, and I am being recalled. Bear in mind, however, that you will get no more concessions!"

This was later acknowledged as the best joke of the year in journalistic circles.

Concluding Words from the International Life Department

Could Georgiy Nikitovich Bolshakov have thought at that time that a quarter of a century later he would again meet certain of the actors in that drama? They met in January of 1989 in Moscow, at a trilateral symposium on the Caribbean crisis.

Pierre Salinger, stocky, black-haired, looking tough from beneath his thick eyebrows, just as energetic as before, amicably hugged his "Russian friend Georgiy" in the auditorium, before the eyes of numerous symposium participants and guests. They were divided by a great deal: years, distance, different political systems. They were also united by many things, however: a desire to make every effort to eliminate the nuclear confrontation between the USA and the USSR in the fall of '62, a confrontation posing great danger to the fate of peace, sincerity, a liking for each other and mutual affection for the American and Soviet peoples.

Georgiy Nikitovich was warmly greeted also by other long-ago Washington acquaintances: Robert McNamara, McGeorge Bundy, Theodore Sorensen. Back then they were guys on the "Kennedy team"—his friends and confederates, creators of the "new horizons" policy. Today they were dignified, grey-haired gentlemen (with the exception perhaps of Salinger), prominent political experts, consultants, businessmen.

And not one of them could help thinking at that meeting about the two leaders who had looked with their own eyes into the abyss of nuclear catastrophe in October of 1962. They had the courage to leave the path of confrontation and begin seeking mutual, peaceful solutions to world problems. One of them was prevented from continuing on that path, however, by his assassination in Dallas in the fall of 1963. The other was sent into "deserved retirement" in October of 1964.... Possibilities opening up for the normalization of Soviet-American relations and the weakening of military confrontation were thus missed, and valuable time was wasted.

In 1962 the leaders of the two superpowers succeeded in halting the slide of human civilization into the nuclear abyss. That political experience is extraordinarily important today. It is easier to avert the flames of local crises than to extinguish them after they are capable of developing into global crises. The risk of nuclear confrontation can be reduced immeasurably today if we are guided by the axioms of the new political thinking and the right of peoples freely to choose their development, and proceed from a balance of interests and equal security for the sides. As President G. Bush rightly noted in his telegrammed greetings to the symposium participants, the meeting in Moscow itself is "an example of the new openness of the Soviet Union under the leadership of President Gorbachev."

Yes, it was as though two policies were represented by the symposium participants: Kennedy's "new horizons"

of the '60s and M.S. Gorbachev's new political thinking of the '80s. In memory of the meeting Pierre Salinger presented Georgiy Bolshakov with a unique watch, which is very fashionable in the West today. Instead of numbers, Latin letters spell out the word "restructuring" around the perimeter of the face. Throughout the world today this word is associated with renewal in both our foreign and defense policy.

It is precisely through the prism of the restructuring and the new political thinking that we now view the events of October 1962. A number of serious publications by political, state and military figures, researchers and publicists have recently been devoted to an analysis of those events. (For the military-political aspects of those events read I. Statsenko's article "The Invasion Did Not Take Place," published in issue No. 20 of the magazine *KOMMUNIST VOORUZHENNYKH SIL* for 1987).

A.A. Gromyko, a participant in the 1989 symposium on the Caribbean crisis, recalled that while N.S. Khrushchev was returning from Bulgaria on 20 May 1962, the Soviet leader told him the following in a face-to-face discussion on the aircraft:

"The situation which has now developed around Cuba is dangerous. In order to save it as an independent state we must deploy a certain number of our nuclear missiles there. This is the only thing which can save the nation. Washington will not be stopped by last year's unsuccessful Bay of Pigs invasion.

And he asked Gromyko what he thought about it.

A.A. Gromyko replied that he was familiar with the situation in the USA, where he had spent 8 years, including time as the ambassador. He frankly said that the importation of our nuclear missiles into Cuba would evoke a political explosion in the United States.

Khrushchev remained silent for a while and then said in a firm voice:

"We do not need a nuclear war, and we do not intend to fight."

Gromyko states that from USSR Defense Minister R. Ya. Malinovskiy's demeanor at the meeting of the Presidium of the CPSU Central Committee which discussed the matter of taking Soviet missiles into Cuba, one sensed that he supported Khrushchev's suggestion unconditionally. All participants in the session unanimously supported his suggestion. Missiles were taken into Cuba....

The events which followed demonstrated that both sides did not give in to the influence of emotions, which were fairly heated, but, understanding their great responsibility both to their own peoples and to the world as a whole, achieved a peaceful settlement of the crisis. The Cuban leadership and Fidel Castro personally also demonstrated great responsibility throughout that complex and dangerous period.

According to Gromyko, there was an "intense and vigorous search for common positions and a meeting of views. The main communication was effected through an exchange of envoys between Khrushchev and Kennedy. There were also other channels operating, however."

Now, having read this documentary outline, you know what channel was referred to. Upon receiving our suggestion that he write an article, Georgiy Nikitovich Bolshakov worked painstakingly on it. He performed his job conscientiously, even though his health prevented him from writing with adequate speed. The front, and many years of intense work on a different front, the diplomatic one, also made themselves felt....

From the editors: While the article was already being readied for printing, we learned the sad news that Georgiy Nikitovich is no longer with us. And he wanted so much to attend the next symposium on the Caribbean crisis, which will be held next year in beautiful Havana....

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Investigation Into Fate Of Raoul Wallenberg

90UM0189A Moscow KRSNAYA ZVEZDA in Russian
22 Dec 89 First Edition p 4

[Article by Yelena Karlbek: "Who Saw Raoul Wallenberg?"]

[Text] This year, the name of Swedish diplomat Raoul Wallenberg, who disappeared in the final months of the war in battle-torn Budapest, has repeatedly appeared on the pages of the Soviet press. Let us recall that, according to the competent Soviet agencies, Wallenberg was arrested and held in Lubyanka Prison, where he died on July 17, 1947.

Swedish historian Yelena Karlbek is gathering materials on Wallenberg in the Soviet Union. Through our newspaper, she makes a request of those front-line soldiers who took part in the battles for Budapest and who might have met or seen the Swedish diplomat.

Information received from Soviet citizens partially coincides with testimony from foreign citizens in the possession of associates of the Raoul Wallenberg research project to the effect that Wallenberg was seen in various parts of Pest after Jan. 8, 1945.

The following information comes from Vasilii Vasilyevich Silyava of Irkutsk. In January 1945, he commanded the Third Rifle Battalion of the 317th Red Banner Rifle Division's 761st Rifle Regiment. (He recognized Wallenberg from a photograph in *KOMSO-MOLSKAYA PRAVDA*. In a Pest house from whose balcony a foreign flag was flying, Silyava met Wallenberg. This occurred on January 14 or 15. Vasilii Vasilyevich left a guard—his orderly and a messenger—at the apartment where Wallenberg was staying and reported to the regiment commander.

Mikhail Vasilyevich Danilash of the village of Nizhneye Bolotnoye, Transcarpathian Oblast, also testifies that Wallenberg was present in liberated Budapest. Danilash served as a civilian Hungarian-language interpreter in the staff of the 30th Rifle Corps and had a conversation with the Swedish diplomat in the corps staff intelligence department between January 8 and January 14.

Danilash recounts the meeting: "I entered the room. There, sitting at the middle of a table (insofar as I recall) in a black suit, was a thin man with black hair, about 30 years old; his face was not white but had a dark complexion. To the left of the table was a stocky man wearing a leather jacket. The man politely introduced himself as Wallenberg, secretary of the Swedish Embassy, and he said the other man was his driver."

Danilash recalls that Wallenberg complained about the confiscation of his official car and asked for a meeting with Marshal R. Malinovskiy. The conversation was witnessed (or could have been witnessed) by Lieutenant Colonel Lavrinenko, chief of the intelligence department; Major Sevryuga, his deputy; and Lieutenant Anatoliy Sinishev, a German-language interpreter.

There is also testimony from war veteran M. P. Shmulev of Alma-Ata to the effect that Wallenberg helped wounded Soviet prisoners of war in Budapest.

We are interested in everything that could be linked with the name of our compatriot. We ask those who served with V. Silyava, M. Danilash, and M. Shmulev to contact us, as well as anyone who can shed even the faintest light on R. Wallenberg's fate.

'Surprise' Of German Attack 'Invention' Of Stalin
90UM0189B Moscow KRASNAYA ZVEZDA in Russian 23 Dec 89 First Edition p 4

[Article by Professor, Doctor of History F. Volkov: "1941-1945: The Coded Messages Sat In The Archives"]

[Text] Was fascist Germany's attack on the USSR a surprise? The controversy over this continues, despite the fact that almost a half a century now separates us from June 22, 1941. The poignancy of the debate is not hard to explain: The Soviet people paid too high a price for the enemy's having caught us off guard.

Soviet intelligence had such extensive and reliable information about Hitler's accelerated preparations for war that there can be no question of any element of strategic surprise—such is the opinion of the prominent Soviet historian F. Volkov, a Professor at the Moscow State Institute of International Relations. Fedor Dmitriyevich seeks to uphold this viewpoint in his book "The Rise and Fall of Stalin," which he is now completing. We offer our readers an excerpt from the book.

The network of informants who, as far back as early 1940, were reporting to Moscow about preparations for fascist Germany's treacherous attack on the USSR was unprecedented for its time. Tokyo, Bern, Berlin,

London, Washington, Warsaw, Paris, Rome, Ankara, and Vienna—alarming coded messages were sent to the Center from more than 40 locations.

In Germany, Soviet military intelligence had succeeded in gaining access to top secret information from the highest echelons of power. There, at the head of the most important organization of the Resistance, was the group consisting of Shultse, Boyzen, and Kharnak, and Communist Party of Germany leaders Ion Zig and Vilgelm Guddorf. The organization's members included officers, scientists, and cultural figures who moved in the reich's ruling circles.

In Germany, Belgium, Holland, France, and Switzerland, there operated a group that figured in Nazi documents as the "Red Chapel." The professional military intelligence agents who made up the group had access to secrets of Hitlerite headquarters on the course of the fascists' preparations for war and on when military operations would commence.

Extremely valuable information came from neutral Switzerland. There an extensive intelligence organization known as "Dora" had been set up. The organization was led by the Hungarian communist Shandor Rado. Rado's most valuable source of information was the German antifascist R. Ressler (Lyutsi). Ressler had ties with several generals and officers (the so-called "Viking" group) who operated on the eve of and during the Second World War in the fascist den itself—the headquarters of the Wehrmacht supreme command.

Through the "Viking" group, apparently, Ressler had learned of the top secret plan "Barbarossa." This enabled Rado in late February to report to the Center: "Germany now has 150 divisions in the East... Germany's assault will begin in late May."

As we know, Hitler moved the date back on account of the aggression against Yugoslavia, about which Rado reported to the Center in late March. In addition, he relayed precise information on the transfer of German-fascist armies and their composition and armament. And the following coded message was received from Rado in June: "The general offensive against the USSR will begin at dawn on Sunday, June 22."

Who was the source of Ressler's information? He took that secret to the grave. But the information was so secret that it has been suggested in the West German press that the Ressler's informant (and through him, Rado's) was Captain Vilgelm Shend, who in May 1942 was given the title "plenipotentiary military historian to Hitler." And the not-unknown General Gelen, chief of West German intelligence, believed the informant to be none other than Martin Borman.

The most valuable and precise information was received from Rikhard Zorge, who had access to the most secret correspondence of the German Ambassador to Japan, E.

Ott. During the entire first half of 1941, Zorge systematically provided information on the intensified concentration of German troops on the Soviet border, the transfer of units from France, and the composition of the Hitlerite army in the East. On May 21 he sent the following coded message: "Germany has against the USSR nine armies comprising 150 divisions." And a short time later he reported: The war would begin on June 20-22, and "the main thrusts will be directed against Moscow and Leningrad, and subsequently the Ukraine."

But two radiograms that Zorge sent on June 15 were particularly valuable. The first said: "The war will be started in late June." In the second, Zorge was more explicit: "The attack will occur along a broad front at dawn on June 22."

Alarming reports were received constantly from the Soviet Embassy in Berlin. For example, a report sent to Moscow in May 1941 said: "For all practical purposes, Germany's preparations for an attack on the Soviet Union are complete..., the entire concentration of troops and equipment has been concluded. An attack can therefore be expected at any moment." The Soviet naval attache in Berlin, Captain First Rank M. Vorontsov, provided precise data on this score. "He not only reported on the Germans' preparations," recalled Admiral N. Kuznetsov, the People's Commissar of the Navy, "but also gave almost the exact date of the war's start."

Precise reports on the timing of Germany's invasion were received from the USSR Ambassador to the United States, K. Umanskiy.

The leadership's attention was called to fascist Germany's intensive military preparations by the Soviet Ambassador to the Vichy government in France, A. Bogomolov, and by the military attache, General I. Susloparov. They reported that the attack could be expected in June.

A little known fact: In the very German Embassy in Moscow, there worked a communist by the name of Vilgelm Kegel, who reported on Hitler's preparations to invade the USSR. It's hard to believe, but the German Ambassador in Moscow, Shulenburg, reported on the same to the USSR Ambassador in Berlin.

As a result of the courageous and selfless actions of the aforementioned and other people, the Red Army Main Intelligence Directorate, as its former chief, Marshal of the Soviet Union F. Golikov, later said, had extremely important materials "on Hitlerite Germany's military potential, its mobilization measures and new force elements, the total strength of its armed forces, the number and composition of Hitler's divisions and their grouping in the theaters of military operations, and the high command's strategic reserves."

Soviet intelligence provided precise data on the number of German-fascist troops not only as a whole but also

broken down by the contingents facing each of our western military districts. The Main Intelligence Directorate had information of exceptional importance: As Marshal G. Zhukov attested, it knew about the "Barbarossa" plan, about the basic strategic directions of the German-fascist forces' thrusts, and the exact timing of the attack. What else was needed to draw the unambiguous conclusion that war was inevitable, that urgent measures were needed to prepare to repulse the aggressor?

However, everything took place in a kind of monstrous theater of the absurd. On March 20, Golikov reported the information received to Stalin and other members of the leadership and, quoting the military attache in Berlin, reported the time when military operations would begin—"between May 15 and June 15, 1941." And then he drew a striking, absolutely incorrect conclusion: "The rumors and documents attesting to the inevitability of war against the USSR in the spring of this year must be viewed as disinformation emanating from British and perhaps even German intelligence."

Needless to say, Golikov knew what a dim view Stalin took of any talk of the possibility of aggression on Germany's part, as he was convinced that Hitler would hardly dare attack the Soviet Union until he had settled accounts with Britain. And knowing this, Golikov reported accordingly. Alas, not just he but also other senior officials of the General Staff, the People's Commissariat of Defense, and the Main Intelligence Directorate—as Marshal Zhukov himself self-critically admitted—lacked the courage and party honesty to report on the true affairs and on the mortal danger that threatened our country.

The information gained truly at the cost of the lives of many known and anonymous military intelligence agents was corroborated by information received through diplomatic channels. In March, Stalin received a telegram concerning preparations for Hitler's invasion from U.S. President F. Roosevelt. On April 22, the General Secretary received a similar message from W. Churchill.

On June 6, Stalin was presented with intelligence information on border concentrations of German and Romanian forces with a strength of up to four million soldiers and officers.

Under the force of these reports, which, though they came from the most varied sources, were equally alarming, it would seem that an end should have been put to what was once reasonable caution but had become, in the emerging situation, criminal inaction. However, Stalin, convinced that he had succeeded in "outwitting" Hitler, viewed with maniacal obstinacy this exceptionally valuable information as "disinformation." The coded messages crying out about the impending disaster were filed away in the archives. On June 21, Beria inscribed orders on the intelligence agents' reports—that their authors be ground into "camp dust."

It is my most profound conviction that the myth about Germany's "surprise attack" on the USSR was invented by Stalin in order to excuse his criminal inaction on the threshold of the war. Had the Red

Army been placed on full combat readiness in a timely fashion, the picture of the war would have been completely different, and the Soviet people would have avoided such frightening losses.

Markushin on Debate Over U.S. Naval Strategy

90UM0297A Moscow KRASNAYA ZVEZDA in Russian
10 Feb 90 First Edition p 5

[Article by Col V. Markushin: "Seek Paths of Rapprochement"]

[Text] "A serious discussion of naval forces is truly essential today." These words are from the greeting by N. Ryzhkov, head of the Soviet Government, to the participants in the first international seminar on the limitation of naval weapons and the reduction of naval activities in the World Ocean. They probably describe the mental atmosphere of the forum being held in our capital.

The attention of those present was drawn to the address by MSU S. Akhromeyev, who explained his viewpoint on the influence of the naval forces and their effect on Soviet-American relations. Among other things, he noted that naval strategy is a component of overall military strategy. In the United States it is an offensive strategy designed to maintain that international order which suits Washington. The Soviet marshal stressed the fact that the changes occurring in the world and in the Soviet Union should influence the U.S. position on naval forces and convince the administration in the White House that talks on reducing the navies are essential.

I would point out that the concern expressed by MSU S. Akhromeyev met with understanding from the seminar participants, although not all of them agreed with his conclusions. Read Admiral U. Carol (Retired) of the USA, for example, told your correspondent that Marshal Akhromeyev was laying it on a bit thick when he spoke of the American Navy's threat to the USSR.

Rear Adm R. James (Retired), another American representative, spoke in a similar manner. The USSR, he feels, in general exaggerates the extent of the problem of the navies. The U.S. naval presence in various areas of the world, in his opinion, is necessitated by the existence of regional problems and the imbalance of situations, whether it be in the Persian Gulf or the Mediterranean. He did say, however, that the question is increasingly being asked in America: Just who empowered Washington to act as the guardian of peace throughout the world?

New U.S. 'Virginia Slims' NAVSTAR Receiver

90UM0297B Moscow KRASNAYA ZVEZDA
in Russian 9 Feb 90 First Edition p 3

[Article under the rubric "In the Arsenals and on the Ranges": "A Miniature Navigational Device"]

[Text] The weekly JANE'S DEFENSE reports that the American company, "Collins", has produced two demonstration models of a device designated "Virginia Slims" under an assignment from the U.S. Defense Department's Office for Development Projects. It is designed for receiving and processing signals from satellites of the NAVSTAR navigational system. The receiver (see photo [photo not reproduced]) weighs 230 grams (without the power unit). It makes it possible to determine the coordinates of an object to within 16 meters (geographic coordinates are indicated to within tenths of a second), speed with an error of no more than 1 m/s and time with an error of less than a millionth of a second.

The press stresses the fact that the weight and size of the "Virginia Slims" receiver were reduced in comparison with other similar devices by using a new type of gallium-arsenide integrated semiconductor circuits. It was also noted that the U.S. Defense Department plans to place the entire planned series of NAVSTAR satellites (18 functioning and three reserve) into space by mid-1992.

Norwegian Submarine Modernization

90UM0297C Moscow KRASNAYA ZVEZDA
in Russian 9 Feb 90 First Edition p 3

[Unattributed article: "The Submarines Are Being Modernized"]

[Text] According to the reference book "Jane's Fighting Ships," in the '60s the Norwegian naval forces acquired 15 Kobben-class diesel submarines built in the FRG under Project 207. These submarines have the following specifications and performance characteristics: displacement surfaced, 370 tons; submerged displacement, 435 tons; length, 45.4 m; width, 4.6 m; diesel-electric power plant and screw propeller electric engine, 1,200 and 1,700 hp respectively; armament, eight 533mm torpedo tubes for firing wire-controlled torpedos.

The Norwegian government has decided to modernize six Kobben-class submarines to enhance the combat capabilities of its submarine forces and has allocated 422 million kroner for this purpose. The magazine TRUPENPRAXIS reports that the first modernized submarine, the Sklinna (see photo [photo not reproduced]), is already on line in the navy. Its hull has an additional compartment 2m long and outfitted with new communication, navigational, sonar and fire control equipment. It is planned to complete work on the last (the 6th) submarine, the Kaura, in April 1992.

Lt Gen Varennikov Interviewed on Entry Into Afghanistan

*90UM0232A Moscow SOVETSKIY PATRIOT
in Russian 27 Dec 89 pp 1-2*

[Interview with Army General Valentin Ivanovich Varennikov, commander-in-chief of the ground forces and deputy USSR minister of defense, by correspondents O. Yermolina and A. Zubkov: "We Were Not Preaching Evil"]

[Text] It has been 10 years since Soviet troops first marched into Afghanistan. A political assessment was given to this event and the concrete "creators" of this secret war were named at the Second Congress of USSR People's Deputies.

[SOVETSKIY PATRIOT] Valentin Ivanovich, perhaps everyone is interested in this question now: Should we have gone there or not?

[Varennikov] I will only express my personal opinion as to some matters concerning commitment of our troops to Afghanistan. Having made this decision, we pitted ourselves against world public opinion, and the world community. That was on one hand. On the other hand a number of violations of our own legislation and of our internal party and civic norms were made. This decision was essentially made behind the back of the party and people.

However, I would like to turn attention to the following fact. Assessing the situation from today's standpoint, we must not forget that historic events should be approached from the yardsticks of those times. The year was 1979. Before the decision was reached, the General Staff was opposed to commitment of troops. Why? Much was not clear to us in this matter. Former chief of General Staff Marshal N. V. Ogarkov communicated this opinion to the leadership. But let's put ourselves in the shoes of these leaders. The year 1979 was not 1989. At that time, 10 years ago, in a time of confrontation, mistrust and suspiciousness, in a time when we possessed information that the Americans were intending to capitalize on the Afghan factor in their interests, and after 12 or 13 appeals for assistance from the Afghan leadership, one could somehow understand why this step was taken. It was taken with a lack of foresight, which is why the consequences to us were so serious.

[SOVETSKIY PATRIOT] And how did it happen that a troop commitment planned to last several months turned into 10 long years for us?

[Varennikov] After the decision to commit was made, the army was obligated to carry it out. But the matter of time, or more precisely, the "from and to" dates, was not addressed. It was also important that we did not intend to involve ourselves in combat activities. And we did not pose such goals to ourselves. Our mission was to enter the country, establish garrisons and thus stabilize the situation, and prevent opposing forces from disturbing

the tranquillity of the country and the people, including transferring their detachments out of Pakistan.

[SOVETSKIY PATRIOT] But didn't we get involved in combat activities nonetheless?

[Varennikov] Yes, because the forces of the opposition began raiding our units, and naturally we had to defend ourselves in such a situation.

And after that, all of this began growing like a snowball, and events began developing in an undesirable direction.

[SOVETSKIY PATRIOT] Valentin Ivanovich, how do you explain the fact that when our troops entered Afghanistan they were met as good friends? This is something which unfortunately cannot be said about the withdrawal. Why did attitudes change so abruptly?

[Varennikov] Our peoples are tied together by many years of friendship, which is why the Afghan people met our troops warmly, with flowers. But subsequently the opposition utilized commitment of our troops in their own propagandistic interests. It armed itself with this postulate: "Infidels have entered our sacred Muslim land." And this factor had its effect on them. What made this possible? An incorrect assessment of the situation in the country. The former leadership of Afghanistan pursued the wrong line in relation to the clergy, it conducted its water and land reforms incorrectly, and it made a number of other mistakes. All of this put the people in opposition to the government, and consequently in opposition to us as well, because we supported this government.

At the same time we did not devote enough attention to the traditions of Afghan Muslims and their customs. All of this taken together caused change in attitudes and in the situation in the country.

[SOVETSKIY PATRIOT] You were in charge of a Ministry of Defense operations group in Afghanistan responsible for coordinating actions between our troops and Afghans....

[Varennikov] Not only that. We were also responsible for creating national armed forces in Afghanistan. And I must say that we were able to accomplish this mission. After the Soviet forces were withdrawn, opposition forces hoped to quickly break the resistance of the Afghan army. But the armed forces of the Republic of Afghanistan are now far different from what they were like prior to 1979-1980. For practical purposes that was just a small royal army. Now it is a truly modern armed force containing highly professional officers devoted to the people and trained in the USSR and Afghanistan, well-trained personnel, excellent equipment and weapons, sufficient reserves, and what is especially important, they possess considerable combat experience.

[SOVETSKIY PATRIOT] Recently many articles have often cited cases of drug addiction, pillaging and improper mutual relations in our army in Afghanistan. Some authors are trying to persuade readers that this

became a "fatal flaw" in the military milieu, and undermined the army from within.

[Varennikov] There were certain individuals among our servicemen who violated public order and even committed crimes. But let me emphasize that these were individuals, and not dozens or hundreds. And generalizations should not be made on the basis of particular cases. The bulk of the people fulfilled their international duty honorably, conscientiously, and with merit. And as one "Afghan" poet said: "We Were Not Preaching Evil." These lads helped the friendly people, and they did this out of the goodness of their hearts.

But unfortunately, some reporters bent on sensation are attempting to elevate every negative incident, even chance ones, into an absolute, having no desire to understand that all of this affects thousands of human destinies, and no one has the right to cast a shadow upon them. I am not against criticism, but particular phenomena must be assessed calmly, objectively, in a principled manner.

What can I say concerning the question as to whether or not improper mutual relations existed in Afghanistan? How can I put this? The problem was not "dedovshchina," as the press suggests, but collisions between soldiers in some subunits did occur. Moreover these were basically verbal altercations. For example a subunit would go out for combat activities, but someone would remain behind. When the soldiers returned, they would naturally look askance at those who had not gone with them.

And in general, speaking frankly, in the extreme conditions faced by the fighting units, which rarely "came down from the hills," such behavior was completely impossible. Combat activities united the soldiers into one family.

[SOVETSKIY PATRIOT] Could it be that contradictory rumors are arising because the subject of Afghanistan had remained closed for such a long time?

[Varennikov] I don't know. But when I was in Afghanistan I gave instructions to organize things such that all correspondents, be they Soviet or foreign, would be permitted to visit our units without restrictions. Let them talk with any soldiers that might want to do so. Let them meet the inhabitants of the kishlaks after we leave. It is one thing when we are deployed next to a kishlak, and quite another when we are gone. Let them ask: "How did the soldiers behave themselves?" I know of no serious case that might cast a shadow upon our soldiers.

We were visited by Americans, Englishmen and West Germans, and there were an especially large number of Italian reporters. By the way, a camera crew of Italian television's Channel Five made a fabulous two-part film titled "Farewell, Kabul!", which demonstrated the heroic daily efforts of our "Afghans"—our soldier-internationalists.

[SOVETSKIY PATRIOT] Valentin Ivanovich, the published figures for human losses in Afghanistan are 13,310 killed, 35,478 wounded and 311 missing in action. However, these figures are felt to be understated in the West; they cite other figures—30,000-40,000 killed.

[Varennikov] Our figures are true, and there should be no doubt, because they are not subject to alteration. All the more so because our figures are backed by lists of names.

[SOVETSKIY PATRIOT] The issue of amnesty for our servicemen imprisoned in Afghanistan was discussed not that long ago at a session of the USSR Supreme Soviet. Do you agree with the adopted approach?

[Varennikov] From my opinion the approach that has now been adopted is extremely charitable. And today, this is the correct decision to make. But I personally think that we will come back to this issue again. Because it is not entirely right to treat everyone the same. It is one thing when a soldier finds himself in a difficult situation, or when his vigilance is dulled, or if he is wounded, or if his weapon fails, and he is captured; and it is another matter when he deserts, when he goes over to the opposition. These are entirely different categories of people.

[SOVETSKIY PATRIOT] Valentin Ivanovich, how has it happened that disabled "Afghans" have turned out to be the socially most unprotected category of people. When will they finally receive the assistance they need?

[Varennikov] An organization that will make it possible to efficiently solve these problems is presently being organized. Its creation was initiated by representatives of the Ministry of Defense, the KGB, the Ministry of Internal Affairs, the All-Union Komsomol, the Orthodox Church, the Novosti Press Agency and others. Direct assistance will be provided in relation to all problems associated with "Afghans."

[SOVETSKIY PATRIOT] Why is it that "Afghans" receive pensions from the poorest department—social welfare, and not from the Ministry of Defense?

[Varennikov] This is an issue that needs to be resolved. In my opinion the matter lies not with where an "Afghan" gets his pension but with how much he receives and how much he needs in order to live a normal life. We are working on this problem right now.

[SOVETSKIY PATRIOT] Sometimes "Afghans" are accosted in lines for scarce goods by admonitions such as this: We defended our motherland in 1941, but how do you rate? It is insulting when such words are uttered by veterans of the Great Patriotic War.

[Varennikov] I believe that this happens due to a lack of culture and a failure to understand the common social problems of the state. We need to be equable and kind, and not evil and critical. I often deal with this issue, and I do everything I can to smooth out relations between veterans of the Great Patriotic War and our "Afghans."

We cannot permit any kind of attacks against former soldier-internationalists. Concurrently we need to note that omissions or mistakes made in the political arena should in no way cast a shadow upon the youngsters who endured Afghanistan. They honorably fulfilled their patriotic international duty, and they are faithful sons of our fatherland, our people.

[SOVETSKIY PATRIOT] Do we now have legal guarantees that such a thing will never happen again?

[Varennikov] Of course. Commitment of our troops was a direct violation of provisions of the USSR Constitution—articles 73 and 121. Today, under the new conditions of democracy and glasnost, in matters of similar nature, and in the positions which are presently being developed at congresses of USSR people's deputies as well as in sessions of the Supreme Soviet, we can be certain that such actions are precluded.

[SOVETSKIY PATRIOT] Valentin Ivanovich, thank you very much for this interview.

Former 1st Deputy Commander, Turkestan MD on Invasion

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[Interview with Col Gen Yu. Tukharinov complied by Lt Col N. Ivanov, Tashkent, Termez, Moscow: "H-hour"]

[Text] [Box] As is known, the agenda of the second Congress of People's Deputies of the USSR included a discussion by the Committee of the USSR Supreme Soviet for international affairs on the political evaluation of the decision to send Soviet troops to Afghanistan. There have been many letters to the editors in which our readers ask: how was the decision made to send the troops, what was the situation at that time in Afghanistan? The editors of SOVETSKAYA ROSSIYA had a chance to talk on this subject with the first commander of the limited contingent of Soviet forces in Afghanistan, Col Gen Yu. Tukharinov. This is his story.

[Ivanov] Yuriy Vladimirovich, two months before the Afghan events you arrived in Tashkent to assume the position of first deputy commander of forces of the Turkestan Military District...

[Tukharinov] Yes, from Transbaykal. I set about becoming acquainted with the progress of troop combat training, and in parallel prepared the units for the 7 November parade. Then, Afghanistan.

[Ivanov] But surely there had already been talk about Afghanistan.

[Tukharinov] I had personally studied Afghanistan because it bordered on the district's territory. There was no talk of sending troops there in November among us military men, no one believed in that. What is more, Gen of the Army I. Pavlovskiy, who flew to Kabul with a group of officers on orders from the Defense Ministry,

landed in Tashkent on his way back to Moscow—this was also in November—and did not so much as hint to the district command that it was possible. And even when we had been alerted, when they ordered the crossing of the Amu Darya, even I, the army commander, still did not believe that the order would come.

[Ivanov] How were you appointed commander?

[Tukharinov] I was summoned by the district troop commander Col Gen Yu. Maksimov and ordered to begin forming up and deploying the 40th Army. So there was no competition: I was the first deputy and therefore had to assume the job.

[Ivanov] You mentioned the crossing of the Amu Darya...

[Tukharinov] There was still no Friendship Bridge, only the first supports stuck up from the water. And the two banks, our Termez and Afghan Kheyraton were joined only by a ferry crossing. A little up-stream from the port and the bridge under construction there were little islands in the middle of the river, and we planned the crossing over them. But here we immediately encountered our first difficulty. The banks of the river are sandy, and the water had even undermined the concrete plates to which we wanted to connect the first sections of a bridge. The locals came to the rescue: they advised that we "hold the sand" with reeds.

[Ivanov] But troops were not only sent via Termez.

[Tukharinov] No, it was just that the Army CP was at Termez, and that's where Marshal of the Soviet Union S. L. Sokolov was, at the time the first deputy defense minister. Units were preparing at Kushka, and a small grouping in the Central Asian Military District, at Feyzabad. Oh yes, and the airborne forces who were to land at the Kabul airport. But Termez was the first to move.

[Ivanov] When was this?

[Tukharinov] On 25 December at 1700 hours local time. This was "H-hour" for me. Marshal Sokolov, Col Gen Maksimov, and I were at the CP—it was on a hill above the river, and we stayed there until morning, until the last column had crossed to the left bank.

[Ivanov] But, as I understood it, you personally were not the first to enter Afghanistan.

[Tukharinov] The Army staff crossed the border in the first days of January. But I came a few days later. On 31 December, I was wishing the officers a Happy 1980 New Year, when I suddenly began to feel sick. I was taken to the hospital with a temperature of 40.

[Ivanov] Before this you had seen Afghanistan only from the right bank of the Amu Darya?

[Tukharinov] For some reason, on the morning of 25 December I had flown by helicopter to Kunduz.

[Ivanov] That is, before the troops were sent in?

[Tukharinov] Of course. There is no need to present the matter as if the introduction of troops came out of nowhere. I don't know how the political leadership felt, but we military men prepared seriously. We didn't believe it, but we prepared. But how could it be otherwise—after all, we were responsible for the lives of our men. And we crossed the border without breaking down the barriers, calmly.

[Ivanov] And if the military had refused to enter?

[Tukharinov] By all norms and laws, the Army carries out the orders of the nation's highest leadership, the Defense Council. I would suggest to those who write and talk about the incursion of troops to look at the events from the standpoint of 1979. We were following an order, while all the people kept totally silent; they are all brave now, but where were they before? But this is the case, you know. But then, as the end of the seventies, everything was much more complicated in the world. I will not speak of the relations with America and NATO, but talk about what I know precisely. At the end of 1979, the northeast regions of Afghanistan had left the control of the people's power and were preparing either to proclaim a new state or to merge with Pakistan. This was only one of the nuances. And Moscow, I am certain, knew others as well. Imagine, if Brezhnev decided to invade and he sent in the "limited contingent"—its a primitive person who doesn't check out everything.

On the 25th I was ordered to fly to Kunduz to meet with the older brother of Amin.

[Ivanov] Abdulla?

[Tukharinov] Yes, him. When I was ordered, I realized that a full agreement had been reached between our governments. Abdulla was the one responsible for the northern provinces of Afghanistan, and his residence was in Kunduz.

[Ivanov] Your impression of him?

[Tukharinov] When we came in, he was sitting at a desk. He did not stand, he did not greet us. He only pointed to the couch, which for some reason was on the same line with the desk. We had to keep craning our necks in order to talk. They say that in this he was similar to his brother H. Amin.

[Ivanov] And what did you talk about?

[Tukharinov] About the disposition of our troops. As you see, talks that our arrival was also a surprise to the Afghan government are without merit. Abdulla named several points where we could deploy our units and subunits. I immediately traveled to those places. The fact that not a single spot was suitable, that's another story. On returning, I reported this to Maksimov. This only strengthened our initial decision to encamp.

[Ivanov] Meaning?

[Tukharinov] We took places unsuited for agriculture, and set up tents there. On agreement, of course, with local authorities. I believe the only exception was the Jelalabad garrison. There we were first given a place in the rocks, no water, no wood, and the heat in the summer was around 60. I went to the governor of the province and invited him to see how the men were living, or more precisely, being tormented. He took my map, called the chief of the irrigation system—they have a very good irrigation network there, constructed, incidently, under the supervision of our experts—and together they chose a place near one of the irrigation ditches. Right on the hood of the "wazik", he wrote on that map that he, the governor of the province, was assigning this section for the temporary use of the Shuravi, the Soviets. No bureaucracy at all.

[Ivanov] You said, "for the temporary use". So it was implied that the limited contingent would not stay long on the territory of the republic?

[Tukharinov] Within a year, I proposed either withdrawing the troops, after either ceasing or at least decreasing combat actions, or forming garrisons as much as possible.

[Ivanov] And there was a point to this, forming garrisons?

[Tukharinov] A very important point. Where our garrisons were located, the simple people felt themselves in complete safety for the whole nine years. They peacefully grew their grain, and they knew that they would reap it in time and for themselves. For practically all nine years our doctors took in a steady stream of sick Afghan children and old people. Even the women came, even though by their laws they could not show their bodies to a stranger.

[Ivanov] So when did combat actions begin?

[Tukharinov] Some "experts" on Afghanistan have even gone so far as to say that the dushman did not appear until after our arrival. This is a juggling of the facts. Even before the arrival of the limited contingent of Soviet Forces, the government troops had fought hard actions with the rebels. As I already said, the northeast was out of Kabul's control. And the first operation—no, then the word operation had still not been spoken, there was another term, "raid"—well, the Afghan government asked us to conduct the first raid back in January, i.e. within a half a month after we came in. At that time, an Afghan artillery regiment had gone over to the dushman. Our Soviet military advisors were killed, and we later found their mutilated, broken bodies on a rubbish heap. So the second opinion, that the dushman had nothing except flint swords and knives, was also mistaken. They had tanks, APCs, heavy guns, not to mention machine guns and assault rifles. Initially they had large groups of calvary, at times reaching 600 men. The dushman had their own front, their own commanding general. And despite this, the first joint raid—and all raids, I stress this especially, we conducted only with the knowledge of

the General Staff of the Afghan Armed Forces, and with the participation of their troops—the first joint raid was a success. We were also able to set up a garrison in Feyzabad, the very center of the dushman lair. Thus the plan to withdraw the provinces failed, and we prevented the division of Afghanistan into two parts.

[Ivanov] Do you recall the reports on the first dead?

[Tukharinov] The first dead, eight men, came around two hours after the start of movement. One of the fighting vehicles overturned—it was making way for an Afghan vehicle, pulled close to side of the road, and fell from the embankment. So, judge for yourself, were these losses or a traffic accident? But it was the first and last incident during the march. Even Salang passed without losses. There were precautionary measures, of course: there was a rigid towbar for every ten vehicles, and there were trucks with sand. Combat losses...In February near Kabul, we lost 10 men all at once. In one twenty-four hour period. And after a report to Moscow, and there was a report on each dead man, I was summoned to the telephone by the Chief of the General Staff, Marshal of the Soviet Union N. V. Ogarkov: "Why such heavy losses? When will you learn to take care of your men?" I had to explain that three men had died in the battle itself, and the rest in a BMP after it was exploded by a mine. After this the soldiers began to travel on top or dismounted.

[Ivanov] Experienced soldiers first looked to see which doctor was going on a raid with them, and then which commander.

[Tukharinov] You can say that. They ought to write a book about how the doctors fought for the lives of the wounded.

[Ivanov] Did you study and get used to the new, unaccustomed conditions as you went?

[Tukharinov] Sometimes there was no other way. In March we had already put out a flyer on the operating tactics of the rebels, and gave it to each soldier. In April, this was still 1980, we organized an exhibit of the equipment, arms, and gear that our soldiers had altered and adapted for military actions in the mountains and desert. Marshal Sokolov summoned weapons designers and rear service workers to look and learn. And soon our BTRs, helicopters, certain types of weapons and gear underwent substantial changes.

We also studied how to fight. At first my command post directed all combat actions. Marshals Sokolov and Akhromeyev demanded the most detailed reports. At first it was difficult under their continuous supervision, of course. Psychologically difficult. But now I say that this was concern for the men. After their departure, a new chief military advisor came who was responsible for the coordination of Afghan and Soviet troops. He first announced that the troops weren't doing anything there—how surprised I always am by people who think

that before them there was nothing—and since we had done nothing, then the main task was to destroy all rebels in a year.

Of course, he fought in his own peculiar way, by squares. He sketched a square on the map and said: it had to be cleared of "spooks". And that, within a year, all Afghanistan was to be in such cleared squares.

[Ivanov] And what happened after a year?

[Tukharinov] He calmly went back to the Union, and we stayed. To fight.

[Ivanov] But, initially, as far as I know, there was no order to conduct combat actions.

[Tukharinov] There was one order, to go in and put ourselves at the disposal of the chief military advisor, at the time Col Gen S. Magometov. There was the order given me by Marshal Sokolov—not to occupy the buildings of the Afghans. Even Amin's palace, which the Afghans themselves turned over to us, the Army staff entered only in July. And this after a representative of the Central Committee came from Moscow and personally saw to it that the Afghan comrades were giving us the building.

[Ivanov] Probably you met with Babrak Karmal?

[Tukharinov] I was presented to him at one of the meetings by Marshal Sokolov. The meeting was a long one—all of us were quite unable to solve some problem. I had the feeling that Babrak Karmal lacked resolve and clarity. As for me, chosen by fate to be an executor, I am impressed by wise and decisive leadership.

[Ivanov] What remains memorable from the first months?

[Tukharinov] The winter was very cold and snowy, the Afghans said: "The Russians came and brought the snow with them." And then the performers began to come. The first was Josif Kobzon. They called from the check point: Comrade Commanding General, Pvt. Kobzon is at your disposal." But where could we have a concert? There were no buildings, and you can't really sing in tents. We dug a spot right on the side of a mountain, put down two trucks with their beds together, and had an amphitheater, just barely. Kobzon began to sing, and suddenly it started to rain. We sat there, and didn't leave. The performer looked at us, and he stayed put too. Then he took off his jacket, saying he should spare it, and began to sing. Then the rain stopped, and we dried out, and he sang and sang.

It was joy and sorrow combined when the reservists left us in March. The units were filled out by men called up from the reserve. Many had families, children. Only they stood guard at night. Their sense of responsibility and their sense of self-preservation were very strong. To serve with such soldiers was a pure pleasure. Regards to them, first, for their soldierly labor, from me, their commanding general.

[Ivanov] How did you become a military man?

[Tukharinov] It was wartime. In 1942, when I turned 15, I went to a plant as an apprentice to a gauge maker. And then, together with a friend, to the Saratov Infantry School. Yes it was interesting how I myself was told that I was the Army commander in Afghanistan. After the incursion, a friend sent a letter from Cuba: well well, he said, the Americans report over their radio that the Soviet troops are commanded by Tukharinov, so at least I found out where you were. That's the kind of propaganda they had. And you, Soviet journalists, sought me out only ten years later. But the families... For us who were in Afghanistan, the family was sacred. So we tried to send the reservists home as quickly as possible.

[Ivanov] And their places were taken by young soldiers?

[Tukharinov] If you mean those who donned their uniform just yesterday, and today found themselves in Afghanistan, then no. We, the Army staff, were able to see to it that special training subunits were set up for our 40th Army on Union territory. That is, sergeants and specialists, as should be, trained for half a year and came to us after six months, and privates, after two months. There were also special programs for the officers who joined the limited contingent of Soviet Troops. We did not throw and did not lead the untrained into battle.

[Ivanov] Are you decorated?

[Tukharinov] The Order of the October Revolution, the Afghan Order of the Red Banner, and the medal "For Defense of the Borders".

[Ivanov] When did you give up your position, and to whom?

[Tukharinov] In September, 1980, to my deputy, Maj Gen Tkach. But I myself remained the senior member of the group from the district.

[Ivanov] We are talking with you in Tashkent, in December...

[Tukharinov] Yes, it has been precisely 10 years. Ten years of history. Our history. And we should know and remember it.

[Ivanov] After talking with Yuriy Vladimirovich I flew to Termez. I stood in the area where once the Army CP stood, and went down to the Amu Darya. There was practically no reminder of the crossing here. But now "Sovtransavto" trucks drive into Afghanistan over the Friendship bridge. And near the border detail stood a teacher with a group of kindergarten children. In their hands were packages of toys.

"They're giving them as a surprise to Afghan children," explained their escort.

For Col Gen Yu. Tukharinov, I brought back several reeds from the place of his crossing (probably ten years ago he had no time for such a souvenir), and I told him about the children with the presents.

"That's very good," Yuriy Vladimirovich exclaimed. "A good sequel."

He stood up, a tall man, trim for his age. He was in a hurry. But he repeated again.

"That's really excellent, children with gifts."

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